DEPARTMENT OF THE AIR FORCE
AIR FORCE CIVIL ENGINEER CENTER
INSTALLATION RESTORATION PROGRAM
NIAGARA FALLS AIR RESERVE STATION

AFCEC/CZOE
2405 Franklin Drive
Niagara Falls, NY 14304-5063

26 March 2026

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Re: Transmittal of Final 2024 Annual Report, Niagara Falls Air Reserve Station, New York

Seres-Arcadis SB JV, LLC is pleased to present our Final 2024 Annual Report for Niagara Falls ARS, New York, Northeast Group ORC.

Sincerely,

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Final 2024 Annual Comprehensive Sampling/ Monitoring Report

Installation-Wide Groundwater Monitoring Program

Niagara Falls Air Reserve Station, New York

Northeast Group Optimized Remediation Contract
Contract W912DR-19-D-0009
Task Order W912DR-20-F-0483

March 2026

Final 2024 Annual Comprehensive Sampling/ Monitoring Report

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Contract W912DR-19-D-0009
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March 2026

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Acronyms and Abbreviations

µg/L	Micrograms per liter
AFCEC	Air Force Civil Engineer Center
amsl	Above mean sea level
ALS	ALS Environmental Laboratory
BOMARC	Boeing Michigan Aeronautical Research Center
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CMI	Corrective Measure Implementation
COC	Contaminant of concern
CVOC	Chlorinated volatile organic compound
DCE	Dichloroethene
DoD	Department of Defense
EA	EA Engineering, P.C., and Its Affiliate EA Science and Technology
E&E	Ecology & Environment, Inc.
EPA	U.S. Environmental Protection Agency
ERD	Enhanced reductive dechlorination
EZVI	Emulsified vegetable oil and zero valent iron mixture
GPS	Groundwater protection standard
GWTS	Groundwater treatment system
HRC	Hydrogen release compound
IRP	Installation Restoration Program
IWGP	Installation-Wide Groundwater Monitoring Program
MCL	Maximum Contaminant Level
MS	Matrix spike
MSD	Matrix spike duplicate
MW	Monitoring well
NFARS	Niagara Falls Air Reserve Station
NYSDEC	New York State Department of Environmental Conservation
ORC	Optimized Remediation Contract
PDB	Passive diffusion bag

POTW	Publicly owned treatment works
ppb	Parts per billion
PW	Pumping well
PZ	Piezometer
QA	Quality Assurance
QC	Quality control
RA	Remedial Action
RCRA	Resource Conservation and Recovery Act
RPP	Rigid porous polyethylene
RSL	Regional Screening Level
RW	Recovery well
S-A JV	Seres-Arcadis Small Business Joint Venture LLC
SC	Site Closure
SMP	Site Management Plan
SWMU	Solid waste management unit
SW	Surface water
TCE	Trichloroethene
UST	Underground storage tank
VC	Vinyl chloride
VOC	Volatile organic compound

1 Introduction

The United States Department of the Air Force, Air Force Civil Engineer Center (AFCEC) and the United States Army Corps of Engineers has retained the SERES-Arcadis Small Business Joint Venture LLC (S-A JV) to perform installation-wide groundwater monitoring in support of the Northeast Group Optimized Remediation Contract (ORC) at the Niagara Falls Air Reserve Station (NFARS) in Niagara Falls, New York under Contract Number W912DR-19-D-0009, Task Order W912DR-20-F-0483. The work related to the installation-wide groundwater monitoring program (IWGP) is conducted under the United States Department of Defense (DoD) Installation Restoration Program (IRP) and in compliance with the requirements of a 2016 New York State Department of Environmental Conservation (NYSDEC) Order on Consent and Administrative Settlement (Site No. 932106, Index No. R9-20150902-65). This 2024 Annual Comprehensive Sampling/Monitoring Summary Report was prepared to provide IWGP monitoring results, data evaluation, and recommendations associated with the Spring and Fall 2024 sampling/monitoring events performed at NFARS. In addition, although not part of the IWGP, this report also presents the results of the final performance monitoring event performed in 2024 to evaluate the effectiveness of remedial injections performed at Sites 5 and 10 in November 2022.

1.1 Background

NFARS is located in Niagara County, New York, approximately 15 miles north of the City of Buffalo and 4 miles east of the City of Niagara Falls (**Figure 1-1**). The base covers approximately 631 acres in the towns of Wheatfield and Niagara, New York. The environmental setting for NFARS, including physiography, climate, land use, hydrology, and geology is described in previous reports provided in the Administrative Record, including: the Stratigraphy Assessment (Ecology & Environment, Inc. [E&E] 1999); the Focused Resource Conservation and Recovery Act Facility Investigation, and Interim Corrective Measures Study (E&E 2000); and the Site Management Plan (SMP) prepared by EA Science and Technology (EA 2021).

1.2 Installation Restoration Program

The DoD developed the IRP to ensure compliance with hazardous waste regulations, identify and evaluate environmental contamination, and associated public health hazards at DoD facilities resulting from past operations and waste handling/disposal. IRP studies at Air Force installations were initially developed and implemented in a four-phase program. That four-phase approach was later changed to a three-phase program to ensure consistency with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response action process. Environmental studies conducted at NFARS have followed the three-phase approach outlined in the National Contingency Plan.

The objective of the IRP is to provide a methodical and logical approach to the identification, quantification, and development of feasible remedies for environmental problems including public health hazards caused by the use or disposal of hazardous material at United States Air Force installations. The Air Force's ultimate objective for IRP remediation sites is to achieve Unlimited Use/Unrestricted Exposure status leading to Site Closure (SC).

AFCEC is responsible for implementation of the IRP. As the host unit at NFARS, the 914th Air Refueling Wing Mission Support Group/Civil Engineering-Environmental is responsible for administering remediation under the IRP, including remediation of contamination resulting from tenant organization activities, which is currently the New York Air National Guard.

1.2.1 IRP Site Status

As indicated in the SMP (EA 2021), 13 Solid Waste Management Units (SWMUs) are managed at the Site under the 2016 Consent Order. These 13 SWMUs include the following:

- Site 1 – Building 600 Jet Fuel No. 4 (JP-4) Pipeline Leak
- Site 2 – JP-4 Tank C
- Site 3 – Landfill
- Site 4 – BX MOGAS Tank Leak
- Site 5 – Former Boeing/Michigan Aeronautical Research Center Missile Site
- Site 6 – JP-4 Tank A
- Site 7 – JP-4 Tank Truck Spill
- Site 8 – Former Building 202 Drum Storage Yard
- Site 9 – Fire Training Area No. 3
- Site 10 – Former Fire Training Area No. 1
- Site 11 – Fire Training Area No. 2
- Site 12 – Building 850 Drum Storage Yard
- Site 13 – 4,000-gallon Underground Storage Tank (UST)

Monitoring is currently performed at Sites 3, 5, 10, and 13 under the IRP IWGP and in accordance with the requirements of the Work Plan for the IWGP (Appendix D of the SMP). As noted in Section 1.2.2, a final sampling event will be required at Site 8 to demonstrate achievement of the criteria necessary for Site Closure.

1.2.2 Prior Remedial Actions

Prior to 2012, corrective actions were performed at certain IRP sites to prevent offsite migration of contaminants of concern (COCs). EA conducted Remedial Actions (RAs) consisting of in-situ injections to treat COCs in groundwater through enhanced reductive dechlorination (ERD) and in-situ chemical reduction at Sites 3, 5, 7, 8, 10 and 13 between August and September 2015 and at Sites 5, 8, 10, and 13 in June 2018 (EA 2017 and EA 2020). Based on the overall improvement of groundwater quality at certain sites following the 2015 and 2018 RAs, the 2018 and 2019 Annual Comprehensive Sampling/Monitoring Reports (EA 2019 and EA 2020, respectively), both of which were approved by NYSDEC, presented several recommendations including the following:

- Site 7 was removed from the IWGP in June 2018 based on the achievement of alternate termination criteria specified in Section 5.1.2 of the SMP (EA 2021). Separately from the IWGP, a separate investigation to determine the potential presence of perfluorooctanoic acid and perfluorooctane sulfonic acid is currently being conducted at Site 7 under the CERCLA process.
- Site 8 was removed from the IWGP prior to the Fall 2020 sampling/monitoring event based on the achievement of alternate termination criteria at monitoring well MW8-1 and termination of groundwater monitoring criteria at monitoring well MW8-10D. However, NYSDEC subsequently indicated that an additional sampling event will be required at Site 8 prior to achieving Site Closure. The scope of that sampling event will be discussed with NYSDEC. Further, an investigation to determine the potential presence of 1,4-dioxane was conducted separately by the S-A JV at Site 8 in July 2022. 1,4-dioxane was detected in only one of three

monitoring wells sampled at Site 8 (MW8-4D) at a concentration of 0.65 micrograms per liter (µg/L), which was greater than the NYSDEC human health guidance value of 0.35 µg/L and the United States Environmental Protection Agency (EPA) risk-based regional screening level (RSL) of 0.46 µg/L for tap water, but less than NYSDOH's maximum contaminant level (MCL) of 1 µg/L for public drinking water. That well was resampled in February 2024 to confirm the presence of 1,4-dioxane at a concentration greater than the NYSDOH human health guidance value of 0.35 µg/L and the EPA risk-based RSL of 0.46 µg/L for tap water. 1,4-dioxane was detected in that sample at a concentration of 0.57 ug/L, which was greater than the NYSDEC human health guidance value of 0.35 µg/L and the EPA risk-based RSL of 0.46 µg/L for tap water, but remained less than the NYSDOH MCL of 1 ug/L. AFCEC is currently evaluating next steps related to these sampling results.

- The pumping wells at Sites 10 and 13 and the groundwater treatment system at Site 10 (which were shut down prior to the 2015 and 2018 RAs) will remain shut down.

Evaluations of the annual monitoring data and recommendations to further modify the sampling network and/or sampling frequency (if any) based on those evaluations continue to be presented in the Annual Comprehensive Sampling/Monitoring Reports.

1.3 Installation-Wide Groundwater Program Monitoring

As indicated in Section 5 of the SMP (EA 2021), certain wells and piezometers at Sites 3, 5, 10, and 13 are subject to monitoring for volatile organic compounds (VOCs) under the IWGP until approval is received from NYSDEC to cease monitoring based on the achievement of either Termination of Groundwater Monitoring Criteria or Alternate Termination Criteria (which are further described below). To evaluate achievement of either set of criteria, the groundwater analytical results for detected compounds at each Site are compared to Groundwater Protection Standards (GPS) derived from NYSDEC Class GA Groundwater Standards, as set forth in New York Code of Rules and Regulations Part 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations and Division of Water, Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values (NYSDEC 1998). **Table 1-1** lists the COCs which have exceeded the GPS at one or more SWMU at NFARS. There are no drinking water wells at the installation or in the surrounding neighborhoods as local municipalities supply drinking water. Additional details regarding the criteria used to remove wells and/or piezometers from the IWGP are provided in the following sections. It should be noted that NYSDEC has required the removal of the Alternate Termination Criteria in comments to the 2020 and 2021 Annual Comprehensive Sampling/Monitoring Reports. Accordingly, the S-A JV is in the process of preparing an update to the SMP that will address NYSDEC concerns with the Alternate Termination Criteria; however, text describing those criteria is retained herein until the updated SMP is approved by NYSDEC.

1.3.1 Termination of Groundwater Monitoring Criteria

The basis for determining whether sampling at a particular well or piezometer may be terminated under the IWGP is specified in Section 5.1.2 of the SMP (EA, 2021) and is determined using the following methodology:

1. GPS are achieved at the well or piezometer for four consecutive quarterly sampling events or another frequency as approved by NYSDEC; or
2. The well or piezometer has achieved Alternative Termination Criteria as defined below; or
3. Other criteria acceptable by NYSDEC.

1.3.2 Alternative Termination Criteria

As also specified in Section 5.1.2 of the SMP (EA, 2021), groundwater monitoring may still be discontinued at a well or piezometer if the GPS are not achieved for four consecutive quarterly sampling events, if the following criteria are satisfied:

1. The chemical concentration of hazardous waste constituents in the well or piezometer indicate achievement of a "Zero Slope Condition" (as defined below); and
2. The total concentration of organics in the well or piezometer is no greater than 100 parts per billion (ppb), and no single organic compound concentration exceeds 50 ppb for a minimum of four consecutive quarterly sampling events, or another frequency approved by NYSDEC; and
3. NFARS submits, and the NYSDEC approves an analysis, which indicates that the residual groundwater contamination would not result in an unacceptable risk to human health and the environment.
4. In the event that remedial systems with pumping wells are restarted, then termination criteria for the pumping well will be developed in coordination with NYSDEC and incorporated into a revised version of the SMP.

The determination of a zero-slope condition shall be made on a location-by-location basis using the following procedures:

- The sum concentration of hazardous waste constituents from the equivalent of the eight sampling events will be plotted versus time.
- If the curve which best fits these data points is linear, then a straight line using a least squares regression model will be fitted to the data and the slope of the fitted curve will be computed and designated as the estimated slope.
- If the data fits a non-linear form, then an exponential curve using a least square regression model will be fitted to the data. The estimated slope will be the first derivative of the curve at a value of time half-way between the data from the last two sampling points.

The estimated slope shall be deemed zero if:

- The slope of the line/curve is less than or equal to zero (i.e., the concentration is declining or stable) or the yearly decrease of the total concentration of hazardous waste constituents is less than the average overall precision of analytical methods used. NFARS and NYSDEC will develop a methodology of calculating the average overall precision prior to implementation of Termination Monitoring.
- In addition, the spatial and temporal distributions of the concentrations of compounds will be assessed to provide additional information regarding trends.

2 Summary of 2024 Investigation Activities

This section describes the field investigation tasks performed in 2024 under the IWGP at NFARS, as well as the performance monitoring activities performed in 2024 under the Final Remedial Injection Work Plan (S-A JV 2022). Specifically, the following activities were performed during the Spring and Fall 2024 sampling/monitoring events and the final performance monitoring event performed in February 2024:

IWGP Monitoring Events

- Inspections were performed, and groundwater and surface water elevations were collected at the required monitoring wells, piezometers, and surface water monitoring locations on 6 June 2024 (Spring 2024 IWGP event) and on 8 and 9 October 2024 (Fall 2024 IWGP event).
- Passive diffusion bags (PDBs) were deployed in the applicable background monitoring well (Site 8) and the required IWGP monitoring wells and piezometers within Sites 3, 5, 10, and 13 on 6 June 2024 (Spring 2024 IWGP event). PDBs were deployed at the applicable background monitoring well (Site 1) and the required IWGP monitoring wells and piezometers at Sites 3, 5, 10, and 13 on 8 and 9 October 2024 (Fall 2024 IWGP event). PDB retrieval and groundwater/surface water sample collection activities were performed on 16 July 2024 (Spring 2024 event) and on 28 October 2024 (Fall 2024 event).
- Minor repairs (e.g., missing bolts, locks, lids/caps) identified during well and piezometer gauging were completed during the Spring and Fall 2024 sampling/monitoring events. The need for major repairs to any wells or piezometers was not identified during those events.

Performance Monitoring Events

- The fourth performance monitoring event associated with the November 2022 remedial injections at Sites 5 and 10 was performed in February 2024. This event involved sampling for VOCs (using PDBs), as well as methane, ethane, ethene, and total organic carbon (TOC) using rigid porous polyethylene (RPP) samplers.
- PDBs and RPP samplers were deployed in the required monitoring wells on 12 February 2024. PDB and RPP retrieval was performed on 26 February 2024.

The remainder of this section provides additional details associated with the field activities performed during the Spring and Fall 2024 sampling/monitoring events and the fourth performance monitoring event performed at Sites 5 and 10 in February 2024. Unless otherwise noted, all field activities were performed in accordance with the SMP (EA 2021) or, for the February 2024 performance monitoring event, the Final Remedial Injection Work Plan (S-A JV 2022).

2.1 Groundwater and Surface Water Elevation Measurements

The monitoring network under the IWGP consists of 123 monitoring/pumping/recovery wells and piezometers and nine surface water measurement locations. The groundwater and surface water elevation measurement locations are listed in Table 2-1 and illustrated on Figure 2-1. The condition of each monitoring/ pumping/recovery well and piezometer is inspected during each monitoring event under the IWGP. With the exception of Site 8, groundwater and surface water elevations are also measured at each location twice a year (i.e., during the spring and fall

IWGP monitoring events). As discussed with NYSDEC, the collection of surface water and groundwater elevations at Site 8 was discontinued starting with the Spring 2024 monitoring event until such time that groundwater sampling is resumed at Site 8 to confirm that groundwater at that site achieves the GPS, leading to Site Closure. In the interim, the core hole and monitoring wells at Site 8 will continue to be inspected and maintained until Site Closure (similar to the monitoring wells at Site 7).

Water level gauging activities typically occur across two days during each event; however, water levels at each site are collected on a single day to provide accurate data for the development of the overburden and bedrock groundwater contour maps for Sites 3, 5, 10, and 13 that are included in each Annual Comprehensive Sampling/Monitoring Report. Water level measurements were collected at each well, piezometer, or surface water location using an electronic water level indicator with an accuracy of 0.01 foot (ft). Water levels were referenced to a previously established reference point at each well, piezometer, and surface water location.

Static water levels were measured at 107 wells and piezometers and seven surface water locations on 6 June 2024 for the Spring 2024 monitoring event (**Tables A-1 and A-2** [**Appendix A**]). Water levels were not measured at the following locations during this event: monitoring wells MW5-3D, MW13-6, and MW13-6D (wells could not be located). All three monitoring wells were subsequently located (MW13-6 and MW13-6D were located using global positioning system equipment as part of a recent military construction [MILCON] at Sites 5 and 13 to install a hydrant fueling system and monitoring well MW5-3D was located during the Spring 2025 sampling/monitoring event).

Static water levels were measured at 104 wells and piezometers and five surface water locations on 8 and 9 October 2024 for the Fall 2024 monitoring event (**Tables A-1 and A-2** [**Appendix A**]). Water levels were not measured at the following locations during this event: monitoring wells MW5-3D, and MW5-7D, (wells could not be located) and monitoring wells/piezometer MW13-5A, MW13-6D, and PZ13-1 (each well/piezometer was dry), as well as surface water locations SW10-5 and SW10-6 (each measurement location was dry). Monitoring wells MW5-3D and MW5-7D were subsequently located during the Spring 2025 sampling/monitoring event.

Although not used for groundwater contour development, static water levels were also measured at nine wells during the February 2024 performance monitoring event (**Table A-3**). Finally, 2024 precipitation data for Niagara Falls, New York (Station KIAG, Weather Underground 2024) were obtained from Weather Underground (www.wunderground.com) to supplement the groundwater elevation data. The precipitation data are presented in **Appendix B**.

2.2 Groundwater Sampling

Two groundwater sampling events (Spring and Fall 2024) were performed at Sites 3, 5, 10, and 13 under the IWGP in 2024. In addition, the final performance monitoring event was performed at Sites 5 and 10 in February 2024 to evaluate the effectiveness of the November 2022 remedial injections performed at those sites. Additional details regarding these monitoring events are provided in the following subsections.

2.2.1 IWGP Monitoring Events

A total of 22 IWGP wells and piezometers were sampled during the Spring 2024 sampling event, including: six locations at Site 3; six locations at Site 5; five locations at Site 10; four locations at Site 13; and one background location at Site 8. PDB deployment was performed on 6 June 2024, with retrieval and sample collection

performed on 16 July 2024 for the Spring 2024 sampling event. A total of 19 IWGP wells and piezometers were sampled during the Fall 2024 sampling event, including: six locations at Site 5; eight locations at Site 10; four locations at Site 13; and one background location at Site 1. PDB deployment was performed on 8 and 9 October 2024, with retrieval and sample collection on 28 October 2024. **Table 2-2** presents a summary of the wells and piezometers sampled, sample analyses, and field quality assurance/quality control (QA/QC) samples collected during the Spring and Fall 2024 sampling events. The well and piezometer locations are shown on **Figure 2-1**.

As previously indicated, groundwater samples for the IWGP monitoring events were collected using PDB samplers. Prior to PDB deployment, depth-to-water was measured at each well and piezometer to ensure there was sufficient water to deploy the PDB. Each PDB was then attached to a dedicated stainless-steel wire suspension apparatus and lowered to the midpoint of the screened interval. If there was insufficient water to reach the midpoint of the screened interval, the PDB was suspended at a lower elevation to ensure that it remained fully saturated throughout the deployment period. The PDBs were left undisturbed for a minimum two-week equilibrium period. At the time of retrieval, the water level in each well and piezometer was re-measured to ensure the PDB had remained submerged throughout the deployment period. Next, the PDBs were retrieved using the dedicated cables, the laboratory-supplied glassware was filled with water from the PDBs, and the samples were submitted to the analytical laboratory for analysis of VOCs.

2.2.2 Remedial Injection Performance Monitoring Event

A total of nine wells were sampled during the February 2024 performance monitoring events, including: four locations at Site 5 and five locations at Site 10. PDB deployment was performed on 12 February 2024, with retrieval and sample collection on 26 February 2024. **Table 2-2** presents a summary of the wells sampled, sample analyses, and field QA/QC samples collected during the performance monitoring events. The well locations are shown on **Figure 2-1**.

As previously indicated, groundwater samples for the performance monitoring event were collected using PDB and RPP samplers. Prior to PDB and RPP sampler deployment, depth-to-water was measured at each well and piezometer to ensure there was sufficient water to deploy the PDB and RPP samplers. Each PDB and RPP sampler was then attached to a dedicated stainless-steel wire suspension apparatus and lowered to the midpoint of the screened interval. If there was insufficient water to reach the midpoint of the screened interval, the PDB and RPP sampler was suspended at a lower elevation to ensure that it remained fully saturated throughout the deployment period. The PDB and RPP samplers were left undisturbed for a minimum two-week equilibrium period. At the time of retrieval, the water level in each well and piezometer was re-measured to ensure the PDB and RPP samplers had remained submerged throughout the deployment period. Next, the PDB and RPP samplers were retrieved using the dedicated cables, the laboratory-supplied glassware was filled with water from the PDBs, and the RPP samplers were collected and submitted for analysis of ethane, ethene, methane and TOC.

2.3 Surface Water Sampling

Surface water samples were collected at eight locations during the Spring and Fall 2024 sampling events. **Table 2-3** presents a summary of the surface water sampling locations, sample analyses, and field QA/QC samples collected during these sampling events and the surface water sampling locations are shown on **Figure 2-1**.

Surface water quality parameters were also collected at each sampling location during each sampling event and are summarized in **Table A-2** (**Appendix A**).

The surface water samples were collected using the dip method of filling the sample containers directly from the creek, except for the samples collected at location SW99-10. At location SW99-10, a polyethylene bailer was lowered into the creek to collect the surface water samples due to the height of the sampling platform above the water.

2.4 Quality Assurance/Quality Control Sampling

In general, QA/QC sampling is performed at a frequency of one sample per 20 field samples collected per matrix (e.g., groundwater, surface water, etc.). Based on the number of samples collected during the February 2024 Performance Monitoring event (i.e., nine groundwater samples), the QA/QC samples for that event should have included one field duplicate and one matrix spike/matrix spike duplicates (MS/MSD) sample. Similarly, based on the number of samples collected during the Spring 2024 sampling event (i.e., 22 groundwater samples and eight surface water samples), the QA/QC samples for that event should have included two groundwater field duplicates, two groundwater MS/MSD samples, one surface water field duplicate and one surface water MS/MSD sample. Finally, based on the number of samples collected during the Fall 2024 sampling event (19 groundwater samples and eight surface water samples), the QA/QC samples should have included one groundwater field duplicate, one groundwater MS/MSD sample, one surface water field duplicate, and one surface water MS/MSD sample.

The QA/QC samples collected during the February 2024 Performance Monitoring sampling event included one field duplicate sample (MW5-5D) and one MS/MSD sample (RW5-1), as indicated in **Table 2-2**. The QA/QC samples collected during the Spring 2024 IWGP sampling event included two groundwater field duplicate samples (PZ3-7D and MW5-6) and two groundwater MS/MSD samples (PW3-3A and MW5-1DA), as indicated in **Table 2-2**, as well as one surface water field duplicate sample (SW3-15) and one surface water MS/MSD sample (SW3-3), as indicated in **Table 2-3**. The QA/QC samples collected during the Fall 2024 IWGP sampling event included one groundwater field duplicate and one groundwater MS/MSD sample (both at RW5-1), as indicated in **Table 2-2**, as well as one surface water field duplicate sample and one surface water MS/MSD sample (both at SW3-15), as indicated in **Table 2-3**. Finally, trip blanks were also shipped with the field samples during each sampling event at a frequency of one trip blank per cooler. One cooler and one trip blank were used for each event to ship the samples associated with the February 2024 Performance Monitoring event, as well as the Spring and Fall 2024 IWGP sampling events.

The laboratory QA/QC procedures were consistent with the associated requirements described in SW-846, Third Edition, (all promulgated updates) (EPA 1997) and the SMP (EA 2021). All laboratory analytical data were reviewed for compliance with precision, accuracy, representativeness, completeness, and comparability parameters using the guidelines and practices published in the EPA Contract Laboratory Program, National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2008). A complete QA/QC summary is included in the data usability summary report and data validation reports provided in **Appendix C**. As noted therein, there were no significant QA/QC concerns and minor issues were addressed by adding validation qualifiers where necessary. Overall, the data were determined to meet the project requirements and completeness goals, and all results are considered valid and useable.

2.5 Analytical Methods and Sample Handling

Each field sample was collected in laboratory-approved containers and in accordance with the field documentation, chain-of-custody, sample identification, custody, and labeling procedures specified in the SMP (EA 2021). All samples collected in support of the February 2024 Performance Monitoring event and the Spring and Fall 2024 IWGP sampling events were submitted to ALS Environmental Laboratory (ALS, which is a DoD-certified laboratory) for analysis of VOCs by EPA Method 8260C. In addition, the samples collected in support of the February 2024 Performance Monitoring event were submitted to ALS for analysis of ethane, ethene, and methane by Method RSK-175 and TOC by EPA Method 9060A.

For each of the sites, the groundwater analytical results for detected compounds were compared to the GPS for program analytes, which were derived from NYSDEC Class GA Groundwater Standards, as set forth in New York Code of Rules and Regulations Part 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations and Division of Water, Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values. The sample data associated with the Spring and Fall 2024 IWGP sampling events are described in Sections 3 through 6, while the sample data associated with the February 2024 Performance Monitoring event are described in Sections 4 and 5. The associated analytical laboratory reports, data validation reports, and data usability summary report are provided in **Appendix C**.

2.6 Decontamination and Investigative Derived Waste

Non-dedicated sampling tools (e.g., water level indicators) were decontaminated before and after use in accordance with the procedures in the SMP (EA 2021). Dedicated equipment (e.g., PDB harnesses and disposable bailers) did not require decontamination. No investigative-derived wastewater was generated during the sampling events and all personnel protective equipment (e.g., gloves) and general trash were disposed of offsite as non-regulated solid waste.

2.7 Inspections and Maintenance

Inspections of existing IRP groundwater monitoring/recovery/pumping wells and piezometers were performed on 6 June 2024 (Spring 2024 monitoring event), as well as on 8 and 9 October 2024 (Fall 2024 monitoring event). The purpose of these inspections was to document the physical condition of each well/piezometer and to identify maintenance actions required to keep the wells/piezometers operational.

The well/piezometer inspections included the following:

- Inspection of well/piezometer identification marking and painting, protective casing lock, protective casing cover, monitoring well riser, concrete drainage pad, and guard posts.
- Inspection of each well/piezometer casing annulus for the presence of accumulated water.

The results of the inspections were documented on the well inspection checklists provided in **Appendix D**. The necessity for well/piezometer maintenance was determined by a review of the inspection results. Minor items identified during the inspection (e.g., missing or damaged well labels, bolts, well caps, locks, etc.) were addressed during the subject sampling/monitoring event. Wells/piezometers noted as missing equipment (i.e., PDB harnesses) were only addressed if the well/piezometer was subject to sampling during the current

sampling/monitoring event; all other wells/piezometers will be addressed only if the wells/piezometers are added to the IWGP. More significant well/piezometer repairs (e.g., protective covers and concrete pads) that require a driller, will be addressed during a future mobilization, as necessary.

Finally, the Site 3 landfill cap is subject to inspection on an annual basis. As necessary, maintenance activities are performed to address damage to the cap noted during the annual inspection and/or in response to any reported damage throughout the year. The 2024 annual landfill cap inspection was performed on 6 June 2024. No deficiencies were observed during the inspection and no maintenance activities were required, as documented in the landfill inspection form provided in **Appendix D**,

2.8 System Inspections and Discharge Monitoring

Prior to 2015, monitoring of the groundwater effluent from the pumping wells at Sites 10 and 13 were typically conducted during the fourth week of each month under NFARS Industrial Waste Discharge Permit 15-16 issued by the Niagara County Sewer District No. 1 (2016). The pumping systems at Sites 10 and 13 and the groundwater treatment system (GWTS) at Site 10 were taken offline in 2015 in preparation for the implementation of the RAs at those sites. Groundwater extraction for the pumping systems at Sites 10 and 13 and effluent monitoring of the GWTS at Site 10 was subsequently discontinued in June 2018 (with approval from NYSDEC) as it was determined that the systems were no longer needed to remove chlorinated volatile organic compound (CVOC) mass following the implementation of the RAs at those sites. Accordingly, operation and maintenance inspections of the Site 10 and Site 13 pumping wells and at the GWTS treatment trailer at Site 10 were discontinued in June 2018 (again, with approval from NYSDEC). No extracted groundwater or treatment system effluent was discharged to the Niagara County Sewer System in 2024.

3 Site 3 (LF008) – Landfill

Site 3 is a 9.4-acre inactive landfill located in the eastern portion of NFARS. Landfill operations began in 1952 in a former wetland area along Cayuga Creek and resulted in the placement of 8 to 10 feet of fill materials, including solid and potentially hazardous waste. Two acres of the landfill were subsequently excavated, filled, and sporadically burned. After burning practices ceased in 1966, waste was buried in trenches in the southern portion of the landfill. The remainder of the landfill consists of regraded soil fill that contains small amounts of construction debris. In 1969, landfilling operations ceased and a soil cap measuring from 6 inches to several feet in thickness was installed and the landfill was closed. Site 3 was subsequently identified as a SWMU in 1983. Site activities conducted since that time were focused on addressing groundwater CVOC contamination associated with the landfill.

In 1996, three vertical pumping wells were installed in shallow bedrock, discharging to the publicly owned treatment works (POTW). A groundwater collection trench measuring 150 feet in length and excavated in bedrock was subsequently installed in 1999. Two of the pumping wells were abandoned following installation of the groundwater collection trench and the third pumping well was shut down in 2011. In September 2015, a treatment curtain consisting of a mixture of emulsified vegetable oil and zero valent iron (EZVI) was placed in the groundwater collection trench. Site 3 was removed from the Niagara County Sewer Discharge Permit in May 2016.

The existing IWGP monitoring/sampling network at Site 3 consists of 32 wells/piezometers (including 13 screened in the overburden, 17 screened in the shallow bedrock, and 2 screened in the deep bedrock) and three surface water monitoring and/or sampling locations (**Figure 3-1**). The current scope of elevation monitoring under the IWGP involves the semi-annual collection of groundwater elevations from all 32 wells/piezometers in the network and the collection of surface water elevations at two of three locations (SW3-2 and SW3-3 only) at Site 3. The current sampling scope at Site 3 under the IWGP involves annual sampling of six shallow bedrock wells/piezometers (i.e., MW3-3DA, MW3-4DA, PW3-3A, PZ3-6D, PZ3-7D, and PZ3-8D) and semi-annual sampling of three surface water locations (SW3-2, SW3-3, and SW3-15).

3.1 2024 Field Activities

Groundwater elevations were measured at 32 wells/piezometers and surface water elevations were measured at two locations on 6 June 2024 (Spring monitoring event). PDBs were deployed in one inactive pumping well (PW3-3A) and five shallow bedrock monitoring wells/piezometers (MW3-3DA, MW3-4DA, PZ3-6D, PZ3-7D, and PZ3-8D) on 6 June 2023. PDB retrieval and sample collection activities were performed at locations MW3-3DA, MW3-4DA, PW3-3A, PZ3-7D, and PZ3-8D on 16 July 2024. Surface water grab samples were also collected at locations SW3-2, SW3-3, and SW3-15 on 16 July 2024. All groundwater and surface water samples were submitted to ALS for analysis of VOCs.

Similarly, groundwater elevations were measured at 32 wells/piezometers and surface water elevations were measured at two locations on 8 October 2024 (Fall monitoring event). PDBs were not deployed during the Fall 2024 IWGP sampling event as Site 3 wells/piezometers are only sampled annually during spring events. However, surface water grab samples were collected at locations SW3-2, SW3-3, and SW3-15 on 28 October 2024 and submitted to ALS for analysis of VOCs.

3.2 Groundwater and Surface Water Data

3.2.1 Groundwater Elevations and Flow Direction

The groundwater elevation data collected on 6 June 2024 (Spring event) and 8 October 2024 (Fall event) were used to develop groundwater contours for the overburden and bedrock water bearing units. The monitoring/sampling locations, water level elevations and associated contours are presented on **Figure 3-2** (overburden) and **Figure 3-4** (shallow bedrock) for the Spring 2024 monitoring event and **Figure 3-3** (overburden) and **Figure 3-5** (shallow bedrock) for the Fall 2024 monitoring event. Additional information regarding the groundwater contours and flow gradients are presented in the following sections.

3.2.1.1 Overburden Groundwater and Surface Water

A potentiometric high point appears to be present in the northwest portion of Site 3 in the vicinity of well MW3-1A. Historical reporting indicates that overburden groundwater flows across Site 3 to the southeast toward Cayuga Creek; however, overburden groundwater in the northern portion of Site 3 flows toward the drainage ditch that flows to the east, before turning south and emptying into Cayuga Creek. The overburden adjacent to Cayuga Creek was previously noted as periodically unsaturated during dry periods as the overburden is only three to six feet thick in this area. Finally, historical reporting indicated that the portion of Cayuga Creek located adjacent to Site 3 fluctuates between losing and gaining conditions throughout the year.

Spring 2024 overburden groundwater elevations and contours are presented on **Figure 3-2** and Fall 2024 overburden groundwater elevations and contours are presented on **Figure 3-3**. Consistent with historical observations, the overburden contours for both events indicate that groundwater flow at Site 3 is predominantly to the southeast toward Cayuga Creek. The average overburden horizontal gradient was approximately 1.5 percent for both the Spring and Fall 2024 events, which were consistent with historic measurements.

The surface water elevations at location SW3-2 were compared to the groundwater elevations at nearby piezometer PZ3-5 and the surface water elevations at location SW3-3 were compared to the groundwater elevations at nearby well MW3-7 to determine if the portion of Cayuga Creek adjacent to Site 3 was in a gaining or losing condition during the Spring and Fall 2024 monitoring events. During the Spring 2024 monitoring event, the surface water elevation at location SW3-2 was approximately 2.1 feet higher than the groundwater elevation at piezometer PZ3-5 and the surface water elevation at location SW3-3 was approximately 0.6 feet higher than the groundwater elevation at well MW3-7, indicating that the portion of Cayuga Creek adjacent to Site 3 was in a losing condition during that event. During the Fall 2024 monitoring event, the surface water elevation at location SW3-2 was approximately 2.3 feet lower than the groundwater elevation at piezometer PZ3-5 and the surface water elevation at location SW3-3 was approximately 1.2 feet higher than the groundwater elevation at well MW3-7, indicating that the norther portion of Cayuga Creek adjacent to Site 3 was in a gaining condition, while the southern portion of Cayuga Creek adjacent to Site 3 was in a losing condition during that event.

3.2.1.2 Bedrock Groundwater

Similar to overburden groundwater, a potentiometric high point appears to be present in the northwest portion of Site 3 in the vicinity of well MW3-6D. Historical reporting indicates that bedrock groundwater predominantly flows across Site 3 to the southeast toward Cayuga Creek; however, groundwater northwest of well MW3-6D flows to

the north/northwest. Historical reporting also noted localized variations in groundwater flow due to fractured bedrock. One such historical variation is a localized depression observed in the vicinity of the groundwater collection trench, which is likely attributable to the increased permeability of the trench materials, which was partially excavated into bedrock. Finally, bedrock groundwater east of the creek appears to flow to the west/southwest toward the creek.

Previous annual reports have also indicated that a potential hydraulic connection exists between Cayuga Creek and the shallow-bedrock zone, which is substantiated by the presence of bedrock outcroppings and the relatively thin veneer of sediment present at certain locations along the creek. However, multiple dye tracer tests performed at Site 3 were unable to trace a groundwater connection between wells/piezometers located on the west and east sides of the creek (E&E 2007).

The Spring 2024 bedrock groundwater elevations and contours are presented on **Figure 3-4** and the Fall 2024 bedrock groundwater elevations and contours are presented on **Figure 3-5**. Consistent with prior events, the groundwater elevations appear to be the highest in the vicinity of monitoring well MW3-6D in the northwest portion of the Site. Bedrock groundwater appears to flow radially away from this monitoring well, with the predominant flow direction across the site to the southeast. The magnitude of the shallow bedrock horizontal gradient was very low (less than one percent) during both events, which is consistent with historical observations. A groundwater contour map was not prepared for deep bedrock groundwater as there are only two deep bedrock monitoring wells located within Site 3. However, a comparison of the groundwater elevations in monitoring well MW3-8E (590.88 feet above mean sea level [amsl] during the Spring 2024 monitoring event and 590.39 feet amsl during the Fall 2024 monitoring event) and monitoring well MW3-1E (590.2 feet amsl during the Spring 2024 monitoring event and 589.86 feet amsl during the Fall 2024 monitoring event) indicates that deep bedrock groundwater flows from northwest to southeast between these two wells.

3.2.1.3 Vertical Gradients

Historical documentation indicates that the vertical gradients are variable between upward and downward depending on seasonal fluctuations, zone (i.e., overburden, shallow, or deep bedrock), and proximity to Cayuga Creek. Prior documentation also noted that the vertical gradients were typically upward near Cayuga Creek and downward or variable west of the groundwater collection trench. As noted in prior reports, the presence of artesian shallow bedrock monitoring wells/piezometers in the vicinity of Cayuga Creek indicates upward flow potential near the creek. To evaluate vertical gradients associated with the Spring and Fall 2024 monitoring events, the groundwater elevations for each event were compared for three adjacent wells (one screened in each zone) at two different locations within Site 3, as further described below.

Groundwater elevations were compared for overburden piezometer PZ3-3, shallow bedrock piezometer PZ3-3D, and deep bedrock monitoring MW3-1E, which are located between the groundwater collection trench and Cayuga Creek. The Spring 2024 groundwater elevations for these piezometers/well were as follows: overburden piezometer PZ3-3 (588.14); shallow bedrock piezometer PZ3-3D (588.37 feet amsl); and deep bedrock well MW3-1E (590.20 feet amsl). Similarly, the Fall 2024 groundwater elevations at those same piezometers/well were as follows: overburden piezometer PZ3-3 (587.04 feet amsl); shallow bedrock piezometer PZ3-3D (587.82 feet amsl); and deep bedrock well MW3-1E (589.86 feet amsl). Those data indicate that the groundwater elevation in the deep bedrock well was higher than the groundwater elevation in the shallow bedrock well, which in turn was higher than the groundwater elevation in the overburden well during both events. Based on these

measurements, an upward gradient from bedrock to overburden was present in this portion of Site 3 during the Spring and Fall 2024 monitoring events.

Groundwater elevations were also compared for overburden well MW3-8, shallow bedrock well MW3-8D, and deep bedrock monitoring MW3-8E, which are located in the northwest portion of Site 3. The Spring 2024 groundwater elevations for these wells were as follows: overburden well MW3-8 (596.99); shallow bedrock well MW3-8D (591.26 feet amsl); and deep bedrock well MW3-8E (590.88 feet amsl). The Fall 2024 groundwater elevations at those same wells were as follows: overburden well MW3-8 (595.22 feet amsl); shallow bedrock well MW3-8D (590.54 feet amsl); and deep bedrock well MW3-8E (590.39 feet amsl). A review of those data indicates that the groundwater elevation in the overburden well was higher than the groundwater elevation in the shallow bedrock well, which in turn was higher than the groundwater elevation in the deep bedrock well during both events. Based on these measurements, a downward gradient from overburden to bedrock was present in this portion of Site 3 during the Spring and Fall 2024 monitoring events.

3.2.2 Groundwater Analytical Results

Groundwater samples were collected from six wells/piezometers located within Site 3 (MW3-3DA, MW3-4DA, PW3-3A, PZ3-6D, PZ3-7D, and PZ3-8D) during the Spring 2024 sampling event and submitted for analysis of VOCs. (As noted above, the Site 3 wells/piezometers are not sampled during the fall sampling events.) The groundwater analytical data associated with these samples are presented in **Table 3-1** and on **Figure 3-6**. The laboratory analytical data reports and associated data validation and usability reports are provided in **Appendix C**.

A review of the data presented in **Table 3-1** and on **Figure 3-6** indicates the following VOCs were detected during the Spring 2024 sampling event:

- Acetone was detected in all six wells/piezometers at concentrations ranging from non-detect (with a duplicate sample concentration of 9.9 µg/L) to 10.1 µg/L, which were each less than the GPS of 50 µg/L.
- Chloroform was detected in one well (PW3-3A) at a concentration of 0.42 µg/L (estimated), which was less than the GPS of 7 µg/L.
- Cis-1,2-dichlorethene (cis-1,2-DCE) was detected in five wells/piezometers (MW3-3DA, MW3-4DA, PW3-3A, PZ3-7D, and PZ3-8D) at concentrations ranging from 0.61 µg/L (estimated) to 14.5 µg/L. Further, this constituent was detected in two wells and one piezometer (MW3-4DA, PW3-3A, and PZ3-7D) at concentrations greater than the GPS of 5 µg/L (ranging from 6.0 µg/L to 14.5 µg/L). The maximum concentration was detected in well PW3-3A.
- Trans-1,2-dichlorethene (trans-1,2-DCE) was detected in one well (PW3-3A) at a concentration of 0.36 µg/L (estimated), which was less than the GPS of 5 µg/L.
- Trichloroethene (TCE) was detected in one well (PW3-3A) at a concentration of 2.3 µg/L, which was less than the GPS of 5 µg/L.
- Vinyl Chloride (VC) was detected in five wells/piezometers (MW3-3DA, MW3-4DA, PW3-3A, PZ3-7D, and PZ3-8D) at concentrations ranging from 0.89 µg/L (estimated) to 9.5 µg/L. Further, this constituent was detected in three wells and one piezometer (MW3-3DA, MW3-4DA, PW3-3A and PZ3-7D) at concentrations greater than the GPS of 2 µg/L (ranging from 3.1 µg/L [with a duplicate sample concentration of 3.2 µg/L] to 9.5 µg/L). The maximum concentration was detected in well PW3-3A.

3.2.3 Surface Water Analytical Results

Surface water samples were collected at three locations within Site 3 (SW3-2, SW3-3, and SW3-15) during the Spring and Fall 2024 sampling events to determine whether site-related COCs have entered Cayuga Creek. The surface water analytical data for Site 3 are presented in **Table 3-2** and the sampling locations are illustrated on **Figure 3-6** (Spring 2024 event) and **Figure 3-7** (Fall 2024 event). Readings of pH, temperature, and conductivity were recorded at the time of sample collection and those data are presented in **Table A-2** (**Appendix A**). The laboratory analytical data reports, and associated data validation and data usability reports are provided in **Appendix C**.

A review of the data presented in **Table 3-2** and on **Figures 3-6 and 3-7** indicates that the following VOCs were detected during at least one of the 2024 sampling events:

- Acetone was detected at one location (SW3-15) during the Spring and Fall 2024 sampling events at estimated concentrations of 4.4 µg/L (with a sample duplicate of 4.5 µg/L) and 4.9 µg/L (with a sample duplicate of 4.6 µg/L), respectively.
- Chloroform was not detected at any sampling location during the Spring 2024 sampling event. However, this constituent was detected at all three sampling locations during the Fall 2024 sampling event at estimated concentrations ranging from 0.51 µg/L (with a sample duplicate of 0.57 µg/L) to 0.93 µg/L.

3.3 Data Evaluation and Recommendations

The data from the Spring 2024 sampling event were combined with the data from the seven previous sampling events for each of the Site 3 IWGP wells/piezometers (MW3-3DA, MW3-4DA, PW3-3A, PZ3-6D, PZ3-7D, and PZ3-8D) to evaluate data trends and develop appropriate recommendations. A review of the data tables and trend graphs presented in **Appendix E** indicates the following:

- The total VOC concentrations for the Spring 2024 sampling event were within the range of total VOC concentrations over the prior seven sampling events in MW3-3DA, PW3-3A, PZ3-6D, and PZ3-7D. The total VOC concentrations were approximately 20 µg/L or lower in each well/piezometer, except well PW3-3A (37.6 µg/L). While the total VOC concentrations observed for well MW3-4DA (19 µg/L) and piezometer PZ3-8D (11.6 µg/L) during the Spring 2024 event represent the highest concentrations observed over the last eight monitoring events, those concentrations were largely attributed to acetone (8.9 µg/L for well MW3-4DA and 10.1 µg/L for piezometer PZ3-8D), which is a common laboratory contaminant.
- Except for TCE in well PW3-3A in June 2019 and June 2022, cis-1,2-DCE and VC were the only VOCs detected at concentrations greater than the GPS in wells/piezometers MW3-3DA, MW3-4DA, PW3-3A, PZ3-6D, and PZ3-7D over the last eight sampling events. The data for these wells suggest that attenuation continues to occur based on stable or decreasing cis-1,2-DCE concentrations, combined with consistent detections of VC (which is a daughter compound of cis-1,2-DCE formed through reductive dechlorination).
- Individual constituents were detected at concentrations greater than the corresponding GPS during only one of the last eight sampling events at PZ3-6D (June 2018) and none of the last eight sampling events at PZ3-8D (where no individual constituents have exceeded the corresponding GPS since October 2016).
- Although the total VOC concentrations indicate some variability over time, the trends are stable or declining in five of the six wells/piezometers (MW3-3DA, MW3-4DA, PW3-3A, PZ3-6D, and PZ3-7D) within Site 3. The

trend graph for piezometer PZ3-8D appears to indicate that total VOC concentrations are increasing; however, those concentrations remain generally low (i.e., less than 15 µg/L), with no individual constituents detected at concentrations greater than the corresponding GPS.

- While cis-1,2-DCE and VC continue to be detected at concentrations greater than the GPS in certain shallow bedrock groundwater in certain wells/piezometers both west and east of Cayuga Creek, surface water sample data continues to indicate that those constituents are not impacting surface water quality for the portion of Cayuga Creek located within Site 3.

The following recommendations are made based on the data evaluation provided above:

- Continue annual sampling at six wells/piezometers within Site 3, including: MW3-3DA, MW3-4DA, PW3-3A, PZ6-6D, PZ3-7D and PZ3-8D.
- Continue semi-annual sampling at three surface water sampling locations within Site 3, including: SW3-2, SW3-3, and SW3-15.

4 Site 5 (DS004) – Former BOMARC Missile Site

Site 5 was the primary launching site for Boeing Michigan Aeronautical Research Center (BOMARC) surface-to-air missiles. The missiles were positioned at launcher pits equipped with adjacent launcher shelters. When the missiles were decommissioned, the walls, roof, and machinery associated with the launcher shelters were pushed into the launcher pits and buried with soil. Site 5 currently includes vehicle maintenance buildings and a petroleum, oil, and lubricant storage area for JP-8 jet fuel.

Investigations at Site 5 were initiated after discovery of CVOC contamination in soil near former missile Shelter F-5 and continued when CVOC contamination was also observed in downgradient groundwater near former missile Shelter F-6. Potential risk to human health and the environment was subsequently evaluated and dismissed due to an incomplete exposure pathway. A Resource Conservation and Recovery Act (RCRA) investigation was subsequently conducted that included subsurface soil and groundwater sampling near the former missile shelters and additional groundwater monitoring well installations within the plume of impacted groundwater. The underground sumps of several former launcher pits in the source area were excavated and sampled, and the system formerly used to drain water from the missile launcher sumps was surveyed, sampled, and video-inspected to determine if it was acting as a contaminant migration pathway.

In response to those prior investigations, in-situ bioremediation (injection of a hydrogen release compound [HRC] into the subsurface) was performed as a corrective measure for the Air Force Reserve Center. The initial injection was performed in 2001, with additional injections performed in 2002 and 2006, followed by long-term groundwater monitoring. Prior reports noted that TCE concentrations decreased by several orders of magnitude (and were non-detect in many instances) following the HRC injections in 2001, 2002, and 2006. The injections were effective in reducing CVOC concentrations (particularly TCE) in groundwater; however, complete dechlorination of cis-1,2-DCE and VC did not occur. As a result, EZVI injections were conducted in September 2015 and June 2018 and ABC-Olé injections were conducted in November 2022 to address CVOC concentrations remaining in overburden and shallow bedrock groundwater. Performance monitoring performed following each of the remedial injections indicated that those injections were effective in reducing CVOC concentrations at Site 5.

The existing IWGP monitoring/sampling network at Site 5 consists of 23 wells (including 10 screened in the overburden, 12 screened in the shallow bedrock, and 1 screened in the deep bedrock) (**Figure 4-1**). The current scope of elevation monitoring under the IWGP involves the semi-annual collection of groundwater elevations from all 23 wells in the network, while the current sampling scope under the IWGP involves semi-annual sampling of four overburden wells (MW5-6, RW5-1, RW5-2, and RW5-4) and two shallow bedrock wells (MW5-1DA and MW5-5D) at Site 5. Finally, the performance monitoring activities for the November 2022 ABC-Olé injections involved quarterly sampling of two overburden wells (RW5-1 and RW5-2) and two shallow bedrock wells (MW5-1DA and MW5-5D).

4.1 2024 Field Activities

The fourth and final performance monitoring event to evaluate the effectiveness of the remedial injections completed in November 2022 was completed in February 2024. Groundwater elevations were measured and PDB and RPP samplers were deployed in four wells (MW5-1DA, MW5-5D, RW5-1, and RW5-2) on 12 February

2024. The PDB and RPP samplers were retrieved for sample collection on 26 February 2024 and the collected samples were submitted to ALS for analysis of VOCs, ethane, ethene, methane, and TOC.

Groundwater elevations were measured at 22 wells (well MW5-3D was not located and construction activities were noted in the area) on 6 June 2024 (Spring event). Similarly, groundwater elevations were measured at 21 wells (wells MW5-3D and MW5-7D were not located and construction activities were noted in the area) on 9 October 2024 (Fall event). PDBs were deployed in six wells (MW5-1DA, MW5-5D, MW5-6, RW5-1, RW5-2, and RW5-4) on 6 June 2024 (Spring event) and 9 October 2024 (Fall event). PDB sampler retrieval and sample collection activities were performed on 16 July 2024 (Spring event) and on 28 October 2024 (Fall event). The samples collected from each well were submitted to ALS for analysis of VOCs.

4.2 Groundwater Data

4.2.1 Groundwater Elevations and Flow Direction

The groundwater elevation data collected on 6 June 2024 (Spring event) and 9 October 2024 (Fall event) were used to develop groundwater contours for the overburden and bedrock water bearing units. The monitoring/sampling locations, water level elevations and associated contours are presented on **Figure 4-2** (overburden) and **Figure 4-4** (shallow bedrock) for the Spring 2024 monitoring event and **Figure 4-3** (overburden) and **Figure 4-5** (shallow bedrock) for the Fall 2024 monitoring event. Additional information regarding the groundwater contours and flow gradients are presented in the following sections.

4.2.1.1 Overburden Groundwater

Historically, the predominant direction of overburden groundwater flow at Site 5 is to the south/southwest; however, localized radial flow components (primarily to the west) were also observed in certain areas during previous monitoring events. The localized variability is believed to be a result of the various surface (e.g., paved parking area, drainage swales, and grassy areas) and subsurface features (e.g., buried launch pads and storm drains) which result in different infiltration rates following precipitation events. The variability of the historical groundwater flow directions may also be due to the relatively low magnitude of the horizontal gradient observed during prior monitoring events at the site.

Spring 2024 overburden groundwater elevations and contours are presented on **Figure 4-2** and Fall 2024 overburden groundwater elevations and contours are presented on **Figure 4-3**. Those contour maps indicate that the groundwater flow was toward the south in the central portion of the site, while groundwater flow was toward the southwest in the western portion of the site. The average overburden horizontal gradients were less than one percent for both the Spring and Fall 2024 events, which were generally consistent with historical measurements.

As previously indicated, the Air Force recently implemented a MILCON project involving the installation of a hydrant fueling system at Sites 5 and 13. That project included excavation and dewatering activities (where needed) beginning in Spring 2022 and continuing through 2024. However, no construction activities were performed near Site 5 in 2024. A review of the overburden groundwater contours prior to, during, and following that MILCON project indicates that the construction activities did not appear to have a significant impact on the overburden groundwater flow directions at Site 5.

4.2.1.2 Bedrock Groundwater

As with overburden groundwater, historical data indicate that shallow bedrock groundwater predominantly flows toward the south/southwest at Site 5. However, the magnitude of the horizontal flow gradient at Site 5 has historically been very low (i.e., less than one percent).

The Spring 2024 bedrock groundwater elevations and contours are presented on **Figure 4-4** and the Fall 2024 bedrock groundwater elevations and contours are presented on **Figure 4-5**. The shallow bedrock groundwater flow direction was predominantly to the southwest during the Spring and Fall 2024 events. Consistent with prior measurements, the magnitude of the shallow bedrock horizontal gradient was less than one percent during the Spring and Fall 2024 events. Finally, a deep bedrock groundwater contour map was not prepared as well MW5-1E is the only deep bedrock monitoring well within Site 5.

4.2.1.3 Vertical Gradients

Historical observations indicate that a downward vertical gradient is present from overburden to shallow bedrock to deep bedrock at Site 5. To evaluate vertical gradients associated with the Spring and Fall 2024 monitoring events, the groundwater elevations for each event were compared for three adjacent wells (one screened in each zone) at one location within Site 5, as further described below.

Groundwater elevations were compared for overburden well MW5-6, shallow bedrock well MW5-5D, and deep bedrock monitoring MW5-1E. The Spring 2024 groundwater elevations for these wells were as follows: overburden well MW5-6 (589.04 feet amsl); shallow bedrock well MW5-5D (587.59 feet amsl); and deep bedrock well MW5-1E (584.52 feet amsl). The groundwater elevation in the overburden well was higher than the groundwater elevation in the shallow bedrock well, which in turn was higher than the groundwater elevation in the deep bedrock well during the Spring 2024 event. Based on these measurements, a downward gradient from overburden to bedrock was present in this portion of Site 5 during the Spring 2024 monitoring event. The Fall 2024 groundwater elevations at those same wells were as follows: MW5-6 (588.07 feet amsl); shallow bedrock well MW5-5D (592.30 feet amsl); and deep bedrock well MW5-1E (582.85 feet amsl). The groundwater elevation in shallow bedrock well MW5-5D was higher than the groundwater elevation in overburden well MW5-6, the groundwater elevations in both wells were higher than the groundwater elevation in deep bedrock well MW5-1E. Moreover, the groundwater elevations in nearby shallow bedrock core holes CH5-1 (585.35 feet amsl), CH5-2 (586.47 feet amsl), CH5-3 (584.76 feet amsl), and CH5-4 (587.39 feet amsl) were each less than the elevation in overburden monitoring well MW5-6 and greater than the elevation in deep bedrock monitoring well MW5-1E. Based on these measurements, it was concluded that the shallow bedrock elevation was anomalous and an overall downward gradient from overburden to bedrock was present in this portion of Site 5 during the Fall 2024 monitoring event.

4.2.2 IWGP Groundwater Analytical Results

Groundwater samples were collected from six wells located within Site 5 (MW5-1DA, MW5-5D, MW5-6, RW5-1, RW5-2, and RW5-4) during the Spring and Fall 2024 IWGP sampling events and submitted for analysis of VOCs. The groundwater analytical data associated with these samples are presented in **Table 4-1, Figure 4-6** (Spring 2024 event), and **Figure 4-7** (Fall 2024 event). The laboratory analytical data reports, and associated data usability and data validation reports are provided in **Appendix C**.

A review of the data presented in **Table 4-1, Figure 4-6,** and **Figure 4-7** indicates the following nine VOCs were detected during at least one of the 2024 sampling events:

- 2-Butanone (MEK) was detected in one well (MW5-5D) during the Spring 2024 sampling event at a concentration of 4.8 µg/L (estimated), which was less than the GPS of 50 µg/L. This constituent was not detected in any wells during the Fall 2024 sampling event.
- Acetone was detected in three wells (MW5-5D, MW5-6, and RW5-1) during the Spring 2024 sampling event at estimated concentrations ranging from 3.2 µg/L and 4.8 µg/L, which were each less than the GPS of 50 µg/L. This constituent was detected in all six wells during the Fall 2024 sampling event at estimated concentrations ranging from 3.4 µg/L to 4.6 µg/L (with a parent sample result of 4.5 µg/L), which were each less than the GPS of 50 µg/L.
- Chloroform was not detected in any wells during the Spring 2024 sampling event. However, this constituent was detected in all six wells during the Fall 2024 sampling event at estimated concentrations ranging from 0.42 µg/L to 0.49 µg/L (with a duplicated sample result of 0.44 µg/L), which were each less than the GPS of 7 µg/L.
- Cis-1,2-DCE was detected in all six wells during the Spring 2024 sampling event at concentrations ranging from 0.45 µg/L (estimated) to 58.3 µg/L. However, this constituent was detected in only two wells (RW5-1 and RW5-2) at concentrations greater than the GPS of 5 µg/L (ranging from 13.3 µg/L to 58.3 µg/L). The maximum concentration was detected in well RW5-1. This constituent was also detected in all six wells during the Fall 2024 sampling event at concentrations ranging from 0.43 µg/L (estimated) to 8.4 µg/L. However, this constituent was detected in only one well (MW5-5D) at a concentration greater than the GPS of 5 µg/L (8.4 µg/L).
- Iodomethane was detected in one well (RW5-1) during the Spring 2024 sampling event at a concentration of 0.44 µg/L (estimated), which was less than the GPS of 50 µg/L. This constituent was not detected in any wells during the Fall 2024 sampling event.
- Toluene was detected in five wells (MW5-5D, MW5-6, RW5-1, RW5-2, and RW5-4) during the Spring 2024 sampling event at concentrations ranging from 0.34 µg/L (estimated) to 6 µg/L. However, this constituent was detected in only one well (RW5-1) at a concentration greater than the GPS of 5 µg/L (6 µg/L). This constituent was also detected in four wells (MW5-6, RW5-1, RW5-2, and RW5-4) during the Fall 2024 sampling event at concentrations ranging from 0.55 µg/L (estimated) to 4.1 µg/L (with a parent sample of 3.8 µg/L), which were each less than the GPS of 5 µg/L.
- Trans-1,2-dichloroethene (trans-1,2-DCE) was detected in one well (RW5-1) during the Spring 2024 sampling event at a concentration of 2.0 µg/L, which was less than the GPS of 5 µg/L. This constituent was also detected in two wells (MW5-5D and RW5-1) during the Fall 2024 sampling event at estimated concentrations ranging from 0.47 µg/L (with a sample duplicate of 0.55 µg/L) to 0.52 µg/L, which were both less than the GPS of 5 µg/L.
- TCE was detected in three wells (MW5-5D, MW5-6, and RW5-1) during the Spring 2024 sampling event at concentrations ranging from 0.7 µg/L (estimated) to 2.1 µg/L, which were each less than the GPS of 5 µg/L. This constituent was detected in the same three wells during the Fall 2024 sampling event at concentrations ranging from 0.81 µg/L (estimated, with a parent sample of 0.89 µg/L [estimated]) to 6.4 µg/L. However, this constituent was detected in only one well (MW5-5D) at a concentration greater than the GPS of 5 µg/L (6.4 µg/L).

- VC was detected in four wells (MW5-6, RW5-1, RW5-2, and RW5-4) during the Spring 2024 sampling event at concentrations ranging from 0.38 µg/L (estimated) to 97.9 µg/L. However, this constituent was detected in only two wells (RW5-1 and RW5-2) at concentrations greater than the GPS of 2 µg/L (ranging from 26.8 µg/L to 97.9 µg/L). The maximum concentration was detected in well RW5-1. This constituent was also detected in three wells (MW5-5D, RW5-1, and RW5-4) during the Fall 2024 sampling event at concentrations ranging from 0.49 µg/L (estimated) to 6.8 µg/L. However, this constituent was detected in only one well (MW5-5D) at a concentration greater than the GPS of 2 µg/L (6.8 µg/L).

4.2.3 Remedial Injection Performance Monitoring Analytical Results

Four quarterly performance monitoring events were performed at Site 5 to evaluate the effectiveness of the remedial injections completed in November 2022. Three quarterly events were completed in 2023 and the fourth and final performance monitoring event was performed in February 2024. Groundwater samples were collected from four wells (MW5-1DA, MW5-5D, RW5-1, and RW5-2) during each quarterly event for analysis of VOCs, dissolved gases, and TOC. The groundwater analytical data associated with these samples are presented in **Table 4-2** and on **Figure 4-8**. The laboratory analytical data reports and associated data usability and data validation reports are provided in **Appendix C**. Data collected as part of the quarterly performance monitoring events and subsequent Spring and Fall 2024 IGWP sampling events indicate the following:

- MW5-1DA - Cis-1,2-DCE and VC were detected in this well at concentrations greater than the corresponding GPS (5 µg/L and 2 µg/L, respectively) during the November 2023 event. However, those constituents were less than the corresponding GPS during the other three performance monitoring events, as well as the Spring and Fall 2024 IWGP sampling events.
- MW5-5D – Cis-1,2-DCE was detected in this well at concentrations greater than the GPS of 5 µg/L during the third and fourth performance monitoring events, as well as the Fall 2024 IWGP sampling event at concentrations ranging from 5.3 µg/L to 8.4 µg/L. However, those levels were significantly lower than observed at this well during the Spring 2022 pre-injection IWGP sampling event (31.2 µg/L). VC was detected at concentrations greater than the GPS of 2 µg/L during all four performance monitoring events, as well as the Fall 2024 IWGP sampling event at concentrations ranging from 3.7 µg/L to 10.6 µg/L. As with cis-1,2-DCE, those levels were significantly lower than observed at this well during the Spring 2022 pre-injection IWGP sampling event (28.9 µg/L). Finally, the total molar CVOCs for the Fall 2024 sampling event represent an approximate 87% decrease when compared to the Spring 2022 IWGP sampling event.
- RW5-1 – Elevated concentrations of cis-1,2-DCE (1,390 µg/L) and VC (767 µg/L) were detected in this well prior to the November 2022 injections. Concentrations of those constituents immediately decreased to below the GPS in the first three performance monitoring events following the injections, rebounding to above the GPS during the fourth performance monitoring event and the Spring 2024 IGWP sampling event, before returning below the GPS for the November 2024 IWGP sampling event. Finally, the total molar CVOCs for the Fall 2024 sampling event represent an approximate 99% decrease when compared to the Spring 2022 IWGP sampling event.

- RW5-2 – As with RW5-1, elevated concentrations of cis-1,2-DCE (358 µg/L) and VC (223 µg/L) were detected in this prior to the November 2022 injections. Concentrations of those constituents remained high (and in the case of VC, increased) for the Fall 2022 pre-injection IWGP sampling event, before decreasing following the injections. Specifically, concentrations of cis-1,2-DEC decreased to less than the GPS for all four performance monitoring events, rebounding to slightly above the GPS during the Spring 2024 IGWP sampling event, before returning below the GPS for the November 2024 IWGP sampling event. Similarly, the VC concentrations decreased to slightly above the GPS during the April 2023 performance monitoring event, dropping below the GPS for the next two performance monitoring events, rebounding to slightly greater than the GPS for the fourth performance monitoring event and Spring 2024 IWGP sampling event, before dropping below the GPS for the Fall 2024 IWGP sampling event. Finally, the total molar CVOCs for Fall 2024 IWGP event represent an approximate 99% decrease when compared to the Fall 2022 IWGP sampling event.
- Based on the above data, the biogeochemical parameter data collected from wells MW5-5D, RW5-1, and RW5-2 were reviewed (MW5-1DA was not reviewed as the CVOC concentrations in that well are routinely less than the corresponding GPS). Those biogeochemical data for those wells indicated the following:
  - Ethane and/or ethene were detected in wells MW5-5D, RW5-1, and RW5-2 during each of the four performance monitoring events. These results indicate that the microbes required for complete dechlorination are present and active in groundwater at Site 5.
  - Methane concentrations in well MW5-5D increased to greater than 5 mg/L wells RW5-1 and RW5-2 increased to greater than 5 mg/L for the second and third performance monitoring events but declined to approximately 0.5 mg/L by the fourth performance monitoring event, indicating that MW5-5D is returning to ambient conditions. Methane concentrations in wells RW5-1 and RW5-2 also increased to greater than 5 mg/L for the second performance monitoring event and remained above that level through the fourth performance monitoring event, indicating that reducing conditions persisted more than one year following the injections.
  - TOC concentrations in each well increased to greater than 100 mg/L by the second performance monitoring event. However, the TOC concentrations in each well decreased to less than 10 mg/L during the fourth performance monitoring event, indicating that the organic carbon was being consumed by ambient bacteria, including dechlorinating species.

The above data demonstrated sustained degradation of CVOCs in wells MW5-5D, RW5-1, and RW5-2 and the ability to treat the remaining CVOC mass in Site 5 groundwater.

4.3 Data Evaluation and Recommendations

The data from the 2024 performance monitoring and IWGP sampling events were combined with the data from the five (MW5-1DA, MW5-5D, RW5-1, and RW5-2) or six (MW5-6 and RW5-4) previous sampling events to evaluate data trends and develop appropriate recommendations. A review of the data tables and trend graphs presented in **Appendix E** indicates the following:

- The total VOC concentrations for the February 2024 performance monitoring event (where applicable) and the Spring and Fall 2024 IWGP sampling events were within the range of total VOC concentrations over the prior five or six sampling events for each of the Site 5 wells. Also, the total VOC concentrations were less than 20 µg/L in each well during each monitoring event, except well MW5-5D (26.89 µg/L).

- Cis-1,2-DCE and VC were the two constituents detected most frequently at concentrations greater than the corresponding GPS in wells MW5-1DA, MW5-5D, RW5-1, and RW5-2 over the last eight sampling events. The data for these wells suggest that attenuation continues to occur based on stable or decreasing cis-1,2-DCE concentrations, combined with consistent detections of VC (which is a daughter compound of cis-1,2-DCE formed through reductive dechlorination). In addition, chloroethane and toluene (five of eight sampling events) were detected in well RW5-1 at concentrations greater than the corresponding GPS in four and five of the last eight sampling events, respectively. Certain additional constituents were sporadically detected at concentrations greater than the corresponding GPS over the last eight sampling events, including acetone (one of eight events at well MW5-6), TCE (one of eight events at well MW5-5D), trans-1,2-DCE (one of eight events at well RW5-1).
- Individual constituents were detected at concentrations greater than the corresponding GPS during only one of the last eight sampling events at wells MW5-1DA (cis-1,2-DCE and VC in November 2023) and MW5-6 (acetone in July 2021) and in none of the last eight sampling events at well RW5-4.
- Although the total VOC concentrations indicate some variability over time, the trends are stable or declining in five of the six Site 5 wells/piezometers (MW5-5D, MW5-6, RW5-1, RW5-2, and RW5-4). The trend graph for well MW5-1DA appears to indicate that total VOC concentrations are increasing; however, this is largely attributable to the November 2023 sample, which represents the only exceedances of the GPS for cis-1,2-DCE and VC over the last eight sampling events. The total VOC concentrations for that well over the three sampling events (February, June, and November 2024) were each less than 5 µg/L.
- A review of the 2023 and 2024 performance monitoring groundwater data indicates that the November 2022 remedial injections were effective in reducing CVOC concentrations in Site 5 groundwater. The total VOC concentrations in bedrock well MW5-5D continues to indicate an overall decreasing trend following the 2018 EZVI and 2022 ABC-Olé injection. The total VOC concentrations in this well have decreased over 99% from approximately 7,980 µg/L in October 2016 to approximately 26 µg/L in November 2024.
- A review of the groundwater data collected prior to, during, and following the MILCON project performed in the vicinity of Site 5 indicates that those construction activities did not appear to have a significant impact on the overburden groundwater flow directions, contours, and/or constituent concentrations.

The following recommendations are made based on the data evaluation provided above:

- Continue semi-annual sampling at wells MW5-1DA, MW5-5D, MW5-6, RW5-1, RW5-2, and RW5-4.
- The results of the 2023 and 2024 performance monitoring data will be evaluated, along with the data from the Spring and Fall 2025 IWGP sampling events, to determine if an additional injection event is recommended for groundwater to achieve the GPS at Site 5.

5 Site 10 (FT005) – Former Fire Training Area No. 1

Historical operations at the Site 10 fire-training area included the burning of waste oil, solvents, and jet fuel as part of fire-training exercises between 1955 and 1963. The former burn pit used for these activities measured approximately 100 feet in diameter. This site is currently unused and covered with thick vegetation. The ground surface slopes to the south toward Cayuga Creek.

An initial Corrective Measure Implementation (CMI) was completed in 1996 to address impacts at Site 10. The CMI used six-phase soil heating within the source area to heat groundwater combined with collection and treatment of soil vapors and condensate. A second CMI was initiated in June 1998, which included groundwater extraction from an overburden groundwater collection trench. Extracted groundwater was initially pumped directly to the POTW for treatment. The CMI was modified in 2002 to include a vertical pumping well near the source area as a secondary means of controlling groundwater migration and to remove residual contaminant mass. An onsite GWTS was added so that groundwater extracted from Site 10 could be treated for VOCs using an air stripper system prior to discharging to the POTW. The GWTS remained in operation until it was taken offline in preparation for the first EZVI injection in September 2015. The GWTS has remained offline since the first EZVI injection as the system is no longer needed to remove CVOC mass. A second injection of EZVI was conducted in June 2018 and an ABC-Olé injection was conducted in November 2022 to address remaining CVOC contamination in groundwater.

The existing IWGP monitoring/sampling network at Site 10 consists of 26 wells and one piezometer (including 11 screened in the overburden, 11 screened in the shallow bedrock, and 5 screened in the deep bedrock) and four surface water monitoring and/or sampling locations (**Figure 5-1**). Also, two surface water monitoring and/or sampling locations (SW99-10 and SW99-14) located downstream of Site 10 are included when discussing the Site 10 monitoring network (**Figure 1-1**). The current scope of elevation monitoring under the IWGP involves the semi-annual collection of groundwater elevations from all 26 wells and one piezometer in the network and the collection of surface water elevations at three of four locations (SW10-5, SW10-6, and SW10-7) within Site 10 and both locations downstream of Site 10 (SW99-10 and SW99-14). The current sampling scope at Site 10 under the IWGP involves annual sampling of two overburden wells and one piezometer (MW10-3, MW10-7, PZ10-7) each spring, annual sampling of five shallow bedrock wells (MW10-1DA, MW10-3D, MW10-4D, MW10-9D, and MW10-10D) and one deep bedrock well (MW10-4E) each fall, and semi-annual sampling of one overburden pumping well (PW10-1) and one shallow bedrock pumping well (PW10-2). Finally, surface water samples are collected semi-annually from four locations within Site 10 (SW10-5, SW10-6, SW10-7, and SW10-8) and one location downstream of Site 10 (SW99-10).

5.1 2024 Field Activities

The fourth and final performance monitoring event to evaluate the effectiveness of the remedial injections completed in November 2022 was completed in February 2024. PDB and RPP samplers were deployed in five wells (MW10-1DA, MW10-7, MW10-10D, MW10-11D, and PW10-1) on 12 February 2024 and retrieved for sample collection on 26 February 2024. The collected samples were submitted to ALS for analysis of VOCs, ethane, ethene, methane, and TOC.

For the Spring 2024 IWGP monitoring event, groundwater elevations were measured at 26 wells and one piezometer and surface water elevations were measured at five locations (three within Site 10 and two downstream of Site 10) on 6 June 2024. PDBs were also deployed in four wells and one piezometer (MW10-3, MW10-7, PW10-1, PW10-2, and PZ10-7) on 6 June 2024. PDB sampler retrieval and sample collection activities were performed on 16 July 2024. The samples collected from each well/piezometer were submitted to ALS for analysis of VOCs.

For the Fall 2024 IWGP monitoring event, groundwater elevations were measured at 26 wells and one piezometer and surface water elevations were measured at three locations (one within Site 10 [SW10-5 and SW10-6 were dry] and two downstream of Site 10) on 8 October 2024. PDBs were deployed in eight wells (MW10-1DA, MW10-3D, MW10-4D, MW10-4E, MW10-9D, MW10-10D, PW10-1, and PW10-2) on 8 and 9 October 2024. PDB sampler retrieval and sample collection activities were performed on 28 October 2024. The samples collected from each well were submitted to ALS for analysis of VOCs.

5.2 Groundwater and Surface Water Data

5.2.1 Groundwater Elevations and Flow Direction

The groundwater elevation data collected on 6 June 2024 (Spring event) and 8 October 2024 (Fall event) were used to develop groundwater contours for the overburden and bedrock water bearing units. The monitoring/sampling locations, water level elevations and associated contours are presented on **Figure 5-2** (overburden), **Figure 5-4** (shallow bedrock), and **Figure 5-6** (deep bedrock) for the Spring 2024 monitoring event and **Figure 5-3** (overburden), **Figure 5-5** (shallow bedrock) and **Figure 5-7** (deep bedrock) for the Fall 2024 monitoring event. Additional information regarding the groundwater contours and flow gradients are presented in the following sections.

5.2.1.1 Overburden Groundwater and Surface Water

Historically, the direction for overburden groundwater flow at Site 10 is predominantly south toward Cayuga Creek; however, overburden groundwater on the western portion of the Site has been noted as flowing west toward the drainage ditch during prior monitoring events. The magnitude of the horizontal hydraulic gradient at Site 10 has exhibited localized variability ranging from 0.5 to 2.6 percent, especially in the vicinity of pumping well PW10-1 and the groundwater collection trench when the GWTP was operational.

Spring 2024 overburden groundwater elevations and contours are presented on **Figure 5-2** and Fall 2024 overburden groundwater elevations and contours are presented on **Figure 5-3**. The overburden contours for both events indicate groundwater flow is predominantly to the south/southeast toward Cayuga Creek. Consistent with prior measurements, the average overburden horizontal gradient was approximately 1.9 percent during the Spring 2024 event but was less than 1.1 percent during the Fall 2024 event.

Comparisons of the surface water elevations at location SW10-5 to the groundwater elevations at nearby well MW10-3 and the surface water elevations at locations SW10-6 and/or SW10-7 to the groundwater elevations at nearby piezometer PZ10-7 were performed to determine if the surface water bodies adjacent to Site 10 were in gaining or losing conditions during the Spring and Fall 2024 monitoring events. The surface water elevation at location SW10-5 was approximately 0.6 feet lower than the groundwater elevation at well MW10-3 and the

surface water elevation at location SW10-6 was approximately 4.7 feet lower than the groundwater elevation at piezometer PZ10-7, indicating a gaining condition for the drainage ditch adjacent to the west side of Site 10 during the Spring 2024 event. However, the surface water elevation at location SW10-7 was approximately 0.7 feet higher than the groundwater elevation at piezometer PZ10-7, indicating a losing condition for the portion of Cayuga Creek adjacent to Site 10 during the Spring 2024 event. As previously noted, surface water locations SW10-5 and SW10-6 were dry during the Fall 2024 event, so no conclusion can be made regarding whether the drainage ditch adjacent to the west side of Site 10 was gaining or losing during that event. However, the surface water elevation at location SW10-7 was approximately 2.0 feet higher than the groundwater elevation at piezometer PZ10-7, indicated a losing condition for the portion of Cayuga Creek adjacent to Site 10 during the Fall 2024 event.

5.2.1.2 Bedrock Groundwater

Bedrock groundwater flow at Site 10 has historically been to the south/southeast, consistent with regional groundwater flow. Historical observations have also indicated that the average horizontal gradient across the site was locally variable, increasing with proximity to well MW10-10D.

Spring 2024 shallow bedrock groundwater elevations and contours are presented on **Figure 5-4** and Fall 2024 shallow bedrock groundwater elevations and contours are presented on **Figure 5-5**. Shallow bedrock groundwater elevations at Site 10 were highest at well MW10-10D during the Spring and Fall 2024 monitoring events, with radial groundwater flow away from that well. However, consistent with historical observations, the predominant direction of shallow bedrock groundwater flow at Site 10 was to the south/southeast during both monitoring events. The average shallow bedrock horizontal gradient was approximately 1.6 percent during the Spring 2024 monitoring event and approximately 5.2 percent during the Fall 2024 monitoring event.

Finally, the screened intervals for the five deep bedrock wells located within Site 10 (MW10-1EA, MW10-2E, MW10-3E, MW10-4E, and MW10-1F) are sufficiently similar to enable development of the deep bedrock groundwater contour maps presented on **Figure 5-6** (Spring 2024 event) and **Figure 5-7** (Fall 2024 event). The deep bedrock groundwater contours indicate that the groundwater flow in this unit is predominantly to the south/southwest during both monitoring events. The magnitude of the deep bedrock horizontal gradient was very low (less than one percent) during both monitoring events.

5.2.1.3 Vertical Gradients

Historical documentation has indicated seasonal and localized variability for the vertical gradients at Site 10. To evaluate the vertical gradients north and south of the groundwater collection trench during the Spring and Fall 2024 events, groundwater elevations were compared for three adjacent wells (one each screened in overburden, shallow bedrock, and deep bedrock) at three separate locations within Site 10, as further described below.

Groundwater elevations in the west-central portion of Site 10 were compared for overburden well MW10-2, shallow bedrock well MW10-1DA, and deep bedrock monitoring MW10-1EA, which are located northwest of the groundwater collection trench. The Spring 2024 groundwater elevations for these wells were as follows: overburden well MW10-2 (585.69); shallow bedrock well MW10-1DA (584.36 feet amsl); and deep bedrock well MW10-1EA (583.22 feet amsl). The groundwater elevation in the overburden well was higher than the groundwater elevation in the shallow bedrock well, which in turn was higher than the groundwater elevation in the deep bedrock well. Based on these measurements, a downward vertical gradient was present in this portion of

Site 10 during the Spring 2024 monitoring event. The Fall 2024 groundwater elevations at those same wells were as follows: overburden well MW10-2 (583.03 feet amsl); shallow bedrock well MW10-1DA (582.15 feet amsl); and deep bedrock well MW10-1EA (582.4 feet amsl). While the groundwater elevation in the shallow bedrock well was lower than the groundwater elevation in the deep bedrock well, both groundwater elevations were lower than the groundwater elevation in the overburden well. Based on these measurements, an overall downward vertical gradient was present in this portion of Site 10 during the Fall 2024 monitoring event.

Groundwater elevations were also compared for overburden well MW10-6, shallow bedrock well MW10-4D, and deep bedrock monitoring MW10-4E, which are located north of the groundwater collection trench. The Spring 2024 groundwater elevations for these wells were as follows: overburden well MW10-6 (583.19 feet amsl), shallow bedrock well MW10-4D (584.13 feet amsl), and deep bedrock well MW10-4E (583.53 feet amsl). While the groundwater elevation in the deep bedrock well was lower than the groundwater elevation in the shallow bedrock well, the groundwater elevations in both wells were higher than the groundwater elevation in the overburden well. Based on these data, an upward vertical gradient from bedrock to overburden was present in this portion of Site 10 during the Spring 2024 monitoring event. The Fall 2024 groundwater elevations at those same wells were as follows: overburden well MW10-6 (580.63 feet amsl), shallow bedrock monitoring well MW10-4D (581.76 feet amsl), and deep bedrock monitoring well MW10-4E (582.74 feet amsl). The groundwater elevation in the deep bedrock well was higher than the groundwater elevation in the shallow bedrock well, which in turn was higher than the groundwater elevation in the overburden well. Based on these data, an upward gradient from bedrock to overburden was present in this portion of Site 10 during the Fall 2024 monitoring event.

Finally, groundwater elevations were compared for overburden piezometer PZ10-7, shallow bedrock well MW10-9D, and deep bedrock monitoring MW10-2E, which are located south of the groundwater collection trench. The Spring 2024 groundwater elevations for these wells were as follows: overburden piezometer PZ10-7 (582.13); shallow bedrock well MW10-9D (582.53 feet amsl); and deep bedrock well MW10-2E (582.31 feet amsl). While the groundwater elevation in the deep bedrock well was lower than the groundwater elevation in the shallow bedrock well during both events, both bedrock groundwater elevations were higher than the groundwater elevation in the overburden piezometer. Based on these data, an overall upward gradient from bedrock to overburden was present in this portion of Site 10 during the Spring 2024 monitoring event. The Fall 2024 groundwater elevations at those same wells were as follows: overburden piezometer PZ10-7 (580.35 feet amsl); shallow bedrock well MW10-9D (581.13 feet amsl); and deep bedrock well MW10-2E (581.58 feet amsl). The groundwater elevation in the deep bedrock well was higher than the groundwater elevation in the shallow bedrock, which in turn was higher than the groundwater elevation in the overburden piezometer, indicating an upward gradient from bedrock to overburden was present in this portion of Site 10 during the Fall 2024 monitoring event.

5.2.2 IWGP Groundwater Analytical Results

Groundwater samples were collected from two overburden wells and one overburden piezometer (MW10-3, MW10-7, and PZ10-7) and two pumping wells (PW10-1 and PW10-2) during the Spring 2024 sampling event. Alternatively, Groundwater samples were collected from six shallow bedrock wells (MW10-1DA, MW10-3D, MW10-4D, MW10-4E, MW10-9D, and MW10-10D) and two pumping wells (PW10-1 and PW10-2) during the Fall 2024 sampling event. The samples collected during both events were submitted for analysis of VOCs. The groundwater analytical data associated with these samples are presented in **Table 5-1,** as well as **Figure 5-8**

(Spring 2024 event) and **Figure 5-9** (Fall 2024 event). The laboratory analytical data reports, and associated data usability and data validation reports are provided in **Appendix C**.

A review of the data presented in **Table 5-1, Figure 5-8,** and **Figure 5-9** indicates the following 10 VOCs were detected during at least one of the 2024 sampling events:

- 2-Butanone (MEK) was detected in one well (MW10-7) during the Spring 2024 sampling event at a concentration of 2.4 µg/L (estimated), which was less than the GPS of 50 µg/L. This constituent was also detected in one well (MW10-10D) during the Fall 2024 sampling event at a concentration of 10.1 µg/L, which was less than the GPS of 50 µg/L.
- Acetone was detected in all four wells and one piezometer (MW10-3, MW10-7, PW10-1, PW10-2, and PZ10-7) during the Spring 2024 sampling event at concentrations ranging from 10.2 µg/L to 11.8 µg/L, which were all less than the GPS of 50 µg/L. This constituent was also detected in seven wells (MW10-1DA, MW10-3D, MW10-4D, MW10-4E, MW10-9D, PW10-1, PW10-2) during the Fall 2024 sampling event at estimated concentrations ranging from 3.3 µg/L to 4.7 µg/L, which were each less than the GPS of 50 µg/L.
- Benzene was detected in one well (PW10-2) during the Spring 2024 sampling event at a concentration of 1.9 µg/L, which was greater than the GPS of 1 µg/L. This constituent was also detected in three wells (MW10-1DA, MW10-4D, and MW10-10D) during the Fall 2024 sampling event at concentrations ranging from 0.99 µg/L (estimated) to 3.6 µg/L. Further, this constituent was detected in two wells (MW10-1DA and MW10-10D) at concentrations greater than the GPS of 1 µg/L (ranging from 2.0 µg/L to 3.6 µg/L). The maximum concentration was detected in well MW10-1DA.
- Chloroform was not detected in any well/piezometer during the Spring 2024 sampling event. However, this constituent was detected in seven wells (MW10-1DA, MW10-3D, MW10-4D, MW10-4E, MW10-9D, PW10-1, and PW10-2) during the Fall 2024 sampling event at estimated concentrations ranging from 0.34 µg/L to 0.47 µg/L, which were each less than the GPS of 7 µg/L.
- Cis-1,2-DCE was detected in two wells (MW10-7 and PW10-1) during the Spring 2024 sampling event at estimated concentrations ranging from 0.42 µg/L to 0.49 µg/L, which were both less than the GPS of 5 µg/L. This constituent was also detected in seven wells (MW10-1DA, MW10-4D, MW10-4E, MW10-9D, MW10-10D, PW10-1, and PW10-2) during the Fall 2024 sampling event at concentrations ranging from 0.34 µg/L (estimated) to 120 µg/L. Further, this constituent was detected in three wells (MW10-4E, MW10-9D, and MW10-10D) at concentrations greater than the GPS of 5 µg/L (ranging from 5.4 µg/L to 120 µg/L). The maximum concentration was detected in well MW10-10D.
- Iodomethane was detected in one well and one piezometer (PW10-2 and PZ10-7) during the Spring 2024 sampling event at estimated concentrations ranging from 0.42 µg/L to 0.68 µg/L, which were both less than the GPS of 50 µg/L. This constituent was also detected in one well (PW10-1) during the Fall 2024 sampling event at a concentration of 1.1 µg/L, which was less than the GPS of 50 µg/L.
- Toluene was detected in one well (MW10-7) during the Spring 2024 sampling event at a concentration of 0.61 µg/L (estimated), which was less than the GPS of 5 µg/L. This constituent was also detected in one well (MW10-10D) during the Fall 2024 sampling event at a concentration of 8.4 µg/L, which was greater than the GPS of 5 µg/L.
- Trans-1,2-DCE was detected in one well (MW10-7) during the Spring 2024 sampling event at a concentration of 1.0 µg/L, which was less than the GPS of 5 µg/L. This constituent was also detected in three wells (MW10-

1DA, MW10-4D, and MW10-10D) during the Fall 2024 sampling event at concentrations ranging from 0.33 µg/L (estimated) to 2.3 µg/L, which were each less than the GPS of 5 µg/L.

- TCE was not detected in any well during the Spring 2024 sampling event. However, this constituent was detected in one well (MW10-10D) during the Fall 2024 sampling event at a concentration of 13.6 µg/L, which is greater than the GPS of 5 µg/L.
- VC was not detected in any well during the Spring 2024 sampling event. However, this constituent was detected in six wells (MW10-1DA, MW10-4D, MW10-4E, MW10-9D, MW10-10D, and PW10-1) during the Fall 2024 sampling event at concentrations ranging from 1.2 µg/L to 8.0 µg/L. Further, this constituent was detected in four wells (MW10-1DA, MW10-4D, MW10-9D, and MW10-10D) at concentrations greater than the GPS of 2 µg/L (ranging from 3.4 µg/L to 8.0 µg/L). The maximum concentration was detected in well MW10-4D.

5.2.3 Remedial Injection Performance Monitoring Analytical Results

Four quarterly performance monitoring events were performed at Site 10 to evaluate the effectiveness of the remedial injections completed in November 2022. Three quarterly events were completed in 2023 and the fourth and final performance monitoring event was performed in February 2024. Groundwater samples were collected from five wells (MW10-1DA, MW10-7, MW10-10D, MW10-11D, and PW10-1) during each quarterly event for analysis of VOCs, dissolved gases, and TOC. The groundwater analytical data associated with these samples are presented in **Table 5-2** and on **Figure 5-10**. The laboratory analytical data reports and associated data usability and data validation reports are provided in **Appendix C**. Data collected as part of the quarterly performance monitoring events and subsequent Spring and Fall 2024 IGWP sampling events indicate the following:

- MW10-1DA – Benzene and VC were consistently detected in this well at concentrations slightly greater than the corresponding GPS (1 µg/L and 2 µg/L, respectively) prior to the November 2022 injections. Those constituents continued to be detected at concentrations slightly greater than the GPS following the injections; however, the total molar CVOCs were approximately 63% lower than pre-injection levels.
- MW10-7 – Cis-1,2-DCE and VC were consistently detected in this well at concentrations greater than the GPS (1 µg/L and 2 µg/L, respectively) leading up to the November 2022 injections. However, the concentrations of cis-1,2-DCE decreased to below the GPS during the November 2023 and February 2024 Performance Monitoring events, as well as the Spring 2024 IWGP sampling event. Similarly, the concentrations of VC decreased to below the GPS during the February 2024 Performance Monitoring event and the Spring 2024 IWGP sampling event.
- MW10-10D – The November 2022 pre-injection total VOCs concentration in this well was approximately 1,465 µg/L and included detections of 2-hexanone, chloroform, cis-1,2-DCE, toluene, TCE, and VC at concentrations above the GPS (50 µg/L, 5 µg/L, 5 µg/L, 5 µg/L, 5 µg/L, and 2 µg/L, respectively). The total VOCs concentration in this well immediately decreased following the injections to approximately 262 µg/L in the February 2023 performance monitoring event. Although the total VOCs concentration in this well during the Fall 2024 IWGP sampling event had decreased to approximately 163 µg/L, several constituents (benzene, cis-1,2-DCE, toluene, TCE, and VC) were detected at concentrations greater than the GPS. The total molar CVOCs for the Fall 2024 sampling event represent an approximate 89% decrease when compared to the pre-injection levels.

- MW10-11D – No constituents were detected at concentrations greater than the GPS in this well during any post-injection performance monitoring or IWGP sampling events.
- PW10-1 – No constituents were detected at concentrations greater than the GPS in this well during any post-injection performance monitoring or IWGP sampling events.
- Based on the above data, the biogeochemical parameter data collected from wells MW10-1DA, MW10-7, and MW10-10D were reviewed (MW10-11D and PW10-1 were not reviewed as the CVOC concentrations in those wells are routinely less than the corresponding GPS). Those biogeochemical data for those wells indicated the following:
  - Ethane and/or ethene were detected in wells MW10-1DA and MW10-10D during each of the four performance monitoring events and in well MW10-7 during two of four performance monitoring events. These results indicate that the microbes required for complete dechlorination are present and active in groundwater at Site 10.
  - Methane concentrations in wells MW10-1DA and MW10-10D increased to greater than 5 mg/L and remained above that level through the fourth performance monitoring event. Similarly, methane concentrations increased to greater than 5 mg/L by the second performance monitoring event and have remained above that level. These methane concentrations indicate that reducing conditions persisted more than one year following the injections.
  - While TOC concentrations in well MW10-1DA have remained low (ranging from 9.5 mg/L to 12.4 mg/L), the TOC concentrations in well MW10-7 and MW10-10DA increased to greater than 300 mg/L and greater than 8,100 mg/L, respectively immediately following the injections. The TOC concentrations in both wells decreased to approximately 69 mg/L and 2,260 mg/L, respectively during the fourth performance monitoring event, indicating that the organic carbon was being consumed by ambient bacteria, including dechlorinating species.

The above data demonstrate sustained degradation of CVOCs in wells MW10-1DA, MW10-7, and MW10-10D and the ability to treat the remaining CVOC mass in Site 10 groundwater.

5.2.4 Surface Water Analytical Results

Surface water samples were collected at four locations (SW10-5, SW10-6, SW10-7, and SW10-8) during the Spring 2024 sampling event and at two locations (SW10-7 and SW10-8) during the Fall 2024 sampling event. As previously noted, locations SW10-5 and SW10-6 were dry during the Fall 2024 sampling event, to determine whether site-related COCs have entered Cayuga Creek either directly or via the drainage ditch on the west side of the Site. (As previously indicated, surface water samples were not collected at locations SW10-5 or SW10-6 during the Fall 2024 sampling event as both locations were dry.) Surface water samples were also collected at one location downstream of Site 10 (SW99-10) during the Spring and Fall 2024 sampling events. The surface water analytical data for Site 10 are presented in **Table 5-3, Figure 5-8** (Spring 2024), and **Figure 5-9** (Fall 2024). Readings of pH, temperature, and conductivity were recorded at the time of sample collection and those data are presented in **Table A-2** (**Appendix A**). The laboratory analytical data reports, and associated data usability and data validation reports are provided in **Appendix C**.

A review of the data presented in **Table 5-3, Figure 5-8,** and **Figure 5-9** indicates that the following four VOCs were detected during at least one of the 2024 sampling events:

- Acetone was detected at one location (SW10-7) during the Spring 2024 sampling event at a concentration of 3.6 µg/L (estimated). This constituent was not detected at any location during the Fall 2024 sampling event.
- Chloroform was not detected at any location during the Spring 2024 sampling event. However, this constituent was detected at three locations (SW10-7, SW10-8, and SW99-10) during the Fall 2024 sampling event at estimated concentrations ranging from 0.52 µg/L to 0.68 µg/L.
- Cis-1,2-DCE was detected at two locations (SW10-6 and SW10-8) during the Spring 2024 sampling event at concentrations ranging from 0.51 µg/L (estimated) to 1.5 µg/L. This constituent was not detected at any location during the Fall 2024 sampling event.
- TCE was detected at one location (SW10-5) during the Spring 2024 sampling event at a concentration of 0.90 µg/L (estimated). This constituent was not detected at any location during the Fall 2024 sampling event.

5.3 Data Evaluation and Recommendations

The data from the 2024 performance monitoring and IWGP sampling events were combined with the data from the five (PW10-1), six (MW10-1DA, MW10-7, MW10-10D, and PW10-2), or seven (MW10-3, MW10-3D, MW10-4D, MW10-4E, MW10-9D, and PZ10-7) previous sampling events to evaluate data trends and develop appropriate recommendations. A review of the data tables and trend graphs presented in **Appendix E** indicates the following:

- The total VOC concentrations for the February 2024 performance monitoring event (where applicable) and the Spring and Fall 2024 IWGP sampling events were within the range the total VOC concentrations over the prior five to seven sampling events for all 10 wells and one piezometer at Site 10. Also, the total VOC concentrations were less than 20 µg/L in each well/piezometer during each monitoring event, except well MW10-10D (163.44 µg/L).
- Cis-1,2-DCE and/or VC were the two VOCs detected most frequently at concentrations greater than the corresponding GPS in wells MW10-1DA, MW10-4D, MW10-4E, MW-10-7, MW10-9D, MW10-10D over the last eight sampling events. The data for these wells suggest that attenuation continues to occur based on stable or decreasing cis-1,2-DCE concentrations, combined with consistent detections of VC (which is a daughter compound of cis-1,2-DCE formed through reductive dechlorination). Certain other constituents were also frequently detected at concentrations greater than the corresponding GPS in certain wells (i.e., benzene in wells MW10-1DA and PW10-2; as well as toluene and TCE in well MW10-10D).
- Well MW10-10D continues to demonstrate the highest total VOC concentrations. However, the total VOC concentrations in this well has been substantially reduced following the November 2022 remedial injection activities at Site 10, as noted in Section 5.2.3.
- Benzene, toluene, ethylbenzene, and total xylenes (primarily benzene and toluene) were detected in Site 10 groundwater (most notably in wells MW10-1DA, MW10-10D, and PW10-2); however, these detections represent a small contribution to the total VOC concentrations. Further, benzene groundwater concentrations in well MW10-10D have declined over time from a high of 570 µg/L in 1998 to 2 µg/L during the Fall 2024 monitoring event. The presence of petroleum hydrocarbons and chlorinated solvents is consistent with the former use of Site 10 as a fire training area.
- No VOCs were detected at concentrations greater than the GPS at wells MW10-3 and MW10-3D or piezometer PZ10-7 during any of the last eight sampling events. The last constituent exceedance at well

MW10-3 was in October 2015, while no constituent exceedances have been observed in well MW10-3D since November 2012 or piezometer PZ10-7 since June 2013. Further, vinyl chloride is the only constituent detected in well PW10-1 at concentrations greater than the corresponding GPS (two of last eight sampling events, with the last exceedance in June 2022).

- Although the total VOC concentrations indicate some variability over time, the trends appear to be stable or declining in seven Site 10 wells (MW10-1DA, MW10-3, MW10-4D, MW10-4E, MW10-7, MW10-10D, and PW10-1). The total VOC concentrations appear to be trending higher in three wells (MW10-3D, MW10-9D, and PW10-2) and one piezometer (PZ10-7). However, as previously noted, all detected constituents in well MW10-3D and piezometer PZ10-7 remain at concentrations less than the GPS over the last eight sampling events. Similarly, all detected constituents in well PW10-2 were less than the GPS during the Fall 2024 sampling event. Finally, the total VOC concentrations for the Fall 2023 (28.3 µg/L) and Fall 2024 (15.26 µg/L) sampling events at well MW10-9D are trending lower following the Fall 2022 sampling event (30.4 µg/L).
- The 2023 surface water data for locations SW10-5, SW10-6, SW10-7, SW10-8, and downstream location SW99-10 indicate that only sporadic, low-level detections were observed for certain constituents at certain sampling locations. Further, acetone (Spring 2024) and chloroform (Fall 2024) were the only constituents detected at location SW10-7 (the furthest downstream sampling location at Site 10) during the Spring or Fall 2024 sampling events and chloroform was detected at location SW99-10 (downstream of Site 10) during only the Fall 2024 sampling event.
- A review of the 2023 and 2024 performance monitoring groundwater data indicates that the November 2022 remedial injections were effective in reducing CVOC concentrations in Site 10 groundwater. The total VOC concentrations in bedrock well MW10-10D continues to indicate an overall decreasing trend following the 2018 EZVI and 2022 ABC-Olé injection. The total VOC concentrations in this well have decreased over 93% from approximately 2,373 µg/L in December 2020 to approximately 163 µg/L in October 2024.

The following recommendations are made based on the data evaluation provided above:

- It is recommended that the pumping systems in PW10-1 and PW10-2 and the GWTS remain off as an additional remedial injection was performed at Site 10 on November 2022.
- Maintain the sampling locations and frequencies specified in the SMP (EA, 2021). Specifically, annual sampling will be performed in the spring at wells MW10-3, MW10-7, and PZ10-7, annual sampling will be performed in the fall at wells MW10-1DA, MW10-3D, MW10-4D, MW10-4E, MW10-9D, and MW10-10D, and semi-annual sampling will be performed at wells PW10-1 and PW10-2.
- Continue semi-annual sampling at four surface water sampling locations within Site 10 and one surface water sampling location downstream of Site 10, including: SW10-5, SW10-6, SW10-7, SW10-8, and SW99-10.
- The results of the 2023 and 2024 performance monitoring data will be evaluated, along with the data from the Spring and Fall 2025 IWGP sampling events, to determine if an additional injection event is recommended for groundwater to achieve the GPS at Site 10.

6 Site 13 (ST010) – 4,000 Gallon UST

Site 13 was a former UST that was located near the southeast corner of Building 904 (**Figure 6-1**). The storage tank was originally used to store gasoline, but was also used to store general shop wastes, including solvents, oils, and automotive fluids between 1971 and 1986. In 1986, the UST was emptied and removed. Subsequent groundwater monitoring performed at the Site indicated that contaminant migration had occurred. In response, a RCRA Facility Investigation and Corrective Measures Study were completed. A CMI was subsequently performed in 1998 to reduce contaminant concentrations in groundwater and prevent further vertical or offsite migration. That CMI included a groundwater extraction system consisting of two shallow bedrock pumping wells that discharged directly to the sanitary sewer. Based on decreasing CVOC concentrations, pump operation was modified to a 3-month on/3-month off cycle in 2004. As CVOC concentrations continued to decrease under "steady state" pumping conditions to below the alternative termination criteria specified in the SMP (EA 2021), groundwater extraction was suspended at one of the pumping wells (PW13-4D) on 11 February 2015. In August 2015, an injection of EZVI was conducted at the site to address remaining CVOC contamination in groundwater. Groundwater extraction was suspended at the other pumping well (PW13-1) to implement another EZVI RA in 2018. Groundwater COC concentrations have decreased significantly across the Site following these RAs. There is no surface water at Site 13; therefore, discharge of groundwater impacts to surface water is not a concern at this site, which further reduces the risk to human health and the environment posed by groundwater at Site 13.

The existing IWGP monitoring/sampling network at Site 13 consists of 21 wells/piezometers, including eight screened in the overburden, 12 screened in the shallow bedrock, and one screened in the deep bedrock (**Figure 6-1**). The current scope of elevation monitoring under the IWGP involves the semi-annual collection of groundwater elevations from all 21 wells/piezometers in the network, while the current sampling scope under the IWGP involves semi-annual sampling of four shallow bedrock wells (MW13-4D, MW13-5D, PW13-1, and PW13-4D) at Site 13.

6.1 2024 Field Activities

For the Spring 2024 IWGP monitoring event, groundwater elevations were measured at 19 wells/piezometers on 6 June 1014 (wells MW13-6 and MW13-6D were inaccessible due to construction). PDBs were deployed in four shallow bedrock wells (MW13-4D, MW13-5D, PW13-1, and PW13-4D) on 6 June 2024 and retrieved for sample collection activities on 16 July 2024. The samples collected from each well were submitted to ALS for analysis of VOCs.

For the Fall 2024 IWGP monitoring event, groundwater elevations were measured at 18 wells/piezometers on 8 October 2024 (wells MW13-5A and MW13-6D and piezometer PZ13-1 were dry). PDBs were deployed in four shallow bedrock wells (MW13-4D, MW13-5D, PW13-1, and PW13-4D) on 9 October 2024 and retrieved for sample collection activities on 28 October 2024. The samples collected from each well were submitted to ALS for analysis of VOCs.

6.2 Groundwater Data

6.2.1 Groundwater Elevations and Flow Direction

The groundwater elevation data collected on 6 June 2024 (Spring event) and 8 October 2024 (Fall event) were used to develop groundwater contours for the overburden and bedrock water bearing units. The monitoring/sampling locations, water level elevations and associated contours are presented on **Figure 6-2** (overburden) and **Figure 6-4** (shallow bedrock) for the Spring 2024 monitoring event and **Figure 6-3** (overburden) and **Figure 6-5** (shallow bedrock) for the Fall 2024 monitoring event. Additional information regarding the groundwater contours and flow gradients are presented in the following sections.

6.2.1.1 Overburden Groundwater

Historically, overburden groundwater at Site 13 flows toward the east, with seasonal variations between northeasterly and southeasterly flow. The magnitude of the horizontal gradient historically varied at Site 13 and was observed to be relatively steep on the west side of the site and less steep on the east side when the pumping wells were in operation. A more gradual horizontal gradient was noted at Site 13 following the suspension of pumping well operations.

Spring 2024 overburden groundwater elevations and contours are presented on **Figure 6-2** and Fall 2024 overburden groundwater elevations and contours are presented on **Figure 6-3**. The groundwater contours indicate that groundwater flow was to the northeast during the Spring and Fall 2024 monitoring events. The average horizontal gradient was approximately 1.0 percent during the Spring 2024 event and approximately 1.5 percent during the Fall 2024 event.

As previously indicated, the Air Force recently implemented a MILCON project involving the installation of a hydrant fueling system at Sites 5 and 13. That project included excavation and dewatering activities (where needed) beginning in Spring 2022 and continuing through 2024. However, the construction activities performed in 2024 were limited to the taxiway located south of Site 13. A review of the overburden groundwater contours prior to, during, and following that MILCON project indicates that the construction activities did not appear to have a significant impact on the overburden groundwater flow directions at Site 13.

6.2.1.2 Bedrock Groundwater

Bedrock groundwater flow at Site 13 was historically variable due to a variety of influences, including existing buildings, pavement, seasonal fluctuations in the water table, and operation of the two shallow bedrock pumping wells (PW13-1 and PW13-4D). The average horizontal gradient across the site varied greatly when the pumping wells were in operation. Following the suspension of pumping well operations, the previously observed cones of depression are no longer present, shallow bedrock groundwater flow is predominantly toward the east, and the horizontal gradient is low in magnitude.

Spring 2024 bedrock groundwater elevations and contours are presented on **Figure 6-4** and Fall 2024 bedrock groundwater elevations and contours are presented on **Figure 6-5**. The groundwater contours indicate that groundwater flow was predominantly to the east/southeast during both monitoring events. The average shallow bedrock horizontal gradient was less than 1.6 percent during the Spring 2024 monitoring event and 1.3 percent

during the Fall 2024 monitoring event, which are both consistent with previous measurements. Finally, a deep bedrock groundwater contour map was not prepared as MW13-1E is the only deep bedrock monitoring well located within Site 13.

6.2.1.3 Vertical Gradients

Historical documentation indicates that a downward gradient from overburden to shallow bedrock to deep bedrock is present at Site 13. To evaluate the vertical gradients at Site 13 during the Spring and Fall 2024 monitoring events, groundwater elevations were compared at three adjacent wells (one screened in each zone), as further described below.

Groundwater elevations were compared for overburden well MW13-3, shallow bedrock well MW13-5D, and deep bedrock monitoring MW13-1E. The Spring 2024 groundwater elevations for these wells were as follows: overburden well MW13-3 (591.04 feet amsl), shallow bedrock well MW13-5D (590.48 feet amsl), and deep bedrock well MW13-1E (586.21 feet amsl). The groundwater elevation in the overburden well was higher than the groundwater elevation in the shallow bedrock well, which in turn was higher than the groundwater elevation in the deep bedrock well. Based on these measurements, a downward vertical gradient was present in this portion of Site 13 during the Spring 2024 monitoring event. The Fall 2024 groundwater elevations in the same wells were as follows: MW13-3 (589.97 feet amsl), MW13-5D (590.37 feet amsl), and MW13-1E (583.67 feet amsl). While the groundwater elevation in the shallow bedrock well was higher than the groundwater elevation in the overburden well, both groundwater elevations were higher than the groundwater elevation in the deep bedrock well. Based on these measurements, an overall downward vertical gradient was present in this portion of Site 13 during the Fall 2024 monitoring event.

6.2.2 Groundwater Analytical Results

Groundwater samples were collected from four wells located within Site 13 (MW13-4D, MW13-5D, PW13-1, and PW13-4D) during the Spring and Fall 2024 sampling/events and submitted for analysis of VOCs. The groundwater analytical data associated with these samples are presented in **Table 6-1, Figure 6-6** (Spring 2024 event), and **Figure 6-7** (Fall 2024 event). The laboratory analytical data reports, and associated data usability and data validation reports are provided in **Appendix C**.

A review of the data presented in **Table 6-1, Figure 6-6**, and **Figure 6-7** indicates the following five VOCs were detected during at least one of the 2024 sampling events:

- Acetone was not detected in any well during the Spring 2024 sampling event. However, this constituent was detected in two wells during the Fall 2024 sampling event at estimated concentrations ranging from 3.4 µg/L to 3.9 µg/L, which were each less than the GPS of 50 µg/L.
- Chloroform was not detected in any well during the Spring 2024 sampling event. However, this constituent was detected in all four wells during the Fall 2024 sampling event at estimated concentrations ranging from 0.4 µg/L to 0.50 µg/L, which were each less than the GPS of 7 µg/L.
- Cis-1,2-DCE was detected in three wells (MW13-4D, MW13-5D, and PW13-4D) during the Spring 2024 sampling event at concentrations ranging from 5.5 µg/L to 16.6 µg/L, which were each greater than the GPS of 5 µg/L. The maximum concentration was detected in well MW13-5D. This constituent was also detected in all four wells during the Fall 2024 sampling event at concentrations ranging from 1.1 µg/L to 13.6 µg/L.

Further, this constituent was detected in two wells (MW13-4D and MW13-5D) at concentrations greater than the GPS of 5 µg/L (ranging from 7.5 µg/L to 13.6 µg/L). The maximum concentration was detected in well MW13-5D.

- TCE was detected in only one well (PW13-1) during the Spring 2024 sampling event at a concentration of 0.53 µg/L (estimated), which was less than the GPS of 5 µg/L. This constituent was not detected in any well during the Fall 2024 sampling event.
- VC was detected in two wells (MW13-5D and PW13-1) during the Spring 2024 sampling event at concentrations ranging from 3.7 µg/L to 5.3 µg/L, which were each greater than the GPS of 2 µg/L. Further, this constituent was detected in three wells (MW13-4D, MW13-5D, and PW13-4D) during the Fall 2024 sampling event at concentrations ranging from 0.48 µg/L (estimated) to 3.9 µg/L. However, this constituent was detected in only one well (MW13-4D) at a concentration greater than the GPS of 2 µg/L (3.9 µg/L).

6.3 Data Evaluation and Recommendations

The data from the Spring and Fall 2024 sampling events were combined with the data from the six previous sampling events for each of the Site 13 IWGP wells (MW13-4D, MW13-5D, PW13-1, and P13-4D) to evaluate data trends and develop appropriate recommendations. A review of the data tables and trend graphs presented in **Appendix E** indicates the following:

- The total VOC concentrations for the Spring and Fall 2024 IWGP sampling events were within the range of total VOC concentrations over the prior six sampling events for each of the Site 13 wells. Also, the total VOC concentrations were approximately 20 µg/L or less in each well during each sampling event.
- Cis-1,2-DCE and VC are the only two VOCs detected at concentrations greater than the corresponding GPS in Site 13 groundwater over the last eight sampling events. Further, cis-1,2-DCE and VC were detected at concentrations greater than the corresponding GPS in only two of the last eight sampling events for well PW13-1 and cis-1,2-DCE was detected at concentrations greater than the GPS in only two of the last eight sampling events for well PW13-4D.
- Although the total VOC concentrations indicate some variability over time, the trends appear to be stable or declining in three Site 13 wells (MW13-4D, MW13-5D, and PW13-1). The total VOC concentrations appear to be trending higher in one well (PW13-4D). However, no individual VOCs were detected at concentrations greater than the corresponding GPS during the last four sampling events.
- A review of the groundwater data collected prior to, during, and following the MILCON project performed in the vicinity of Site 13 indicates that those construction activities did not appear to have a significant impact on the overburden groundwater flow directions, contours, and/or constituent concentrations.

The following recommendation is made based on the data evaluation provided above:

- Maintain the current semi-annual sampling frequency for wells MW13-4D, MW13-5D, PW13-1, and PW13-4D.

7 Background Wells - Site 1 (ST011) and Site 8 (DS002)

Annual sampling of background wells is required under the SMP (EA 2021). Accordingly, samples were collected from shallow bedrock monitoring wells MW8-11D during the Spring 2024 sampling event and MW1-1DA during the Fall 2024 sampling event (see **Figure 2-1** for locations). These wells are maintained for groundwater level measurements and sampling as needed until the active IRP sites are completed. Overburden and deep bedrock background wells are not sampled.

PDBs were deployed at well MW8-11D on 6 June 2024 (Spring event) and well MW1-1DA on 9 November 2024 (Fall event) and retrieved for sample collection on 16 July 2024 (Spring event) and 28 October 2024 (Fall event). The groundwater analytical data presented in **Table 7-1** indicate no constituents were detected in well MW8-11D during the Spring 2024 event. Chloroform and iodomethane were the only constituents detected in well MW1-1DA during the Fall 2024 event at estimated concentration of 0.33 µg/L and 0.48 µg/L, which are less than the GPS of 7 µg/L and 50 µg/L, respectively. The laboratory analytical data reports and associated data usability and data validation reports are provided in **Appendix C**.

8 Engineering and Institutional Controls Certification

Section 3 of the SMP (EA 2021) provides the Engineering and Institutional Controls Plan for NFARS. As indicated therein, an installation-wide engineering control consisting of secured perimeter fencing exists and controlled entry points exists at NFARS. Section 3.2 of that document also lists the following site-specific engineering controls at certain sites:

- Site 2 – Additional fencing, locking gate, and personnel training regarding nature of contamination present at the Site.
- Site 3 – Landfill cover system and groundwater treatment curtain/collection trench.
- Site 5 – Additional fencing, locking gate, and personnel training regarding nature of contamination present at the Site.
- Site 6 – Additional fencing, locking gate, and personnel training regarding nature of contamination present at the Site.
- Site 7 – Additional fencing, locking gate, and personnel training regarding nature of contamination present at the Site.
- Site 10 – Groundwater treatment trailer, additional fencing, locking gate, and personnel training regarding nature of contamination present at the Site.
- Site 13 – Additional fencing, locking gate, and personnel training regarding nature of contamination present at the Site.

The Air Force is responsible for inspecting and maintaining the installation fencing, as well as the additional fencing, locked gates, and providing personnel training as needed for the above-referenced sites. The Air Force is also responsible for inspecting and maintaining (as necessary) any active engineering controls present at the installation. As noted in Section 3, two pumping wells previously installed at Site 3 were abandoned following the installation of the treatment curtain/collection trench and a third pumping well was shut down in 2011. Similarly, the groundwater treatment system at Site 10 was shut down in 2015 (as described in Section 6) and the two pumping wells installed at Site 13 were shut down in 2015 and 2018. Therefore, the only active engineering control that requires inspection is the landfill cover system. Information regarding the inspection of the landfill cover system is provided in Section 2.7.

Section 3.3 of the SMP (EA 2021) specifies the following institutional controls for NFARS:

- Compliance with an Environmental Easement/Notice (to be included in a future version of the SMP) to: (1) implement, maintain and monitor engineering control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and (3) limit the use and development of the site to commercial and restricted residential uses only.
- Compliance with existing Installation-Wide Dig Permit program managed by the 914th Airlift Wing Mission Support Group/Civil Engineering-Environmental.
- Review of dig permits for all intrusive work completed at NFARS for potential interactions with sites.
- Operation and maintenance for all engineering controls specified in the SMP.

- Annual inspection of engineering controls at NFARS.
- Groundwater monitoring as specified in the SMP.
- Reporting of data and information pertinent to site management as specified in the SMP.

Section 3.3 of the SMP (EA 2021) also specifies the following site restrictions for NFARS:

- The land within NFARS may only be subject to commercial/industrial use, as long as the long-term engineering controls and institutional controls specified in the SMP are employed.
- The land within NFARS may not be used for a higher level of use, such as unrestricted residential use without additional remediation and amendment of an Environmental Easement/Notice, as approved by the NYSDEC.
- All future activities at NFARS that will potentially disturb remaining contaminated material must be conducted in accordance with the requirements specified in the SMP.
- The use of groundwater for a source of potable or process water is restricted without treatment rendering it safe for the intended use.

Per Section 3.3 of the SMP (EA 2021), the following certification is provided in accordance with NYSDEC DER-10, Chapter 6.3(d):

For each engineering or institutional control identified for the site, I certify that each of the following statements are true:

(a) controls employed at the Installation are unchanged from the previous certification or any changes to the controls were approved by the NYSDEC;

(b) nothing has occurred at the site that impairs the ability of the controls to protect public health and environment;

(c) nothing has occurred at the site that would constitute a violation or failure to comply with the SMP;

(d) access to the site will continue to be provided to NYSDEC to evaluate the continued maintenance of any and all controls.

MAIRS.LINDSAY.LEE.1589783227 Digitally signed by MAIRS.LINDSAY.LEE.1589783227 Date: 2026.03.26 11:37:51 -04'00'

26 March 2026

Lindsay Mairs — Date
Remedial Program Manager

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Tables

Table 1-1
Contaminants of Concern Detected at Concentrations that Historically Exceeded Groundwater Protection Standards at NFARS SWMUs
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Parameter[a,b]	CAS No.	Groundwater Protection Standard (µg/L)
1,1,-Dichloroethene	75-35-4	5
2-Butanone (Methyl Ethyl Ketone)	78-93-3	50
2-Hexanone (Methyl N-Butyl Ketone)	591-78-6	50
Acetone	67-64-1	50
Benzene	71-43-2	1
Carbon Tetrachloride	56-23-5	5
Chloroethane	75-00-3	5
Chloroform	67-66-3	7
Cis-1,2-Dichloroethene	156-59-2	5
Ethylbenzene	100-41-4	5
Iodomethane	74-88-4	5
Toluene	108-88-3	5
Trans-1,2-Dichloroethene	156-60-5	5
Trichloroethene	79-01-6	5
Vinyl Chloride	75-01-6	2
Xylenes (total)	1330-20-7	5

Abbreviations:
CAS = Chemical Abstracts Service
No. = Number
µg/L = Microgram(s) per liter

Notes:
(a) 1,4-dioxane has been detected in one monitoring well (MW8-4D) at a concentration greater than the NYSDEC human health guidance value of 0.35 ppb. However, that result was less than the NYSDOH maximum contaminant level of 1 ppb, which would be the determining factor if Site 8 were proposed for Unrestricted Use/Unrestricted Exposure status and if groundwater were to be used for potable water. Such use is not envisioned or proposed and an institutional control has been established at NFARS restricting the use of groundwater as a source of potable or process water without treatment rendering it safe for the intended use.
(b) PFAS compounds are being investigated under a Site Investigation that is being performed separately from the monitoring/sampling activities performed under the IWGP and summarized in this report. Certain PFAS compounds have been detected at concentrations above the GPS at IRP Sites 2, 6, 7, 9, and 12.

Table 2-1
Summary of Groundwater and Surface Water Elevation Measurement Locations
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Measurement Locations					
Wells/Piezometers	PZ3-1D	MW5-4	MW8-4D	MW10-10D	PZ13-1
Former Site 1	PZ3-2	MW5-4D	MW8-5A	MW10-11	PZ13-1D
MW1-1DA	PZ3-2D	MW5-5A	MW8-8	MW10-11D	PZ13-2
MW1-7A	PZ3-3	MW5-5D	MW8-10D	MW10-12	PZ13-2D
Former Site 2	PZ3-3D	MW5-6	MW8-11	MW10-12D	PZ13-3D
MPL2-1A	PZ3-4	MW5-6D	MW8-11D	MW10-13	PZ13-4
MW2-1DA	PZ3-4D	MW5-7	MW8-11E	MW10-13D	PZ13-4D
Site 3	PZ3-5	MW5-7D	**Site 10**	PW10-1	**Surface Water**
MW3-1A	PZ3-5D	MW5-8	MW10-1DA	PW10-2	**Site 3**
MW3-1DA	PZ3-6	MW5-8D	MW10-1EA	PZ10-7	SW3-2
MW3-1E	PZ3-6D	RW5-1	MW10-1F	**Site 13**	SW3-3
MW3-2	PZ3-7D	RW5-2	MW10-2	MW13-1	**Site 8[(a)]**
MW3-2DA	PZ3-8D	RW5-3	MW10-2E	MW13-1D	SW8-8
MW3-3A	PZ3-9	RW5-4	MW10-3	MW13-1E	SW8-9
MW3-3DA	PZ3-9D	**Former Site 6**	MW10-3D	MW13-2D	**Site 10**
MW3-4DA	**Site 5**	MPL6-2A	MW10-3E	MW13-3	SW10-5
MW3-5D	CH5-01	MPL6-3	MW10-4	MW13-3D	SW10-6
MW3-6A	CH5-02	**Site 8[(a)]**	MW10-4D	MW13-4	SW10-7
MW3-6D	CH5-03	CH8-01	MW10-4E	MW13-4D	**Downstream**
MW3-7	CH5-04	MW8-1	MW10-5D	MW13-5A	SW99-10
MW3-8	MW5-1A	MW8-1E	MW10-6	MW13-5D	SW99-14
MW3-8D	MW5-1DA	MW8-2D	MW10-7	MW13-6	
MW3-8E	MW5-1E	MW8-3	MW10-8	MW13-6D	
PW3-3A	MW5-2D	MW8-3DA	MW10-8D	PW13-1	
PZ3-1	MW5-3D	MW8-4A	MW10-9D	PW13-4D	

Note/Abbreviations:
(a) - As discussed with NYSDEC, the collection of surface water and groundwater elevations at Site 8 was discontinued starting with the Spring 2024 monitoring event until such time that groundwater sampling is resumed at Site 8 to confirm that groundwater at that site achieves the GPS, leading to Site Closure. In the interim, the core hole and monitoring wells at Site 8 will continue to be inspected and maintained until Site Closure (similar to the monitoring wells at Site 7).

CH = Core hole
MW = Monitoring well
PW = Pumping well
PZ = Piezometer
RW = Short-term recovery well
SW = Surface water

Table 2-2
Summary of Groundwater Sampling Locations – Spring and Fall 2024
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Well ID	IWGP Sampling Frequency	IWGP Sample Analyses [a]	Performance Monitoring Sampling Frequency	Performance Monitoring Sample Analyses [a]	Field QC Samples[b]
Background Well					
MW1-1DA	Annual (Fall)	VOCs	--	--	--
MW8-11D	Annual (Spring)		--	--	--
Site 3					
MW-3-3DA	Annual (Spring)	VOCs	--	--	--
MW3-4DA			--	--	--
PW3-3A			--	--	MS/MSD (Spring IWGP Event)
PZ3-6D			--	--	--
PZ3-7D			--	--	Field Duplicate (Spring IWGP Event)
PZ3-8D			--	--	--
Site 5					
MW5-1DA	Semi-Annual	VOCs	Quarterly	VOCs, Gases, TOC	MS/MSD (Spring IWGP Event)
MW5-5D					Field Duplicate (February PM Event)
MW5-6			--	--	Field Duplicate (Spring IWGP Event)
RW5-1			Quarterly	VOCs, Gases, TOC	Field Duplicate (Fall IWGP Event); MS/MSD (February PM and Fall IWGP Events)
RW5-2					--
RW5-4			--	--	--
Site 10					
MW10-1DA	Annual - Fall	VOCs	Quarterly	VOCs, Gases, TOC	--
MW10-3	Annual - Spring		--	--	--
MW10-3D	Annual - Fall		--	--	--
MW10-4D			--	--	--
MW10-4E			--	--	--
MW10-7	Annual - Spring		Quarterly	VOCs, Gases, TOC	--
MW10-9D	Annual - Fall		--	--	--
MW10-10D			Quarterly	VOCs, Gases, TOC	--
MW10-11D	--	--			--
PW10-1	Semi-Annual	VOCs			--
PW10-2			--	--	--
PZ10-7	Annual - Spring		--	--	--
Site 13					
MW13-4D	Semi-Annual	VOCs	--	--	--
MW13-5D			--	--	--
PW13-1			--	--	--
PW13-4D			--	--	--

Notes/Abbreviations:
(a) Field parameter (including temperature, pH, dissolved oxygen, oxidation reduction potential, turbidity, and conductivity) were also measured at the time of sample collection.
(b) A trip blank was also shipped with the field samples.
Gases = Ethane, ethene, methane (RSK-175)
IWGP = Installation-Wide Groundwater Program
PM = Performance Monitoring
TOC = Total Organic Carbon (U.S. Environmental Protection Agency [USEPA] Method 9060A)
VOC = Volatile organic compound (USEPA Method 8260C)
MS/MSD = Matrix spike/matrix spike duplicate

Table 2-3
Summary of Surface Water Sampling Locations - Spring and Fall 2024
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Location	Description	Reference Point	Sample Analysis [a]	Field QA/QC Samples [b]
SW3-2	Cayuga Creek as it enters the base, upstream of Site 3	Nail in wooden railroad tie	VOCs[b]	--
SW3-3	Cayuga Creek near gravel road crossing, downstream of Site 3	East end of west gate (top edge of the bottom rail of gate over creek)	VOCs[b]	MS/MSD (Spring IWGP Event)
SW3-15	Cayuga Creek Adjacent to well ID PZ3-4	Top of small rock outcrop	VOCs[b]	Field Duplicate (Spring and Fall IWGP Events); MS/MSD (Fall IWGP Event)
SW10-5	Drainage ditch upstream of fire-training pit	Top of concrete junction box	VOCs[b]	--
SW10-6	Drainage ditch downstream of fire-training pit at Site 10	Top of pipe	VOCs[b]	--
SW10-7	Cayuga Creek downstream of Site 10 and confluence with drainage ditch	Top of south culvert pipe and cut	VOCs[b]	--
SW10-8	Cayuga Creek upstream of Site 10.	Top of berm at level surface	VOCs[b]	--
SW99-10	Cayuga Creek near taxiway A2 just before it flows off base	Top of concrete culvert	VOCs[b]	--

Notes/Abbreviations:
(a) Field parameter (including temperature, pH, dissolved oxygen, oxidation reduction potential, turbidity, and conductivity) were also measured at the time of sample collection.
(b) A trip blank was also shipped with the field samples.
QA/QC = Quality assurance/quality control
VOC = Volatile organic compound (U.S. Environmental Protection Agency Method 8260C)
MS/MSD = Matrix spike/matrix spike duplicate

Table 3-1
Site 3 - Summary of Groundwater Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date Parent Sample	MW3-3DA MW3-3DA_20240716 7/16/2024	MW3-4DA MW3-4DA_20240716 7/16/2024	PW3-3A PZ3-3A_20240716 7/16/2024	PZ3-6D PZ3-6D_20240716 7/16/2024
Volatile Organic Compounds Detected by Method 8260C (µg/L)[b]						
Acetone	50	µg/L	**8.5**	**8.9**	**9.7**	**8.5**
Chloroform	7	µg/L	< 1.0 U	< 1.0 U	**0.42 J**	< 1.0 U
cis-1,2-Dichloroethene	5	µg/L	**4.8**	**6.0**	**14.5**	< 1.0 U
trans-1,2-Dichloroethene	5	µg/L	< 1.0 U	< 1.0 U	**0.36 J**	< 1.0 U
Trichloroethene	5	µg/L	< 1.0 U	< 1.0 U	**2.3**	< 1.0 U
Vinyl chloride	2	µg/L	**7.3**	**4.1**	**9.5**	< 1.0 U

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date Parent Sample	PZ3-7D PZ3-7D_20240716 7/16/2024	PZ3-7D DUP-03-20240716 7/16/2024 PZ3-7D_20240716	PZ3-8D PZ3-8D_20240716 7/16/2024
Volatile Organic Compounds Detected by Method 8260C (µg/L)[b]					
Acetone	50	µg/L	< 5.0 U	**9.9**	**10.1**
Chloroform	7	µg/L	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	5	µg/L	**7.1**	**7.3**	**0.61 J**
trans-1,2-Dichloroethene	5	µg/L	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	5	µg/L	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	2	µg/L	**3.1**	**3.2**	**0.89 J**

Notes:

(a) New York State Department of Environmental Conservation, Technical and Operational Guidance Series Memorandum #1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 1998 (with updates), Class GA Groundwater Standards and Guidance Values.

(b) Only compounds with at least one detect are presented; bold results indicate a detected value, shaded results exceed the screening criterion.

µg/L = Microgram(s) per liter

MW = Monitoring well

PW = Pumping well

PZ = Piezometer

J = Compound detected, estimated concentation

U = Compound was not detected

Table 3-2
Site 3 - Summary of Surface Water Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Location ID Sample Name Sample Date Parent Sample	SW3-2 SW3-2_20240716 7/16/2024	SW3-2 SW3-2_20241028 10/28/2024	SW3-3 SW3-3_20240716 7/16/2024	SW3-3 SW3-3_20241028 10/28/2024	SW3-15 SW3-15_20240716 7/16/2024
Volatile Organic Compounds Detected by Method 8260C (µg/L)[(a)]						
Acetone	µg/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**4.4 J**
Chloroform	µg/L	< 1.0 U	**0.93 J**	< 1.0 U	**0.74 J**	< 1.0 U

Analyte	Location ID Sample Name Sample Date Parent Sample	SW3-15 DUP-01-20240716 7/16/2024 SW3-15_20240716	SW3-15 SW3-15_20241028 10/28/2024	SW3-15 DUP-SW_20241028 10/28/2024 SW3-15_20241028
Volatile Organic Compounds Detected by Method 8260C (µg/L)[(a)]				
Acetone	µg/L	**4.5 J**	**4.9 J**	**4.6 J**
Chloroform	µg/L	< 1.0 U	**0.51 J**	**0.57 J**

Notes:
(a) Only compounds with at least one detect are presented; bold results indicate a detected value.
µg/L = Microgram(s) per liter
SW = Surface water
J = Compound detected, estimated concentration
U = Compound was not detected

Table 4-1
Site 5 - Summary of IWGP Groundwater Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date Parent Sample	MW5-1DA MW5-1DA_20240716 7/16/2024	MW5-1DA MW5-1DA_20241028 10/28/2024	MW5-5D MW5-5D_20240716 7/16/2024	MW5-5D MW5-5D_20241028 10/28/2024	MW5-6 MW5-6_20240716 7/16/2024	MW5-6 DUP-02-20240716 7/16/2024 MW5-6_20240716	MW5-6 MW5-6_20241028 10/28/2024	RW5-1 RW5-1_20240716 7/16/2024
Volatile Organic Compounds Detected by Method 8260C[b]										
2-Butanone (MEK)	50	µg/L	< 5.0 U	< 5.0 U	**4.8 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	50	µg/L	< 5.0 U	**3.4 J**	**4.8 J**	**3.8 J**	**3.8 J**	**3.6 J**	**3.8 J**	**3.2 J**
Chloroform	7	µg/L	< 1.0 U	**0.42 J**	< 1.0 U	**0.43 J**	< 1.0 U	< 1.0 U	**0.47 J**	< 1.0 U
cis-1,2-Dichloroethene	5	µg/L	**0.45 J**	**0.56 J**	**3.2**	**8.4**	**2.6**	**2.4**	**3.3**	**58.3**
Iodomethane	50	µg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.44 J-**
Toluene	5	µg/L	< 1.0 U	< 1.0 U	**0.34 J**	< 1.0 U	**2.3**	**2.3**	**2.3**	**6.0**
trans-1,2-Dichloroethene	5	µg/L	< 1.0 U	< 1.0 U	< 1.0 U	**0.52 J**	< 1.0 U	< 1.0 U	< 1.0 U	**2.0**
Trichloroethene	5	µg/L	< 1.0 U	< 1.0 U	**2.1**	**6.4**	**1.2**	**1.2**	**1.6**	**0.70 J**
Vinyl chloride	2	µg/L	< 1.0 U	< 1.0 U	< 1.0 U	**6.8**	**1.1**	**1.0**	< 1.0 U	**97.9**

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date Parent Sample	RW5-1 RW5-1_20241028 10/28/2024	RW5-1 DUP_20241028 10/28/2024 RW5-1_20241028	RW5-2 RW5-2_20240716 7/16/2024	RW5-2 RW5-2_20241028 10/28/2024	RW5-4 RW5-4_20240716 7/16/2024	RW5-4 RW5-4_20241028 10/28/2024
Volatile Organic Compounds Detected by Method 8260C[b]								
2-Butanone (MEK)	50	µg/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	50	µg/L	**4.5 J**	**4.6 J**	< 5.0 U	**3.7 J**	< 5.0 U	**3.7 J**
Chloroform	7	µg/L	**0.49 J**	**0.44 J**	< 1.0 U	**0.42 J**	< 1.0 U	**0.48 J**
cis-1,2-Dichloroethene	5	µg/L	**1.1**	**0.98 J**	**13.3**	**0.67 J**	**0.46 J**	**0.43 J**
Iodomethane	50	µg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	5	µg/L	**3.8**	**4.1**	**2.2**	**0.73 J**	**1.1**	**0.55 J**
trans-1,2-Dichloroethene	5	µg/L	**0.47 J**	**0.55 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	5	µg/L	**0.89 J**	**0.81 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	2	µg/L	**1.5**	**1.3**	**26.8**	< 1.0 U	**0.38 J**	**0.49 J**

Notes:

(a) New York State Department of Environmental Conservation, Technical and Operational Guidance Series Memorandum #1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 1998 (with updates), Class GA Groundwater Standards and Guidance Values.

(b) Only compounds with at least one detect are presented; bold results indicate a detected value, shaded results exceed the screening criterion.

µg/L = Microgram(s) per liter

MW = Monitoring well

RW = Recovery well

J = Compound detected, estimated concentration

U = Compound was not detected

Table 4-2
Site 5 - Remedial Injection Performance Monitoring Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date Parent Sample	MW5-1DA MW5-1DA-20230411 4/11/2023	MW5-1DA MW5-1DA-20230627 6/27/2023	MW5-1DA MW5-1DA-20231102 11/2/2023	MW5-1DA MW5-1DA-20240226 2/26/2024	MW5-5D MW5-5D-20230411 4/11/2023	MW5-5D DUP-01-20230411 4/11/2023 MW5-5D-20230627
Volatile Organic Compounds Detected by Method 8260C[b]								
2-Butanone (MEK)	50	ug/l	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	50	ug/l	< 5.0 U	**3.6 J**	**10.3**	< 5.0 U	**6.8**	**5.2**
Chloroethane	5	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	5	ug/l	< 1.0 U	**0.74 J**	**88.1**	**0.76**	**3.8**	**4.7**
Toluene	5	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	5	ug/l	< 1.0 U	< 1.0 U	**0.43 J**	< 1.0 U	**0.34 J**	**0.47 J**
Trichloroethene	5	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.4**	**1.6**
Vinyl chloride	2	ug/l	< 1.0 U	< 1.0 U	**8.3**	< 1.0 U	**3.1**	**4.3**
Gases Detected by Method RSK-175								
Ethane	NS	ug/l	< 5.2 UJ	< 5.2 UJ	< 5.2 UJ	< 5.2 U	**7.6 J**	**5.1 J**
Ethene	NS	ug/l	< 7.1 UJ	< 7.1 UJ	< 7.1 UJ	< 7.1 U	**3.5 J**	< 7.1 UJ
Methane	NS	ug/l	< 2.6 UJ	< 2.6 UJ	**11.1 J**	**1.5 J**	**678 J**	**463 J**
Total Organic Carbon Detected by Method 9060A								
Total Organic Carbon	NS	mg/l	**5.7**	**6.9**	**6.6**	**3.0**	**5.1**	**6.6**

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date Parent Sample	MW5-5D MW5-5D-20230627 6/27/2023	MW5-5D DUP-02-20230627 6/27/2023 MW5-5D-20230627	MW5-5D MW5-5D-20231102 11/2/2023	MW5-5D DUP-03-20231102 11/2/2023 MW5-5D-20231102	MW5-5D MW5-5D-20240226 2/26/2024	MW5-5D DUP-01-20240226 2/26/2024 MW5-5D-20240226
Volatile Organic Compounds Detected by Method 8260C[b]								
2-Butanone (MEK)	50	ug/l	< 5.0 U	< 5.0 U	**2.5 J**	NC	< 5.0 U	< 5.0 U
Acetone	50	ug/l	**4.5 J**	**4.0 J**	**10.8**	NC	< 5.0 U	< 5.0 U
Chloroethane	5	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	NC	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	5	ug/l	**4.0**	**3.9**	**7.2**	NC	**5.4**	**5.2**
Toluene	5	ug/l	**0.65 J**	**0.65 J**	< 1.0 U	NC	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	5	ug/l	**0.47 J**	**0.42 J**	**1.3**	NC	**0.57 J**	**0.53 J**
Trichloroethene	5	ug/l	**1.7**	**1.6**	**1.8**	NC	**2.3**	**2.4**
Vinyl chloride	2	ug/l	**7.1**	**6.7**	**10.6**	NC	**4.1**	**3.9**
Gases Detected by Method RSK-175								
Ethane	NS	ug/l	**41.9 J**	**12.1 J**	**21.3 J**	**8.0 J**	**2.2 J**	**2.4 J**
Ethene	NS	ug/l	**38.1 J**	**16.5 J**	**8.2 J**	**8.7 J**	< 7.1 U	**1.0 J**
Methane	NS	ug/l	**5270 J**	**1570 J**	**8010 J**	**4390 J**	**469**	**553**
Total Organic Carbon Detected by Method 9060A								
Total Organic Carbon	NS	mg/l	**105**	**109**	**40.3**	**42.6**	**3.8**	**5.2**

Table 4-2
Site 5 - Remedial Injection Performance Monitoring Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date Parent Sample	RW5-1 RW5-1-20230411 4/11/2023	RW5-1 RW5-1-20230627 6/27/2023	RW5-1 RW5-1-20231102 11/2/2023	RW5-1 DUP-01-20231102 11/2/2023 RW5-1-20231102	RW5-1 RW5-1-20240226 2/26/2024	RW5-2 RW5-2-20230411 4/11/2023
Volatile Organic Compounds Detected by Method 8260C[b]								
2-Butanone (MEK)	50	ug/l	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	50	ug/l	< 5.0 U	**4.1 J**	**11.2**	**12.7**	< 5.0 U	**7.3**
Chloroethane	5	ug/l	**5.8**	**5.6**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	5	ug/l	**2.6**	**1.6**	**1**	**1.1**	**218**	**2.4**
Toluene	5	ug/l	**5.6**	**6.3**	**11.7**	**11.4**	**3.1**	< 1.0 U
trans-1,2-Dichloroethene	5	ug/l	**0.56 J**	**0.47 J**	**0.36 J**	**0.38 J**	**3.5**	< 1.0 U
Trichloroethene	5	ug/l	**0.82 J**	**1.0**	**0.76 J**	**0.67 J**	**1.1**	< 1.0 U
Vinyl chloride	2	ug/l	**3.9**	**1.3 J+**	**0.94 J**	**1.0**	**189**	**3**
Gases Detected by Method RSK-175								
Ethane	NS	ug/l	**5.3 J**	**2.0 J**	**18.7 J**	NC	**21.1**	**7.4 J**
Ethene	NS	ug/l	< 7.1 UJ	< 7.1 UJ	< 7.1 UJ	NC	**71.2**	< 7.1 UJ
Methane	NS	ug/l	**8330 J**	**9050 J**	**8720 J**	NC	**6680**	**5420 J**
Total Organic Carbon Detected by Method 9060A								
Total Organic Carbon	NS	mg/l	**217**	**159**	**24.7 J-**	NC	**7.3**	**31.9**

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date Parent Sample	RW5-2 RW5-2-20230627 6/27/2023	RW5-2 DUP-01-20230627 6/27/2023 RW5-2-20230627	RW5-2 RW5-2-20231102 11/2/2023	RW5-2 RW5-2-20240226 2/26/2024
Volatile Organic Compounds Detected by Method 8260C[b]						
2-Butanone (MEK)	50	ug/l	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	50	ug/l	**5.4**	**4.5 J**	**8.9**	< 5.0 U
Chloroethane	5	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	5	ug/l	**1.7**	**1.5**	**0.74 J**	**0.92 J**
Toluene	5	ug/l	**0.74 J**	**0.76 J**	**0.88 J**	**0.72 J**
trans-1,2-Dichloroethene	5	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	5	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	2	ug/l	**0.83 J+**	**0.78 J**	< 1.0 U	**10**
Gases Detected by Method RSK-175						
Ethane	NS	ug/l	**4.5 J**	NC	**9.0 J**	**28.4**
Ethene	NS	ug/l	< 7.1 UJ	NC	< 7.1 UJ	**2.7 J**
Methane	NS	ug/l	**6350 J**	NC	**6390 J**	**5970**
Total Organic Carbon Detected by Method 9060A						
Total Organic Carbon	NS	mg/l	**137**	NC	**42.4**	**8.8**

Notes:

(a) New York State Department of Environmental Conservation, Technical and Operational Guidance Series Memorandum #1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 1998 (with updates), Class GA Groundwater Standards and Guidance Values.
(b) Only compounds with at least one detect are presented; bold results indicate a detected value, shaded results exceed the screening criterion.
µg/L = Microgram(s) per liter
MW = Monitoring well
NC = Sample not collected and submitted for this analysis
NS = No Standards
RW = Recovery well
J = Compound detected, estimated concentration
J+ = Compound detected, estimated concentration that may be biased high
U = Compound was not detected

Table 5-1
Site 10 - Summary of IWGP Groundwater Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation-Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date	MW10-1DA MW10-1DA_20241028 10/28/2024	MW10-3 MW10-3_20240716 7/16/2024	MW10-3D MW10-3D_20241028 10/28/2024	MW10-4D MW10-4D_20241028 10/28/2024	MW10-4E MW10-4E_20241028 10/28/2024	MW10-7 MW10-7_20240716 7/16/2024	MW10-9D MW10-9D_20241028 10/28/2024
Volatile Organic Compounds Detected by Method 8260C[b]									
2-Butanone (MEK)	50	ug/l	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.4 J**	< 5.0 U
Acetone	50	ug/l	**3.4 J**	**11.0**	**4.7 J**	**3.3 J**	**3.6 J**	**11.8**	**3.3 J**
Benzene	**1**	ug/l	**3.6**	< 1.0 U	< 1.0 U	**0.99 J**	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	7	ug/l	**0.47 J**	< 1.0 U	**0.34 J**	**0.42 J**	**0.38 J**	< 1.0 U	**0.36 J**
cis-1,2-Dichloroethene	**5**	ug/l	**1.5**	< 1.0 U	< 1.0 U	**2.5**	**6.3**	**0.49 J**	**5.4**
Iodomethane	50	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	**5**	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.61 J**	< 1.0 U
trans-1,2-Dichloroethene	5	ug/l	**0.33 J**	< 1.0 U	< 1.0 U	**0.34 J**	< 1.0 U	**1.0**	< 1.0 U
Trichloroethene	**5**	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	**2**	ug/l	**3.4**	< 1.0 U	< 1.0 U	**8.0**	**1.2**	< 1.0 U	**6.2**

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date	MW10-10D MW10-10D_20241028 10/28/2024	PW10-1 PW10-1_20240716 7/16/2024	PW10-1 PW10-1_20241028 10/28/2024	PW10-2 PW10-2_20240716 7/16/2024	PW10-2 PW10-2_20241028 10/28/2024	PZ10-7 PZ10-7_20240716 7/16/2024
Volatile Organic Compounds Detected by Method 8260C[b]								
2-Butanone (MEK)	50	µg/L	**10.1**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	50	µg/L	< 5.0 U	**10.2**	**3.9 J**	**10.7**	**3.7 J**	**10.9**
Benzene	1	µg/L	**2.0**	< 1.0 U	< 1.0 U	**1.9**	< 1.0 U	< 1.0 U
Chloroform	7	µg/L	< 1.0 U	< 1.0 U	**0.35 J**	< 1.0 U	**0.42 J**	< 1.0 U
cis-1,2-Dichloroethene	5	µg/L	**120**	**0.42 J**	**0.80 J**	< 1.0 U	**0.34 J**	< 1.0 U
Iodomethane	50	µg/L	< 1.0 U	< 1.0 U	**1.1**	**0.68 J-**	< 1.0 U	**0.42 J-**
Toluene	5	µg/L	**8.4**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	5	µg/L	**2.3**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	5	µg/L	**13.6**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	2	µg/L	**6.0**	< 1.0 U	**1.2**	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

(a) New York State Department of Environmental Conservation, Technical and Operational Guidance Series Memorandum #1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 1998 (with updates), Class GA Groundwater Standards and Guidance Values.

(b) Only compounds with at least one detect are presented; bold results indicate a detected value, shaded results exceed the screening criterion.

µg/L = Microgram(s) per liter

MW = Monitoring well

PW = Pumping well

PZ = Piezometer

J = Compound detected, estimated concentration

J- = Compound detected, estimated concentration that may be biased low

U = Compound was not detected

Table 5-2
Site 10 - Remedial Injection Performance Monitoring Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation-Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date	MW10-1DA MW10-1DA-20230411 4/11/2023	MW10-1DA MW10-1DA-20230627 6/27/2023	MW10-1DA MW10-1DA-20231102 11/2/2023	MW10-1DA MW10-1DA-20240226 2/26/2024	MW10-7 MW10-7-20230411 4/11/2023	MW10-7 MW10-7-20230627 6/27/2023
Volatile Organic Compounds Detected by Method 8260C (µg/L)[b]								
2-Butanone (MEK)	50	ug/l	< 5.0 U	NC	< 5.0 U	< 5.0 U	< 5.0 U	**8.5**
Acetone	50	ug/l	< 5.0 U	NC	**9.3**	< 5.0 U	< 5.0 U	**21.0**
Benzene	1	ug/l	**2.7**	NC	**3.1**	**2.4**	< 1.0 U	**0.37 J**
cis-1,2-Dichloroethene	5	ug/l	**0.48 J**	NC	**1.3**	**0.38**	**30.7**	**28.9**
Ethylbenzene	5	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Iodomethane	50	ug/l	< 1.0 UJ	NC	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	5	ug/l	< 1.0 U	NC	< 1.0 U	< 1.0 U	< 1.0 U	**1.1**
trans-1,2-Dichloroethene	5	ug/l	< 1.0 U	NC	**0.37 J**	< 1.0 U	**0.52 J**	**0.43 J**
Trichloroethene	5	ug/l	< 1.0 U	NC	< 1.0 U	< 1.0 U	**3.5**	< 1.0 U
Vinyl chloride	2	ug/l	**1.7**	NC	**3.8**	**1.1**	**3.9**	**20.0**
Gases Detected by Method RSK-175								
Ethane	NS	ug/l	**48.5 J**	**57.5 J**	**67.9 J**	**43.0**	< 5.2 UJ	< 5.2 UJ
Ethene	NS	ug/l	< 7.1 UJ	< 7.1 UJ	< 7.1 UJ	< 7.1 U	< 7.1 UJ	< 7.1 UJ
Methane	NS	ug/l	**7770 J**	**8370 J**	**10600 J**	**7190**	**454 J**	**5250 J**
Total Organic Carbon Detected by Method 9060A								
Total Organic Carbon	NS	mg/l	**9.5**	**10.2**	**12.4**	**10.2**	**303**	**126**

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date	MW10-7 MW10-7-20231102 11/2/2023	MW10-7 MW10-7-20240226 2/26/2024	MW10-10D MW10-10D-20230411 4/11/2023	MW10-10D MW10-10D-20230627 6/27/2023	MW10-10D MW10-10D-20231102 11/2/2023	MW10-10D MW10-10D-20240226 2/26/2024
Volatile Organic Compounds Detected by Method 8260C (µg/L)[b]								
2-Butanone (MEK)	50	ug/l	< 5.0 U	< 5.0 U	< 500 U	NC	< 500 U	3.8 U
Acetone	50	ug/l	**13.3**	< 5.0 U	< 500 U	NC	< 500 U	**3.7 J**
Benzene	1	ug/l	< 1.0 U	< 1.0 U	< 100 U	NC	< 100 U	**1.5**
cis-1,2-Dichloroethene	5	ug/l	**1.7**	**0.62 J**	**171**	NC	**141**	**101**
Ethylbenzene	5	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.36 J**
Iodomethane	50	ug/l	< 1.0 UJ	< 1.0 U	< 100 U	NC	< 100 U	0.75 U
Toluene	5	ug/l	< 1.0 U	< 1.0 U	< 100 U	NC	< 100 U	**5.7**
trans-1,2-Dichloroethene	5	ug/l	**0.49 J**	**0.70 J**	< 100 U	NC	< 100 U	**1.9**
Trichloroethene	5	ug/l	**1.7**	< 1.0 U	< 100 U	NC	< 100 U	**8.6**
Vinyl chloride	2	ug/l	**4.3**	**0.69 J**	< 100 U	NC	< 100 U	**5.3**
Gases Detected by Method RSK-175								
Ethane	NS	ug/l	< 5.2 UJ	**2.7 J**	**11.8 J**	**26.5 J**	**11.9 J**	**14.9**
Ethene	NS	ug/l	**8.1 J**	< 7.1 U	**9.2 J**	**13.1 J**	**10 J**	**7.7**
Methane	NS	ug/l	**8840 J**	**7540**	**10000 J**	**9900 J**	**8240 J**	**8450**
Total Organic Carbon Detected by Method 9060A								
Total Organic Carbon	NS	mg/l	**146**	**68.9**	**8140**	**5880**	**3660**	**2260**

Table 5-2
Site 10 - Remedial Injection Performance Monitoring Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation-Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date	MW10-11D MW10-11D-20230411 4/11/2023	MW10-11D MW10-11D-20230627 6/27/2023	MW10-11D MW10-11D-20231102 11/2/2023	MW10-11D MW10-11D-20240226 2/26/2024	PW10-1 PW10-1-20230411 4/11/2023	PW10-1 PW10-1-20230627 6/27/2023
Volatile Organic Compounds Detected by Method 8260C (µg/L)[b]								
2-Butanone (MEK)	50	ug/l	< 5.0 U	NC	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	50	ug/l	**3.2 J**	NC	**3.5 J**	< 5.0 U	**3.2 J**	**3.5 J**
Benzene	1	ug/l	< 1.0 U	NC	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	5	ug/l	< 1.0 U	NC	< 1.0 U	< 1.0 U	**1.5**	**1.1**
Ethylbenzene	5	ug/l	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Iodomethane	50	ug/l	< 1.0 U	NC	**2.4 J-**	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	5	ug/l	< 1.0 U	NC	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	5	ug/l	< 1.0 U	NC	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	5	ug/l	< 1.0 U	NC	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	2	ug/l	< 1.0 U	NC	< 1.0 U	< 1.0 U	**0.38 J**	**0.75 J**
Gases Detected by Method RSK-175								
Ethane	NS	ug/l	< 5.2 UJ	< 5.2 UJ	**10.5 J**	< 5.2 U	< 5.2 UJ	< 5.2 UJ
Ethene	NS	ug/l	< 7.1 UJ	< 7.1 UJ	< 7.1 UJ	< 7.1 U	< 7.1 UJ	< 7.1 UJ
Methane	NS	ug/l	< 2.6 UJ	**246 J**	**2360 J**	**2.9**	**5.5 J**	**22.7 J**
Total Organic Carbon Detected by Method 9060A								
Total Organic Carbon	NS	mg/l	**11.7**	**12.5**	**18.1**	**8.8**	**6.3**	**5.5**

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date	PW10-1 PW10-1-20231102 11/2/2023	PW10-1 PW10-1-20240226 2/26/2024
Volatile Organic Compounds Detected by Method 8260C (µg/L)[b]				
2-Butanone (MEK)	50	ug/l	< 5.0 U	< 5.0 U
Acetone	50	ug/l	**13.5**	< 5.0 U
Benzene	1	ug/l	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	5	ug/l	**0.77 J**	< 1.0 U
Ethylbenzene	5	ug/l	< 1.0 U	< 1.0 U
Iodomethane	50	ug/l	< 1.0 UJ	< 1.0 U
Toluene	5	ug/l	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	5	ug/l	< 1.0 U	< 1.0 U
Trichloroethene	5	ug/l	< 1.0 U	< 1.0 U
Vinyl chloride	2	ug/l	**0.61 J**	< 1.0 U
Gases Detected by Method RSK-175				
Ethane	NS	ug/l	< 5.2 UJ	< 5.2 U
Ethene	NS	ug/l	< 7.1 UJ	< 7.1 U
Methane	NS	ug/l	**197 J**	**0.86 J**
Total Organic Carbon Detected by Method 9060A				
Total Organic Carbon	NS	mg/l	**6.1**	**6.6**

Notes:

(a) New York State Department of Environmental Conservation, Technical and Operational Guidance Series Memorandum #1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 1998 (with updates), Class GA Groundwater Standards and Guidance Values.

(b) Only compounds with at least one detect are presented; bold results indicate a detected value, shaded results exceed the screening criterion.

µg/L = Microgram(s) per liter

MW = Monitoring well

NC = Sample not collected and submitted for this analysis

NS = No Standards

PW = Pumping well

PZ = Piezometer

J = Compound detected, estimated concentration

J- = Compound detected, estimated concentration that may be biased low

U = Compound was not detected

Table 5-3
Site 10 - Summary of Surface Water Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Location ID Sample Name Sample Date	SW10-5 SW10-5_20240716 7/16/2024	SW10-6 SW10-6_20240716 7/16/2024	SW10-7 SW10-7_20240716 7/16/2024	SW10-7 SW10-7_20241028 10/28/2024	SW10-8 SW10-8_20240716 7/16/2024
Volatile Organic Compounds Detected by Method 8260C (µg/L)[(a)]						
Acetone	µg/L	< 5.0 U	< 5.0 U	**3.6 J**	< 5.0 U	< 5.0 U
Chloroform	µg/L	< 1.0 U	< 1.0 U	< 1.0 U	**0.57 J**	< 1.0 U
cis-1,2-Dichloroethene	µg/L	< 1.0 U	**0.51 J**	< 1.0 U	< 1.0 U	**1.5**
Trichloroethene	µg/L	**0.90 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Analyte	Location ID Sample Name Sample Date	SW10-8 SW10-8_20241028 10/28/2024	SW99-10 SW99-10_20240716 7/16/2024	SW99-10 SW99-10_20241028 10/28/2024
Volatile Organic Compounds Detected by Method 8260C (µg/L)[(a)]				
Acetone	µg/L	< 5.0 U	< 5.0 U	< 5.0 U
Chloroform	µg/L	**0.68 J**	< 1.0 U	**0.52 J**
cis-1,2-Dichloroethene	µg/L	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	µg/L	< 1.0 U	< 1.0 U	< 1.0 U

Notes:
(a) Location SW99-10 is downgradient of Site 10 at the installation boundary
(b) Only compounds with at least one detect are presented; bold results indicate a detected value.
µg/L = Microgram(s) per liter
SW = Surface water
J = Compound detected, estimated concentration
J- = Compound detected, estimated concentration that may be biased low
U = Compound was not detected

Table 6-1
Site 13 - Summary of Groundwater Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date Parent Sample	MW13-4D MW13-4D_20240716 7/16/2024	MW13-4D MW13-4D_20241028 10/28/2024	MW13-5D MW13-5D_20240716 7/16/2024	MW13-5D MW13-5D_20241028 10/28/2024	PW13-1 PW13-1_20240716 7/16/2024
Volatile Organic Compounds Detected by Method 8260C (µg/L)[b]							
Acetone	50	µg/L	< 5.0 U	< 5.0 U	< 5.0 U	**3.4 J**	< 5.0 U
Chloroform	7	µg/L	< 1.0 U	**0.50 J**	< 1.0 U	**0.43 J**	< 1.0 U
cis-1,2-Dichloroethene	5	µg/L	**5.5**	**7.5**	**16.6**	**13.6**	< 1.0 U
Trichloroethene	5	µg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.53 J**
Vinyl chloride	2	µg/L	< 1.0 U	**3.9**	**3.7**	**1.0**	**5.3**

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date Parent Sample	PW13-1 PW13-1_20241028 10/28/2024	PW13-4D PW13-4D_20240716 7/16/2024	PW13-4D PW13-4D_20241028 10/28/2024
Volatile Organic Compounds Detected by Method 8260C (µg/L)[b]					
Acetone	50	µg/L	< 5.0 U	< 5.0 U	**3.9 J**
Chloroform	7	µg/L	**0.40 J**	< 1.0 U	**0.42 J**
cis-1,2-Dichloroethene	5	µg/L	**1.1**	**7.4**	**4.4**
Trichloroethene	5	µg/L	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	2	µg/L	< 1.0 U	< 1.0 U	**0.48 J**

Notes:
(a) New York State Department of Environmental Conservation, Technical and Operational Guidance Series Memorandum #1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 1998 (with updates), Class GA Groundwater Standards and Guidance Values.
(b) Only compounds with at least one detect are presented; bold results indicate a detected value, shaded results exceed the screening criterion.
µg/L = Microgram(s) per liter
MW = Monitoring well
PW = Pumping well
J = Compound detected, estimated concentration
U = Compound was not detected

Table 7-1
Background Wells - Summary of Groundwater Analytical Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Analyte	Screening Criteria[a]	Location ID Sample Name Sample Date	MW1-1DA MW1-1DA_20241028 10/28/2024	MW8-11D MW8-11D_20240716 7/16/2024
Volatile Organic Compounds Detected by Method 8260C (µg/L)[b]				
Chloroform	7	µg/L	**0.33 J**	< 1.0 U
Iodomethane	50	µg/L	**0.48 J**	< 1.0 U

Notes:

(a) New York State Department of Environmental Conservation, Technical and Operational Guidance Series Memorandum #1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 1998 (with updates), Class GA Groundwater Standards and Guidance Values.

(b) Only compounds with at least one detect are presented; bold results indicate a detected value, shaded results exceed the screening criterion.

µg/L = Microgram(s) per liter

MW = Monitoring well

Figures

78°58'0"W 78°57'30"W 78°57'0"W 78°56'30"W 78°56'0"W 78°55'30"W

43°7'0"N

43°6'30"N

LOCKPORT RD
ENT AVE
RUBIN WAY
RUBIN WAY
Site 8
DS002
Site 5
DS004
NA
JOHNSON ST
KIRKBRIDGE DR
TUSCARORA RD
KIRSCH DR
BLEWETT AVE
Site 13
ST010
WAGNER DR
FIRE LANE
HULBY ST
KRUG AVE
UTZIG DR
OLMSTEAD ST
NA
FRANKLIN DR
THOMPSON ST
McGUIRE ST
LANGLEY ST
OTIS DR
KINROSS ST
Former
Site 1
Former
Site 2
Former
Site 6
Site 3
LF008
UTZIG DR
Cayuga Creek
Cayuga Creek
Site 10
FT005
WALMORE RD
HASELEY DR
HASELEY DR

78°58'0"W 78°57'30"W 78°57'0"W 78°56'30"W 78°56'0"W 78°55'30"W



Legend

- Approximate Extent of Former Landfill
- Installation Boundary

0 850 1,700

SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

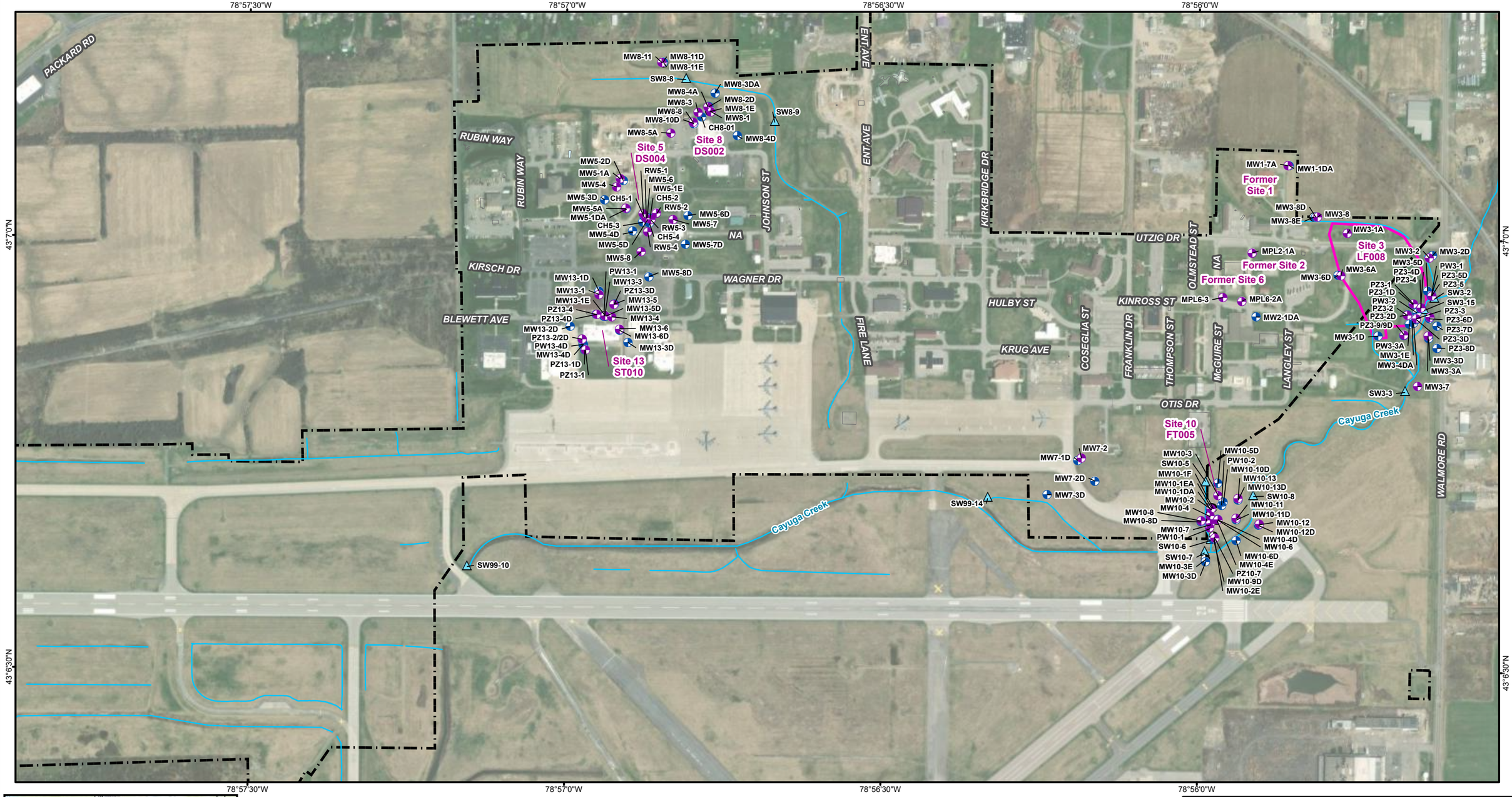
2024 Annual Report

SITE MAP

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
1-1

DIV/GROUP: ENV/IMDV DB: hs6906 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\NFARS -Section 1\NFARS Section 1 2024 Annual Report.aprx /Fig1-1_Niagara_SiteLocation Annual Report 2024 DATE: 8/7/2025





Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Surface Water Sample
- Approximate Extent of Former Landfill
- Installation Boundary

0 550 1,100
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

INSTALLATION-WIDE WELL/PIEZOMETER MONITORING/SAMPLING LOCATIONS

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
2-1

DIV/GROUP: ENV/IMDV DB: hs6906 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\NFARS -Section 1\NFARS Section 1 2024 Annual Report.aprx /Fig2-1_Niagara_WellLocations Annual Report 2024 DATE: 8/7/2025

DIV/GROUP: ENV/IMDV DB: hs6906 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\NFARS -Section 1\NFARS Section 1 2024 Annual Report.aprx /Fig3-1_Niagara_Site3 Annual Report 2024 DATE: 8/7/2025

78°56'0"W

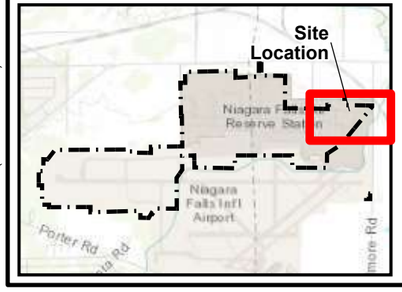
78°55'30"W

43°7'0"N

MW1-1DA
MW1-7A
427
3088
424
3123
425
2559
426
MW3-8E
MW3-8
MW3-8D
MW3-1A
UTZIG DR
302
400
MPL2-1A
3110
3141
N/A
410
UTZIG DR
MW3-2DA
MW3-2
411
411
403
404
12404
OLMSTEAD ST
NA
3120
3120
NA
MW3-6D
MW3-6A
Site 3
WALMORE RD
420
405
MPL6-3
MPL6-2A
421
N/A
MW3-5D
PZ3-5
PZ3-5D
SW3-2
PZ3-1D
PZ3-1
PZ3-4D
PZ3-4
SW3-15
FRANKLIN DR
3200
<Null>
502
503
504
MW2-1DA
KINROSS ST
413
PZ3-2D
PZ3-2
PZ3-3
PZ3-6
PZ3-6D
MW3-1E
PZ3-3D
PW3-3A
MW3-4DA
PZ3-7D
HULBY ST
600
624
MW3-1DA
PZ3-9
PZ3-9D
MW3-3A
MW3-3DA
506
12503
500
2557
618
619
PZ3-8D
KRUG AVE
THOMPSON ST
McGUIRE ST
LANGLEY ST
508
612
602
1198
626
620
621
2562
MW3-7
SW3-3
532
512
Cayuga Creek

78°56'0"W

78°55'30"W



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Surface Water Sample
- Groundwater Collection Trench
- Approximate Extent of Former Landfill
- Installation Boundary

N

0 170 340

SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 3 - MONITORING/SAMPLING LOCATIONS

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
3-1

78°56'0"W 78°55'50"W 78°55'40"W 78°55'30"W

43°7'0"N

Cayuga Creek

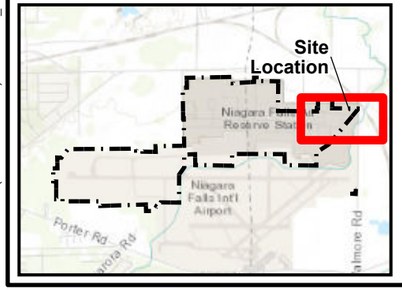
MW3-8 (596.99)
MW3-1A (597.83)
MW3-2 (592.59)
MW3-6A (595.33)
MW3-3A (586.18)
MW3-7 (585.12)
PZ3-1 (589.33)
PZ3-2 (588.50)
PZ3-3 (588.14)
PZ3-4 (587.37)
PZ3-5 (589.32)
PZ3-6 (588.34)
PZ3-9 (586.26)
PW3-3A (586.35)
SW3-2 (591.40)
SW3-3 (585.68)
SW3-15 (N/A)

596 594 592 590 588 586

Site 3

UTZIG DR
OLMSTEAD ST
FRANKLIN DR
HULBY ST
KRUG AVE
THOMPSON ST
McGUIRE ST
LANGLEY ST
KINROSS ST
WALMORE RD

427 3088 424 425 3123 2559 426 302 400 403 404 12404 405 3110 3141 3120 3120 NA NA 420 421 410 411 411 413 3200 <Null> 502 503 504 12600 600 2557 624 618 619 506 12503 500 508 612 602 1198 626 620 621 532 512 2562



Legend

- Overburden well/Piezometer
- Surface Water Sample
- (597.83) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Groundwater Collection Trench
- Approximate Extent of Former Landfill
- Installation Boundary

Notes:
1. N/A = Not applicable; a water level measurement is not collected at this location

0 170 340
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

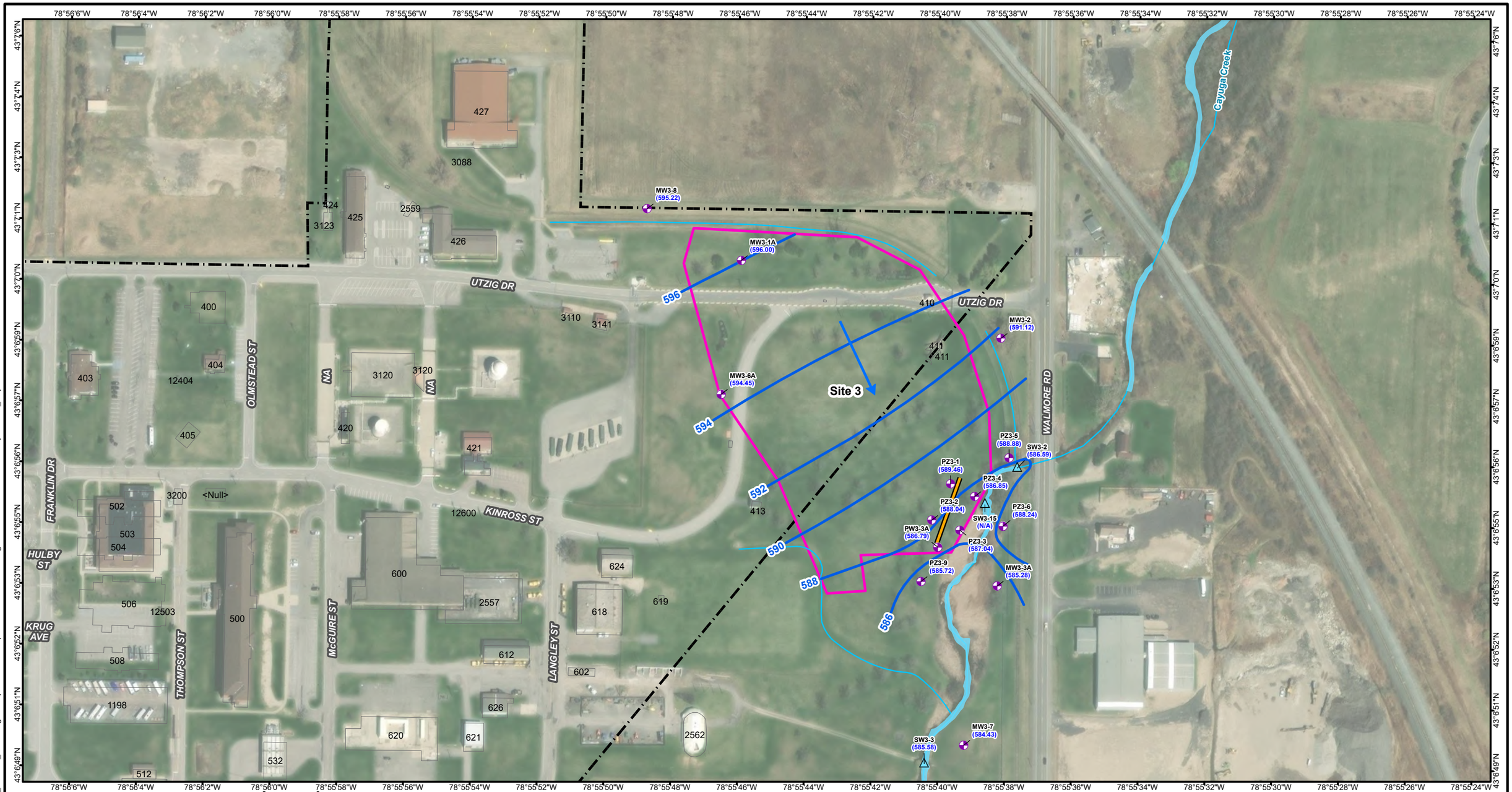
2024 Annual Report

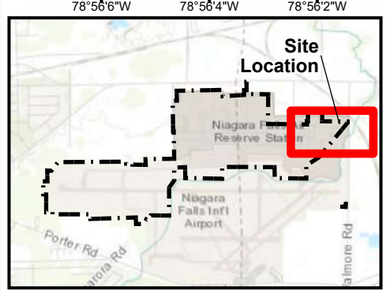
SITE 3 - OVERBURDEN GROUNDWATER CONTOUR MAP (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
3-2

DIV/GROUP: ENV/MDV DB: mali01043 LD: PIC: PM: TM:
PROJECT: JB\MDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site3_5.aprx DATE: 1/29/2026 4:48 PM





Legend

- Overburden Well/Piezometer
- (596.00) Groundwater Elevation
- Surface Water Sample
- Groundwater Contour
- Groundwater Flow Direction
- Groundwater Collection Trench
- Approximate Extent of Former Landfill
- Installation Boundary

Note:
1. N/A = Not applicable; a water level measurement is not collected at this location

0 170 340
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 3 - OVERBURDEN GROUNDWATER CONTOUR MAP (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
3-3

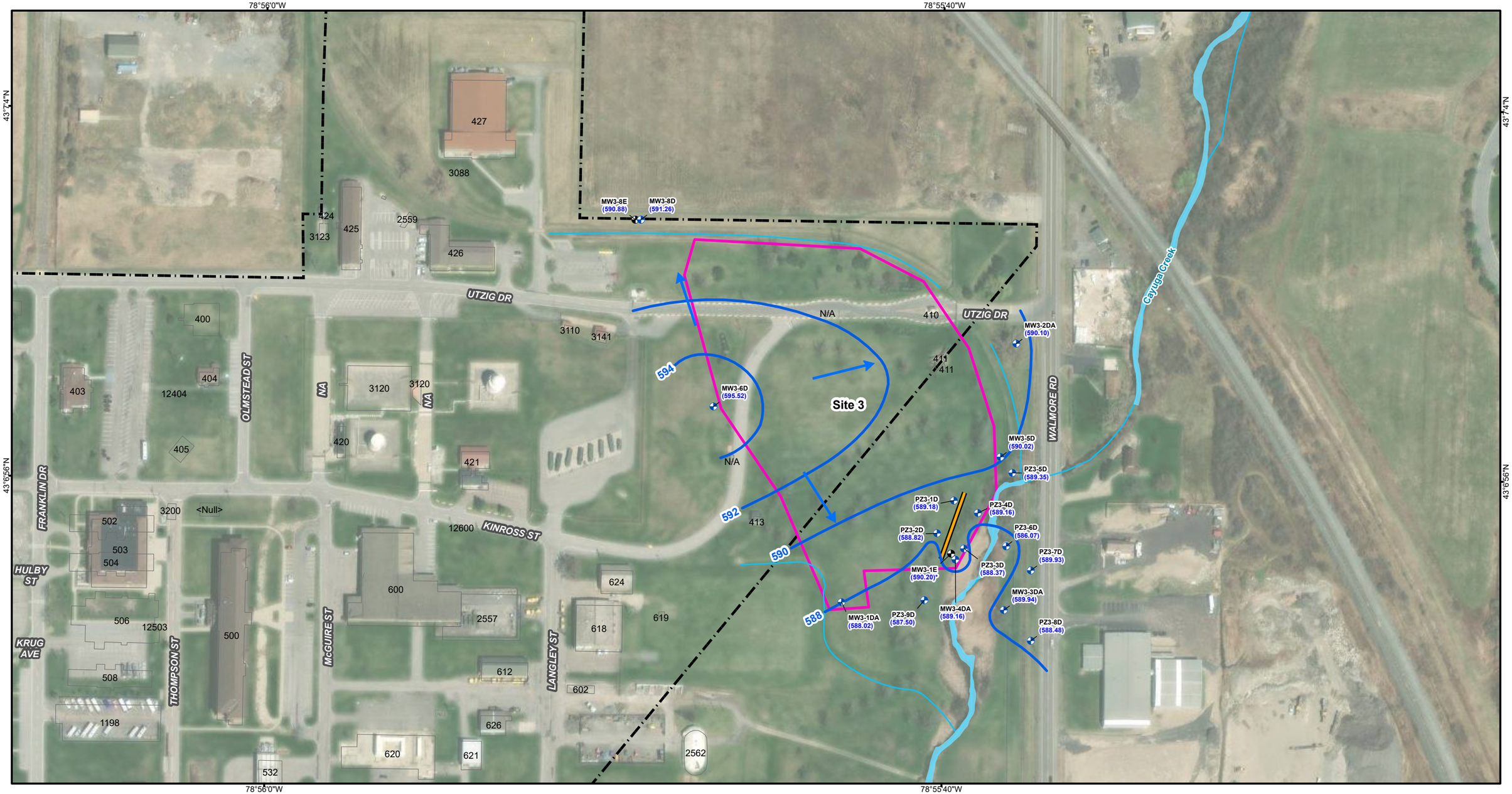
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PROJECT: J:\BMDL (30028498.00001) PATH: T:_ENVINE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site3_5.aprx DATE: 9/8/2025 3:12 PM

78°56'0"W

78°55'40"W

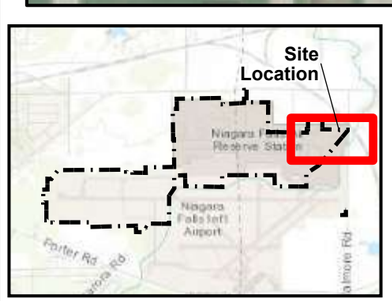
43°7'4"N

43°6'56"N



78°56'0"W

78°55'40"W



Legend

- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- (590.88) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Groundwater Collection Trench
- Approximate Extent of Former Landfill
- Installation Boundary

Notes:
1. * = Elevation not used to develop groundwater contours.

N

0 170 340

SCALE IN FEET

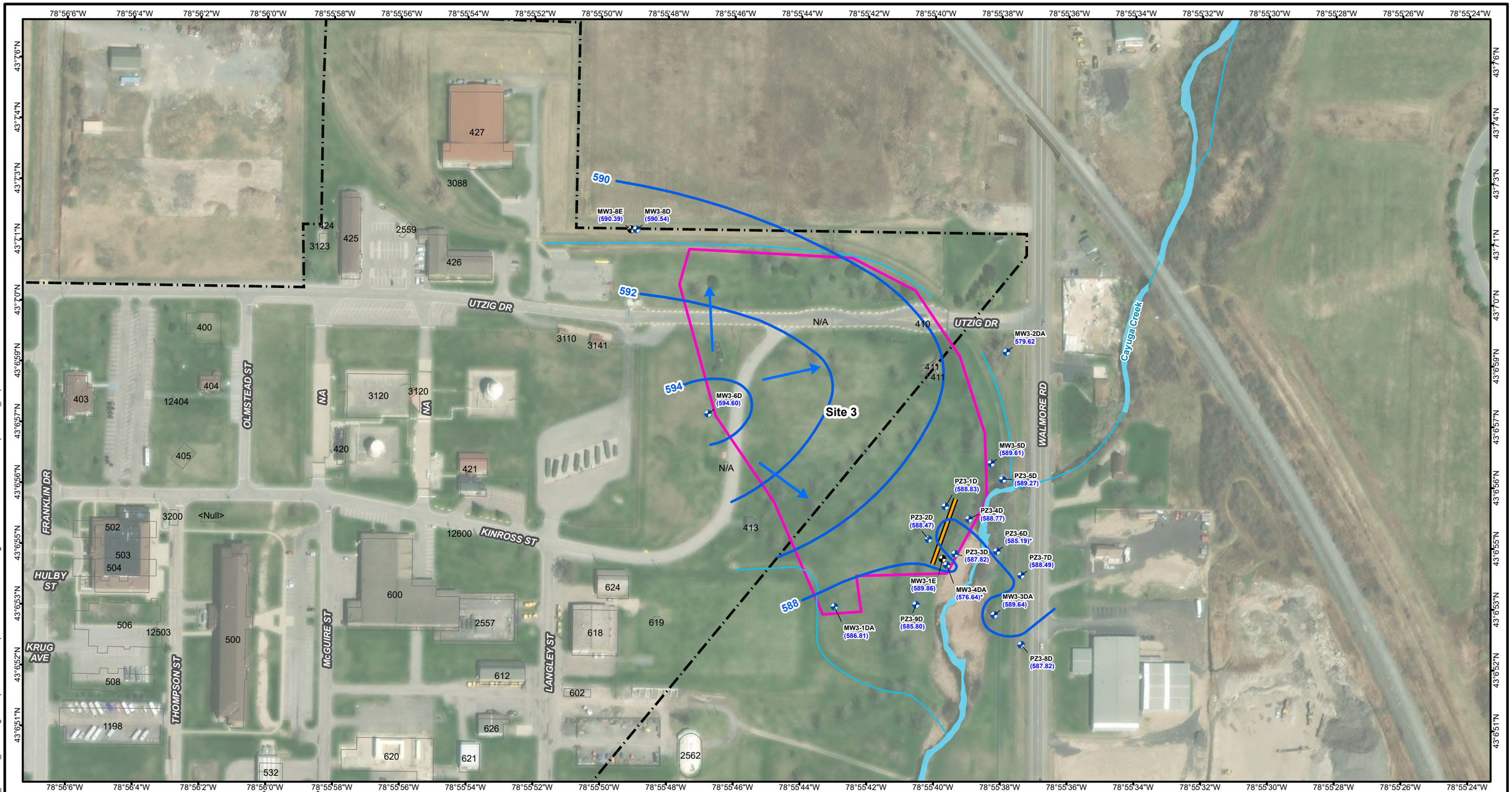
NIAGARA FALLS AIR RESERVE STATION
NEW YORK
2024 Annual Report

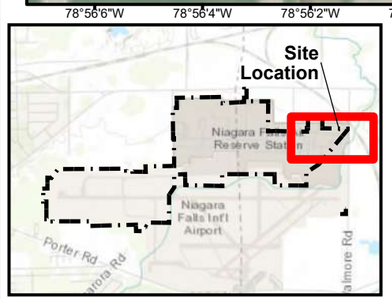
SITE 3 - SHALLOW BEDROCK GROUNDWATER CONTOUR MAP (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 3-4

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site3_5.aprx DATE: 9/1/2025 2:23 PM





Legend

- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- (590.39) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Groundwater Collection Trench
- Approximate Extent of Former Landfill
- Installation Boundary

Notes:
1. * = Elevation not used to develop groundwater contours.

0 170 340
SCALE IN FEET

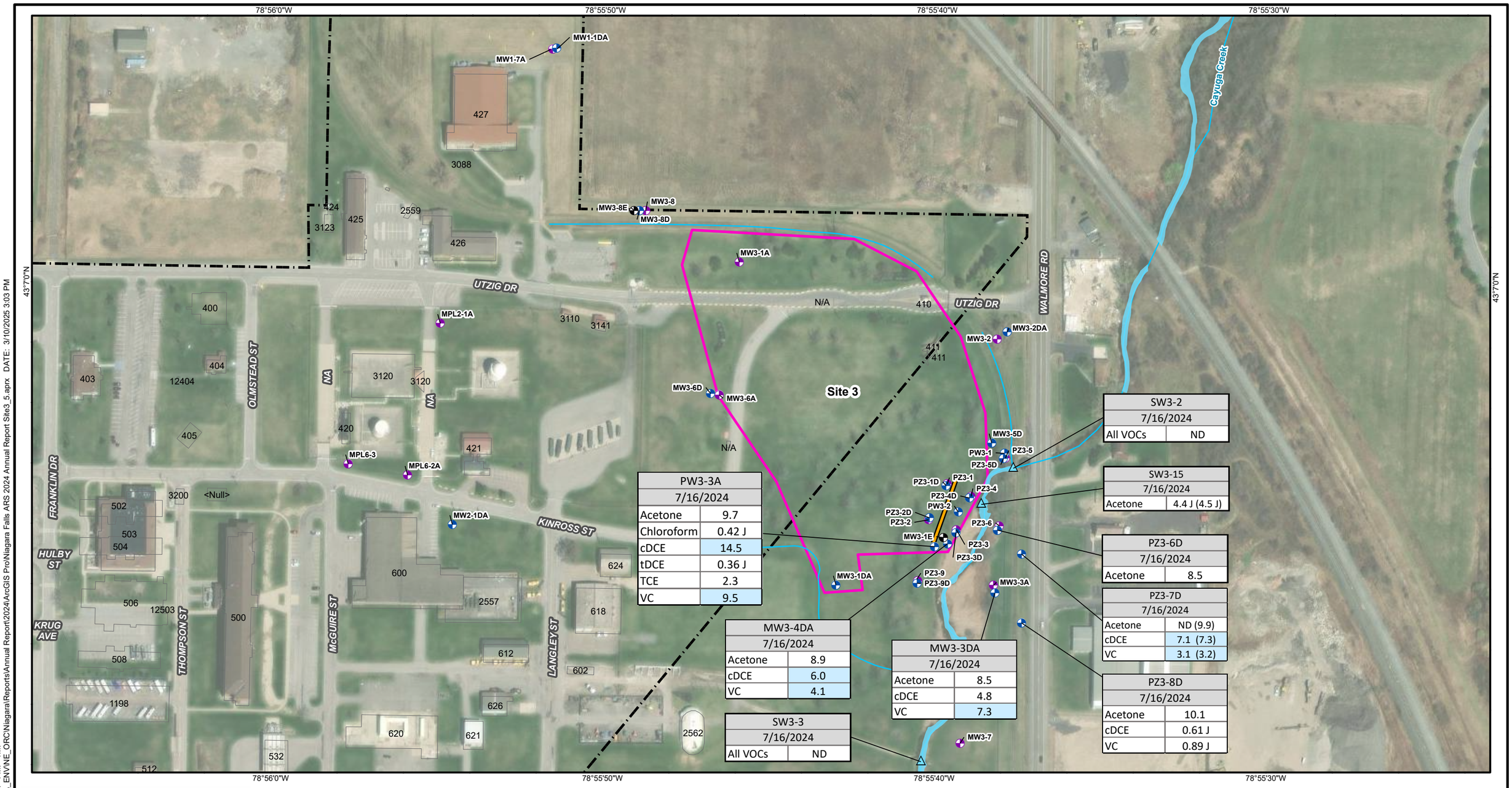
NIAGARA FALLS AIR RESERVE STATION
NEW YORK
2024 Annual Report

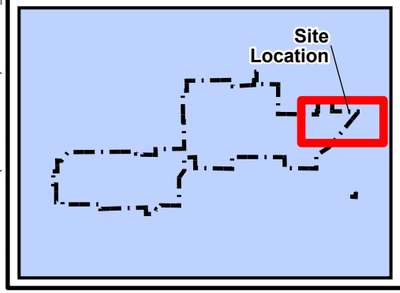
SITE 3 - SHALLOW BEDROCK GROUNDWATER CONTOUR MAP (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
3-5

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site3_5.aprx DATE: 9/1/2025 2:38 PM





Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Surface Water Sample
- Groundwater Collection Trench
- Approximate Extent of Former Landfill
- Installation Boundary

Notes:
1. Results are in micrograms per liter (ug/L).
2. Blue shading indicates result is above NYSDEC Class GA Standards.
3. Results in brackets represent sample duplicate.
4. ND = Non-detect

Lab Qualifier:
J = Compound detected, estimated concentration

0 170 340
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 3 - GROUNDWATER AND SURFACE WATER DETECTIONS (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 3-6

DIV/GROUP: ENV/MDV DB: cvi00949 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENVVNE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site3_5.aprx DATE: 3/10/2025 3:03 PM

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site3_5.aprx DATE: 9/8/2025 3:12 PM

78°56'6"W 78°56'4"W 78°56'2"W 78°56'0"W 78°55'58"W 78°55'56"W 78°55'54"W 78°55'52"W 78°55'50"W 78°55'48"W 78°55'46"W 78°55'44"W 78°55'42"W 78°55'40"W 78°55'38"W 78°55'36"W 78°55'34"W 78°55'32"W 78°55'30"W 78°55'28"W 78°55'26"W 78°55'24"W

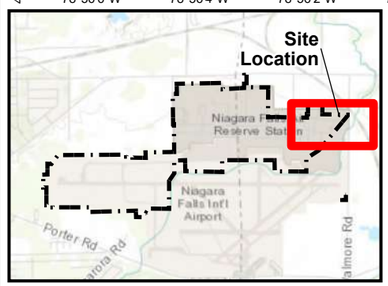
43°7'6"N 43°7'4"N 43°7'3"N 43°7'1"N 43°7'0"N 43°6'59"N 43°6'57"N 43°6'56"N 43°6'55"N 43°6'53"N 43°6'52"N 43°6'51"N 43°6'49"N

MW1-1DA
MW1-7A
427
3088
424
425
3123
2559
426
MW3-8E
MW3-8
MW3-8D
MW3-1A
UTZIG DR
N/A
410
UTZIG DR
MPL2-1A
3110
3141
MW3-2DA
MW3-2
411
411
400
404
403
12404
405
OLMSTEAD ST
NA
3120
3120
NA
MW3-6D
MW3-6A
Site 3
WALMORE RD
Cayuga Creek
420
421
MPL6-3
MPL6-2A
N/A
MW3-5D
PW3-1
PZ3-5
PZ3-5D
PZ3-1D
PZ3-1
PZ3-4D
PZ3-4
PW3-2
PZ3-2D
PZ3-2
PZ3-6
PZ3-6D
MW3-1E
PZ3-3
PW3-3A
PZ3-3D
MW3-4DA
PZ3-7D
MW3-1DA
PZ3-9
PZ3-9D
MW3-3A
MW3-3DA
PZ3-8D
MW3-7
FRANKLIN DR
3200
<Null>
502
503
504
HULBY ST
MW2-1DA
KINROSS ST
413
600
624
618
619
2557
506
12503
500
KRUG AVE
THOMPSON ST
McGUIRE ST
LANGLEY ST
508
612
602
1198
626
620
621
2562
532
512

SW3-2	
10/28/2024	
Chloroform	0.93 J

SW3-15	
10/28/2024	
Acetone	4.9 J (4.6 J)
Chloroform	0.51 J (0.57 J)

SW3-3	
10/28/2024	
Chloroform	0.74 J



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Surface Water Sample
- Groundwater Collection Trench
- Approximate Extent of Former Landfill
- Installation Boundary

Note:
1. Results are in micrograms per liter (ug/L).

Lab Qualifier:
J = Compound detected, estimated concentration

N

0 170 340
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

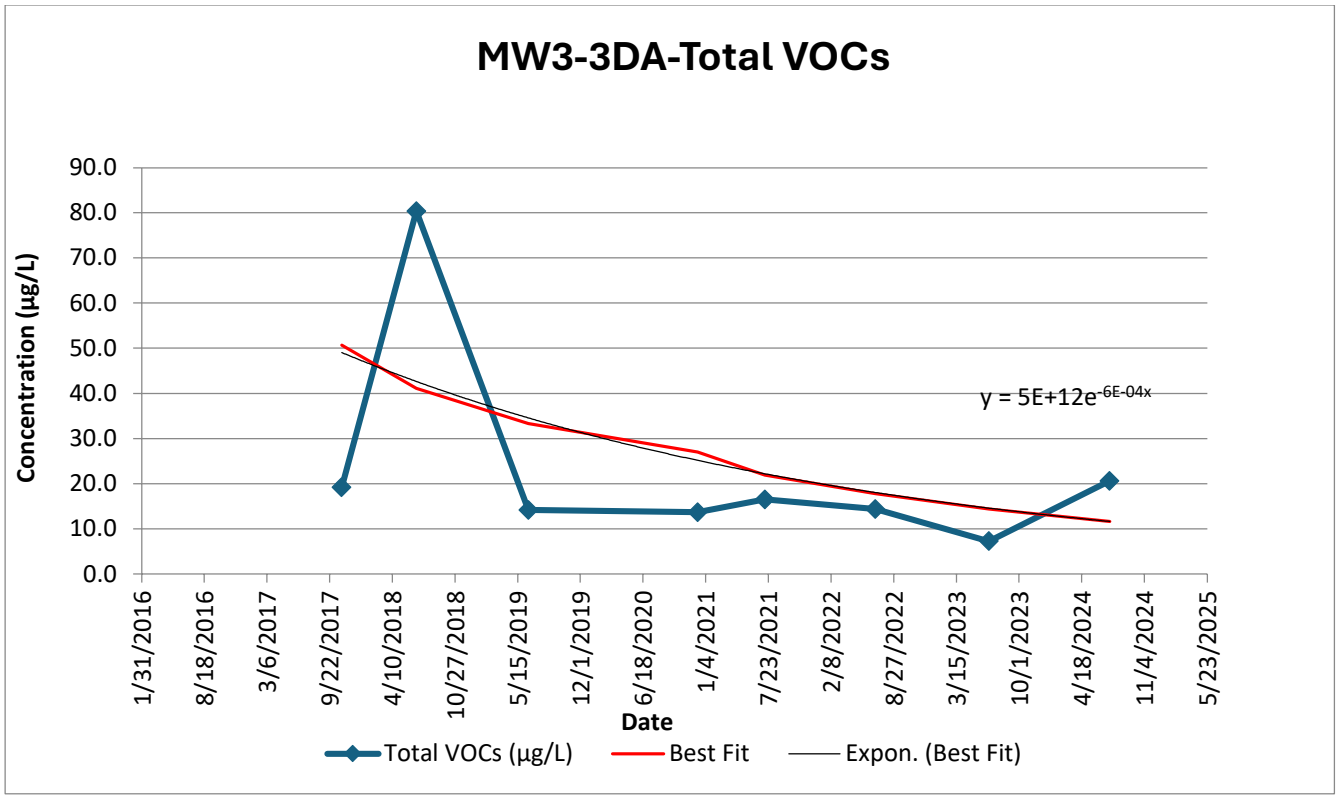
2024 Annual Report

SITE 3 - SURFACE WATER DETECTIONS (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
3-7

Figure 3-8 – Site 3 – Long-Term Trend Data



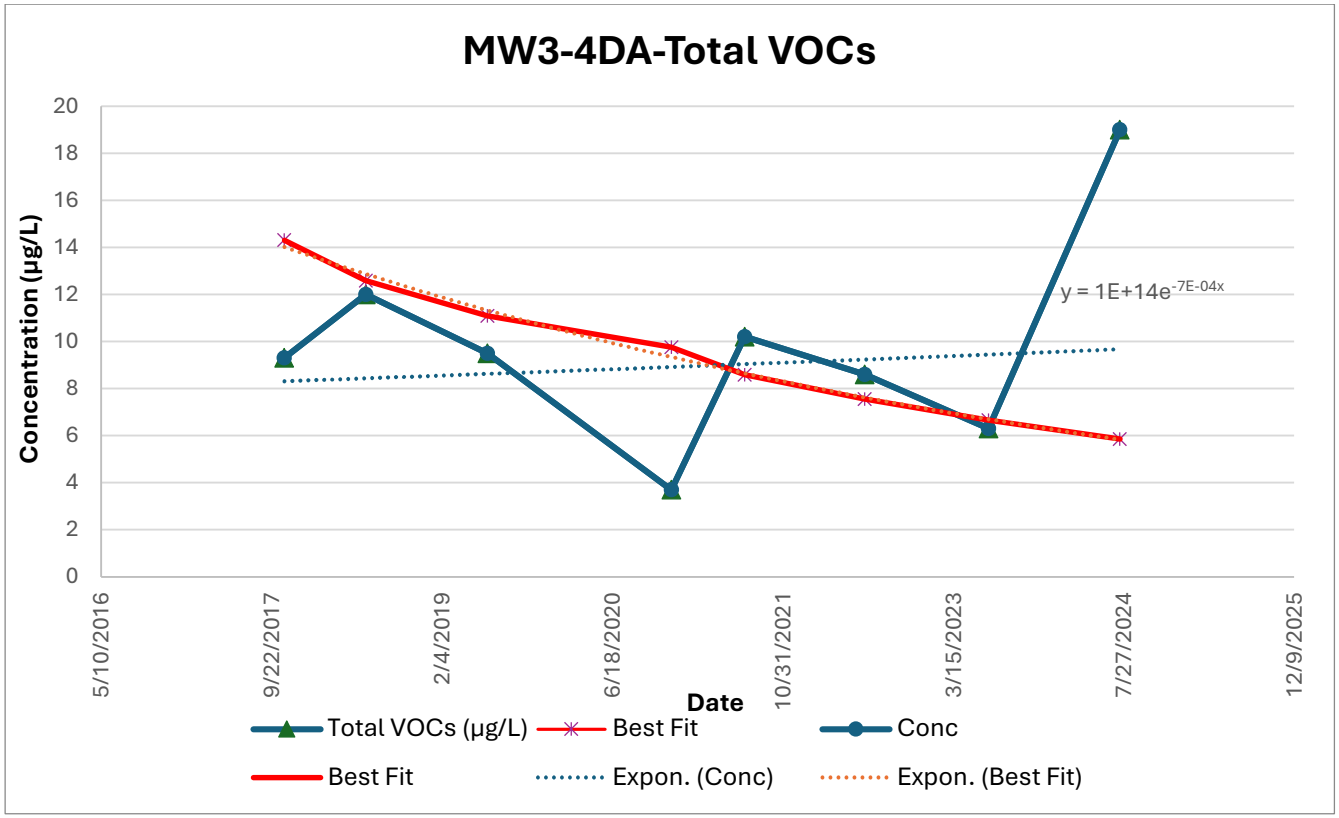
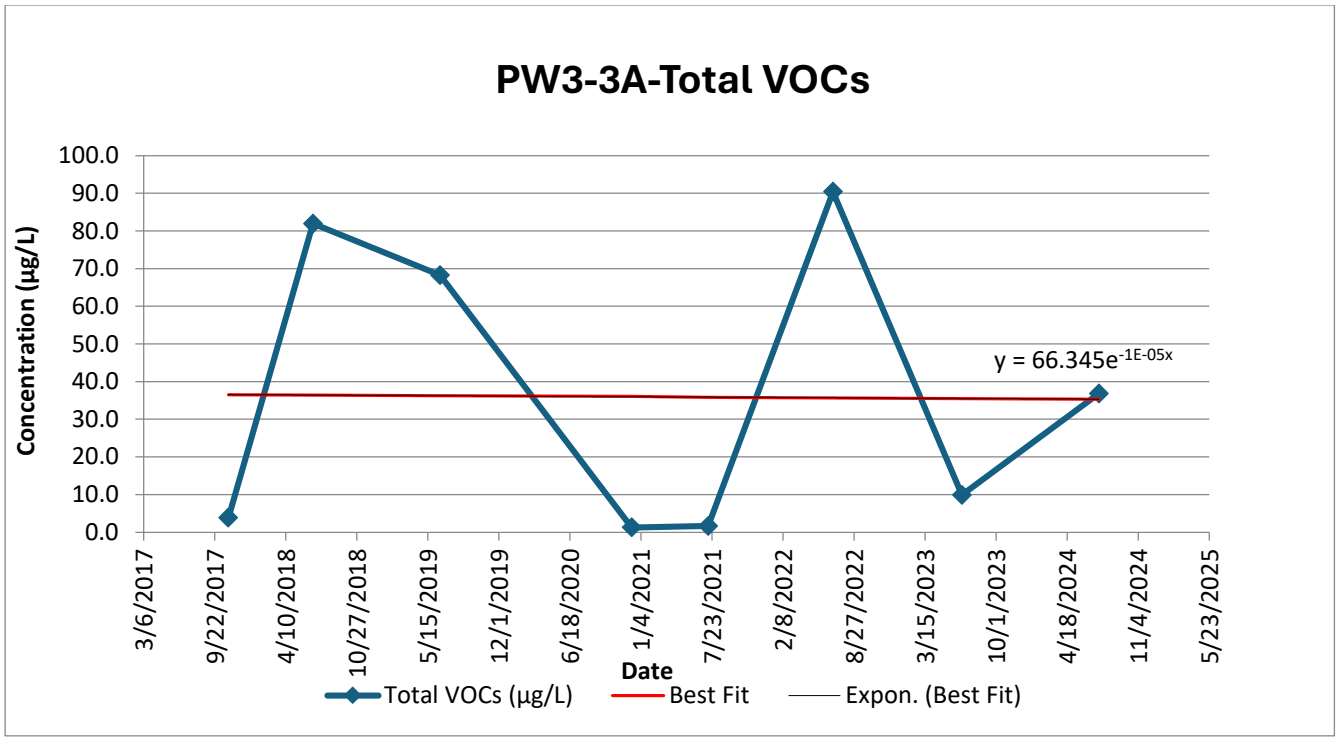


Figure 3-8 – Site 3 – Long-Term Trend Data



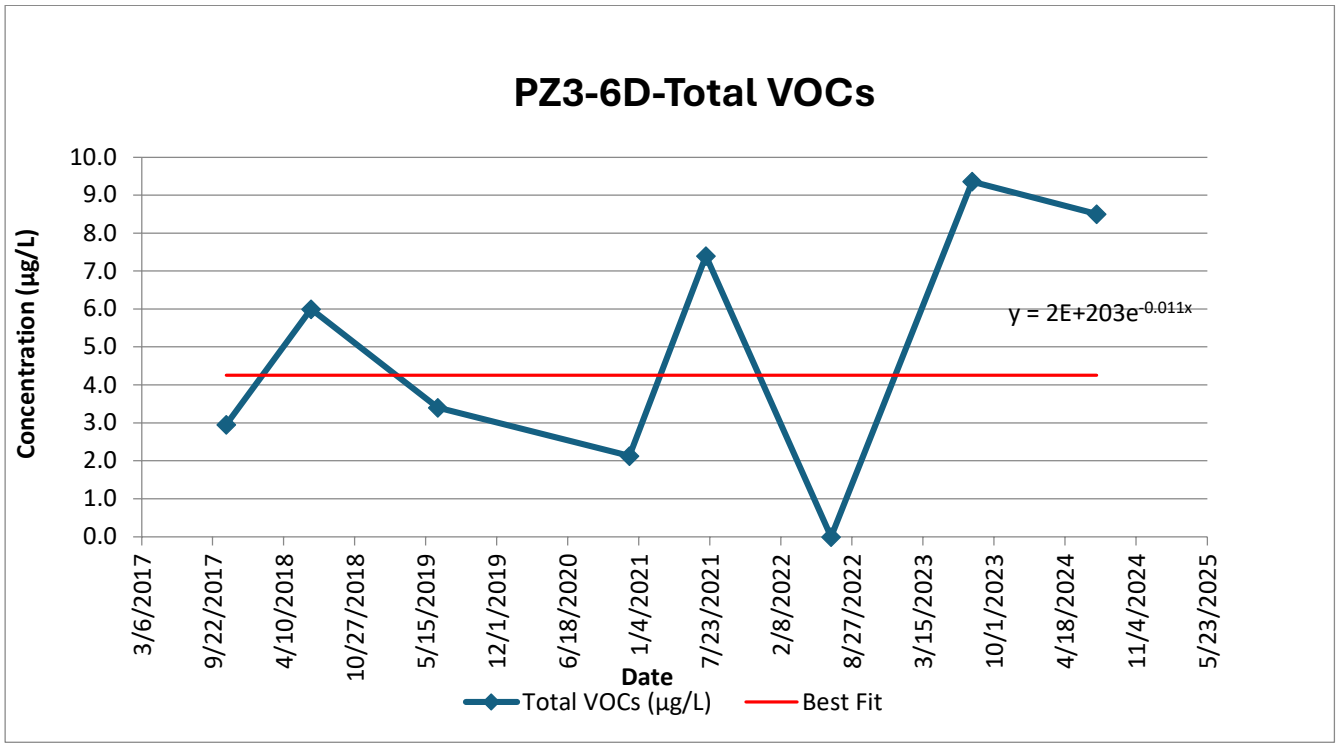
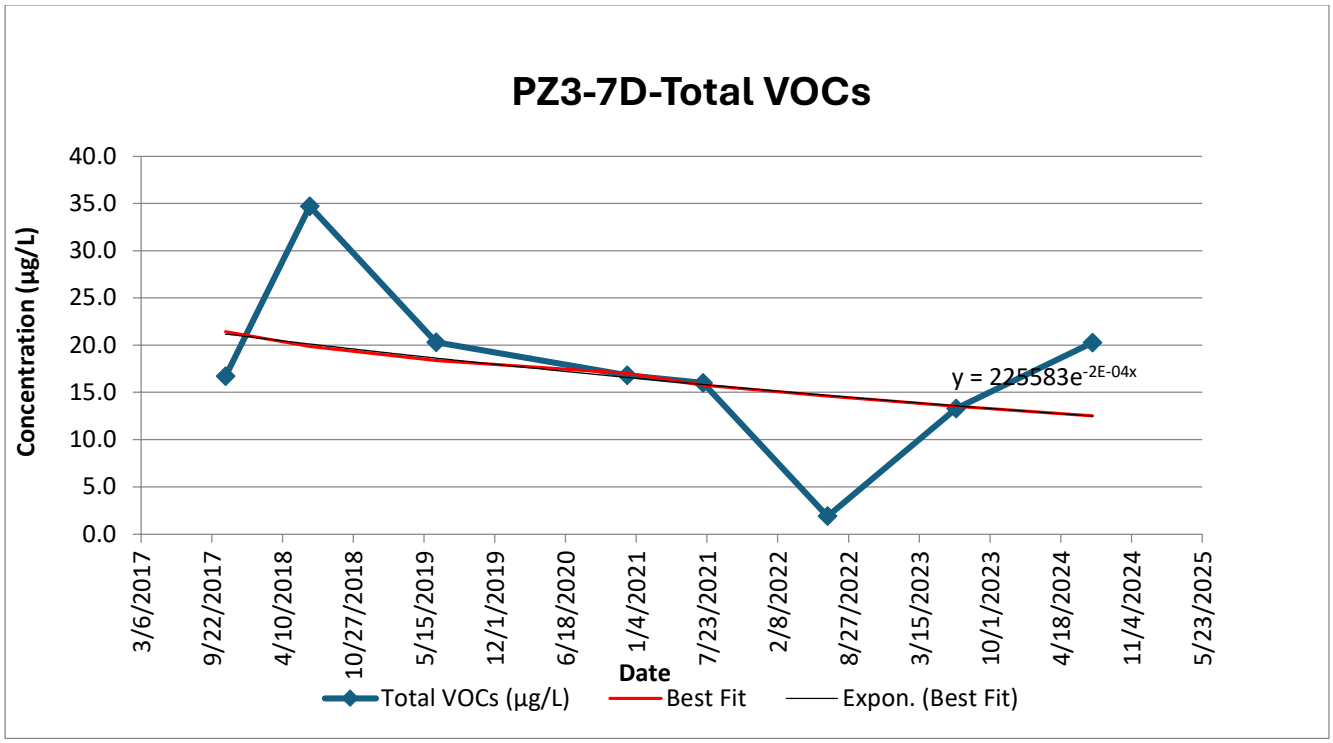
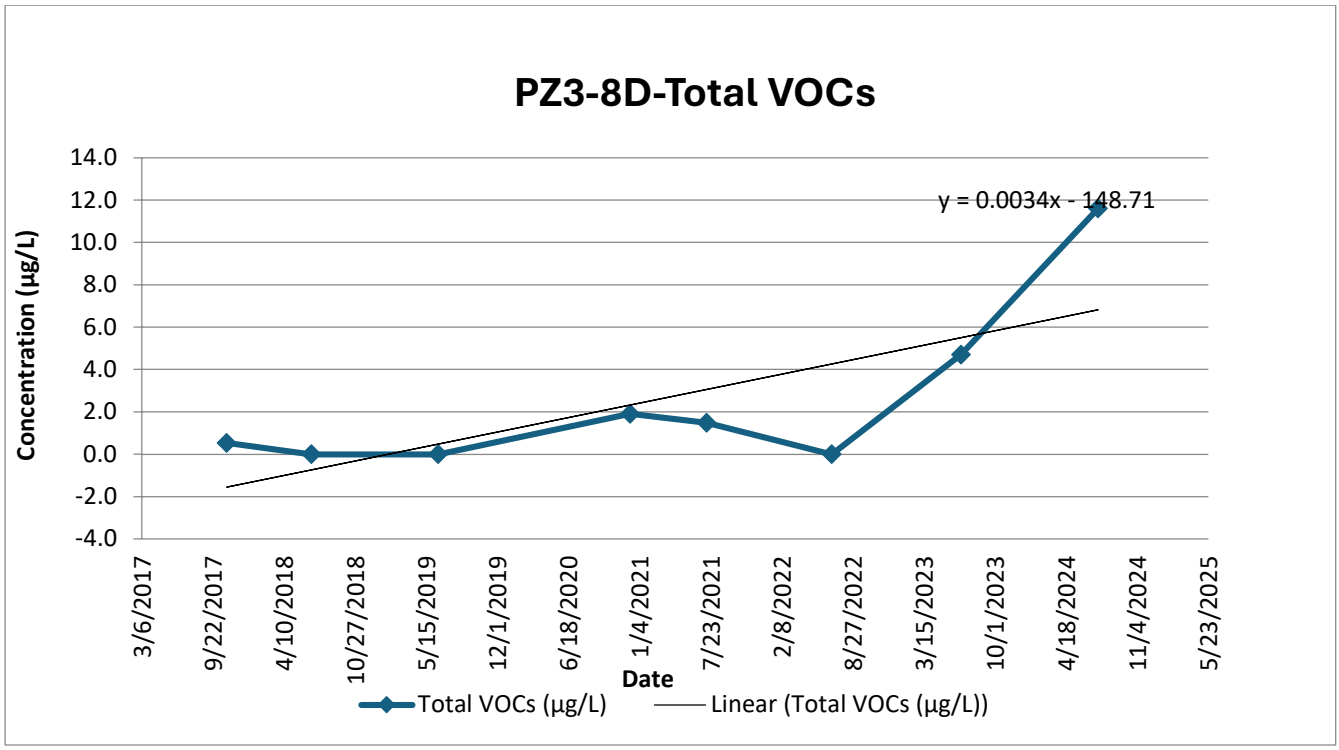


Figure 3-8 – Site 3 – Long-Term Trend Data





78°57'0"W

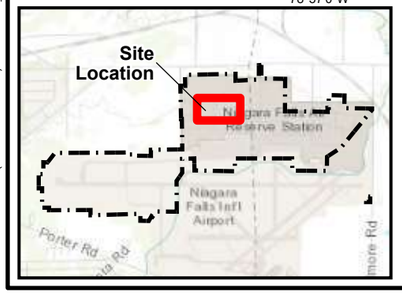
43°7'0"N

MW5-1A
MW5-2D
MW5-4
MW5-3D
MW5-5A
MW5-1DA
MW5-4D
MW5-8
MW5-8D
MW5-6D
MW5-7
MW5-7D
RW5-1
RW5-2
RW5-3
RW5-4
CH5-1
CH5-2
CH5-3
CH5-4
MW5-1E
MW5-6
MW5-5D

AVFUELS CIRCLE
WAGNER DR

919
922
924
920
2502
205
204
1199
830
828
NA

78°57'0"W



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Fence
- Installation Boundary

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

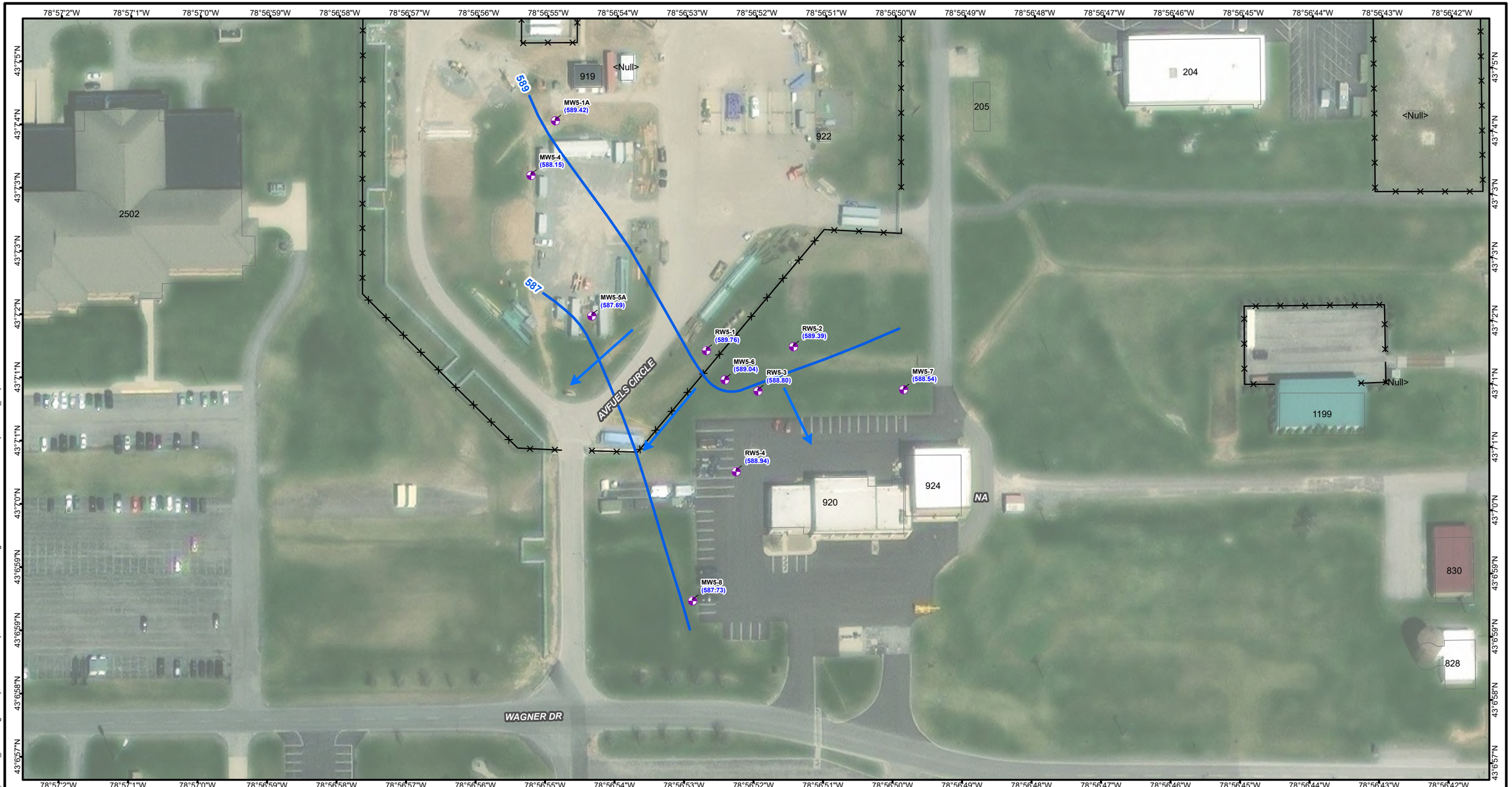
2024 Annual Report

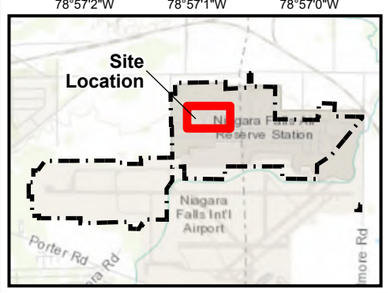
SITE 5 - MONITORING/SAMPLING LOCATIONS

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
4-1

DIV/GROUP: ENV/IMDV DB: hs8906 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\NFARS - Section 1\NFARS Section 1 2024 Annual Report.aprx /Fig4-1_Niagara_Site5 Annual Report 2024 DATE: 8/7/2025





Legend

- Overburden Well/Piezometer
- (589.76) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Fence
- Installation Boundary

0 100 200

SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

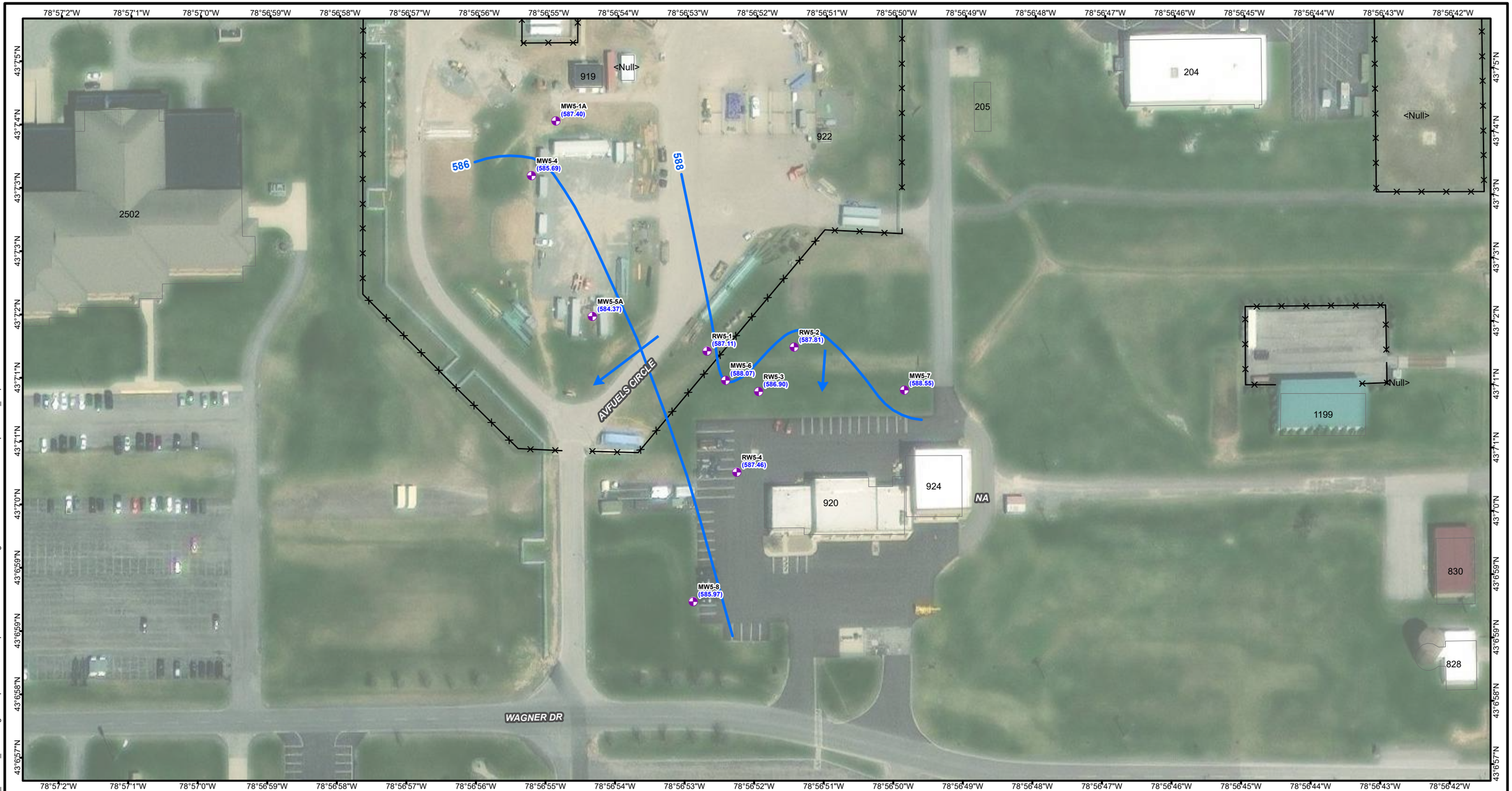
2024 Annual Report

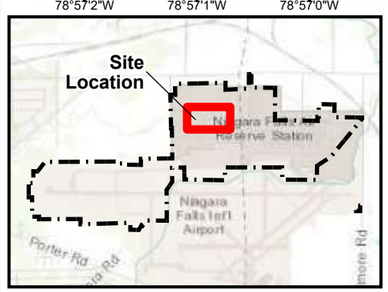
SITE 5 - OVERBURDEN GROUNDWATER CONTOUR MAP (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 4-2

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENVNE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site3_5.aprx DATE: 9/8/2025 3:12 PM





Legend

- Overburden Well/Piezometer
- (585.69) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Fence
- Installation Boundary

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

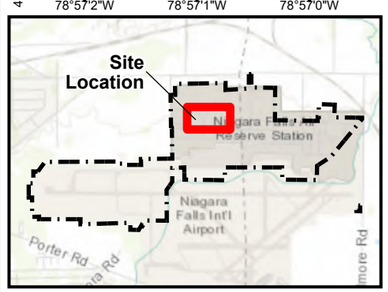
SITE 5 - OVERBURDEN GROUNDWATER CONTOUR MAP (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
4-3

DIV/GROUP: ENV/IMDV DB: cvi00949 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENVNE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site3_5.aprx DATE: 3/10/2025 12:22 PM





Legend

- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- (588.29) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Fence
- Installation Boundary

Note:
1. * = Elevation not used to develop groundwater contours.
2. NM = Not measured

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 5 - SHALLOW BEDROCK GROUNDWATER CONTOUR MAP (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

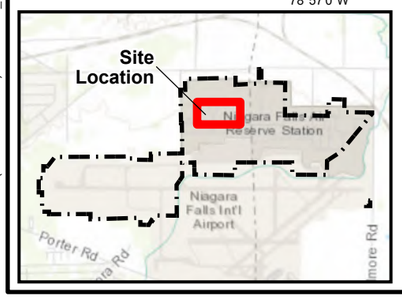
FIGURE
4-4

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78°57'0"W
78°56'50"W
43°7'4"N
43°7'0"N

585
587
919
922
205
204
2502
MW5-2D (585.60)
MW5-3D NM
MW5-1DA (585.20)
MW5-1E (582.85)
CH5-1 (585.35)
MW5-5D (592.30)*
CH5-2 (586.47)
CH5-3 (584.76)
CH5-4 (587.39)
MW5-4D (584.96)
MW5-6D (587.44)
AVFUELS CIRCLE
1199
920
924
NA
MW5-7D NM
830
828
WAGNER DR
MW5-8D (583.60)



Legend

- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- (585.60) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Fence
- Installation Boundary

Note:
1. * = Elevation not used to develop groundwater contours.
2. NM = Not measured.

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2023 Annual Report

SITE 5 - SHALLOW BEDROCK GROUNDWATER CONTOUR MAP (FALL 2023)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 4-5

78°57'0"W

78°56'50"W

43°7'4"N

43°7'0"N

RW5-1	
7/16/2024	
Acetone	3.2 J
cDCE	58.3
Iodomethane	0.44 J-
Toluene	6.0
tDCE	2.0
TCE	0.70 J
VC	97.9

MW5-6	
7/16/2024	
Acetone	3.8 J (3.6 J)
cDCE	2.6 (2.4)
Toluene	2.3 (2.3)
TCE	1.2 (1.2)
VC	1.1 (1.0)

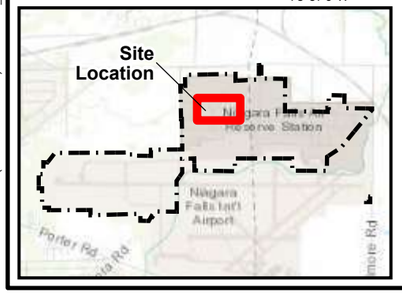
RW5-2	
7/16/2024	
cDCE	13.3
Toluene	2.2
VC	26.8

MW5-1DA	
7/16/2024	
cDCE	0.45 J

RW5-4	
7/16/2024	
cDCE	0.46 J
Toluene	1.1
VC	0.38 J

MW5-5D	
7/16/2024	
2-Butanone	4.8 J
Acetone	4.8 J
cDCE	3.2
Toluene	0.34 J
TCE	2.1

MW5-1A
MW5-2D
MW5-4
MW5-3D
MW5-5A
MW5-1E
CH5-1
CH5-2
RW5-3
CH5-3
CH5-4
MW5-4D
MW5-8
MW5-8D
MW5-7
MW5-6D
MW5-7D
AVFUELS CIRCLE
WAGNER DR
NA
919
<Null>
2502
205
204
924
1199
830
828



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Fence
- Installation Boundary

Notes:
1. Results are in micrograms per liter (ug/L).
2. Blue shading indicates result is above NYSDEC Class GA Standards.
3. Results in brackets represent sample duplicate.

Lab Qualifiers:
J = Analyte detected; estimated concentration
J- = Analyte detected; estimated concentration that may be biased low

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 5 - IWGP GROUNDWATER DETECTIONS (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
4-6

DIV/GROUP: ENV/MDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: J&MDL (30028498.00001) PATH: T:_ENVINE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site3_5.aprx DATE: 9/1/2025 2:23 PM

78°57'0"W
78°56'50"W
43°7'4"N
43°7'0"N

RW5-1	
10/28/2024	
Acetone	4.5 J (4.6 J)
Chloroform	0.49 J (0.44 J)
cDCE	1.1 (0.98 J)
Toluene	3.8 (4.1)
tDCE	0.47 J (0.55 J)
TCE	0.89 J (0.81 J)
VC	1.5 (1.3)

MW5-6	
10/28/2024	
Acetone	3.8 J
Chloroform	0.47 J
cDCE	3.3
Toluene	2.3
TCE	1.6

MW5-1DA	
10/28/2024	
Acetone	3.4 J
Chloroform	0.42 J
cDCE	0.56 J

RW5-2	
10/28/2024	
Acetone	3.7 J
Chloroform	0.42 J
cDCE	0.67 J
Toluene	0.73 J

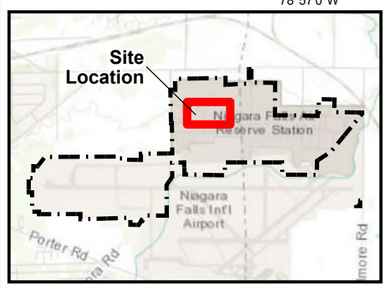
RW5-4	
10/28/2024	
Acetone	3.7 J
Chloroform	0.48 J
cDCE	0.43 J
Toluene	0.55 J
VC	0.49 J

MW5-5D	
10/28/2024	
Acetone	3.8 J
Chloroform	0.43 J
cDCE	8.4
tDCE	0.52 J
TCE	6.4
VC	6.8

MW5-1A, MW5-2D, MW5-4, MW5-3D, MW5-5A, MW5-1E, CH5-1, CH5-2, RW5-3, CH5-3, CH5-4, MW5-4D, MW5-6D, MW5-7, MW5-7D, MW5-8, MW5-8D

AVFUELS CIRCLE
WAGNER DR

919 <Null> 922 205 204 <Null> 2502 924 1199 <Null> 830 828



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Fence
- Installation Boundary

Notes:
1. Results are in micrograms per liter (ug/L).
2. Blue shading indicates result is above NYSDEC Class GA Standards.
3. Results in brackets represent sample duplicate.

Lab Qualifier:
J = Analyte detected; estimated concentration

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

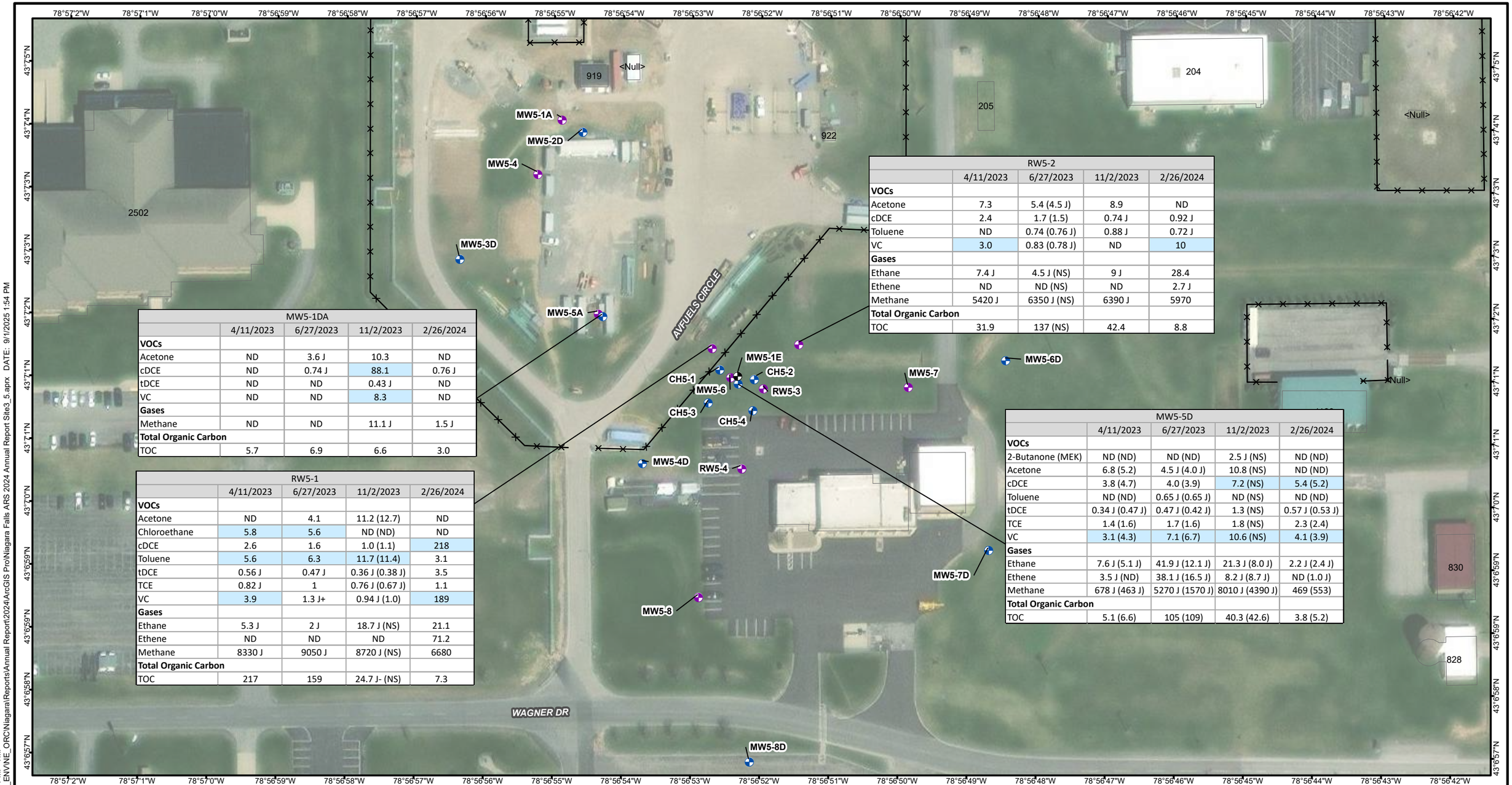
2024 Annual Report

SITE 5 - IWGP GROUNDWATER DETECTIONS (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
4-7

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MW5-1DA				
	4/11/2023	6/27/2023	11/2/2023	2/26/2024
VOCs				
Acetone	ND	3.6 J	10.3	ND
cDCE	ND	0.74 J	88.1	0.76 J
tDCE	ND	ND	0.43 J	ND
VC	ND	ND	8.3	ND
Gases				
Methane	ND	ND	11.1 J	1.5 J
Total Organic Carbon				
TOC	5.7	6.9	6.6	3.0

RW5-1				
	4/11/2023	6/27/2023	11/2/2023	2/26/2024
VOCs				
Acetone	ND	4.1	11.2 (12.7)	ND
Chloroethane	5.8	5.6	ND (ND)	ND
cDCE	2.6	1.6	1.0 (1.1)	218
Toluene	5.6	6.3	11.7 (11.4)	3.1
tDCE	0.56 J	0.47 J	0.36 J (0.38 J)	3.5
TCE	0.82 J	1	0.76 J (0.67 J)	1.1
VC	3.9	1.3 J+	0.94 J (1.0)	189
Gases				
Ethane	5.3 J	2 J	18.7 J (NS)	21.1
Ethene	ND	ND	ND	71.2
Methane	8330 J	9050 J	8720 J (NS)	6680
Total Organic Carbon				
TOC	217	159	24.7 J- (NS)	7.3

RW5-2				
	4/11/2023	6/27/2023	11/2/2023	2/26/2024
VOCs				
Acetone	7.3	5.4 (4.5 J)	8.9	ND
cDCE	2.4	1.7 (1.5)	0.74 J	0.92 J
Toluene	ND	0.74 (0.76 J)	0.88 J	0.72 J
VC	3.0	0.83 (0.78 J)	ND	10
Gases				
Ethane	7.4 J	4.5 J (NS)	9 J	28.4
Ethene	ND	ND (NS)	ND	2.7 J
Methane	5420 J	6350 J (NS)	6390 J	5970
Total Organic Carbon				
TOC	31.9	137 (NS)	42.4	8.8

MW5-5D				
	4/11/2023	6/27/2023	11/2/2023	2/26/2024
VOCs				
2-Butanone (MEK)	ND (ND)	ND (ND)	2.5 J (NS)	ND (ND)
Acetone	6.8 (5.2)	4.5 J (4.0 J)	10.8 (NS)	ND (ND)
cDCE	3.8 (4.7)	4.0 (3.9)	7.2 (NS)	5.4 (5.2)
Toluene	ND (ND)	0.65 J (0.65 J)	ND (NS)	ND (ND)
tDCE	0.34 J (0.47 J)	0.47 J (0.42 J)	1.3 (NS)	0.57 J (0.53 J)
TCE	1.4 (1.6)	1.7 (1.6)	1.8 (NS)	2.3 (2.4)
VC	3.1 (4.3)	7.1 (6.7)	10.6 (NS)	4.1 (3.9)
Gases				
Ethane	7.6 J (5.1 J)	41.9 J (12.1 J)	21.3 J (8.0 J)	2.2 J (2.4 J)
Ethene	3.5 J (ND)	38.1 J (16.5 J)	8.2 J (8.7 J)	ND (1.0 J)
Methane	678 J (463 J)	5270 J (1570 J)	8010 J (4390 J)	469 (553)
Total Organic Carbon				
TOC	5.1 (6.6)	105 (109)	40.3 (42.6)	3.8 (5.2)



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Fence
- Installation Boundary

Notes:
1. Results are in micrograms per liter (ug/L).
2. Blue shading indicates result is above NYSDEC Class GA Standards.
3. Results in brackets represent sample duplicate.
4. ND = Non-detect
5. NS = Not Sampled; Sample not submitted for analysis of this constituent

Lab Qualifiers:
J - Analyte detected; estimated concentration
J+ - Analyte detected; estimated concentration that may be biased high

N

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

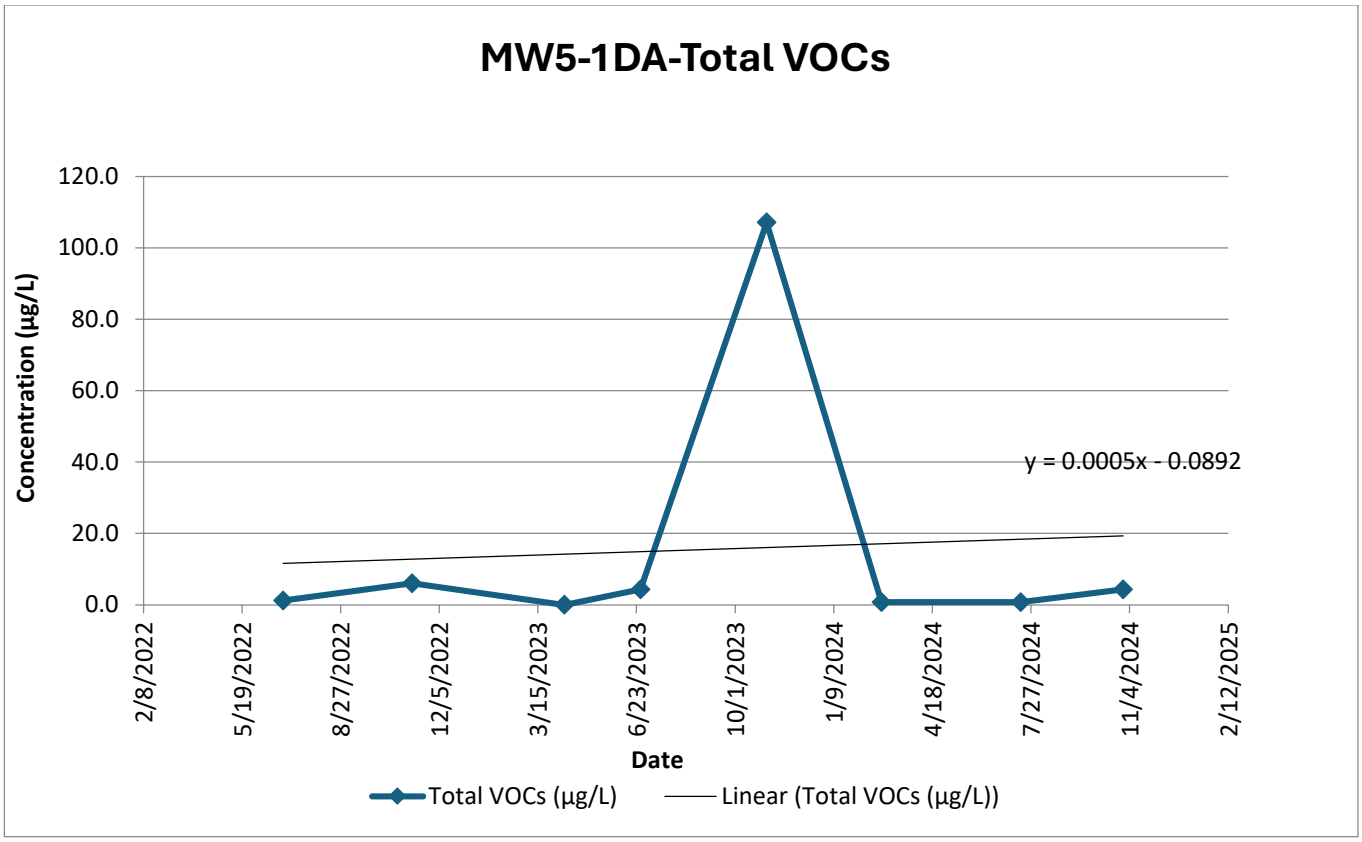
SITE 5 - REMEDIAL INJECTION PERFORMANCE MONITORING GROUNDWATER DETECTIONS

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 4-8

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site3_5.aprx DATE: 9/1/2025 1:54 PM

Figure 4-9 – Site 5 – Long-Term Trend Data



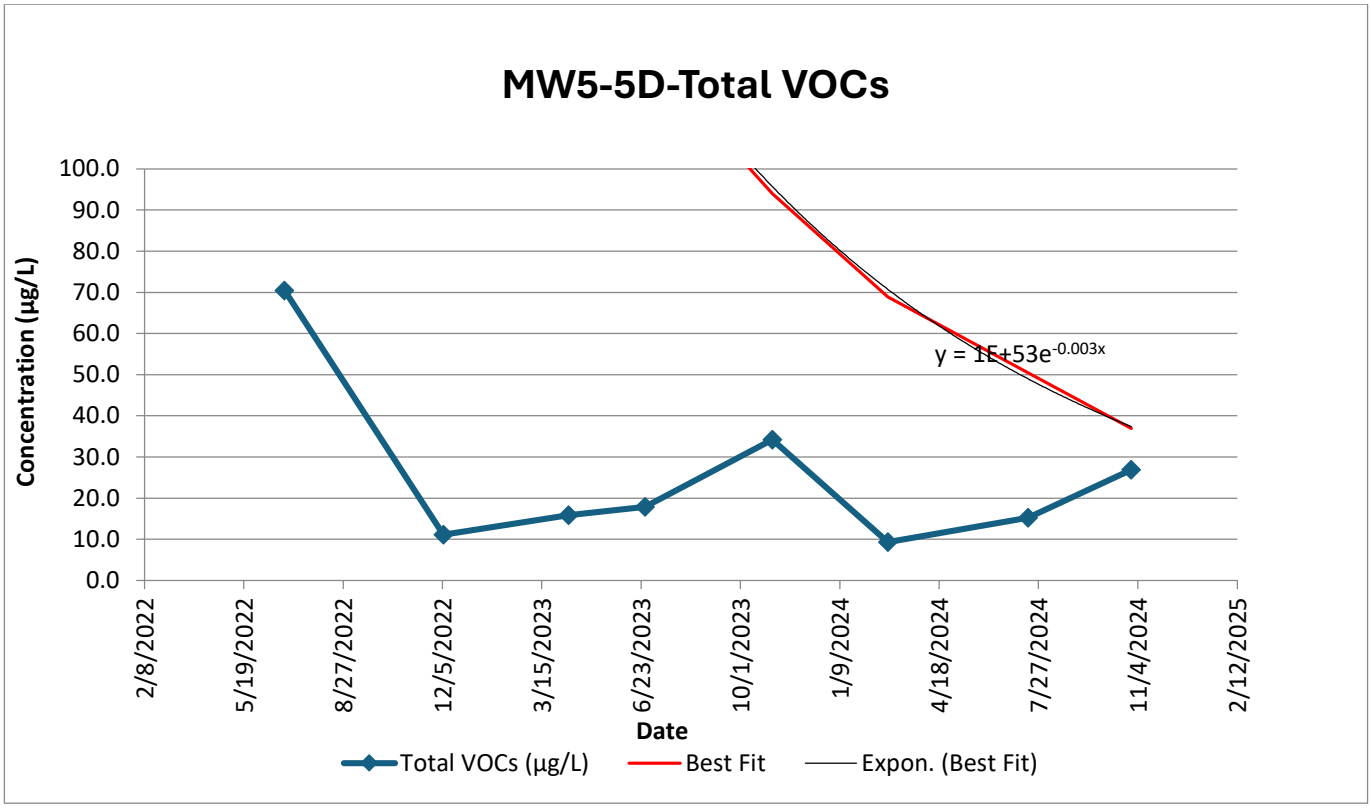
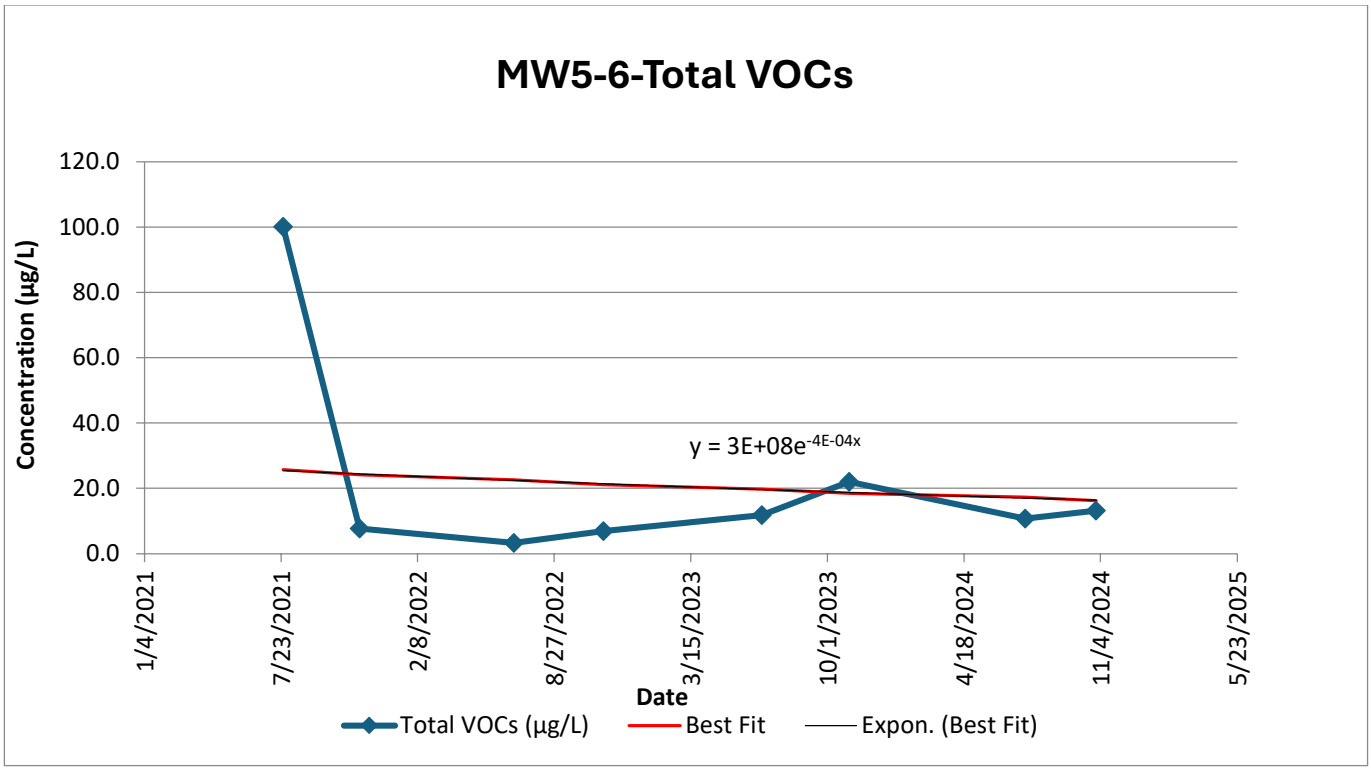


Figure 4-9 – Site 5 – Long-Term Trend Data



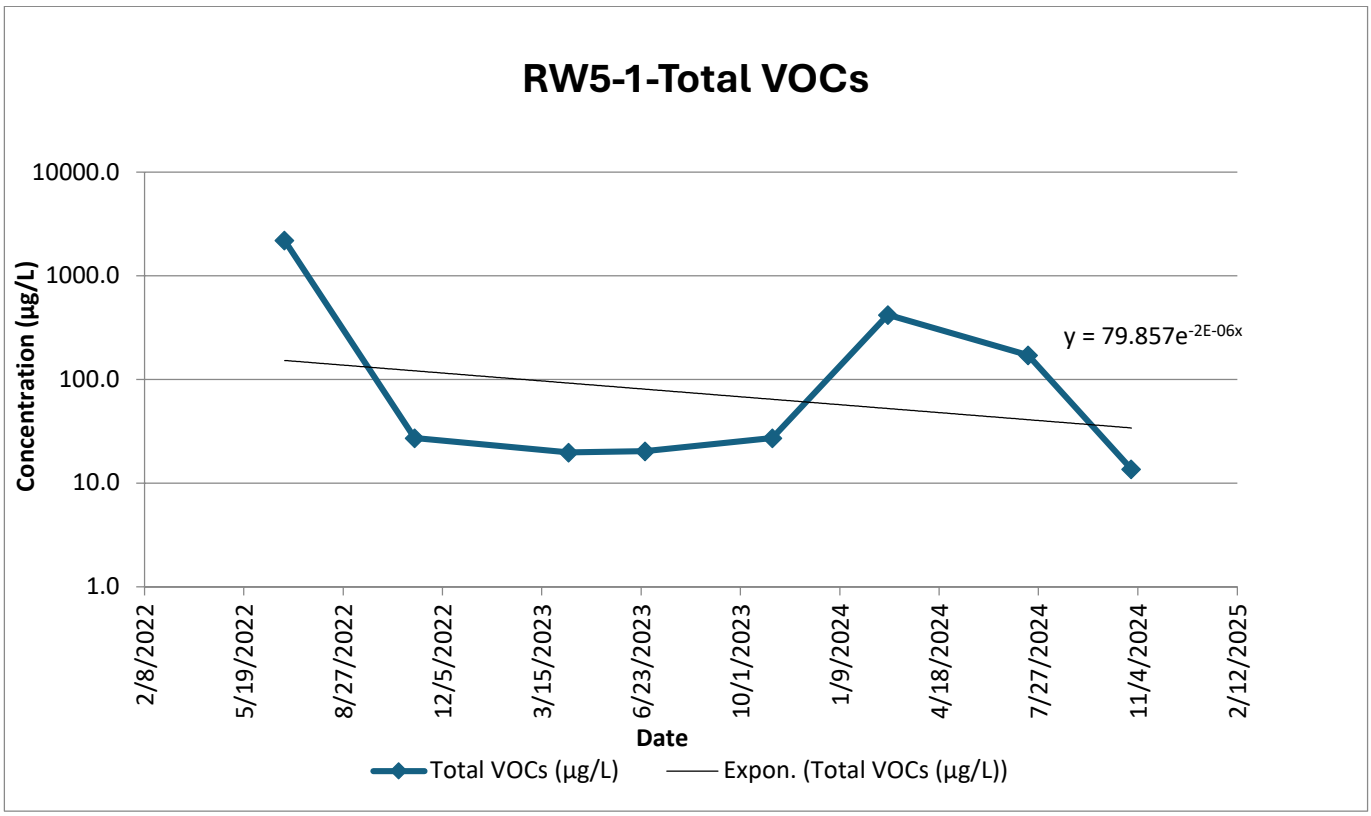
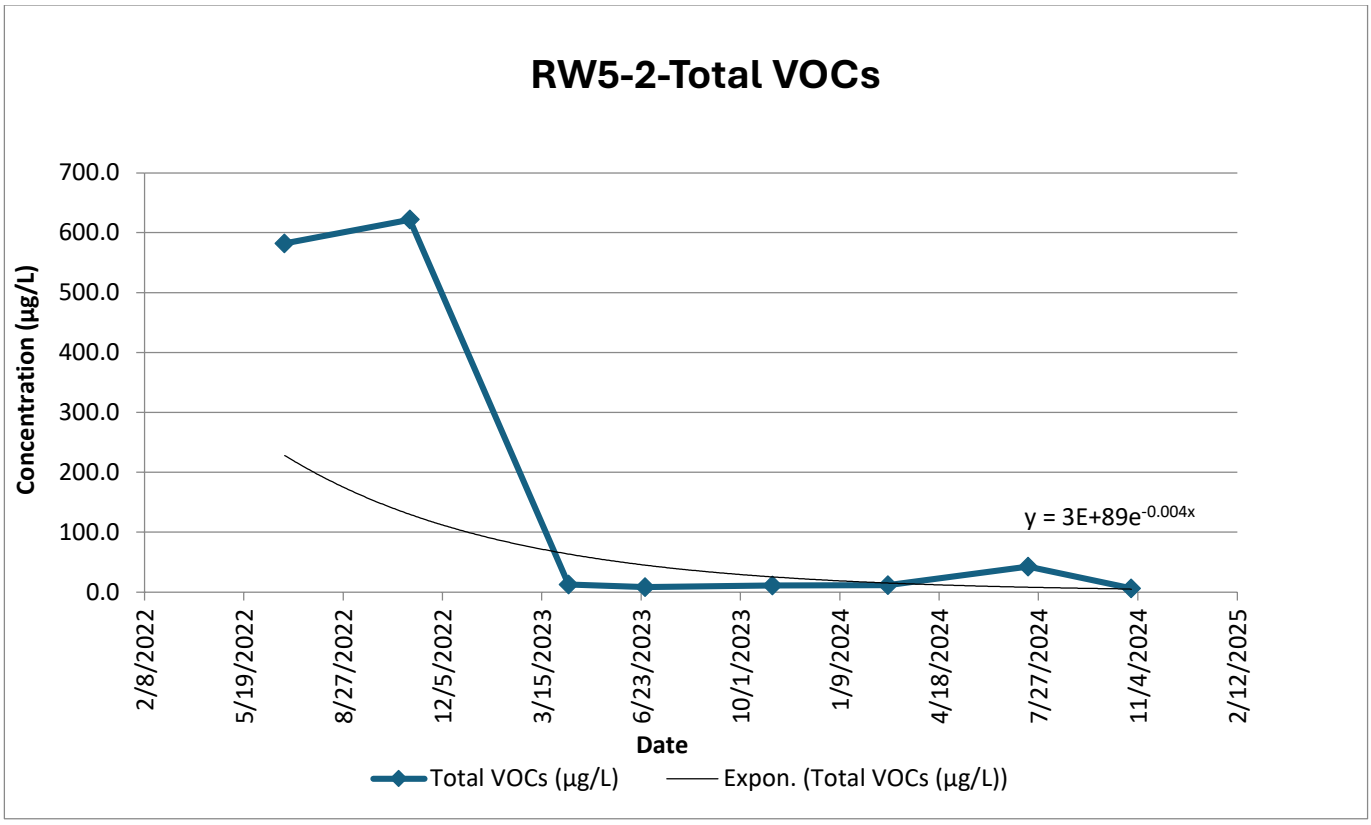
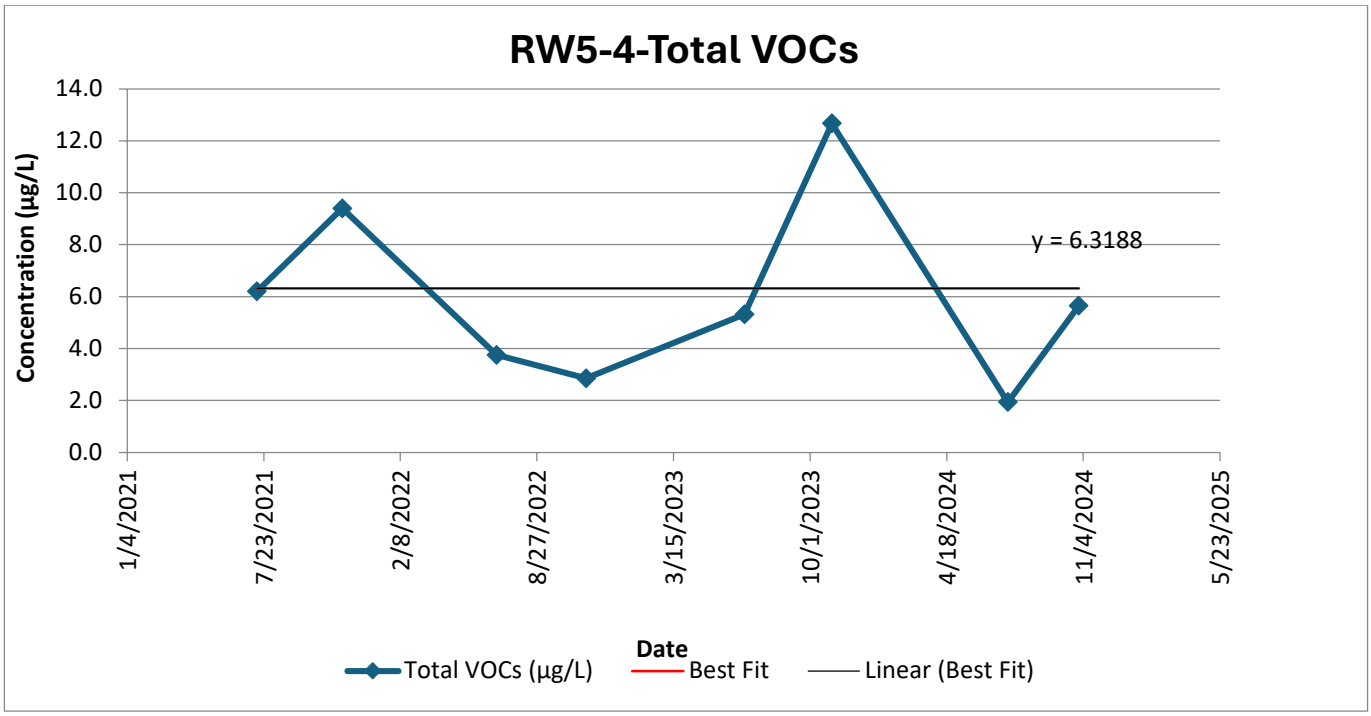


Figure 4-9 – Site 5 – Long-Term Trend Data



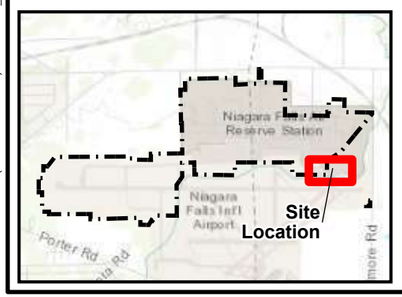


78°56'0"W

43°6'40"N

SW10-5
MW10-5D
MW10-3
SW10-8
MW10-13
MW10-13D
MW10-10D
PW10-2
MW10-1EA
MW10-1F
MW10-1DA
MW10-2
MW10-4
MW10-11
MW10-11D
MW10-8
MW10-4D
MW10-4E
MW10-6
MW10-8D
MW10-7
MW10-12
MW10-12D
PW10-1
TAXIWAY A
TAXIWAY A
MW10-2E
PZ10-7
SW10-6
MW10-9D
SW10-7
MW10-3E
MW10-3D
RUNWAY 6-24
TAXIWAY A

78°56'0"W



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Surface Water Sample
- Drainage Ditch
- Goundwater Collection Trench
- Installation Boundary

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 10 - MONITORING/SAMPLING LOCATIONS

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
5-1

DIV/GROUP: ENV/IMDV DB: hs6906 LD: PIC: PM: TM:
PROJECT: -IBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\NFARS -Section 1\NFARS Section 1 2024 Annual Report.aprx /Fig5-1_Niagara_Site10 Annual Report 2024 DATE: 8/7/2025

78°56'5"W 78°56'1"W 78°55'57"W 78°55'54"W 78°55'51"W 78°55'47"W

43°6'42"N

43°6'39"N

SW10-5 (585.32)

MW10-3 (585.91)

SW10-8 (N/A)

MW10-13 (582.64)

MW10-2 (585.69)

PW10-2 (581.94)*

MW10-4 (585.36)

585

583

MW10-11 (582.83)

MW10-7 (583.55)

MW10-6 (583.19)

MW10-12 (582.15)

MW10-8 (583.48)

PW10-1 (582.99)

PZ10-7 (582.13)

SW10-6 (577.40)

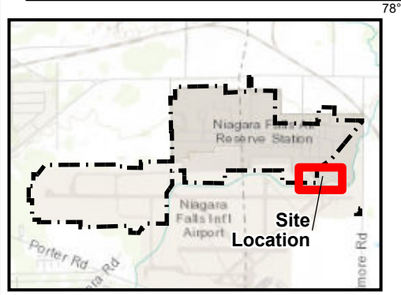
SW10-7 (582.83)

TAXIWAY A

TAXIWAY A

RUNWAY 6-24

TAXIWAY A



Legend

- Overburden Well/Piezometer
- Surface Water Sample
- (581.94) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Drainage Ditch/Cayuga Creek
- Groundwater Collection Trench
- Installation Boundary

Note:
1. N/A = Not applicable; a water level measurement is not collected at this location
2. * = Elevation was not used to develop groundwater contours.

0 100 200

SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 10 - OVERBURDEN GROUNDWATER CONTOUR MAP (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 5-2

DIV/GROUP: ENV/IMDV DB: mali01043 LD: PIC: PM: TM:
PROJECT: J:\BMDL (30028498.00001) PATH: T:_ENVINE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 1/29/2026 5:06 PM

78°56'6"W 78°56'4"W 78°56'2"W 78°56'0"W 78°55'58"W 78°55'56"W 78°55'54"W 78°55'52"W 78°55'50"W 78°55'48"W 78°55'46"W

43°6'44"N 43°6'42"N 43°6'40"N 43°6'38"N

611

727

SW10-5 (NM)

MW10-3 (583.80)

MW10-13 (580.89)

SW10-8 (N/A)

PW10-2 (583.26)

MW10-2 (583.03)

583

MW10-4 (581.57)

MW10-6 (580.63)

MW10-11 (580.33)

MW10-8 (581.72)

MW10-7 (581.24)

MW10-12 (582.61)

581

PW10-1 (580.97)

TAXIWAY A

TAXIWAY A

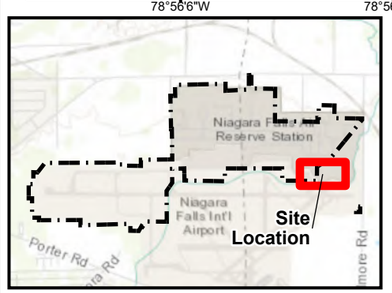
PZ10-7 (580.35)

SW10-6 (NM)

SW10-7 (582.36)

RUNWAY 6-24

TAXIWAY A



Legend

- Overburden well/Piezometer
- Surface Water Sample
- (580.97) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Drainage Ditch/Cayuga Creek
- Groundwater Collection Trench
- Installation Boundary

Notes:
1. N/A = Not applicable; a water level measurement is not collected at this location.
2. NM = Not measured.

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

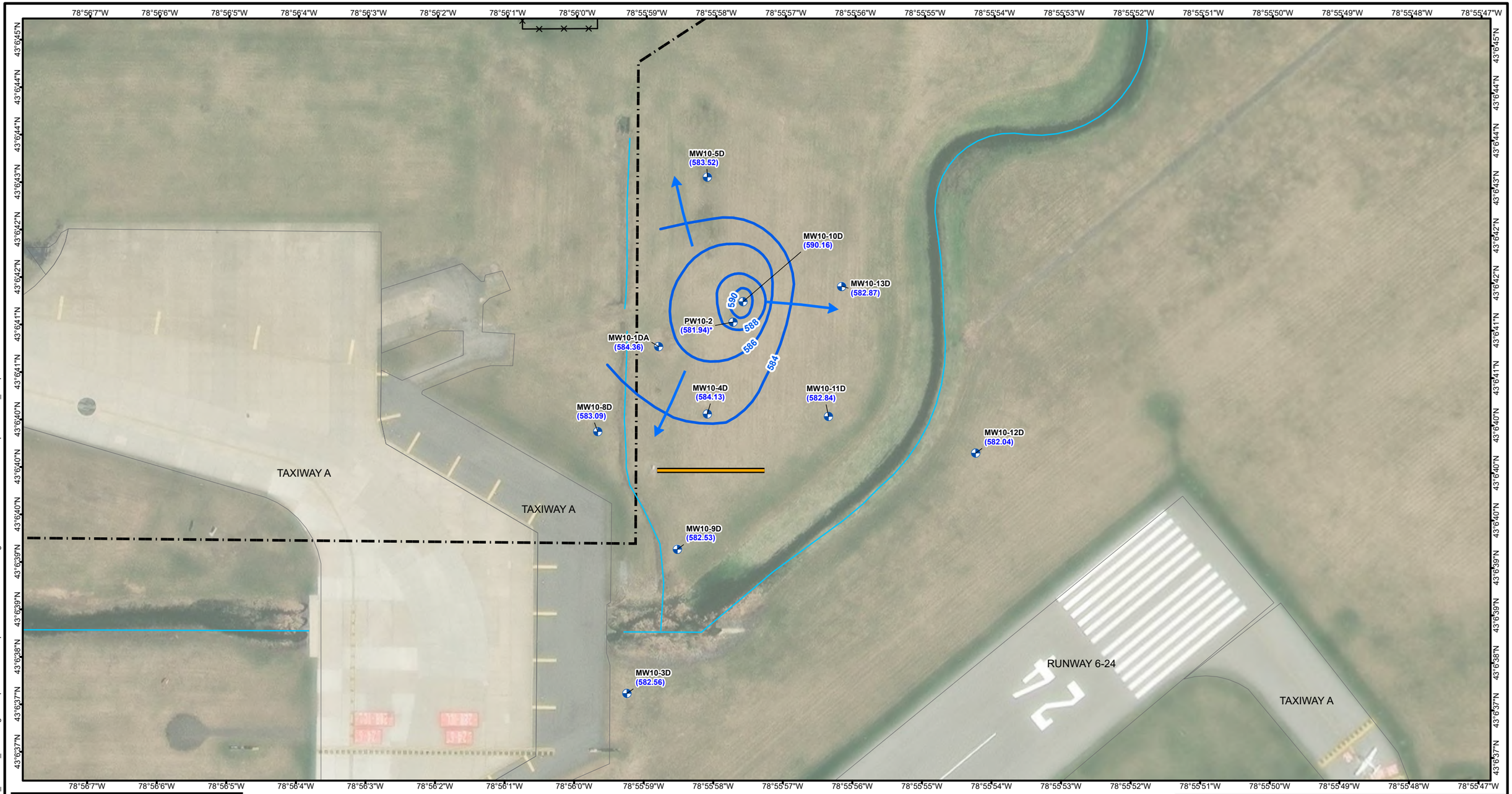
2024 Annual Report

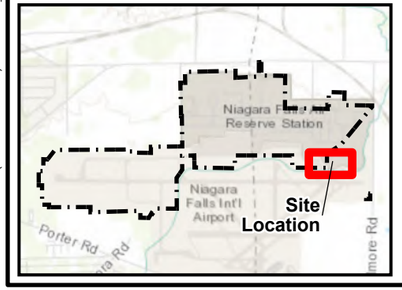
SITE 10 - OVERBURDEN GROUNDWATER CONTOUR MAP (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 5-3

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/8/2025 3:57 PM





Legend

- Shallow Bedrock Well/Piezometer
- (582.87) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Drainage Ditch/Cayuga Creek
- Groundwater Collection Trench
- Installation Boundary

Note:
1. * = Elevation was not used to develop groundwater contours.

N

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK
2024 Annual Report

SITE 10 - SHALLOW BEDROCK GROUNDWATER CONTOUR MAP (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
5-4

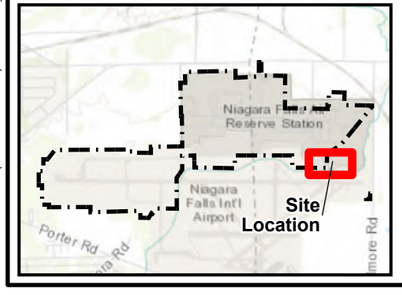
DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/8/2025 3:57 PM

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/2/2025 2:17 PM

78°56'7"W 78°56'6"W 78°56'5"W 78°56'4"W 78°56'3"W 78°56'2"W 78°56'1"W 78°56'0"W 78°55'59"W 78°55'58"W 78°55'57"W 78°55'56"W 78°55'55"W 78°55'54"W 78°55'53"W 78°55'52"W 78°55'51"W 78°55'50"W 78°55'49"W 78°55'48"W 78°55'47"W

43°6'45"N 43°6'44"N 43°6'43"N 43°6'42"N 43°6'41"N 43°6'40"N 43°6'39"N 43°6'38"N 43°6'37"N

MW10-5D (581.62)
MW10-10D (588.89)
MW10-13D (581.08)
MW10-1DA (582.15)
PW10-2 (583.26)
MW10-11D (580.60)
MW10-8D (582.28)
MW10-4D (581.76)
582
MW10-12D (580.66)
TAXIWAY A
TAXIWAY A
MW10-9D (581.13)
582
MW10-3D (580.47)
RUNWAY 6-24
TAXIWAY A



Legend

- Shallow Bedrock Well/Piezometer
- (582.28) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Drainage Ditch/Cayuga Creek
- Groundwater Collection Trench
- Installation Boundary

Notes:
1. * = Elevation not used to develop groundwater contours.

N

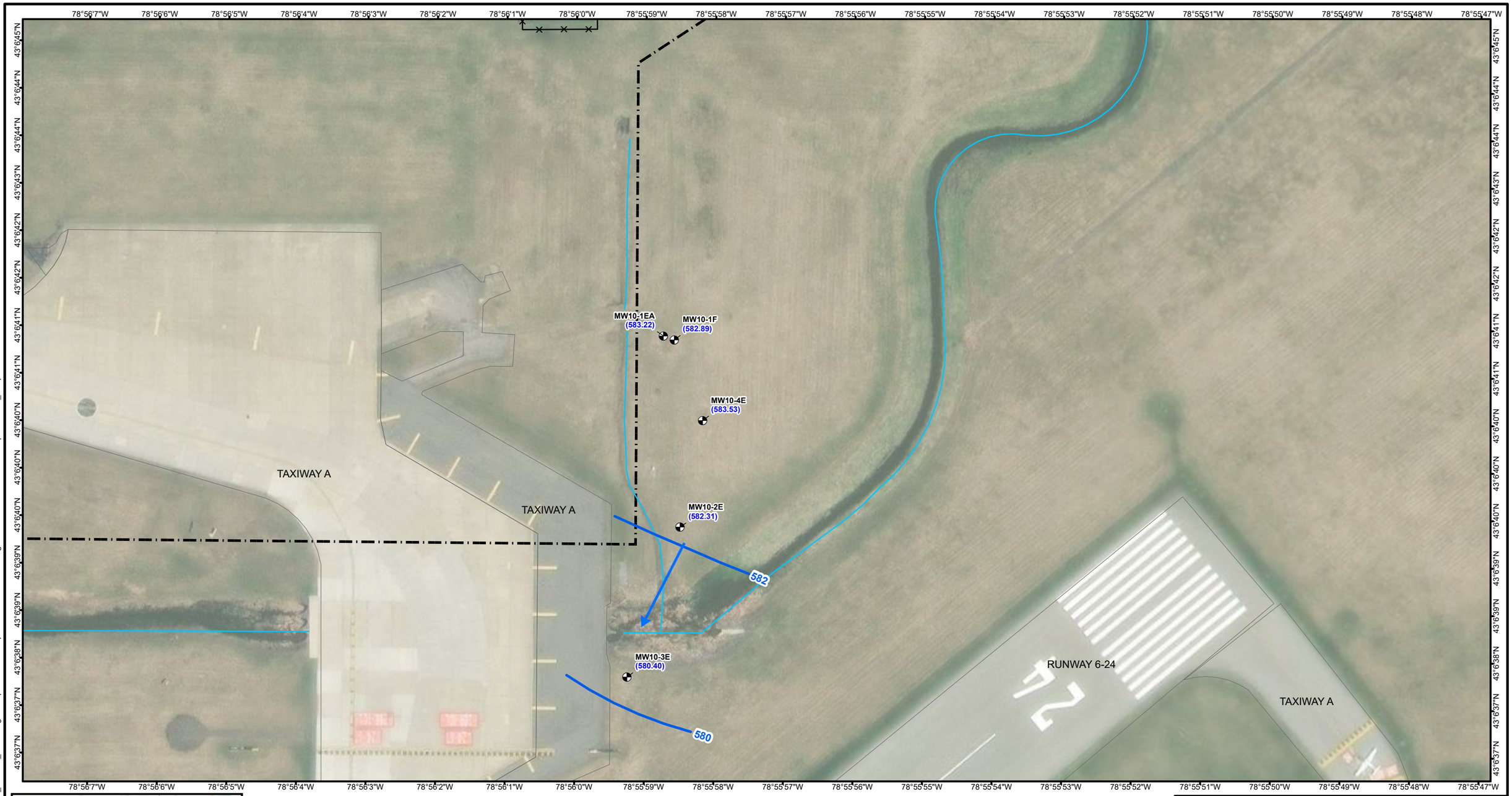
0 100 200
SCALE IN FEET

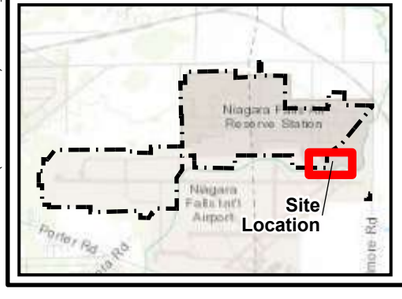
NIAGARA FALLS AIR RESERVE STATION
NEW YORK
2024 Annual Report

SITE 10 - SHALLOW BEDROCK GROUNDWATER CONTOUR MAP (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 5-5





Legend

- Deep Bedrock Well
- (583.53) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Drainage Ditch/Cayuga Creek
- Installation Boundary

N

0 100 200

SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 10 - DEEP BEDROCK GROUNDWATER CONTOUR MAP (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
5-6

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/2/2025 12:10 PM

78°56'7"W 78°56'6"W 78°56'5"W 78°56'4"W 78°56'3"W 78°56'2"W 78°56'1"W 78°56'0"W 78°55'59"W 78°55'58"W 78°55'57"W 78°55'56"W 78°55'55"W 78°55'54"W 78°55'53"W 78°55'52"W 78°55'51"W 78°55'50"W 78°55'49"W 78°55'48"W 78°55'47"W

43°6'45"N 43°6'44"N 43°6'43"N 43°6'42"N 43°6'41"N 43°6'40"N 43°6'39"N 43°6'38"N 43°6'37"N

MW10-1EA (582.40)

MW10-1F (582.03)

582

MW10-4E (582.74)

TAXIWAY A

TAXIWAY A

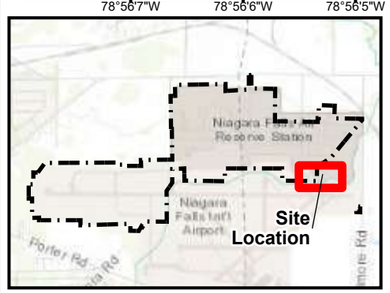
MW10-2E (581.58)

MW10-3E (579.69)

580

RUNWAY 6-24

TAXIWAY A



Legend

- Deep Bedrock Well
- (582.74) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Drainage Ditch/Cayuga Creek
- Installation Boundary

N

0 100 200

SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 10 - DEEP BEDROCK GROUNDWATER CONTOUR MAP (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
5-7

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/2/2025 12:10 PM

78°56'0"W

78°55'50"W

43°6'44"N

43°6'40"N

SW10-5	
7/16/2024	
TCE	0.90 J

MW10-3	
7/16/2024	
Acetone	11.0

SW10-8	
7/16/2024	
cDCE	1.5

MW10-7	
7/16/2024	
2-Butanone (MEK)	2.4 J
Acetone	11.8
cDCE	0.49 J
tDCE	1.0

PW10-2	
7/16/2024	
Acetone	10.7
Benzene	1.9
Iodomethane	0.68 J-

PW10-1	
7/16/2024	
Acetone	10.2
cDCE	0.42 J

SW10-6	
7/16/2024	
cDCE	0.51 J

PZ10-7	
7/16/2024	
Acetone	10.9
Iodomethane	0.42 J-

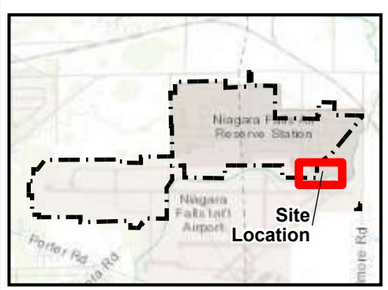
SW10-7	
7/16/2024	
Acetone	3.6 J

SW10-5, MW10-5D, MW10-13, MW10-13D, MW10-10D, MW10-1EA, MW10-1F, MW10-1DA, MW10-2, MW10-4, MW10-4D, MW10-4E, MW10-8, MW10-8D, MW10-6, MW10-11, MW10-11D, MW10-12D, MW10-12, MW10-2E, MW10-9D, MW10-3E, MW10-3D

TAXIWAY A

RUNWAY 6-24

TAXIWAY A



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Surface Water Sample
- Drainage Ditch/Cayuga Creek
- Groundwater Collection Trench
- Installation Boundary

Notes:
1. Results are in micrograms per liter (ug/L).
2. Blue shading indicates result is above NYSDEC Class GA Standards.

Lab Qualifier:
J = Compound detected, estimated concentration
J- = Analyte detected; estimated concentration that may be biased low

N

0 100 200

SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 10 - IWGP GROUNDWATER AND SURFACE WATER DETECTIONS (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
5-8

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/2/2025 12:48 PM

78°56'0"W

78°55'50"W

43°6'44"N

43°6'40"N

MW10-10D	
10/28/2024	
2-Butanone (MEK)	10.1
Benzene	2.0
cDCE	120
Toluene	8.4
tDCE	2.3
TCE	13.6
VC	6.0

PW10-2	
10/28/2024	
Acetone	3.7 J
Chloroform	0.42 J
cDCE	0.34 J

SW10-8	
10/28/2024	
Chloroform	0.68 J

MW10-1DA	
10/28/2024	
Acetone	3.4 J
Benzene	3.6
Chloroform	0.47 J
cDCE	1.5
tDCE	0.33 J
VC	3.4

MW10-4E	
10/28/2024	
Acetone	3.6 J
Chloroform	0.38 J
cDCE	6.3
VC	1.2

PW10-1	
10/28/2024	
Acetone	3.9 J
Chloroform	0.35 J
cDCE	0.80 J
Iodomethane	1.1
VC	1.2

SW10-7	
10/28/2024	
Chloroform	0.57 J

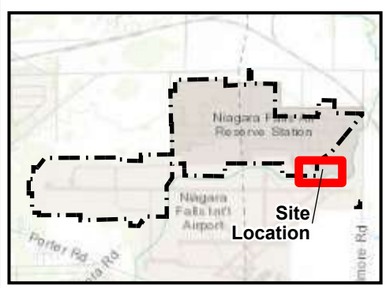
MW10-3D	
10/28/2024	
Acetone	4.7 J
Chloroform	0.34 J

MW10-4D	
10/28/2024	
Acetone	3.3 J
Benzene	0.99 J
Chloroform	0.42 J
cDCE	2.5
tDCE	0.34 J
VC	8.0

MW10-9D	
10/28/2024	
Acetone	3.3 J
Chloroform	0.36 J
cDCE	5.4
VC	6.2

SW10-5
MW10-5D
MW10-3
MW10-13
MW10-13D
MW10-1EA
MW10-1F
MW10-2
MW10-4
MW10-11
MW10-11D
MW10-8
MW10-8D
MW10-6
MW10-7
MW10-12D
MW10-12
MW10-2E
PZ10-7
SW10-6
NS
MW10-3E

TAXIWAY A
RUNWAY 6-24
TAXIWAY A



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Surface Water Sample
- Drainage Ditch/Cayuga Creek
- Groundwater Collection Trench
- Installation Boundary

Notes:
1. Results are in micrograms per liter (ug/L).
2. Blue shading indicates result is above NYSDEC Class GA Standards.
3. ND = Non-detect

Lab Qualifiers:
J = Compound detected, estimated concentration

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 10 - IWGP GROUNDWATER AND SURFACE WATER DETECTIONS (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
5-9

DIV/GROUP: ENV/MDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (300284980.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/2/2025 12:48 PM

78°56'0"W

78°55'50"W

43°6'40"N

MW10-1DA				
	4/11/2023	6/27/2023	11/2/2023	2/26/2024
VOCs				
Acetone	ND	NS	9.3	ND
Benzene	2.7	NS	3.1	2.4
cDCE	0.48 J	NS	1.3	0.38 J
TCE	ND	NS	0.37 J	ND
VC	1.7	NS	3.8	1.1
Gases				
Ethane	48.5 J	57.5 J	67.9 J	43.0
Methane	7770 J	8370 J	10600 J	7190
Total Organic Carbon				
TOC	9.5	10.2	12.4	10.2

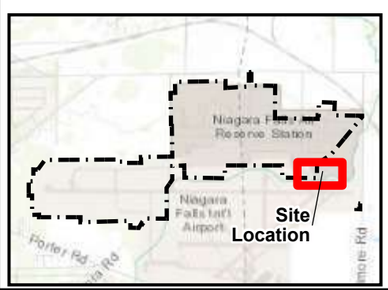
MW10-10D				
	4/11/2023	6/27/2023	11/2/2023	2/26/2024
VOCs				
Acetone	ND	NS	ND	3.7 J
Benzene	ND	NS	ND	1.5
cDCE	171	NS	141	101
Ethylbenzene	ND	NS	ND	0.36 J
Toluene	ND	NS	ND	5.7
tDCE	ND	NS	ND	1.9
TCE	ND	NS	ND	8.6
VC	ND	NS	ND	5.3
Gases				
Ethane	11.8 J	26.5 J	11.9 J	14.9
Ethene	9.2 J	13.1 J	10 J	7.7
Methane	10000 J	9900 J	8240 J	8450
Total Organic Carbon				
TOC	8140	5880	3660	2260

MW10-7				
	4/11/2023	6/27/2023	11/2/2023	2/26/2024
VOCs				
2-Butanone (MEK)	ND	8.5	ND	ND
Acetone	ND	21	13.3	ND
Benzene	ND	0.37 J	ND	ND
cDCE	30.7	28.9	1.7	0.62 J
Toluene	ND	1.1	ND	ND
tDCE	0.52 J	0.43 J	0.49 J	0.70 J
TCE	3.5	ND	1.7	ND
VC	3.9	20	4.3	0.69 J
Gases				
Ethene	ND	ND	8.1 J	2.7 J
Methane	454 J	5250 J	8840 J	7540
Total Organic Carbon				
TOC	303	126	146	68.9

MW10-11D				
	4/11/2023	6/27/2023	11/2/2023	2/26/2024
VOCs				
Acetone	3.2	NS	3.5 J	ND
Iodomethane	ND	NS	2.4 J-	ND
Gases				
Ethane	ND	ND	10.5 J	ND
Methane	ND	246 J	2360 J	2.9
Total Organic Carbon				
TOC	11.7	12.5	18.1	8.8

PW10-1				
	4/11/2023	6/27/2023	11/2/2023	2/26/2024
VOCs				
Acetone	3.2 J	3.5 J	13.5	ND
cDCE	1.5	1.1	0.77 J	ND
VC	0.38 J	0.75 J	0.61 J	ND
Gases				
Methane	5.5 J	22.7 J	197 J	0.86 J
Total Organic Carbon				
TOC	6.3	5.5	6.1	6.6

MW10-5D
MW10-3
MW10-13
MW10-13D
MW10-1EA
PW10-2
MW10-1F
MW10-2
MW10-4
MW10-4D
MW10-8D
MW10-8
MW10-6
MW10-4E
MW10-11
MW10-12
MW10-12D
MW10-2E
PZ10-7
MW10-9D
MW10-3E
MW10-3D
TAXIWAY A
RUNWAY 6-24
TAXIWAY A



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Drainage Ditch/Cayuga Creek
- Groundwater Collection Trench
- Installation Boundary

Notes:
1. Results are in micrograms per liter (ug/L).
2. Blue shading indicates result is above NYSDEC Class GA Standards.
3. ND = Non-detect.
4. NS = Not Sampled; Sample not submitted for analysis of this constituent.

Lab Qualifiers:
J = Compound detected; estimated concentration
J- = Compound detected, estimated concentration that may be biased low

N

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

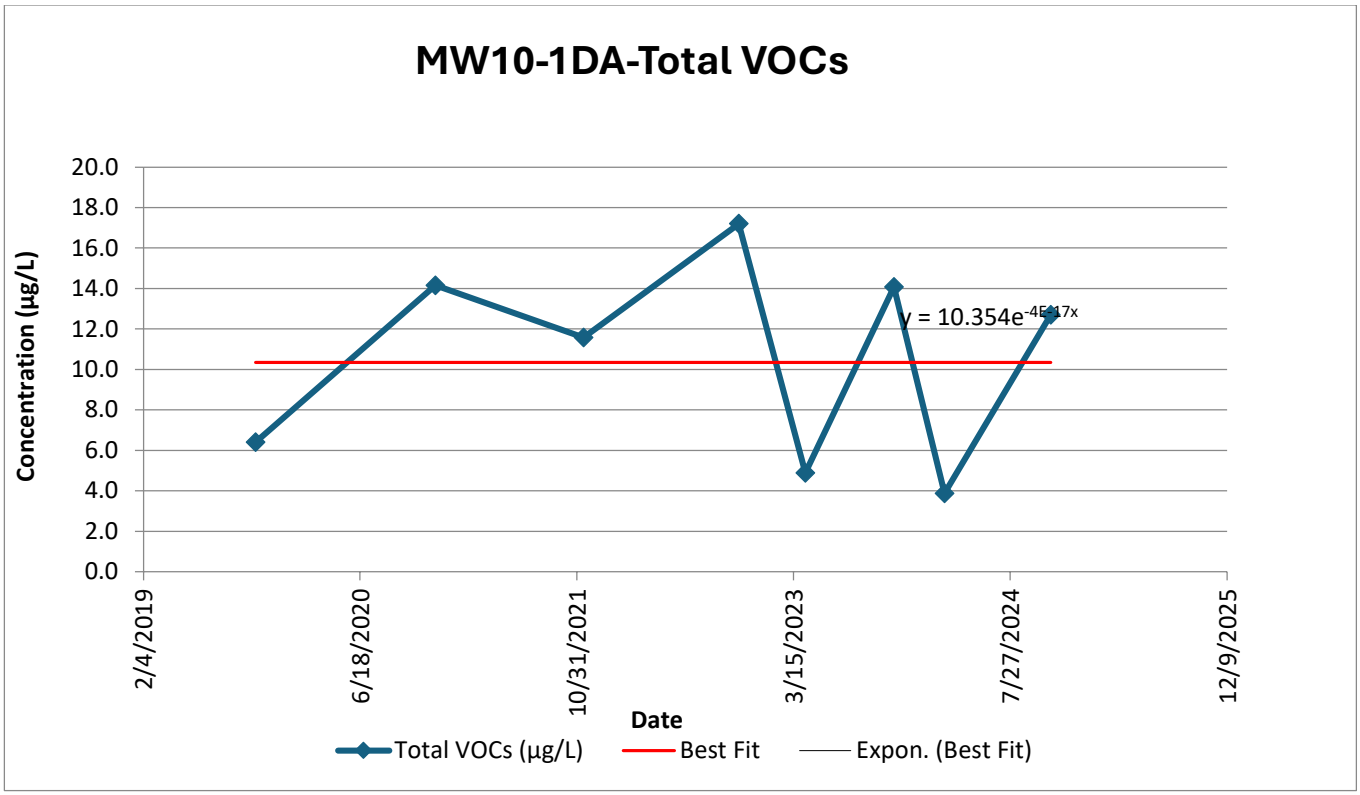
SITE 10 – REMEDIAL INJECTION PERFORMANCE MONITORING GROUNDWATER DETECTIONS

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
5-10

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/2/2025 12:10 PM

Figure 5-11 – Site 10 – Long Term Trend Data



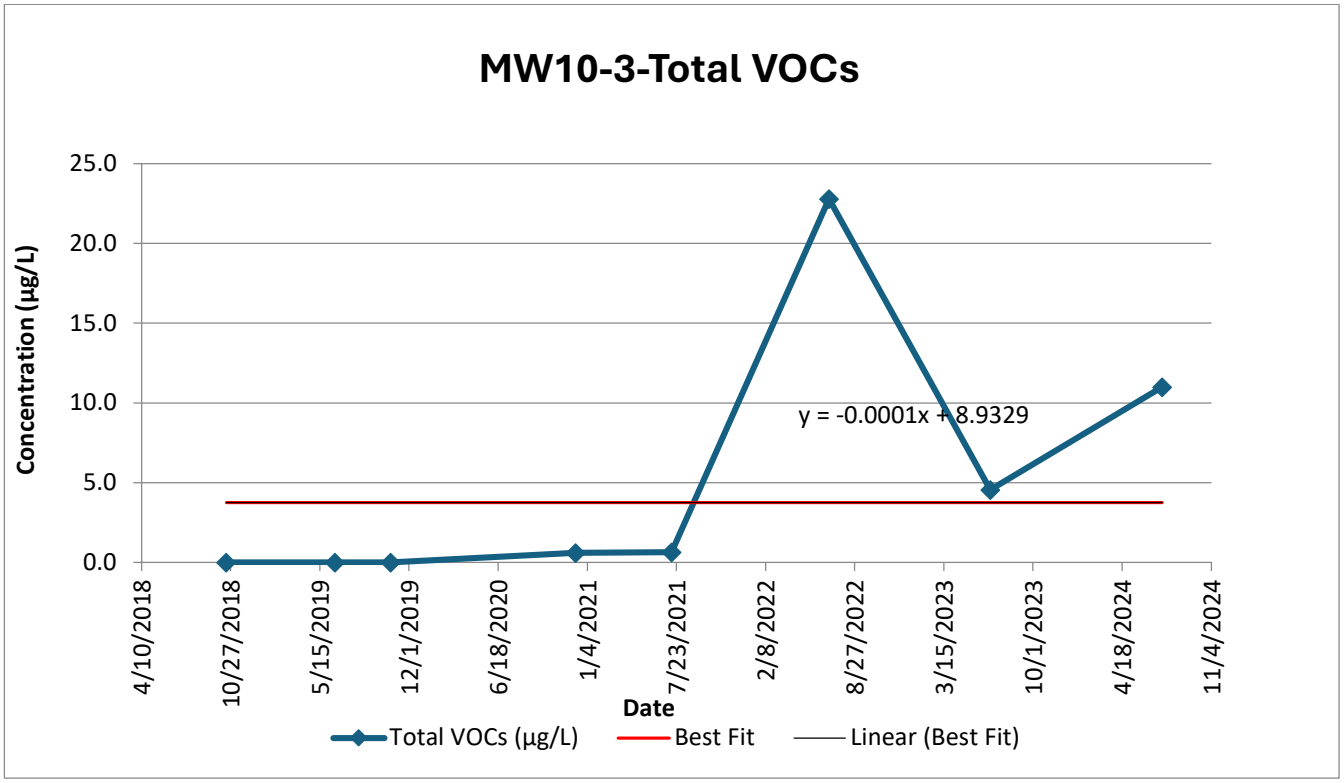
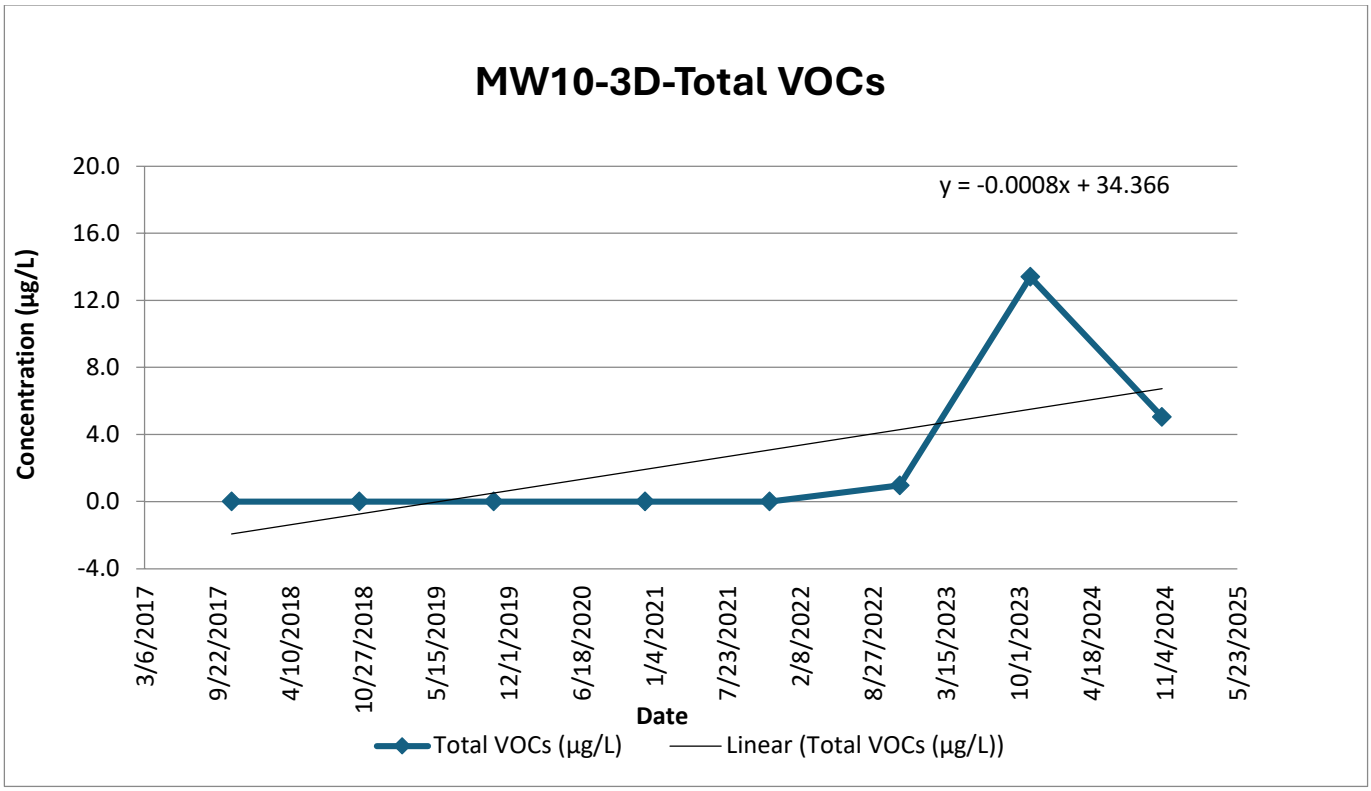


Figure 5-11 – Site 10 – Long Term Trend Data



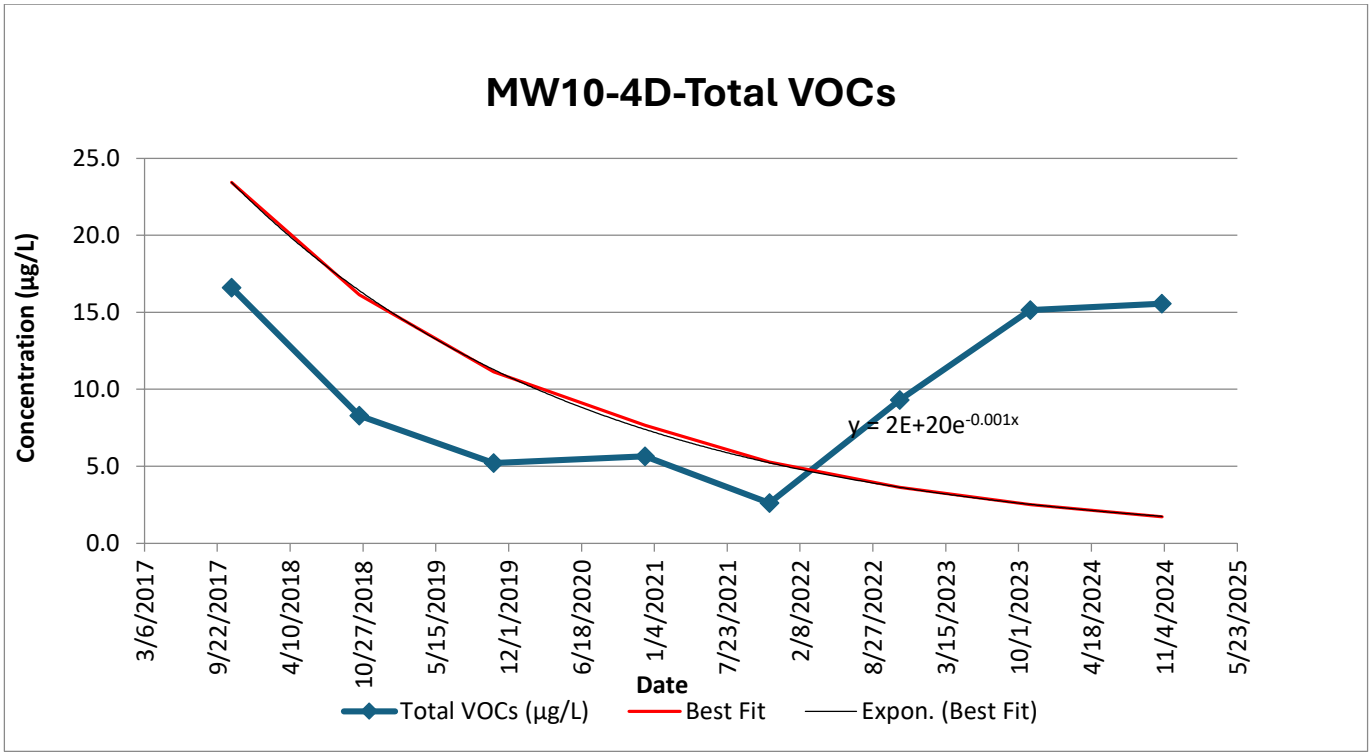
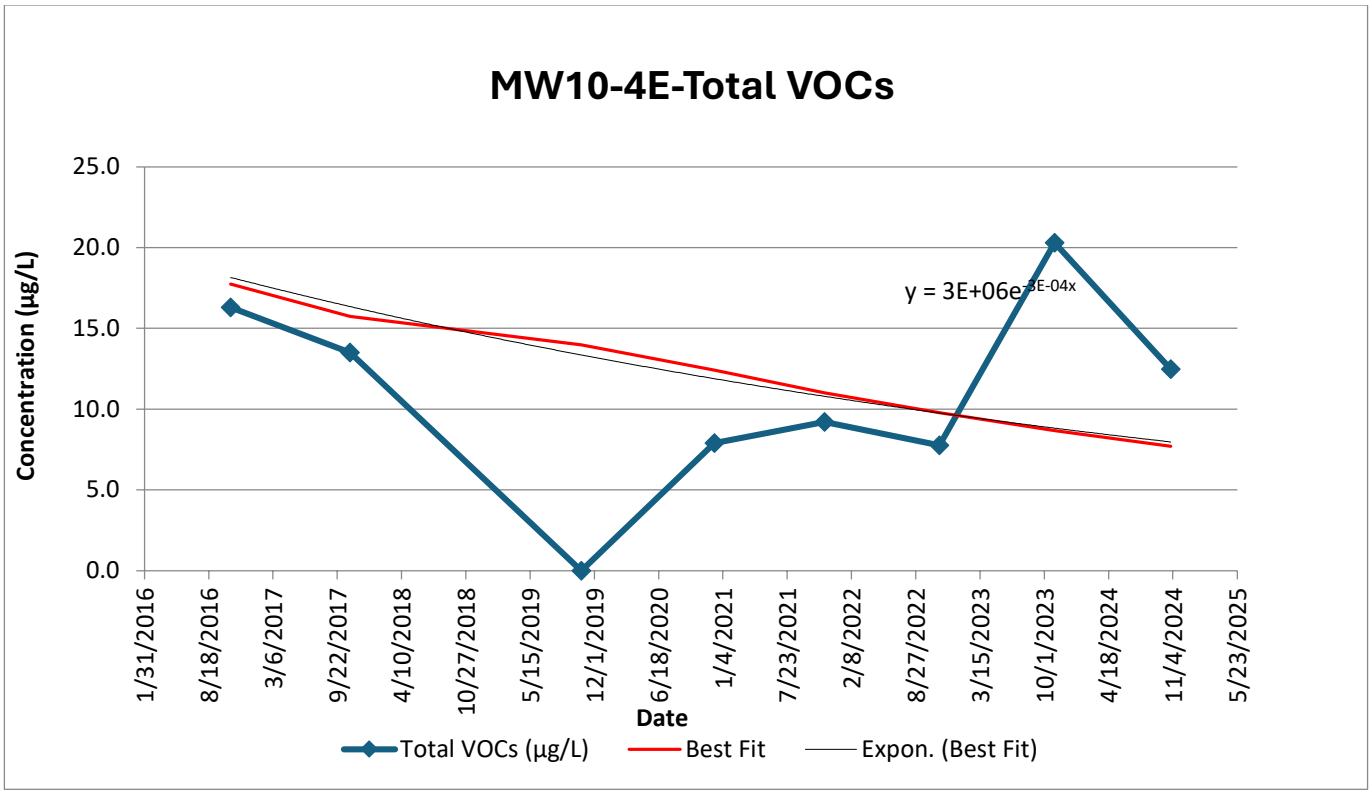


Figure 5-11 – Site 10 – Long Term Trend Data



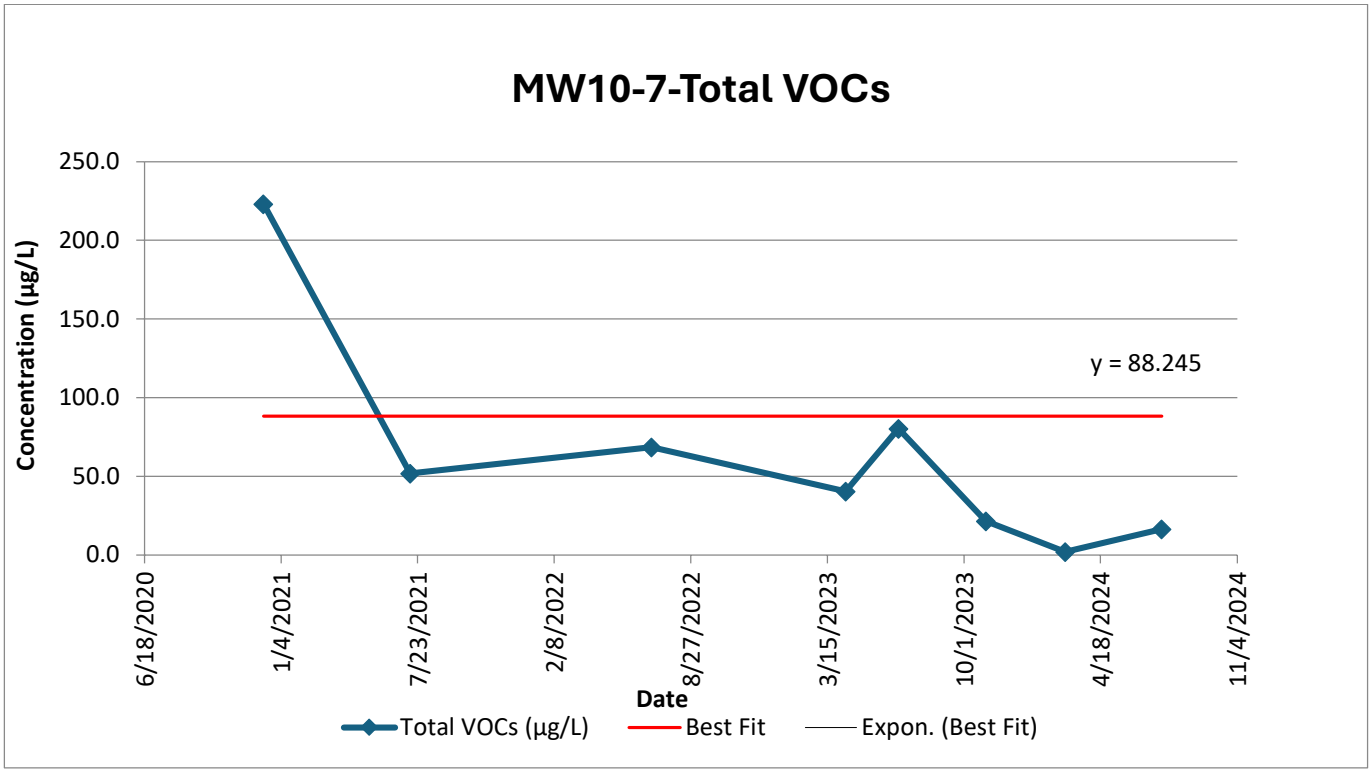
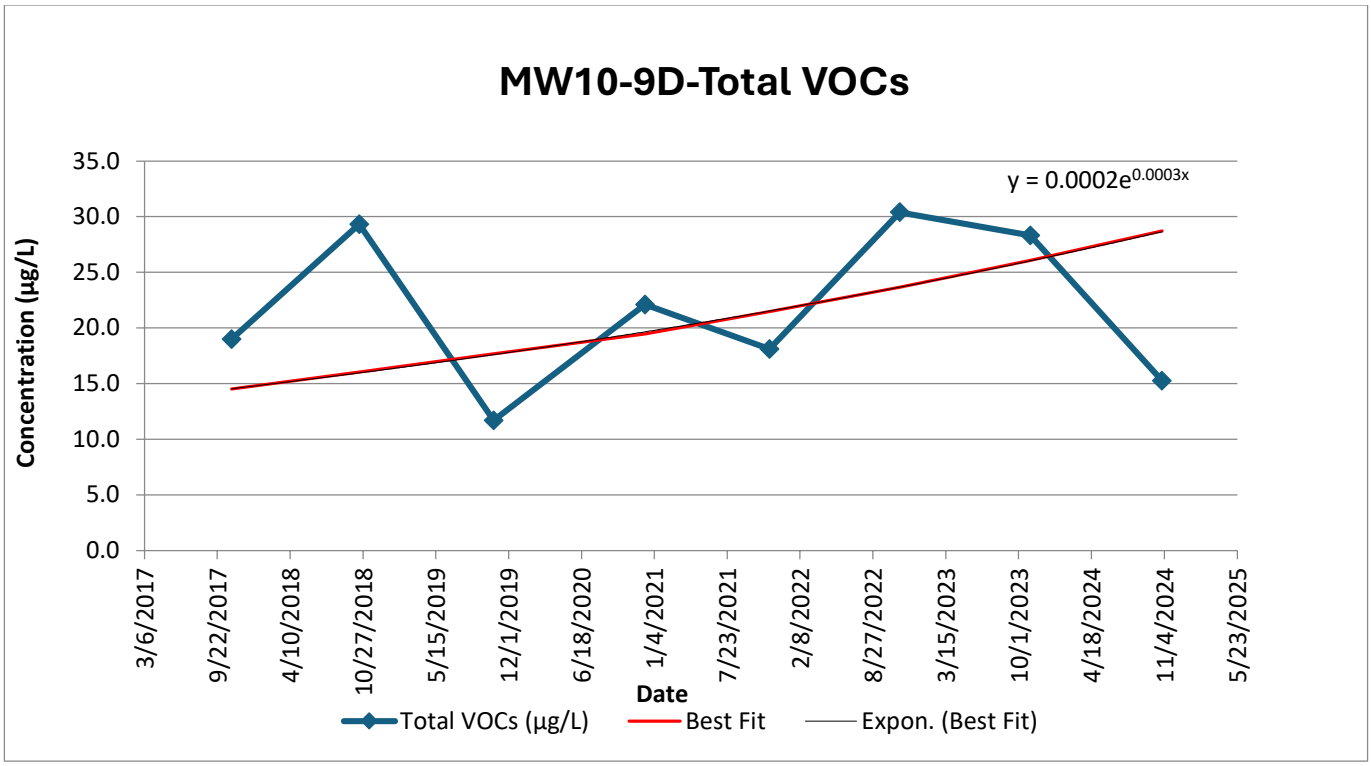


Figure 5-11 – Site 10 – Long Term Trend Data



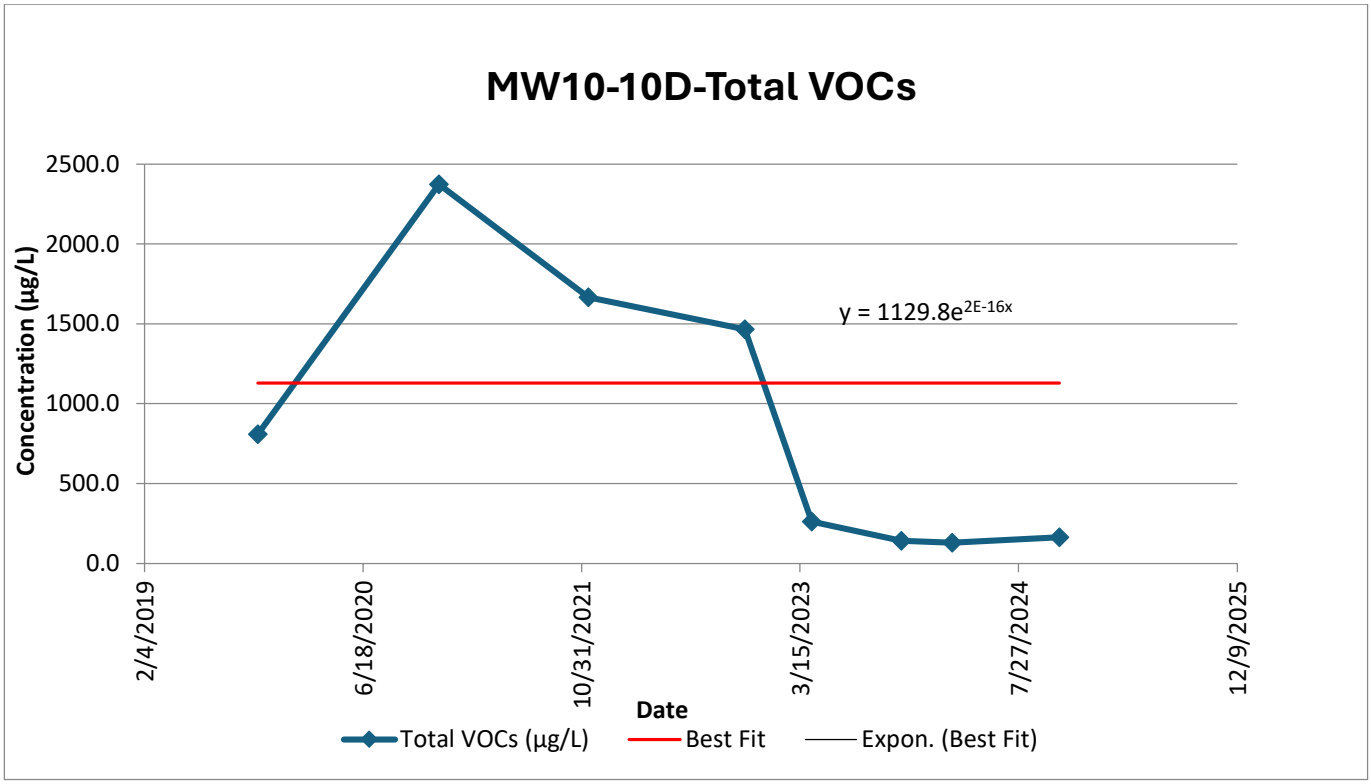
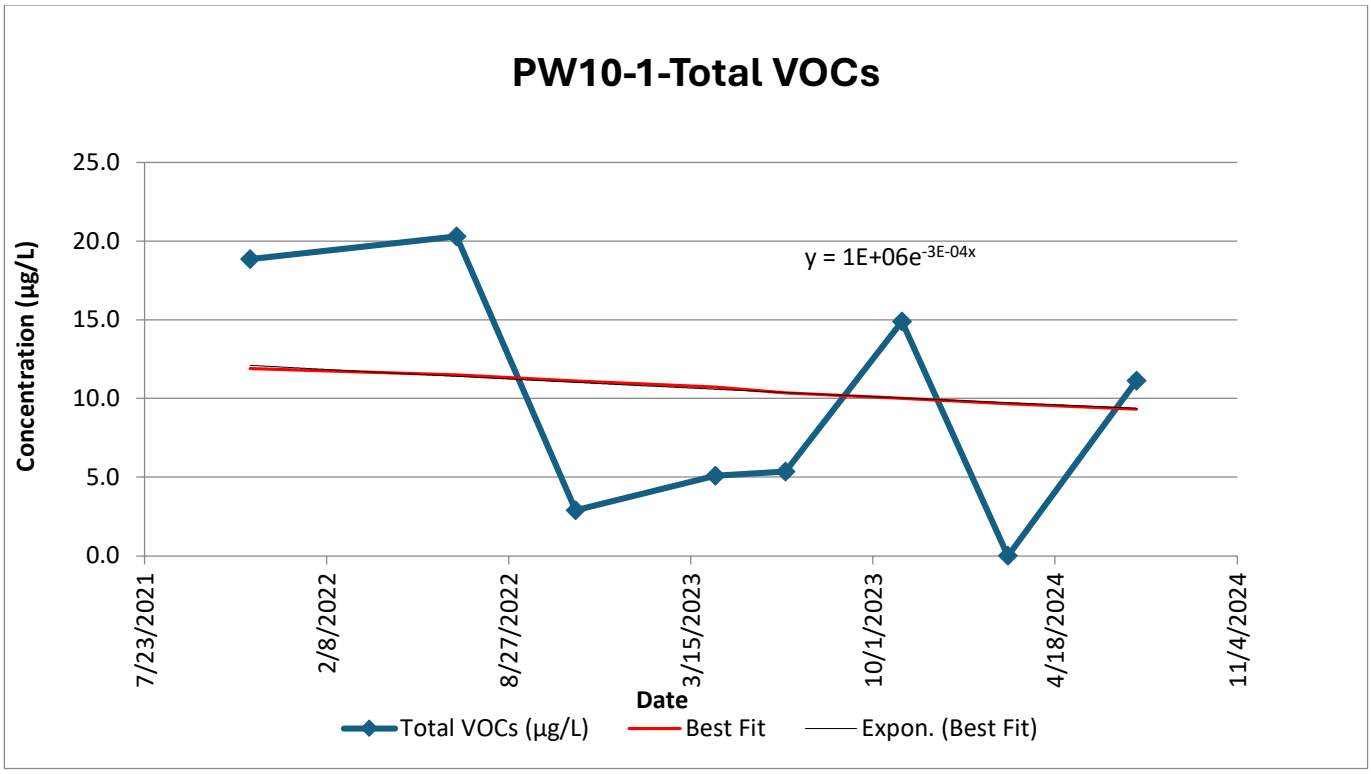


Figure 5-11 – Site 10 – Long Term Trend Data



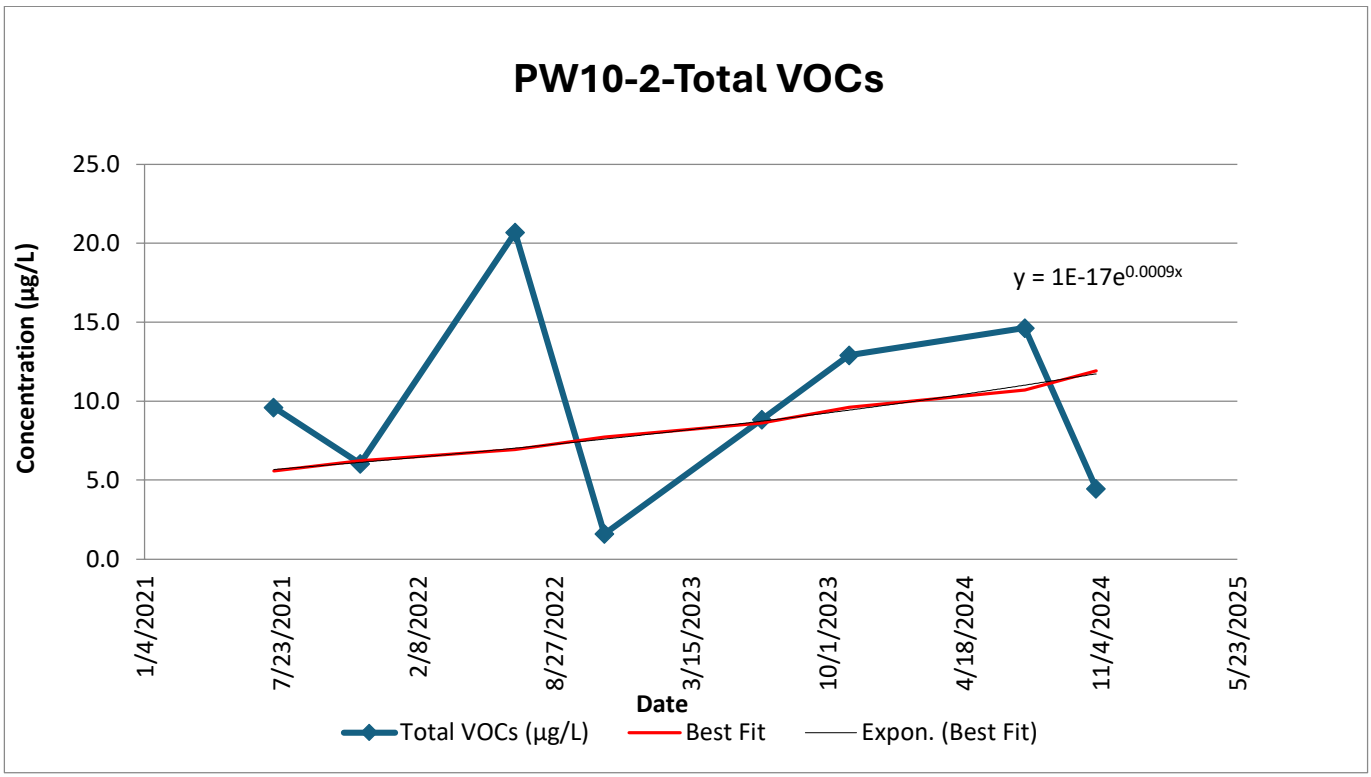
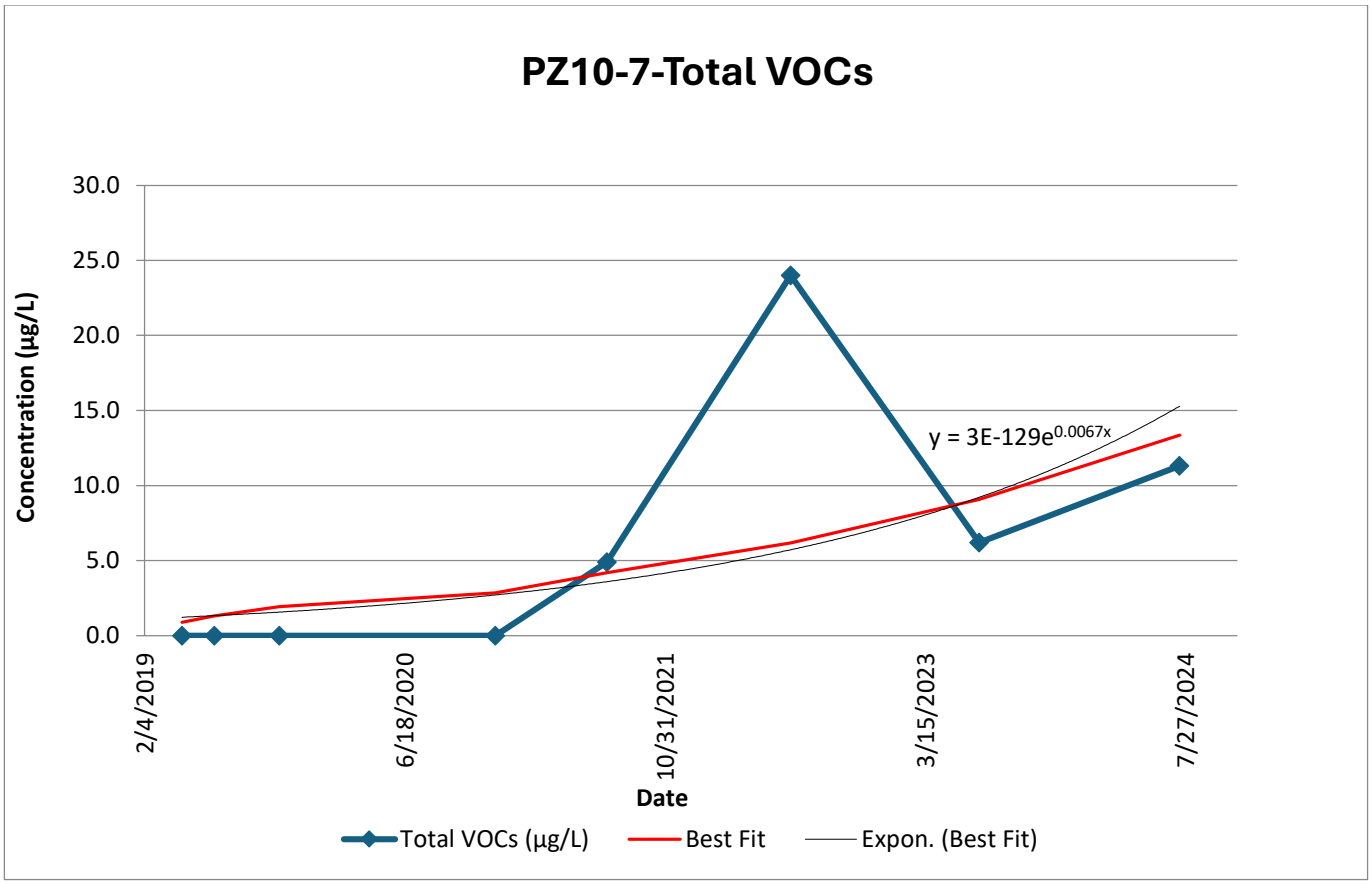


Figure 5-11 – Site 10 – Long Term Trend Data



78°57'0"W

78°56'50"W

KIRSCH DR

RUBIN WAY

WAGNER DR

BLEWETT AVE

MW5-8D

MW13-1D

MW13-1

MW13-5A

PZ13-3D

MW13-1E

MW13-3

PZ13-4D

PZ13-4

PW13-1

MW13-5D

MW13-4

MW13-2D

MW13-6

MW13-6D

PZ13-2

PZ13-2D

MW13-4D

PW13-4D

PZ13-1D

PZ13-1

MW13-3D

910

901

2551

904

923

906

912

915

902

914

USAF-R
WEST RAMP

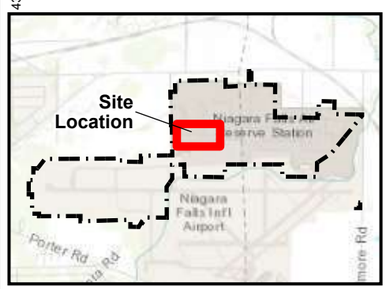
936

907

917

43°6'55"N

43°6'50"N



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Fence
- Installation Boundary

0 100 200

SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

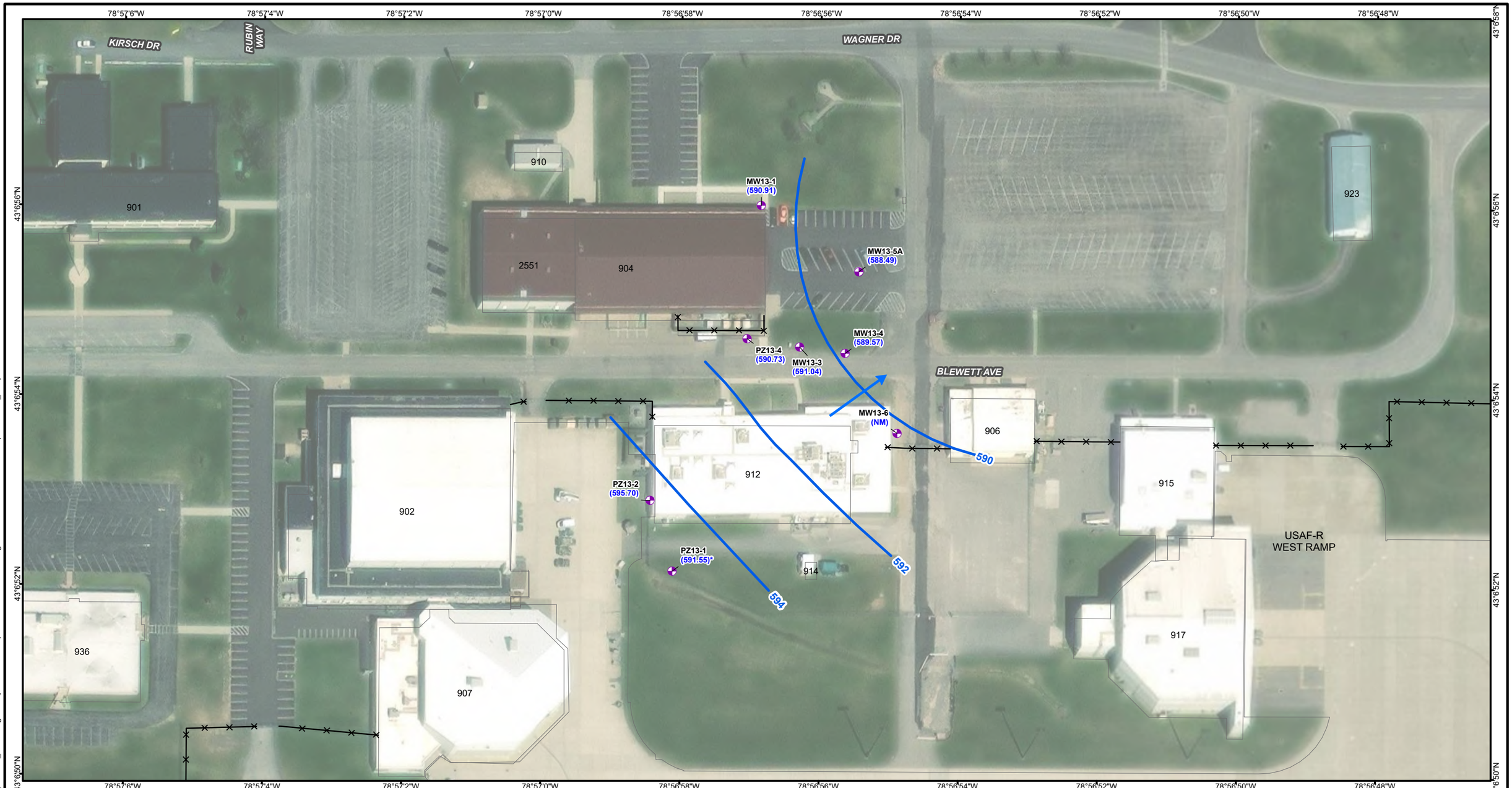
2024 Annual Report

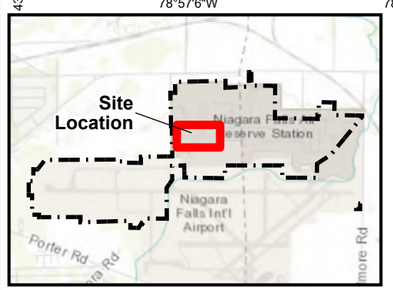
SITE 13 - MONITORING/SAMPLING LOCATIONS

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
6-1

DIV/GROUP: ENV/MDV DB: hs8906 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\NFARS - Section 1\NFARS Section 1 2024 Annual Report.aprx /Fig6-1_Niagara_Site13 Annual Report 2024 DATE: 8/7/2025





Legend

- Overburden Well/Piezometer
- (590.73) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Fence
- Installation Boundary

Note:
1. * = Elevation not used to develop groundwater contours
2. NM = Not measured; MW13-6 was not located.

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 13 - OVERBURDEN GROUNDWATER CONTOUR MAP (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 6-2

DIV/GROUP: ENV/MDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENVNE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/2/2025 2:17 PM

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/8/2025 3:57 PM

78°57'6"W 78°57'4"W 78°57'2"W 78°57'0"W 78°56'58"W 78°56'56"W 78°56'54"W 78°56'52"W 78°56'50"W 78°56'48"W

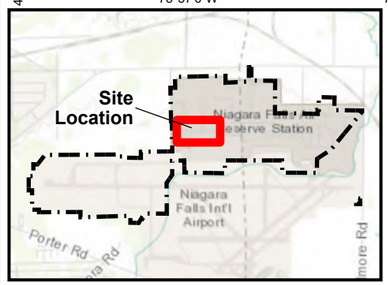
43°6'56"N 43°6'54"N 43°6'52"N 43°6'50"N

KIRSCH DR
RUBIN WAY
WAGNER DR
BLEWETT AVE
USAF-R WEST RAMP

901 902 904 906 907 910 912 914 915 917 923 936 2551

MW13-1 (589.99)
MW13-5A (NM)
PZ13-4 (592.06)
MW13-3 (589.97)
MW13-4 (589.33)
MW13-6 (588.86)
PZ13-2 (594.54)
PZ13-1 (NM)

592 594 590



Legend

- Overburden Well/Piezometer
- (592.06) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Fence
- Installation Boundary

Note:
1. NM = Not measured; MW13-5A and PZ 13-1 were dry.

0 100 200
SCALE IN FEET

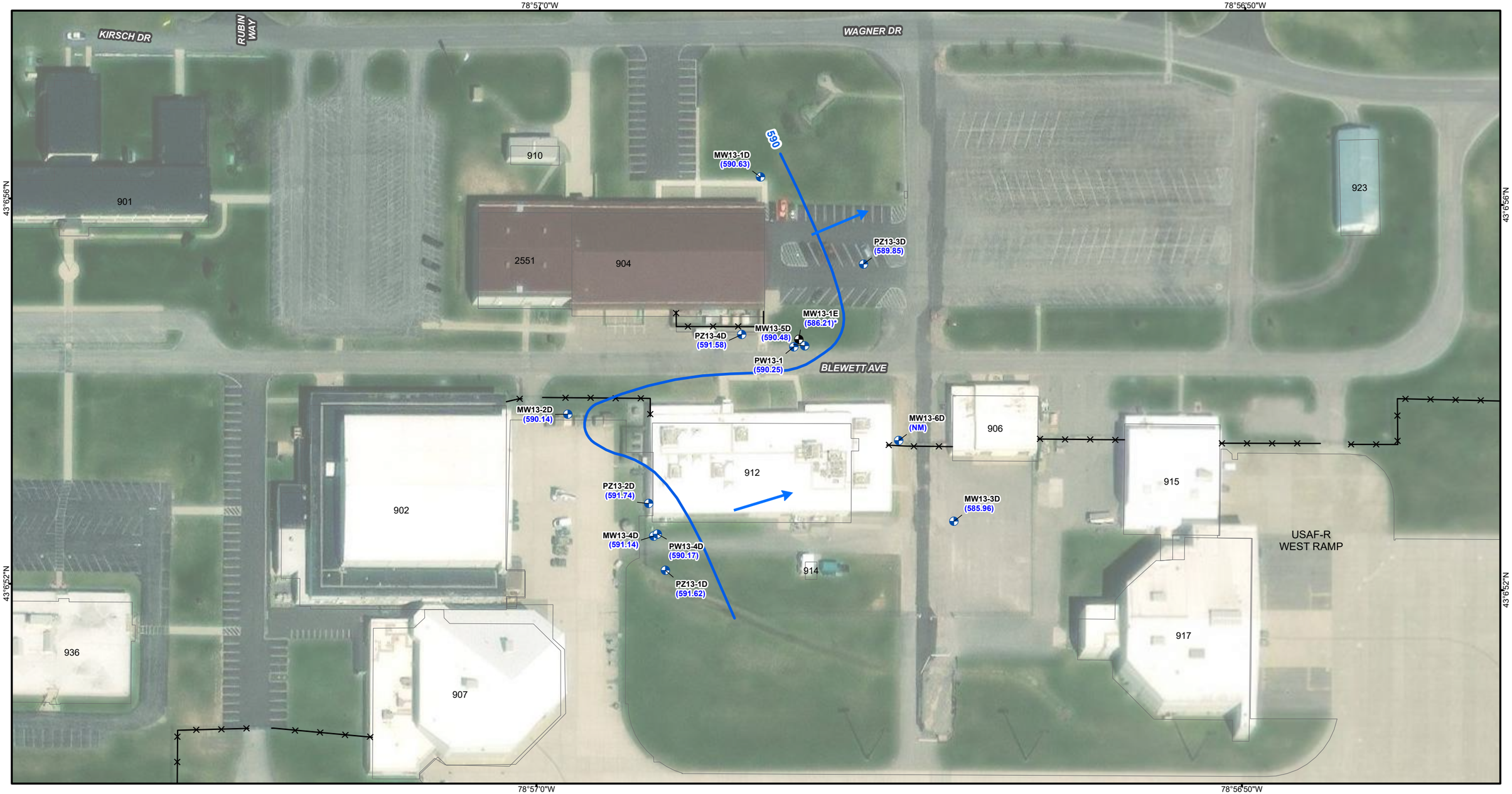
NIAGARA FALLS AIR RESERVE STATION
NEW YORK

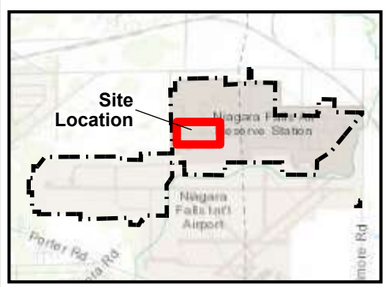
2024 Annual Report

SITE 13 - OVERBURDEN GROUNDWATER CONTOUR MAP (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
6-3





Legend

- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- (591.62) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Fence
- Installation Boundary

Note:
1. * = Elevation not used to develop groundwater contours
2. NM = Not measured; well was not located

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 13 - SHALLOW BEDROCK GROUNDWATER CONTOUR MAP (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
6-4

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: J8MDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/2/2025 12:10 PM

78°57'0"W

78°56'50"W

43°6'56"N

43°6'52"N

KIRSCH DR

RUBIN WAY

WAGNER DR

BLEWETT AVE

USAF-R WEST RAMP

901

902

907

910

912

914

915

917

923

936

2551

904

906

590

588

MW13-1D (589.78)

PZ13-3D (588.71)

MW13-1E (583.67)*

PZ13-4D (591.11)

MW13-5D (590.37)

PW13-1 (589.41)

MW13-2D (589.13)*

MW13-6D (NM)

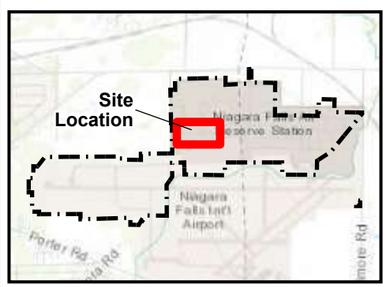
PZ13-2D (590.77)

MW13-3D (587.16)

PW13-4D (589.20)*

MW13-4D (590.11)

PZ13-1D (590.11)



Legend

- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- (589.41) Groundwater Elevation
- Groundwater Contour
- Groundwater Flow Direction
- Fence
- Installation Boundary

Notes:
1. * = Elevation not used to develop groundwater contours
2. NM = Not measured; well was not located

0 100 200

SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

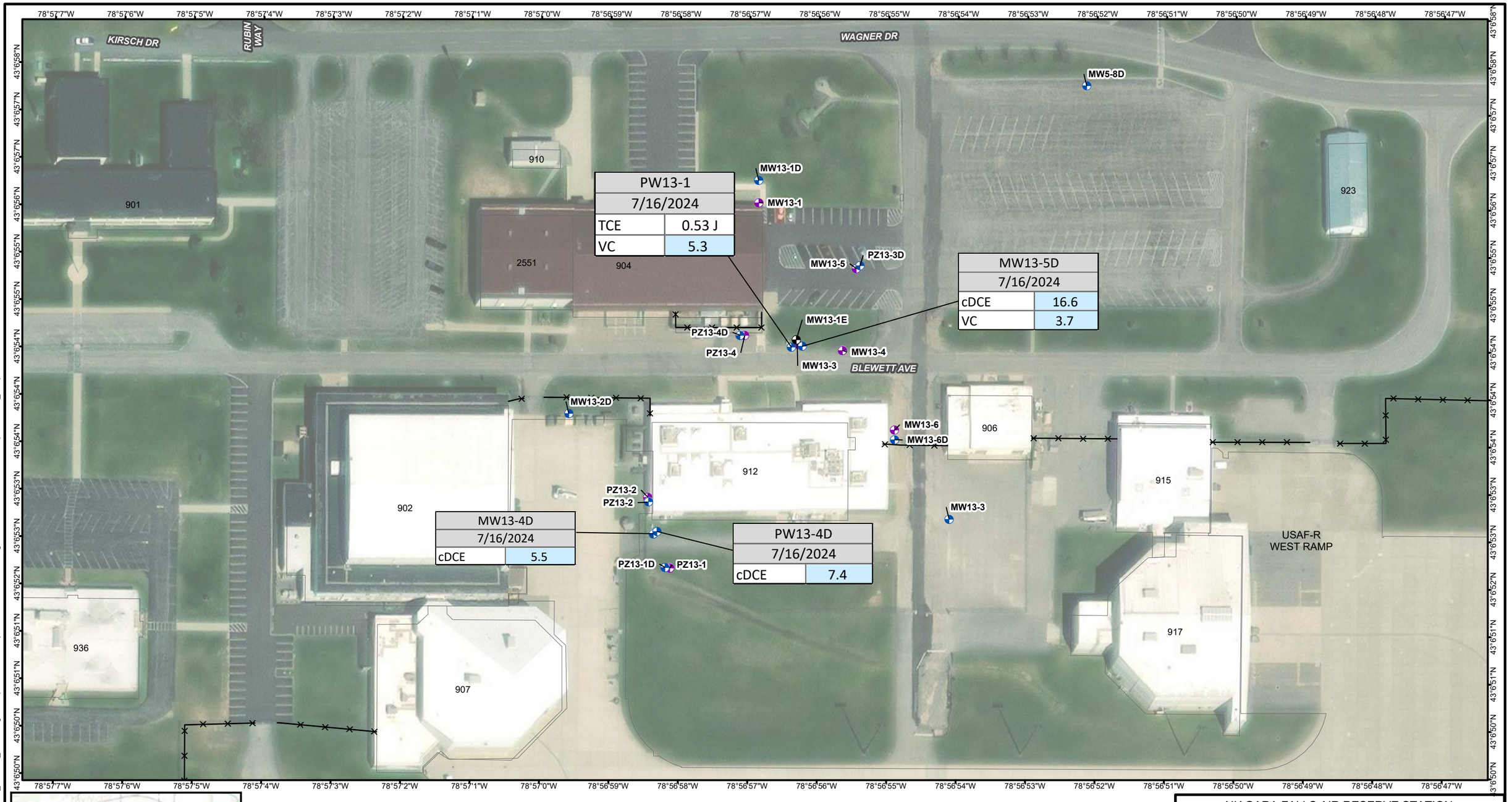
2024 Annual Report

SITE 13 - SHALLOW BEDROCK GROUNDWATER CONTOUR MAP (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
6-5

DIV/GROUP: ENV/MDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: J8MDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/2/2025 12:10 PM

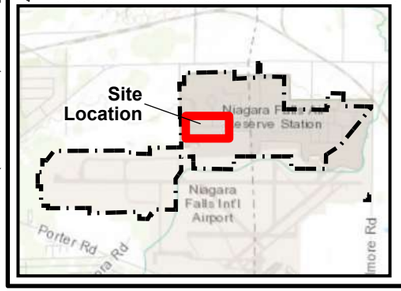


PW13-1	
7/16/2024	
TCE	0.53 J
VC	5.3

MW13-5D	
7/16/2024	
cDCE	16.6
VC	3.7

MW13-4D	
7/16/2024	
cDCE	5.5

PW13-4D	
7/16/2024	
cDCE	7.4



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Fence
- Installation Boundary

Notes:
1. Results are in micrograms per liter (µg/L).
2. Blue shading indicates result is above NYSDEC Class GA Standards.

Lab Qualifier:
J = Compound detected, estimated concentration

0 100 200
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

SITE 13 - GROUNDWATER DETECTIONS (SPRING 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 6-6

DIV/GROUP: ENV/MDV DB: ps0856 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 3/3/2025 2:38 PM

78°57'0"W

78°56'50"W

43°6'56"N

43°6'52"N

KIRSCH DR

RUBIN WAY

WAGNER DR

BLEWETT AVE

901

902

904

906

907

910

912

915

917

923

936

2551

USAF-R WEST RAMP

MW5-8D

MW13-1D

MW13-1

MW13-5

PZ13-3D

MW13-1E

PZ13-4D

PZ13-4

MW13-3

MW13-4

MW13-2D

MW13-6

MW13-6D

PZ13-2

PZ13-2

MW13-3

PZ13-1D

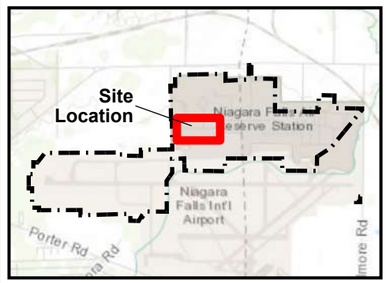
PZ13-1

PW13-1	
10/28/2024	
Chloroform	0.40 J
cDCE	1.1

MW13-5D	
10/28/2024	
Acetone	3.4 J
Chloroform	0.43 J
cDCE	13.6
VC	1.0

MW13-4D	
10/28/2024	
Chloroform	0.50 J
cDCE	7.5
VC	3.9

PW13-4D	
10/28/2024	
Acetone	3.9 J
Chloroform	0.42 J
cDCE	4.4
VC	0.48 J



Legend

- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Deep Bedrock Well
- Fence
- Installation Boundary

Notes:
1. Results are in micrograms per liter (µg/L).
2. Blue shading indicates result is above NYSDEC Class GA Standards.

Lab Qualifier:
J = Compound detected, estimated concentration

0 100 200

SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

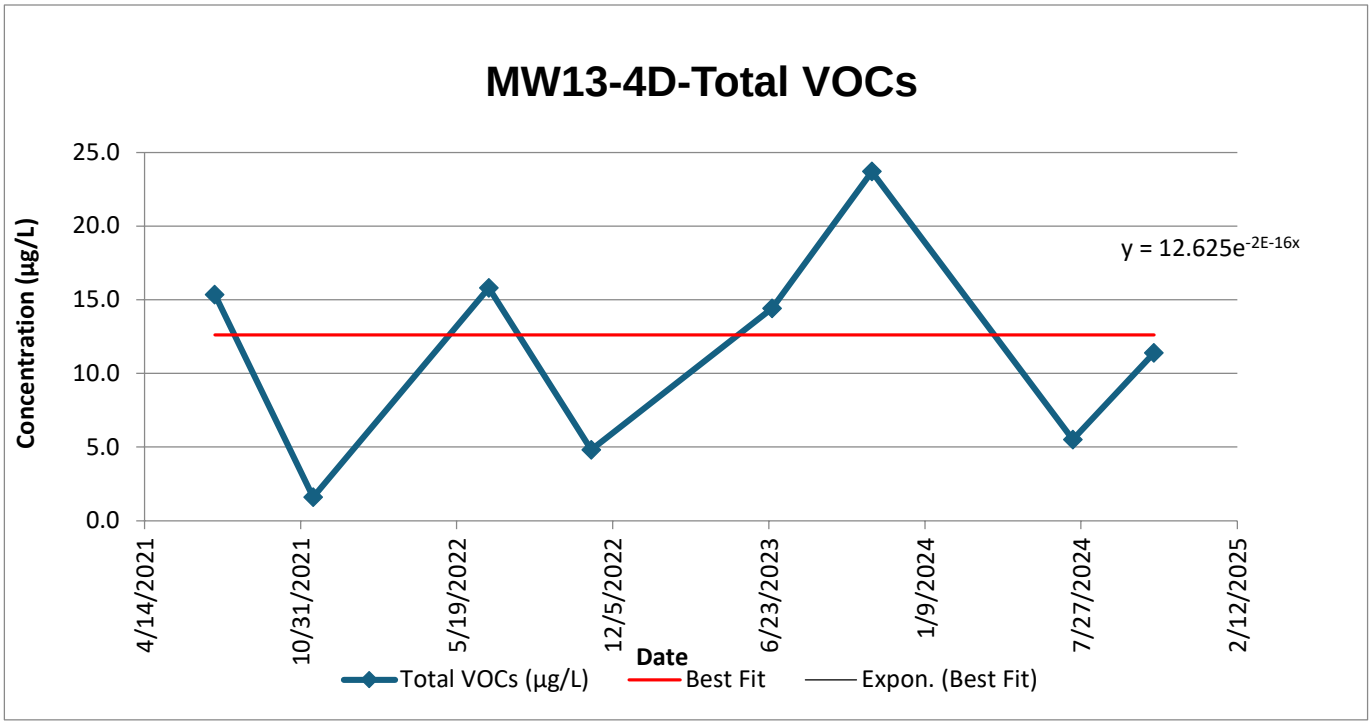
SITE 13 - GROUNDWATER DETECTIONS (FALL 2024)

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE 6-7

DIV/GROUP: ENV/IMDV DB: ps0856 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 3/3/2025 2:40 PM

Figure 6-8 – Site 13 – Long-Term Trend Data



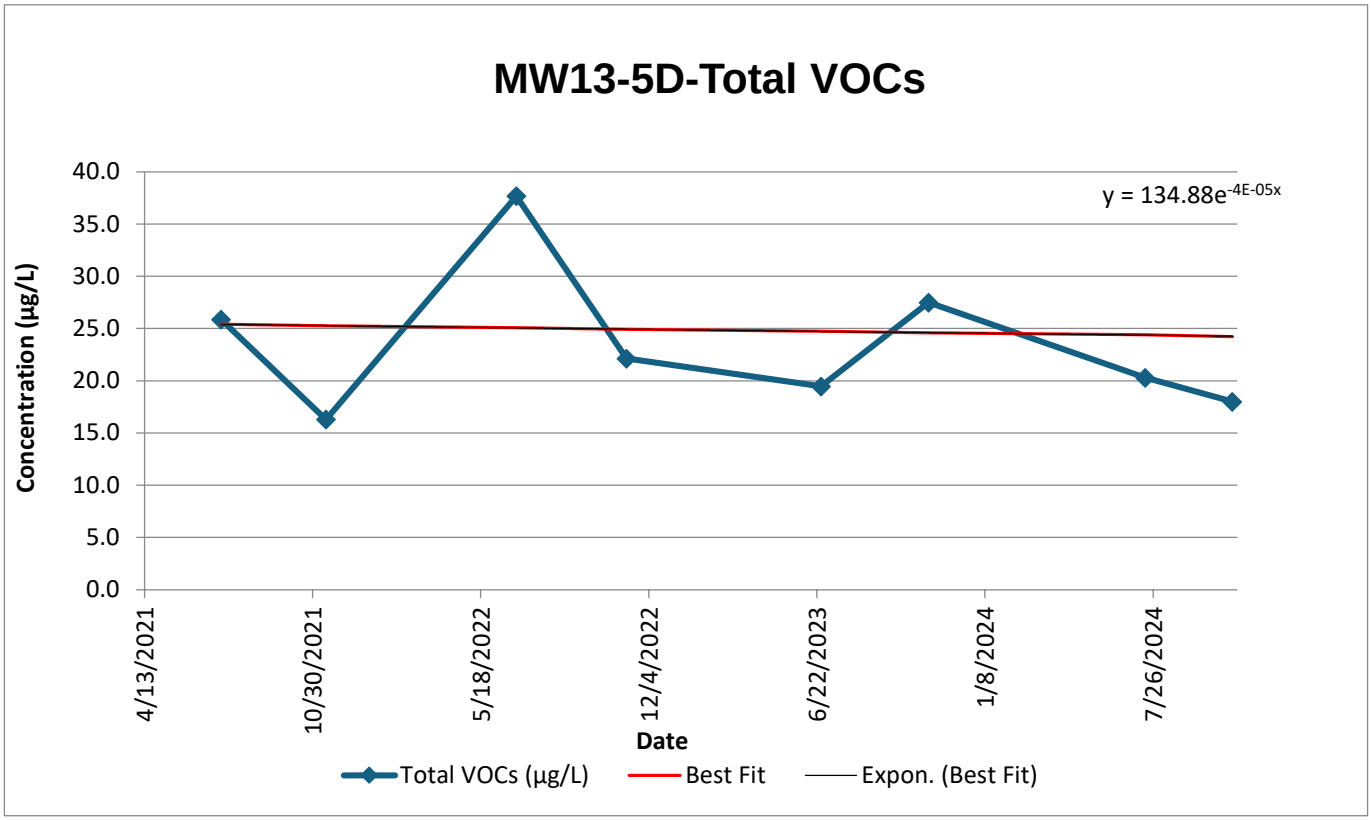
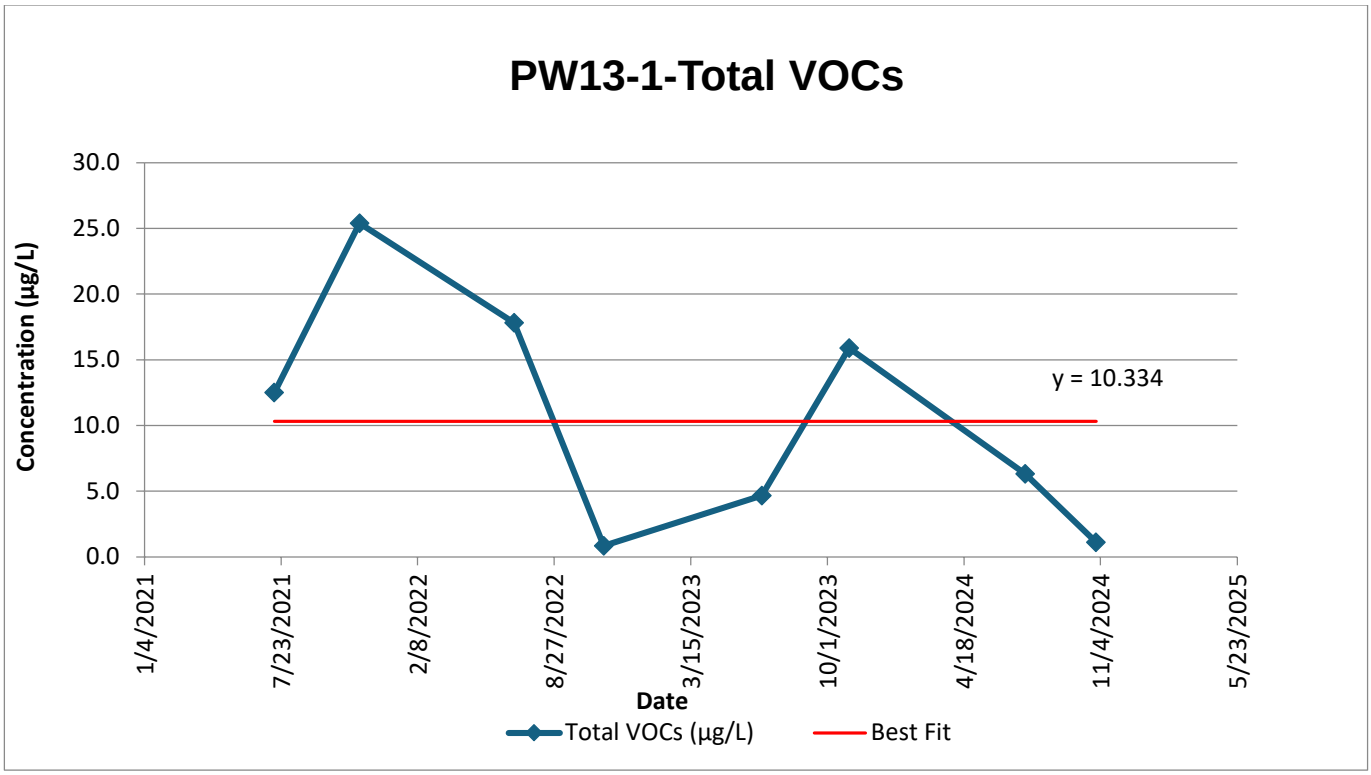
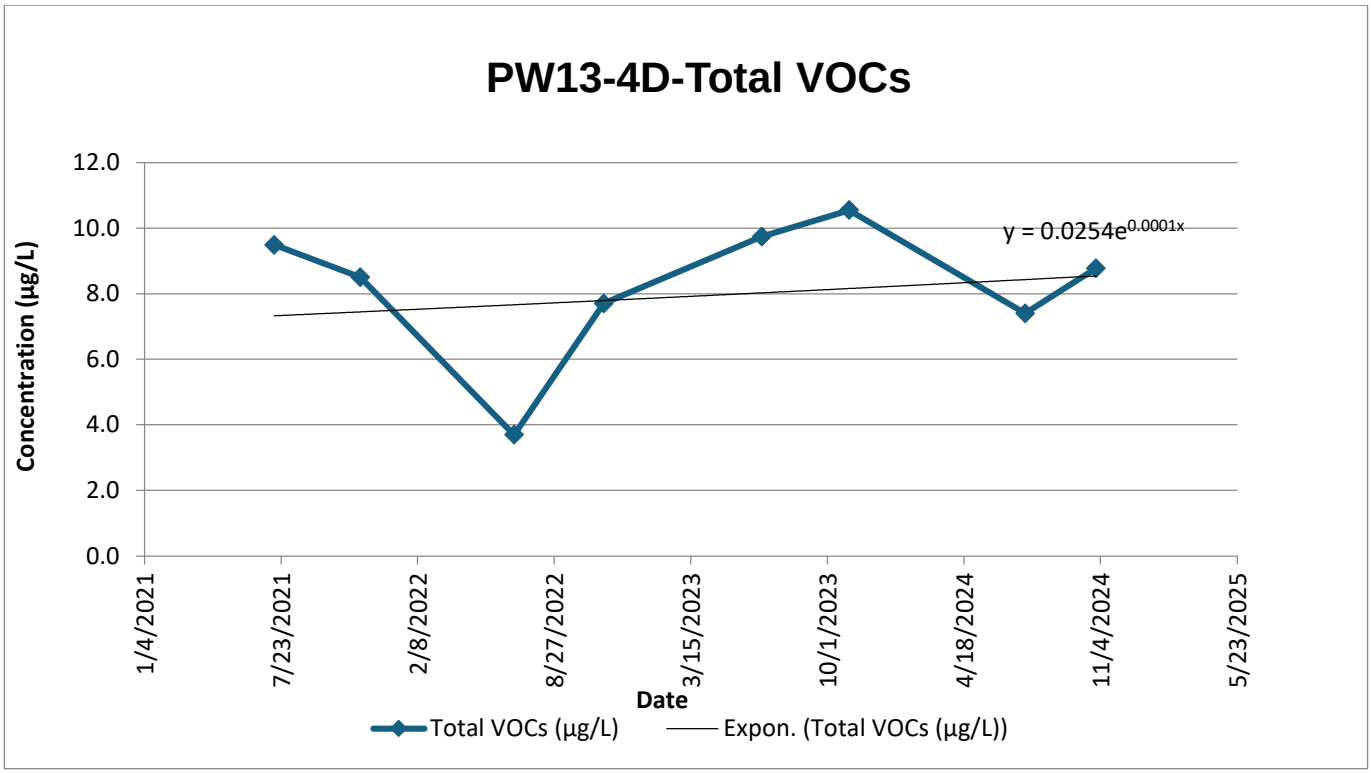
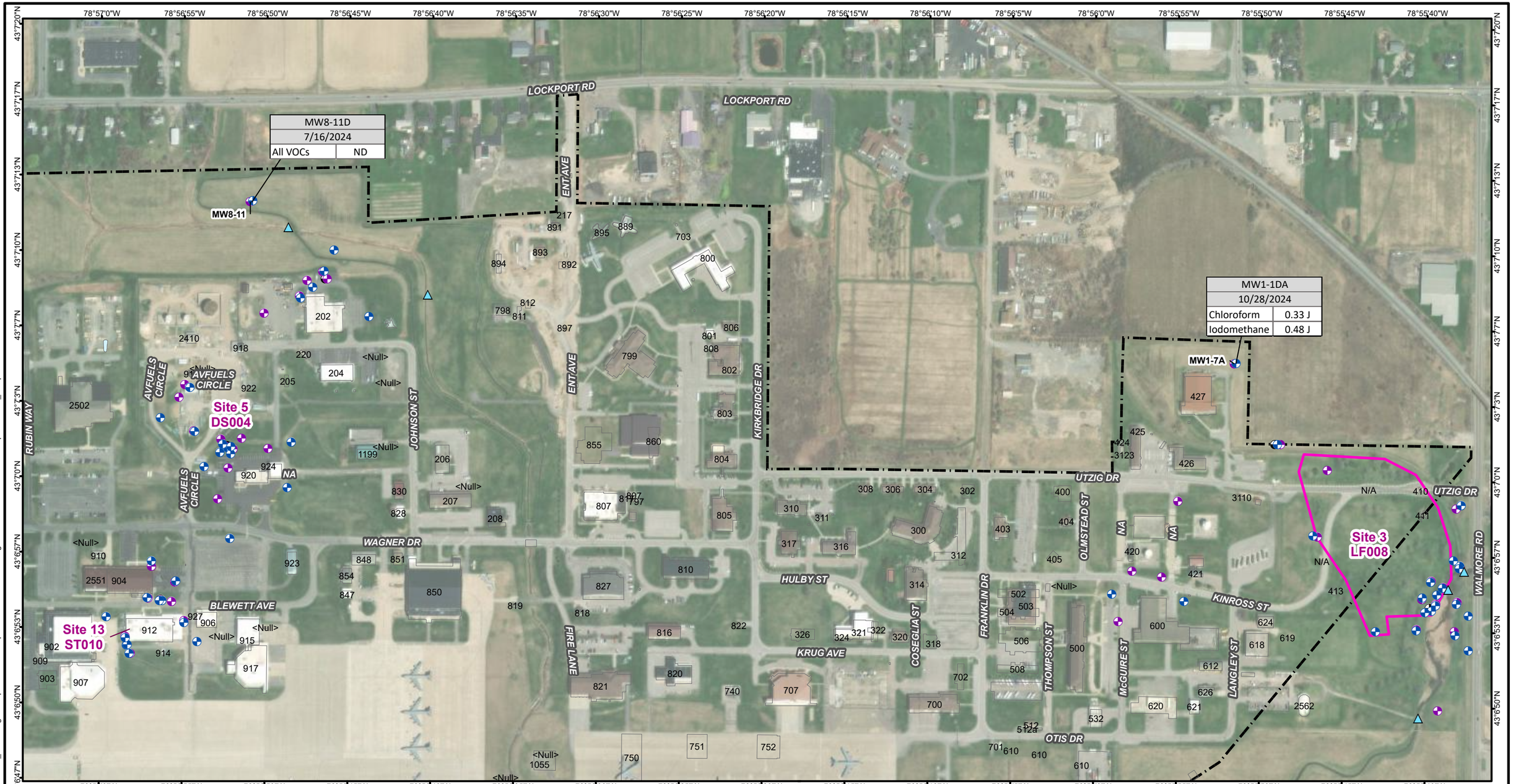
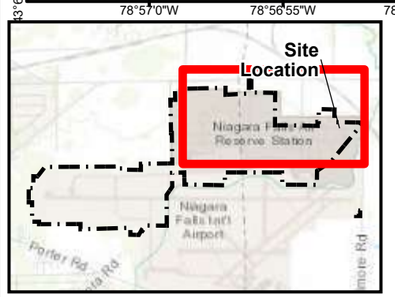


Figure 6-8 – Site 13 – Long-Term Trend Data









Legend

- Deep Bedrock Well
- Overburden Well/Piezometer
- Shallow Bedrock Well/Piezometer
- Surface Water Location
- Approximate Extent of Former Landfill
- Installation Boundary

Note:
1. Results are in micrograms per liter (µg/L).
2. ND = Non-detect

0 420 840
SCALE IN FEET

NIAGARA FALLS AIR RESERVE STATION
NEW YORK

2024 Annual Report

BACKGROUND GROUNDWATER DETECTIONS

SERES Engineering & Services, LLC
ARCADIS a joint venture

FIGURE
7-1

DIV/GROUP: ENV/IMDV DB: pa9162 LD: PIC: PM: TM:
PROJECT: JBMDL (30028498.00001) PATH: T:_ENV\NE_ORC\Niagara\Reports\Annual Report\2024\ArcGIS Pro\Niagara Falls ARS 2024 Annual Report Site 10_13.aprx DATE: 9/2/2025 12:48 PM

Appendix A

Water Level Data

Table A-1
Groundwater Elevations
2024 Annual Comprehensive Sampling/Monitoring Report
Installation-Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

SERES Engineering & Services, LLC
ARCADIS
a joint venture

Location	Top of Inside Casing Elevation (ft amsl)	Spring Event (6 June 2024)			Fall Event (8 and 9 October 2024)		
		Water Depth (ft)	WL Elevation (ft amsl)	Well Depth (ft)	Water Depth (ft)	WL Elevation (ft amsl)	Well Depth (ft)
Former Site 1							
MW1-1DA	605.61	9.96	595.65	24.23	10.78	594.83	24.01
MW1-7A	605.71	8.25	597.46	13.18	10.32	595.39	12.97
Former Site 2							
MPL2-1A	603.29	5.71	597.58	13.62	7.10	596.19	13.44
MW2-1DA	599.39	3.03	596.36	14.67	3.80	595.59	14.45
Site 3							
MW3-1A	603.65	5.82	597.83	13.55	7.65	596.00	13.36
MW3-1DA	593.29	5.27	588.02	16.20	6.48	586.81	15.98
MW3-1E	591.51	1.31	590.20	44.33	1.65	589.86	44.12
MW3-2	598.44	5.85	592.59	10.18	7.32	591.12	9.56
MW3-2DA	599.02	8.92	590.10	22.21	19.40	579.62	22.02
MW3-3A	588.23	2.05	586.18	5.30	2.95	585.28	5.08
MW3-3DA	590.14	0.20	589.94	17.15	0.50	589.64	16.93
MW3-4DA	590.14	0.98	589.16	15.82	13.50	576.64	15.61
MW3-5D	594.96	4.94	590.02	25.78	5.35	589.61	26.09
MW3-6A	602.26	6.93	595.33	11.13	7.81	594.45	10.90
MW3-6D	602.05	6.53	595.52	19.20	7.45	594.60	18.99
MW3-7	591.14	6.02	585.12	7.58	6.71	584.43	7.36
MW3-8	603.84	6.85	596.99	12.94	8.62	595.22	12.72
MW3-8D	603.67	12.41	591.26	23.90	13.13	590.54	23.69
MW3-8E	603.69	12.81	590.88	46.56	13.30	590.39	46.79
PW3-3A	588.09	1.74	586.35	13.83	1.30	586.79	14.71
PZ3-1	591.71	2.38	589.33	12.14	2.25	589.46	5.68
PZ3-1D	591.75	2.57	589.18	5.91	2.92	588.83	12.05
PZ3-2	590.12	1.62	588.50	4.18	2.08	588.04	3.99
PZ3-2D	590.52	1.70	588.82	12.54	2.05	588.47	12.63
PZ3-3	588.14	0.00	588.14	2.45	1.10	587.04	2.24
PZ3-3D	588.62	0.25	588.37	9.53	0.80	587.82	9.35
PZ3-4	589.95	2.58	587.37	3.50	3.10	586.85	3.29
PZ3-4D	590.52	1.36	589.16	11.66	1.75	588.77	11.51
PZ3-5	589.68	0.36	589.32	2.85	0.80	588.88	2.58
PZ3-5D	589.57	0.22	589.35	9.61	0.30	589.27	9.20
PZ3-6	588.34	0.00	588.34	3.48	0.10	588.24	12.79
PZ3-6D	587.90	1.83	586.07	4.48	2.71	585.19	3.22
PZ3-7D	593.01	3.08	589.93	21.72	4.52	588.49	21.51
PZ3-8D	592.12	3.64	588.48	18.38	4.30	587.82	16.15
PZ3-9	588.70	2.44	586.26	3.99	2.98	585.72	3.73
PZ3-9D	588.50	1.00	587.50	23.77	2.70	585.80	23.59
Site 5							
CH5-01	597.21	9.62	587.59	29.96	11.86	585.35	29.96
CH5-02	597.07	9.40	587.67	32.33	10.60	586.47	32.02
CH5-03	597.74	9.73	588.01	31.68	12.98	584.76	31.61
CH5-04	597.60	8.48	589.12	32.44	10.21	587.39	32.51
MW5-1A	600.42	11.00	589.42	16.19	13.02	587.40	15.97
MW5-1DA	600.07	12.34	587.73	28.90	14.87	585.20	28.70
MW5-1E	596.39	11.87	584.52	57.37	13.54	582.85	57.20
MW5-2D	600.8	12.51	588.29	26.55	15.20	585.60	26.37
MW5-3D	600.5	Well not located - construction activities noted in area			Well not located - construction activities noted in area		
MW5-4	599.42	11.27	588.15	15.76	13.73	585.69	15.53
MW5-4D	597.34	10.13	587.21	26.10	12.38	584.96	25.94
MW5-5A	600.8	13.11	587.69	20.12	16.43	584.37	19.93
MW5-5D	597.12	9.53	587.59	27.33	4.82	592.30	27.22
MW5-6	596.42	7.38	589.04	13.66	8.35	588.07	13.41

Table A-1
Groundwater Elevations
2024 Annual Comprehensive Sampling/Monitoring Report
Installation-Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

SERES Engineering & Services, LLC
ARCADIS
a joint venture

Location	Top of Inside Casing Elevation (ft amsl)	Spring Event (6 June 2024)			Fall Event (8 and 9 October 2024)		
		Water Depth (ft)	WL Elevation (ft amsl)	Well Depth (ft)	Water Depth (ft)	WL Elevation (ft amsl)	Well Depth (ft)
Site 5 (continued)							
MW5-6D	594.94	5.83	589.11	23.08	7.50	587.44	22.88
MW5-7	596.46	7.92	588.54	13.10	7.91	588.55	12.92
MW5-7D	595.14	6.07	589.07	22.35	Not located		
MW5-8	594.14	6.41	587.73	10.67	8.17	585.97	10.48
MW5-8D	593.95	7.63	586.32	20.53	10.35	583.60	20.33
RW5-1	596.88	7.12	589.76	14.69	9.77	587.11	14.50
RW5-2	595.46	6.07	589.39	11.23	7.65	587.81	11.03
RW5-3	597.50	8.70	588.80	14.30	10.60	586.90	13.97
RW5-4	597.16	8.22	588.94	14.78	9.70	587.46	14.62
Former Site 6							
MPL6-2A	601.30	8.15	593.15	14.42	8.90	592.40	14.23
MPL6-3	601.58	7.68	593.90	15.80	8.05	593.53	15.61
Site 8							
CH8-01	597.93	NM	N/A	31.11	NM	N/A	31.98
MW8-1	598.87	NM	N/A	13.79	NM	N/A	13.55
MW8-1E	598.52	NM	N/A	50.79	NM	N/A	51.18
MW8-2D	600.57	NM	N/A	30.18	NM	N/A	30.04
MW8-3	599.06	NM	N/A	14.27	NM	N/A	14.36
MW8-3DA	601.24	NM	N/A	26.81	NM	N/A	26.61
MW8-4A	600.40	NM	N/A	15.13	NM	N/A	14.92
MW8-4D	598.41	NM	N/A	22.62	NM	N/A	22.41
MW8-5A	600.02	NM	N/A	15.20	NM	N/A	14.87
MW8-8	600.18	NM	N/A	14.08	NM	N/A	13.88
MW8-10D	600.17	NM	N/A	24.78	NM	N/A	24.75
MW8-11	602.28	NM	N/A	16.82	NM	N/A	16.67
MW8-11D	601.99	12.02	589.97	27.41	NM	N/A	27.21
MW8-11E	602.02	NM	N/A	49.77	NM	N/A	50.09
Site 10							
MW10-1DA	588.55	4.19	584.36	23.05	6.40	582.15	23.00
MW10-1EA	588.90	5.68	583.22	39.88	6.50	582.40	39.62
MW10-1F	588.73	5.84	582.89	59.24	6.70	582.03	59.10
MW10-2	590.38	4.69	585.69	8.96	7.35	583.03	8.70
MW10-2E	587.33	5.02	582.31	47.26	5.75	581.58	47.00
MW10-3	590.50	4.59	585.91	9.59	6.70	583.80	9.38
MW10-3D	586.26	3.70	582.56	25.97	5.79	580.47	25.50
MW10-3E	586.19	5.79	580.40	43.46	6.50	579.69	42.95
MW10-4	589.37	4.01	585.36	8.19	7.80	581.57	7.96
MW10-4D	587.76	3.63	584.13	20.11	6.00	581.76	19.91
MW10-4E	588.15	4.62	583.53	19.22	5.41	582.74	40.75
MW10-5D	589.05	5.53	583.52	19.83	7.43	581.62	19.62
MW10-6	586.35	3.16	583.19	9.79	5.72	580.63	9.59
MW10-7	587.29	3.74	583.55	9.14	6.05	581.24	8.89
MW10-8	588.02	4.54	583.48	9.63	6.30	581.72	9.27
MW10-8D	588.33	5.24	583.09	24.61	6.05	582.28	24.42
MW10-9D	587.03	4.50	582.53	19.89	5.90	581.13	19.76
MW10-10D	591.39	1.23	590.16	11.09	2.50	588.89	11.05
MW10-11	586.51	3.68	582.83	7.33	6.18	580.33	7.23
MW10-11D	586.58	3.74	582.84	17.55	5.98	580.60	17.30
MW10-12	587.76	5.61	582.15	19.00	5.15	582.61	18.79
MW10-12D	587.76	5.72	582.04	8.55	7.10	580.66	8.35
MW10-13	587.29	4.65	582.64	17.01	6.40	580.89	16.79
MW10-13D	587.38	4.51	582.87	7.15	6.30	581.08	6.90
PW10-1	587.47	4.48	582.99	14.00	6.50	580.97	10.90
PW10-2	586.51	4.57	581.94	16.58	3.25	583.26	21.50
PZ10-7	586.80	4.67	582.13	10.23	6.45	580.35	9.98

Table A-1
Groundwater Elevations
2024 Annual Comprehensive Sampling/Monitoring Report
Installation-Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Location	Top of Inside Casing Elevation (ft amsl)	Spring Event (6 June 2024)			Fall Event (8 and 9 October 2024)		
		Water Depth (ft)	WL Elevation (ft amsl)	Well Depth (ft)	Water Depth (ft)	WL Elevation (ft amsl)	Well Depth (ft)
Site 13							
MW13-1	598.91	8.00	590.91	10.25	8.92	589.99	10.07
MW13-1D	598.03	7.40	590.63	17.25	8.25	589.78	20.63
MW13-1E	598.02	11.81	586.21	44.02	14.35	583.67	44.28
MW13-2D	601.11	10.97	590.14	23.81	11.98	589.13	23.61
MW13-3	598.67	7.63	591.04	11.01	8.70	589.97	10.83
MW13-3D	591.94	5.98	585.96	15.55	4.78	587.16	16.03
MW13-4	598.38	8.81	589.57	10.72	9.05	589.33	10.78
MW13-4D	599.96	8.82	591.14	18.91	9.85	590.11	18.70
MW13-5A	595.72	7.23	588.49	8.00	Monitoring Well Dry		
MW13-5D	597.49	7.01	590.48	20.90	7.12	590.37	20.70
MW13-6	594.06	Well not located - construction activities noted in area			5.20	588.86	21.70
MW13-6D	594.17	Well not located - construction activities noted in area			Monitoring Well Dry		
PW13-1	596.41	6.16	590.25	27.25	7.00	589.41	27.20
PW13-4D	598.50	8.33	590.17	23.07	9.30	589.20	23.10
PZ13-1	595.60	4.05	591.55	23.07	Piezometer Dry		
PZ13-1D	595.61	3.99	591.62	17.08	5.50	590.11	16.83
PZ13-2	598.37	2.67	595.70	6.07	3.83	594.54	5.85
PZ13-2D	598.00	6.26	591.74	17.39	7.23	590.77	17.08
PZ13-3D	595.44	5.59	589.85	17.75	6.73	588.71	11.05
PZ13-4	596.26	5.53	590.73	9.79	4.20	592.06	9.57
PZ13-4D	596.61	5.03	591.58	22.51	5.50	591.11	21.76

Note:
amsl = above mean sea level
N/A = not applicable
NM = not measured (as approved by NYSDEC, groundwater elevation measurement is not required until sampling is resumed at Site 8 to confirm that groundwater at that site achieves the GPS, leading to Site Closure).

Table A-2
Surface Water Elevations and Water Quality Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation-Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Location	Measuring Point Elevation (ft AMSL)	Spring Event (June 2024)[1]				
		Depth to Water	Surface Water Elevation	pH (s.u.)	Temperature (°C)	Conductivity (mS/cm)
SW3-2	594.55	3.15	591.4	NM[4]	NM[4]	NM[4]
SW3-3	587.78	2.10	585.68	NM[4]	NM[4]	NM[4]
SW3-15	N/A	N/A	N/A	NM[4]	NM[4]	NM[4]
SW8-8	596.84	NM[5]	NM[5]	N/A	N/A	N/A
SW8-9	591.17	NM[5]	NM[5]	N/A	N/A	N/A
SW10-5	589.49	4.17	585.32	7.65	19.74	1.91
SW10-6	582.65	5.25	577.4	NM[4]	NM[4]	NM[4]
SW10-7	589.56	6.73	582.83	NM[4]	NM[4]	NM[4]
SW10-8	N/A	N/A	N/A	NM[4]	NM[4]	NM[4]
SW99-10	585.58	11.84	573.74	7.7	20.31	1.09
SW99-14	585.93	5.10	580.83	N/A	N/A	N/A

Location	Measuring Point Elevation (ft AMSL)	Fall Event (October/November 2024)[2]				
		Depth to Water	Surface Water Elevation	pH (s.u.)	Temperature (°C)	Conductivity (mS/cm)
SW3-2	594.55	7.96	586.59	8.06	6.30	0.81
SW3-3	587.78	2.2	585.58	6.43	5.87	0.77
SW3-15	N/A	N/A	N/A	7.51	6.20	0.81
SW8-8	596.84	NM[5]	NM[5]	N/A	N/A	N/A
SW8-9	591.17	NM[5]	NM[5]	N/A	N/A	N/A
SW10-5	589.49	Dry	NM	6.65	5.86	1.10
SW10-6	582.65	Dry	NM	6.77	5.36	0.93
SW10-7	589.56	7.2	582.36	7.27	4.70	0.84
SW10-8	N/A	N/A	N/A	7.64	5.17	0.86
SW99-10	585.58	11.74	573.84	5.51	5.11	0.96
SW99-14	585.93	5.78	580.15	N/A	N/A	N/A

Table A-2
Surface Water Elevations and Water Quality Data
2024 Annual Comprehensive Sampling/Monitoring Report
Installation-Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Notes/Abbreviations:

1. Surface water elevations for the Spring 2024 event were measured on 6 June 2024, while field parameter measurement and sample collection was completed on 16 July 2024.
2. Surface water elevations for the Fall 2024 event were measured on 8 and 9 October 2024, while field parameter measurement and sample collection was completed on 28 October 2024.
3. N/A – not applicable. Surface water elevations are not required at locations SW3-15 and SW10-8. Groundwater sample collection and field parameter measurements are not required at locations SW8-8, SW8-9, and SW99-14.
4. NM = not measured; field parameter measurements could not be collected due to YSI meter malfunction.
5. NM = not measured; as discussed with NYSDEC, the collection of surface water elevations at Site 8 was discontinued starting with the Spring 2024 monitoring event until such time that groundwater sampling is resumed at Site 8 to confirm that groundwater at that site achieves the GPS, leading to Site Closure.
6. s.u. = standard units.
7. °C = degrees Celsius.
8. mS/cm = millisiemens per centimeter

Table A-3
Groundwater Elevations
2024 Annual Comprehensive Sampling/Monitoring Report
Installation-Wide Groundwater Monitoring Program
Niagara Falls Air Reserve Station, New York

Location	Top of Inside Casing Elevation (ft amsl)	Fedbruary Performance Monitoring Event (12 February 2024)		
		Water Depth (ft)	WL Elevation (ft amsl)	Well Depth (ft)
Site 5				
MW5-1DA	600.07	11.90	588.17	28.90
MW5-5D	597.12	9.12	588.00	27.33
RW5-1	596.88	5.80	591.08	14.69
RW5-2	595.46	5.05	590.41	11.23
Site 10				
MW10-1DA	588.55	2.30	586.25	23.05
MW10-7	587.29	2.11	585.18	9.14
MW10-10D	591.39	1.52	589.87	11.09
MW10-11D	586.58	2.65	583.93	17.55
PW10-1	587.47	2.48	584.99	14.00

Note:
amsl = above mean sea level

Appendix B

Weather Data

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
Jan	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	34	30.9	29	30	25	20	85	79.2	69	17	8.8	0	29.5	29.4	29.3	0
2	38	32.4	0	29	24.7	0	76	69.3	0	23	15.6	8	29.5	29.4	29.4	0
3	37	35.9	34	30	28	26	79	73.3	67	20	10.6	5	29.4	29.3	29.3	0
4	35	29.4	25	30	19.4	13	85	66.5	51	21	12.9	6	29.7	29.5	29.3	0
5	32	29.7	27	21	17.6	14	69	60.7	56	20	12.6	5	29.6	29.6	29.5	0
6	36	31.8	30	28	24.4	20	86	75	57	17	9.8	0	29.5	29.2	29.1	0
7	33	30.9	30	29	26.3	25	88	83	75	10	5.7	0	29.4	29.1	29	0.02
8	40	36.5	33	30	28.8	26	89	73.9	60	12	6.3	0	29.7	29.6	29.4	0
9	52	39	34	44	32.2	25	89	77.3	64	23	10.7	6	29.6	29.1	28.3	0
10	48	38.5	34	42	30	23	83	71.7	64	35	23.3	14	29	28.6	28.3	0.71
11	38	35.4	34	33	30.6	25	89	83.1	64	20	8.8	5	29.3	29.1	29	0.02
12	44	37.2	32	34	31	29	88	78.7	67	23	12.5	0	29.4	29.1	28.7	0.02
13	46	34.7	29	37	26.4	15	87	72.3	54	40	27.3	8	28.9	28.6	28.4	0.22
14	29	23.4	13	24	16.4	1	89	75.2	54	37	20.5	12	29.4	29.1	28.9	0.03
15	20	15.3	7	12	6.5	-2	78	68.4	56	18	10.4	6	29.5	29.5	29.4	0
16	20	16.6	11	13	9.4	0	84	73.9	56	20	7.1	0	29.4	29.3	29.2	0
17	21	16.1	7	15	7.8	-4	81	70	57	28	17.5	9	29.3	29.2	29.2	0
18	26	24	19	22	17.3	6	85	76	57	18	8.8	0	29.4	29.3	29.3	0
19	25	20.6	14	20	14.5	6	88	77.5	65	15	9.3	0	29.4	29.3	29.3	0
20	19	13.9	5	12	7.3	0	81	75.1	68	17	10.6	5	29.6	29.5	29.4	0
21	27	21.9	12	18	12.4	5	73	66.8	57	16	11.6	8	29.9	29.8	29.6	0
22	35	29.6	24	28	21.4	15	86	71.7	52	24	18	12	29.8	29.7	29.6	0
23	36	34.2	33	32	30.5	28	89	86.5	79	14	5.3	0	29.8	29.7	29.7	0
24	41	37.6	35	39	35.4	32	97	91.9	89	12	2.9	0	29.7	29.6	29.4	0.05
25	39	36.7	36	36	34.5	33	96	91.9	86	14	6.4	0	29.5	29.5	29.4	0.08
26	40	38.1	36	37	35.4	34	97	89.8	86	22	9.2	0	29.5	29.4	29.2	0.97
27	41	38.4	37	39	36.2	35	97	91.9	86	9	4.4	0	29.6	29.5	29.5	0.01
28	39	36.8	34	37	34	31	93	89.9	82	21	12.3	7	29.4	29.3	29.2	0
29	36	34.2	33	31	28.8	26	89	80.8	72	12	6.1	0	29.4	29.4	29.3	0.05
30	39	35.8	33	32	29.4	28	86	77.8	67	14	6.4	0	29.4	29.4	29.3	0
31	43	37.7	32	35	31.6	28	86	79	70	24	11.5	0	29.4	29.4	29.3	0

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
Feb	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	40	38.7	37	36	34.2	32	89	83.9	73	25	12.4	5	29.3	29.2	29.2	0
2	39	37	34	36	31.1	26	89	79.6	67	15	9.6	0	29.5	29.4	29.2	0
3	39	34.4	28	27	25.3	23	85	69.9	60	8	3.8	0	29.6	29.5	29.5	0
4	40	30.4	23	30	25	19	92	80.8	65	9	1.5	0	29.5	29.4	29.4	0
5	36	29.8	24	29	23.8	20	85	78.6	62	10	2.9	0	29.5	29.4	29.4	0
6	41	30.4	22	27	20.7	16	89	68.5	47	10	3.9	0	29.6	29.6	29.5	0
7	47	33.8	24	28	23	18	82	66.4	41	6	2.5	0	29.7	29.6	29.6	0
8	53	41	27	29	25.1	21	85	56.8	32	9	3.2	0	29.6	29.5	29.3	0
9	60	52.2	45	45	38.9	25	76	61.1	38	31	14.8	6	29.3	29.2	29.1	0.01
10	52	48.4	41	44	38.2	27	83	68.1	56	18	13.3	8	29.3	29.1	29.1	0
11	40	37.1	35	29	26.2	25	70	64.8	60	15	8.6	3	29.4	29.3	29.3	0
12	38	34.1	26	26	23.6	19	78	66	55	13	5.6	0	29.3	29.3	29.1	0
13	38	32	23	29	23.3	14	85	70.8	48	26	11.9	0	29.3	29.1	29.1	0
14	33	27.5	23	16	13	10	69	55.2	42	17	11.4	5	29.6	29.5	29.4	0
15	37	32.3	21	32	24.1	13	89	72.6	39	25	12.5	3	29.6	29.2	29	0
16	32	29.7	28	23	17.8	16	69	61.5	52	26	16	8	29.4	29.3	29.2	0.04
17	28	24.4	21	19	14	5	81	65.5	46	25	13.7	5	29.2	29.2	29.1	0
18	32	26.8	24	23	20.7	15	85	77.8	58	30	24.3	17	29.3	29.1	29	0.01
19	31	24.5	12	22	11.2	7	80	57.9	43	22	5.1	0	29.7	29.5	29.3	0
20	43	29.2	16	18	12.5	7	68	51.7	32	8	3.5	0	29.7	29.7	29.6	0
21	54	41	25	27	22.9	15	72	50.7	34	18	8.5	0	29.6	29.5	29.3	0
22	48	44	38	40	35.4	27	93	73.6	46	17	8.8	0	29.3	29.1	28.9	0
23	44	38.8	29	38	34.5	14	97	85.6	46	20	11.1	5	29.1	28.9	28.9	0
24	26	21	18	10	5.3	1	60	50.9	39	16	10.6	3	29.4	29.3	29.1	0
25	44	33.4	21	24	16.3	11	72	51.9	31	24	13.7	5	29.4	29.3	29.1	0
26	54	42.2	35	32	27.3	23	79	57	38	13	7.2	0	29.3	29.3	29.2	0
27	65	53.5	41	47	38.8	29	83	59.3	36	22	11.1	5	29.2	29	28.9	0
28	64	42.4	25	54	34.1	13	86	72.9	58	32	21.2	7	29.4	29	28.6	0.22
29	28	24	21	17	12.7	8	82	63.5	45	29	17.2	0	29.8	29.6	29.4	0.01

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
Mar	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	53	40.5	27	23	20.3	17	72	47.4	27	15	9.9	5	29.8	29.7	29.6	0
2	50	45.9	43	43	38	21	90	75.5	39	13	6	0	29.6	29.5	29.5	0.01
3	55	45.6	42	45	40.8	39	89	83.5	67	10	4.5	0	29.6	29.6	29.5	0
4	72	54.1	38	48	41.4	35	93	66.3	37	15	6	0	29.5	29.5	29.4	0
5	72	59.6	53	51	44.8	40	90	59.8	41	16	8.9	0	29.4	29.3	29.2	0
6	53	45	39	50	42.3	36	97	90.4	85	17	9.4	0	29.4	29.3	29.3	0.15
7	51	42	37	36	30.4	25	89	65.4	42	18	10	5	29.6	29.5	29.4	0
8	64	48.4	34	38	31.3	25	75	54.9	25	16	7.5	3	29.6	29.4	29.3	0
9	55	47.7	41	44	40.9	35	90	78.1	53	23	15.6	8	29.3	29	28.9	0.02
10	41	40.5	40	36	35.3	35	83	82	79	13	9.8	7	29	28.9	28.9	0
11	45	38.1	32	29	23.2	19	64	55.5	41	26	18.4	7	29.4	29.3	29.2	0.02
12	57	46.3	37	39	33.9	28	82	63	47	16	9.8	3	29.3	29.2	29.2	0
13	66	54.2	41	42	37.9	35	82	55.2	40	20	11	0	29.3	29.2	29.1	0
14	64	43.7	34	43	36	29	89	77.3	27	22	5.7	0	29.4	29.3	29.1	0
15	50	44.4	40	40	38.3	33	89	79.5	61	16	9.9	0	29.3	29.2	29.1	0.22
16	53	43	35	41	32.6	27	80	68.4	38	25	13.8	6	29.3	29.1	28.9	0
17	44	40.5	34	38	29.7	22	89	66.6	45	22	13.8	7	29.1	29	28.9	0.15
18	37	32.9	29	28	22.3	17	79	65.5	56	20	15.6	10	29.2	29.2	29.1	0
19	36	32.5	30	30	25.9	18	85	77.1	56	30	16.5	8	29.2	29.1	28.9	0
20	36	31.5	26	27	21.8	12	85	68.6	44	32	18.2	7	29.4	29.1	28.9	0
21	30	26.3	22	13	11.2	8	58	52.8	47	21	15	5	29.7	29.6	29.4	0
22	27	25	18	21	17.9	9	81	74.8	56	16	9.7	0	29.7	29.6	29.4	0
23	35	28.8	27	25	21	12	86	73.8	49	17	11.5	6	29.6	29.4	29.4	0.04
24	37	29.7	21	15	11.5	8	68	47.3	37	13	7.5	0	29.7	29.7	29.6	0
25	63	44.2	27	31	20.4	10	61	41	25	10	8	6	29.7	29.5	29.4	0
26	58	50.1	44	45	30.1	21	86	49.2	29	18	9.2	0	29.4	29.3	29.1	0
27	52	46.5	35	45	38.2	29	87	73.4	58	26	15	7	29.4	29.3	29.1	0
28	45	39.3	34	28	25.7	22	79	59.3	44	18	10.7	6	29.5	29.4	29.3	0
29	43	36.4	27	28	24.2	21	85	62.9	45	22	11.4	0	29.4	29.3	29.3	0
30	48	38.2	25	35	26.5	20	82	64.8	39	9	4.8	0	29.4	29.2	29.1	0
31	48	41.4	38	35	30.2	28	79	65.1	51	13	7.3	3	29.4	29.3	29.2	0

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
Apr	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	54	44.8	38	34	31	26	86	61.2	34	14	6.8	0	29.4	29.3	29.3	0
2	48	42.8	0	43	34.4	0	86	67.9	0	22	16.1	0	29.3	29.1	28.9	0
3	51	45.8	39	45	41.2	36	90	84.2	71	16	9.5	5	28.8	28.8	28.7	0.07
4	45	36.6	34	37	32.7	30	97	86	71	17	7.7	0	29.1	28.9	28.7	0.7
5	43	36.2	34	36	31.3	30	89	82.8	66	16	9.9	5	29.3	29.1	29.1	0.02
6	54	45.3	41	36	33	27	82	64.5	38	20	10.9	7	29.4	29.4	29.3	0.01
7	60	48.5	35	33	27.5	21	77	47.6	27	12	5.8	0	29.6	29.5	29.4	0
8	63	50	39	37	29.5	20	76	46.7	30	6	2.4	0	29.5	29.4	29.4	0
9	79	59.7	38	51	41.5	33	86	56.3	25	14	6.3	0	29.4	29.3	29.2	0
10	65	58.8	53	49	42.8	37	77	56.5	36	13	7.4	3	29.3	29.3	29.2	0
11	70	57.3	50	59	52.1	38	90	83.4	51	17	9.7	6	29.3	29	28.6	0.53
12	63	52	42	59	46.9	36	93	83	66	31	19.2	3	28.8	28.6	28.4	0.92
13	54	45.2	41	36	34.3	30	79	66.8	43	29	21.6	6	29.3	29.1	28.8	0.18
14	68	52.6	45	49	42.5	37	86	69.5	50	17	8.3	0	29.2	29.1	29	0
15	63	51.9	41	43	37.1	30	89	60.6	30	17	8.4	0	29.4	29.3	29.1	0.09
16	64	54.3	42	39	32.5	30	71	45.4	28	12	4.9	0	29.6	29.5	29.4	0
17	54	50.5	46	52	41.5	28	93	73.3	41	18	10.7	0	29.5	29.3	29.1	0
18	57	51.8	47	53	46.7	41	93	83	67	15	8.2	0	29.4	29.3	29.1	0
19	63	53	45	52	44.4	33	86	73.3	52	28	11.9	0	29.4	29.3	29.2	0
20	49	44.8	41	33	27.2	23	65	50.5	42	23	14.1	3	29.4	29.4	29.3	0
21	48	43.1	41	33	27.4	24	73	54.6	39	18	12	7	29.4	29.4	29.3	0
22	55	45.2	31	32	25.8	17	79	50	24	17	9.4	5	29.5	29.4	29.4	0
23	65	54.1	47	46	35	27	87	52.3	28	30	17.4	8	29.4	29.2	29.1	0
24	50	45.4	33	46	38.5	22	90	77.8	42	17	10.3	0	29.6	29.3	29.1	0.03
25	51	40.8	30	27	22.5	17	82	50.9	28	16	6.3	0	29.8	29.7	29.6	0
26	63	48.2	29	32	22.6	15	61	39.3	20	21	9.4	0	29.8	29.7	29.6	0
27	64	57.1	49	53	44.2	27	83	62.7	41	20	12.4	6	29.6	29.5	29.4	0
28	68	61.6	57	60	55.9	50	94	82.1	68	17	8.1	0	29.4	29.4	29.4	0.03
29	73	60.8	54	59	54.7	47	93	81.5	55	13	7.4	0	29.4	29.3	29.2	0.04
30	64	55.3	49	58	49.5	43	90	81.2	58	14	5.8	0	29.3	29.2	29.2	0

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
May	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	76	54.6	48	52	47.1	41	97	79.9	30	16	4.9	0	29.3	29.3	29.2	0.01
2	69	59	47	45	43.5	42	86	59.2	38	13	6.6	0	29.4	29.4	29.2	0
3	79	60.2	51	55	48	43	89	66.8	29	18	7	3	29.4	29.4	29.3	0
4	77	64.2	53	60	52.6	48	86	67	52	15	6.5	0	29.5	29.4	29.4	0.03
5	67	62.2	56	61	56.7	48	93	82.8	70	14	7.7	0	29.4	29.3	29.3	0.01
6	68	57.9	51	57	47.9	32	94	74.2	26	10	5.8	0	29.4	29.4	29.3	0.18
7	74	60.6	43	48	42.4	36	82	53.3	34	13	4.4	0	29.3	29.2	29	0
8	73	61.3	52	58	50.6	44	87	69.7	44	24	13.6	6	29.2	29	28.9	0.04
9	64	55.8	46	46	40.3	35	90	59.3	35	15	7.4	0	29.2	29.2	29.1	0
10	66	57.4	51	47	35.3	0	74	47.2	0	12	5.8	0	29.2	29.2	29.1	0
11	64	54.3	47	49	18.5	0	83	31.2	0	21	8.4	0	29.2	29.1	29	0
12	64	54.3	51	49	47.3	42	92	78.5	45	14	7.1	0	29.3	29.1	29	0.22
13	78	62.5	52	54	48	43	77	60.5	35	20	11.8	5	29.3	29.2	29.1	0
14	77	67	54	56	52.3	47	77	60.2	45	14	6.7	0	29.2	29.2	29.2	0
15	72	63.1	58	58	54.5	51	87	74.1	61	16	9.2	5	29.2	29.2	29.1	0
16	74	60.6	55	58	54.7	53	94	82.2	51	9	5.6	0	29.2	29.2	29.2	0
17	73	64	60	62	58.9	55	93	84	61	12	5.9	0	29.2	29.2	29.2	0
18	73	64.9	59	61	59	55	94	82.2	61	14	5.1	0	29.3	29.3	29.2	0
19	83	63	55	61	56.2	52	94	81.1	38	13	3	0	29.4	29.3	29.3	0
20	86	73.5	61	61	56.7	54	84	58	34	13	4.3	0	29.4	29.3	29.3	0
21	85	76.3	69	63	59.5	57	73	57.5	40	21	10.9	0	29.3	29.2	29.2	0
22	85	74.7	67	65	62	59	78	65.6	44	24	12.7	0	29.2	29.1	29.1	0
23	76	68.7	60	61	52.6	41	86	59.8	33	25	13.4	5	29.3	29.2	29.2	0.09
24	79	68.5	57	53	49.7	45	81	54.3	32	14	6.5	0	29.3	29.2	29.2	0
25	70	61.8	56	61	54.4	44	94	77.6	57	18	4.8	0	29.3	29.2	29.2	0
26	77	60.7	54	59	55.9	52	94	85.2	48	16	3.2	0	29.3	29.3	29	0.36
27	77	69.1	64	65	60.5	56	87	74.5	58	29	15.8	8	29	28.9	28.9	0.08
28	68	63.2	58	56	55	53	90	75.2	60	21	12.8	6	29.3	29.1	29	0.14
29	69	61.4	55	56	50.1	33	93	69.9	27	15	6.3	0	29.4	29.3	29.3	0.39
30	67	58.7	50	44	38.4	32	74	49.7	28	15	8.6	0	29.5	29.5	29.4	0
31	73	61.3	46	49	41.7	37	86	53	29	14	7.7	0	29.7	29.6	29.5	0

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
Jun	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	78	65.9	52	48	41.5	24	83	47.2	14	9	5	0	29.6	29.5	29.4	0
2	70	64.9	59	63	57.4	48	94	77.7	49	9	4.9	0	29.4	29.3	29.3	0
3	79	69.6	65	64	62.6	60	93	79.6	60	9	3.6	0	29.4	29.3	29.3	0
4	87	72.9	59	64	58.8	55	93	64.9	33	10	4.3	0	29.3	29.3	29.2	0
5	82	75.4	67	68	63.7	56	78	67.1	56	15	9.2	0	29.2	29.1	29	0
6	78	70.3	66	67	61.6	49	93	76.2	42	25	9.3	0	29	28.9	28.9	0.24
7	69	62.2	59	57	53.7	48	87	74.6	49	18	9.9	5	29.1	29	28.9	0.01
8	74	64	57	54	50.2	45	83	62.7	40	21	11.8	0	29.2	29.1	29.1	0.5
9	69	60.4	56	57	53.9	49	90	79.8	50	23	11.2	0	29.1	29	29	0.16
10	59	56.3	52	51	47.9	46	83	73.8	62	16	8.8	3	29.3	29.1	29	0.66
11	62	57.9	55	50	48.3	46	83	70.7	62	8	4.5	0	29.4	29.3	29.3	0
12	76	63.8	49	55	48.3	45	89	60.9	34	12	4.9	0	29.4	29.4	29.3	0
13	86	75.6	62	59	54.6	47	65	48.7	38	28	14.8	0	29.3	29.2	29.1	0
14	78	71.9	63	58	51.8	46	68	49.9	38	23	10	5	29.4	29.3	29.1	0
15	73	65.1	57	52	47.5	41	75	55	34	10	5.5	0	29.5	29.5	29.4	0
16	85	68.5	51	56	49.8	45	83	54.5	31	12	5.2	0	29.6	29.5	29.4	0
17	87	79	70	68	63	57	74	58.5	46	17	10	6	29.4	29.4	29.4	0
18	92	78.2	72	74	68.7	64	94	73.8	48	20	9.7	3	29.6	29.5	29.4	0
19	90	82.6	75	74	70.1	67	79	66.5	52	13	7.9	0	29.6	29.6	29.5	1.4
20	89	78.5	71	71	68.9	67	87	73.7	50	30	9.4	0	29.7	29.6	29.6	0.2
21	86	78.3	72	71	69.6	68	91	75.6	61	9	2.8	0	29.6	29.5	29.4	0
22	91	79.6	71	73	69.8	67	87	73.2	46	16	5.8	0	29.4	29.3	29.1	0
23	82	77.6	68	70	65.8	57	85	67	58	29	18.8	0	29.1	29	28.9	0
24	84	73.4	65	62	54.7	48	84	55	29	20	10.3	0	29.3	29.2	29	0.07
25	80	73.8	65	64	60.2	55	90	64.2	47	24	13	0	29.3	29.2	29.1	0
26	82	73.2	65	67	62.4	58	90	70.4	47	14	9.7	5	29.2	29.1	29.1	0
27	73	66.3	60	63	53.5	46	90	65.2	41	16	9.5	0	29.4	29.2	29.1	0.12
28	77	67.4	54	60	51.2	46	77	58.3	37	10	3.7	0	29.5	29.4	29.3	0
29	79	74.4	69	72	68.8	61	91	83	66	23	14.6	3	29.3	29.2	29.2	0.33
30	77	68.3	62	72	58.1	50	87	70.3	53	24	14.9	7	29.5	29.4	29.2	0.31

Time	Temperature (°F)	Dew Point (°F)	Humidity (%)	Wind Speed (mph)	Pressure (in)	Precipitation (in)

Jul	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	76	67.3	58	53	48.4	43	81	53.4	32	14	7.2	0	29.6	29.6	29.5	0
2	82	70.5	55	62	54.2	49	84	59	37	12	4.3	0	29.6	29.6	29.4	0
3	88	79.9	73	70	62.1	54	79	55.3	44	23	14.2	9	29.4	29.3	29.2	0
4	84	78.3	72	70	66.1	62	87	67.3	49	13	6.7	0	29.3	29.3	29.2	0
5	86	78.7	73	68	64.3	60	79	62.6	41	13	5	0	29.2	29.2	29.1	0
6	84	75.9	69	71	65.2	61	87	70.5	47	22	9.4	0	29.3	29.2	29.1	0
7	84	75	66	65	61.2	54	90	64.5	39	12	6.1	0	29.4	29.4	29.3	0.06
8	87	77.5	65	65	60.1	57	84	57.5	37	9	4.3	0	29.4	29.4	29.3	0
9	85	78.2	71	71	67	59	79	68.8	59	15	7.1	0	29.3	29.3	29.2	0
10	79	73.8	71	73	69.8	67	91	87.2	79	17	9.3	0	29.2	29.1	29	1.27
11	78	71.8	68	68	66.3	64	93	83.4	62	17	8.1	0	29.4	29.2	29.1	1.29
12	84	74.2	68	68	65.8	61	93	76.8	47	10	4.9	0	29.5	29.5	29.5	0
13	85	76.2	67	68	61.4	53	90	63.9	33	8	3.5	0	29.6	29.5	29.4	0
14	87	77.5	67	70	65.5	62	84	67.8	47	16	8.3	0	29.5	29.4	29.2	0
15	79	76	73	72	70.3	68	87	82.8	74	17	9.8	0	29.3	29.2	29.1	0
16	82	75.9	71	71	68.5	66	90	78.2	64	22	11.6	3	29.2	29.1	29	0.34
17	82	74.4	69	69	64.1	54	88	72.6	39	14	6.9	3	29.3	29.2	29.1	0.01
18	74	69.1	61	60	55.6	52	81	63.1	46	15	8	0	29.5	29.4	29.3	0.23
19	77	68.4	58	59	53.9	51	86	62.1	42	9	3.8	0	29.5	29.5	29.5	0
20	81	71.8	60	63	57.3	53	87	62.4	42	13	6.2	0	29.5	29.4	29.4	0
21	83	73.9	64	63	59.8	57	87	63.1	45	12	6.1	0	29.4	29.4	29.4	0
22	83	75.4	66	67	64.5	62	87	69.5	54	7	4.1	0	29.4	29.4	29.3	0
23	83	76.3	69	66	63.4	61	84	65.3	51	9	4.7	0	29.4	29.4	29.3	0
24	83	74.8	66	70	66.2	62	87	74.9	60	21	11.1	5	29.4	29.4	29.3	0.08
25	78	69.9	62	60	54.2	46	87	60.3	36	15	8.7	5	29.6	29.5	29.4	0.45
26	81	70.9	59	60	52.7	47	83	55.7	31	9	2	0	29.6	29.6	29.5	0
27	83	72.1	58	62	56.3	53	87	60.1	37	9	3.6	0	29.6	29.5	29.5	0
28	87	75.6	62	64	59.4	56	84	60	35	9	4.3	0	29.5	29.4	29.4	0
29	88	78.3	66	67	63.8	61	84	63.1	42	12	2.7	0	29.4	29.3	29.2	0
30	88	79.6	74	72	70.5	67	87	74.7	51	20	7.9	0	29.2	29.2	29.1	0
31	89	78.6	72	72	69.5	63	91	75	42	17	9.1	0	29.3	29.2	29.1	0.02

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
Aug	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	89	79	71	73	70.5	67	93	76.7	55	10	3.8	0	29.4	29.3	29.3	0
2	79	76	74	73	70.8	68	91	84	72	17	6.1	0	29.3	29.2	29.2	0.08
3	81	75.5	73	71	69.2	67	90	80.9	65	10	5.3	0	29.2	29.2	29.2	0.07
4	85	76.5	68	69	63.5	56	93	67.3	38	13	6.1	0	29.4	29.3	29.2	0
5	85	77.2	71	71	68.6	63	87	75.3	61	17	6.4	0	29.4	29.3	29.3	0
6	73	70	65	69	64.7	59	87	83.1	73	14	8	0	29.4	29.4	29.3	0.28
7	79	70	60	60	55	50	83	60.6	40	21	10.3	0	29.4	29.4	29.3	0
8	84	75	65	70	64.9	57	84	71.3	61	16	6.2	0	29.3	29.3	29.2	0
9	82	75.4	62	72	67.2	51	90	76.7	45	16	8.5	0	29.3	29.1	29.1	0.02
10	76	69	61	57	53.4	50	84	59.2	42	23	11.5	0	29.3	29.3	29.3	0
11	77	67.8	62	61	54.3	48	78	62.6	43	24	13.8	6	29.4	29.3	29.3	0
12	76	67.4	59	63	58.3	54	87	73.6	50	13	7.5	0	29.4	29.4	29.3	0.3
13	80	69.4	57	63	57.9	53	90	69.2	42	9	2.7	0	29.5	29.5	29.4	0.25
14	83	72.5	60	63	56.6	52	86	60.9	34	10	3.4	0	29.5	29.5	29.5	0
15	85	71.1	60	66	60.3	56	93	71.8	37	9	4.3	0	29.5	29.5	29.4	0
16	85	74.1	63	69	62.6	58	88	69.5	41	12	6.3	0	29.4	29.3	29.2	0
17	84	75.9	72	71	68	64	88	77	61	17	8.4	0	29.2	29.1	29.1	0.63
18	82	75.3	71	69	67.1	65	87	76	62	20	11.6	3	29.1	29.1	29	0.02
19	71	63.4	60	66	57.4	47	90	81.1	60	18	12.7	7	29.4	29.2	29.1	0.27
20	70	62.6	58	50	46.7	42	69	56.8	38	20	11.6	0	29.5	29.4	29.4	0.04
21	72	63.4	54	52	48.5	45	83	60.1	40	17	7.3	0	29.5	29.5	29.5	0
22	77	65.7	54	57	52	48	83	63.5	37	15	8	3	29.6	29.6	29.5	0
23	78	67.8	57	56	51.9	47	81	59.3	35	12	6.1	0	29.7	29.6	29.6	0
24	80	69.3	56	60	55.5	51	86	63.8	42	12	2.3	0	29.6	29.6	29.6	0
25	83	72.3	60	60	58	55	86	63.2	41	8	2.1	0	29.6	29.6	29.6	0
26	86	73.4	61	64	60.5	57	87	66.6	38	6	1.6	0	29.6	29.5	29.5	0
27	89	77.7	65	70	64.5	60	84	65.7	42	21	8.9	0	29.5	29.4	29.3	0
28	83	75.8	67	71	66.9	61	84	74	62	15	9.3	0	29.5	29.4	29.3	0
29	75	67.8	62	61	58.3	55	81	71.9	60	12	8.1	3	29.6	29.6	29.5	0
30	87	75	60	69	62.2	56	87	66.5	40	14	5.9	0	29.6	29.4	29.3	0

31	81	74.5	68	71	68.2	64	87	80.7	69	21	8.8	5	29.4	29.3	29.3	0.23

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
Sep	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	80	72.8	64	68	58.9	46	90	64	40	21	12.6	7	29.4	29.3	29.2	0.37
2	68	62.2	54	51	43.9	37	75	52.8	35	15	8.8	0	29.7	29.6	29.4	0
3	74	62.2	48	53	45.6	39	83	57.6	34	7	2	0	29.7	29.7	29.7	0
4	80	65.2	51	55	50	46	83	61.6	32	10	4	0	29.8	29.7	29.7	0
5	82	68.9	54	55	51.1	47	83	56.1	31	12	5.8	0	29.7	29.6	29.4	0
6	77	68.5	63	67	59.1	51	88	73.2	46	18	10.3	3	29.4	29.3	29.2	0
7	65	59.1	52	58	52.8	41	88	80.1	56	20	11.2	3	29.3	29.2	29.2	0.73
8	67	58.5	49	45	42.5	40	80	57.2	38	24	15.1	8	29.4	29.4	29.3	0.11
9	74	65	58	60	56	44	90	73.5	52	20	10.9	0	29.4	29.4	29.3	0
10	75	59.9	54	59	53.8	45	94	82.8	34	8	1.3	0	29.5	29.5	29.4	0.29
11	79	65	52	58	53	47	86	67.8	35	7	2	0	29.5	29.5	29.5	0
12	83	69.2	56	66	59.4	53	90	72.8	42	9	2.6	0	29.6	29.5	29.5	0
13	81	70.4	60	62	59.4	56	87	70.2	45	10	3.3	0	29.6	29.6	29.6	0
14	82	69	59	64	59.3	55	90	73	44	12	3	0	29.7	29.6	29.6	0
15	85	72.4	62	63	59.9	56	90	67.3	37	9	4	0	29.7	29.6	29.6	0
16	84	71.1	60	59	56.8	55	87	63.1	41	13	4.4	0	29.7	29.6	29.6	0
17	82	69.3	59	59	55.8	53	83	64.3	38	9	3.4	0	29.6	29.5	29.5	0
18	83	69.9	60	63	58.2	55	83	68.2	42	13	5	0	29.5	29.4	29.4	0
19	84	70.2	60	64	58.3	50	90	68.4	31	12	4.2	0	29.4	29.3	29.3	0
20	83	69.6	57	62	56.8	52	83	66.4	36	12	4.5	0	29.3	29.3	29.3	0
21	81	71.2	63	63	60.5	57	84	70.1	52	10	4.5	0	29.3	29.3	29.2	0
22	81	69.7	62	68	64.7	59	93	84.6	60	9	3.3	0	29.3	29.3	29.2	0
23	73	68.9	66	67	64.9	63	90	87.1	79	12	6.3	0	29.3	29.2	29.2	0.16
24	72	67.2	63	64	60.7	58	87	79.8	68	13	7.7	3	29.3	29.3	29.2	0.18
25	74	68.7	64	64	61.6	59	87	78.3	68	20	10.9	5	29.3	29.3	29.2	0.19
26	75	68.3	59	65	59.2	48	90	74.7	38	9	3.8	0	29.4	29.4	29.3	0.04
27	78	66.2	55	61	53.7	48	84	66.5	37	16	8.3	0	29.4	29.3	29.3	0
28	76	69.3	65	66	61.7	54	90	77.1	65	16	11.9	8	29.3	29.3	29.2	0
29	76	68.8	63	65	63.1	59	93	82.5	67	12	7.9	5	29.4	29.3	29.3	0.41
30	77	65.5	60	63	59.5	56	93	82.1	54	12	7.3	3	29.4	29.4	29.4	0

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
Oct	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	74	68	61	61	59.1	57	88	74	59	17	7.2	0	29.4	29.3	29.3	0
2	66	59.1	54	57	50.5	43	90	75.2	45	15	8.4	0	29.4	29.3	29.3	0.15
3	73	61.3	50	54	49.5	44	84	67.2	42	15	6.1	0	29.5	29.4	29.4	0
4	74	58.8	51	58	52	47	93	79.7	52	12	2.6	0	29.6	29.6	29.5	0
5	67	58	49	54	46.5	42	92	68.7	42	9	3.9	0	29.7	29.6	29.5	0.09
6	80	64.1	47	59	50.4	42	84	63.3	42	26	11.1	0	29.5	29.2	29.1	0
7	65	57.2	47	48	43	37	74	60.2	41	20	11.1	5	29.3	29.3	29.2	0
8	63	53.1	44	46	42	37	80	67.2	41	18	8.6	0	29.3	29.3	29.2	0.01
9	60	50.6	40	47	38.4	35	86	64.4	42	20	10.3	0	29.5	29.3	29.3	0.01
10	57	50.6	44	41	37.7	36	82	62.2	49	15	8.4	0	29.6	29.5	29.5	0.01
11	68	57.7	41	54	45.3	36	85	64.8	44	28	14	0	29.5	29.4	29.2	0
12	67	56.1	44	50	38.9	27	72	53.9	33	16	7.7	0	29.5	29.4	29.3	0
13	51	49.3	48	46	43.6	36	86	80.9	56	21	10.9	0	29.3	29.2	29.1	0.05
14	53	46.9	43	44	37.1	30	87	69.9	43	20	12.7	6	29.3	29.2	29	0.75
15	50	46.7	40	39	36.6	34	86	68.6	57	20	10.8	0	29.4	29.3	29.3	0.04
16	52	45.5	38	39	36.2	33	83	70.8	49	13	7.2	0	29.6	29.5	29.4	0.21
17	59	41.2	33	44	34	29	93	77.4	42	9	1.7	0	29.7	29.7	29.6	0.01
18	65	49.8	36	48	39.3	32	86	69.9	38	9	3.1	0	29.9	29.8	29.7	0
19	68	43.9	35	48	37.5	32	93	80.4	42	9	1.9	0	29.9	29.9	29.7	0
20	71	59.4	45	53	45.6	39	90	63.5	38	23	11	0	29.7	29.6	29.6	0
21	73	65.2	59	54	50.6	46	78	59.9	44	21	12.9	0	29.6	29.5	29.5	0
22	77	63.8	55	52	47.1	43	83	57.9	31	15	5.2	0	29.6	29.5	29.4	0
23	72	63.8	52	53	47.1	42	72	55.1	44	29	14.3	5	29.4	29.3	29.2	0
24	54	44.4	0	42	33.7	0	83	58.4	0	10	4.9	0	29.5	29.5	29.4	0.04
25	58	49.2	37	49	40.1	32	83	72	49	15	6.4	0	29.5	29.4	29.4	0
26	57	49.9	40	46	37.3	30	83	63	40	21	11.4	5	29.8	29.6	29.4	0
27	56	45.1	33	35	30.6	27	86	59.3	34	15	5.3	0	29.8	29.7	29.7	0
28	61	48.8	42	41	37.8	35	80	67	42	14	6.8	0	29.7	29.7	29.6	0
29	70	55.4	39	56	47.2	33	87	74.3	57	16	7.8	0	29.6	29.5	29.4	0
30	74	70.4	66	57	54.6	51	68	57.5	49	28	18.4	10	29.5	29.5	29.4	0.41
31	76	70.2	62	59	55.8	51	70	60.6	54	25	16	8	29.4	29.3	29.1	0

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
Nov	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	67	55	45	57	41.1	33	72	59.8	51	25	18.3	10	29.6	29.4	29.2	0
2	48	43.2	34	34	31.2	27	76	62.9	50	10	6.4	0	29.8	29.7	29.7	0
3	55	43.5	30	35	29.3	25	82	59.8	37	10	6	0	29.8	29.8	29.7	0
4	67	57.8	46	44	36.5	27	54	45.3	39	17	10.7	0	29.7	29.5	29.4	0
5	78	69.4	64	53	49.1	42	58	48.6	42	24	13.4	6	29.4	29.3	29.2	0
6	73	65.2	57	61	57.4	49	90	76.8	51	32	14.2	5	29.4	29.3	29.2	0.16
7	58	53.5	50	48	42.1	36	77	66.1	44	16	10.3	6	29.6	29.5	29.4	0.03
8	55	51.2	42	42	37.4	24	71	59.6	42	22	15.8	7	29.6	29.4	29.4	0
9	51	41.5	32	30	26.6	23	75	56.9	39	8	4.3	0	29.8	29.7	29.6	0
10	59	51.5	38	54	41.7	27	86	70.9	37	20	10.7	3	29.6	29.3	29	0
11	60	53.1	46	53	43.5	36	83	70.1	56	37	19.1	13	29.2	29.1	29	0.18
12	48	41.8	32	38	30	25	76	63.5	51	24	12.8	0	29.8	29.6	29.2	0.14
13	48	38.6	30	27	24.6	22	82	59.5	37	14	8.9	3	29.9	29.8	29.6	0
14	53	45.3	38	39	27	17	82	52.7	27	14	8.6	5	29.6	29.4	29.3	0
15	50	47	44	42	40.7	39	89	78.9	71	14	5.4	0	29.4	29.4	29.3	0.13
16	52	46.3	40	41	37.1	34	80	70.4	54	16	9.9	0	29.5	29.4	29.4	0
17	54	49	45	43	38.5	36	76	67.2	59	16	7	0	29.5	29.4	29.3	0
18	57	50.8	39	49	41.8	32	86	72.2	51	18	8.8	0	29.4	29.3	29.2	0.01
19	57	45.1	35	44	36.1	30	89	72.1	49	13	6.2	0	29.4	29.3	29.1	0
20	59	51.2	44	50	46.3	37	90	83.7	69	28	4.8	0	29.1	29	28.8	0
21	43	40.5	38	37	34.9	31	87	80.5	73	24	7.8	0	29	29	29	0.37
22	45	43	39	40	37.9	35	87	81.9	76	24	14.3	8	29	28.9	28.8	0.51
23	49	44.2	36	42	37.4	32	93	77.5	64	20	11.3	3	29.2	29.1	29	0.57
24	47	41.9	33	35	32.8	26	79	70.8	56	16	10.8	0	29.4	29.3	29.2	0
25	50	40.9	30	41	33.2	26	85	74.8	56	12	5.4	0	29.4	29.3	29.2	0
26	52	45.9	41	48	38	27	93	74.8	57	25	15.3	5	29.3	29.2	29.1	0.25
27	43	37.5	33	28	24.4	22	73	59.6	43	20	11.1	0	29.4	29.3	29.2	0
28	42	38	36	35	31.1	25	87	76.7	60	17	8.8	0	29.2	29.1	29.1	0.08
29	39	34.1	29	23	19.3	16	66	55.2	41	24	15.7	10	29.3	29.2	29.2	0.05
30	35	30.5	28	18	16.2	13	66	55.8	48	25	17.8	13	29.3	29.3	29.2	0

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation (in)
Dec	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	34	30.8	26	19	16.8	13	63	56.6	48	21	15.4	10	29.4	29.3	29.3	0
2	39	30.8	24	26	21.6	18	84	69.9	43	14	8.8	0	29.6	29.5	29.4	0
3	36	31.4	27	27	22.2	15	86	70.1	43	14	8.2	5	29.7	29.6	29.6	0
4	36	32.9	30	31	25.2	18	85	74	52	25	16.1	6	29.5	29.2	28.8	0.03
5	37	31.8	28	30	24.1	18	89	73.4	59	31	19.2	0	29.4	29	28.7	0.06
6	31	26.9	18	18	15.1	10	71	61.4	51	22	15.1	5	29.6	29.5	29.4	0.01
7	41	33.5	30	29	23.5	16	82	67.2	53	33	16.8	6	29.4	29.3	29	0
8	46	43.5	40	34	32.3	27	77	65	57	26	15.9	0	29.3	29.1	28.9	0.03
9	47	42	38	43	37.7	31	93	84.8	73	14	6.5	0	29.3	29.1	29	0
10	50	46.9	45	44	42.2	41	90	83.9	74	12	6.2	0	29.3	29.2	29.1	0.36
11	45	41.9	33	42	36.3	20	90	81	57	23	8	0	29.1	29.1	29	0.55
12	33	25.5	20	22	9.2	0	66	50.4	35	33	21.1	9	29.7	29.4	29.1	0.02
13	28	21	16	8	5.8	3	68	52.8	38	20	9.2	0	30.1	30	29.7	0
14	35	23.3	13	14	10	6	77	59.1	34	15	6.5	0	30.2	30.1	30	0
15	39	32.2	22	33	23.2	12	83	70	52	10	7.2	5	30	29.8	29.7	0
16	51	44.9	39	46	37.3	33	83	75.1	66	18	10.8	5	29.7	29.4	29.1	0.06
17	53	45	39	48	36.7	29	86	72.8	62	22	15.1	6	29.6	29.4	29.1	0.16
18	40	36.2	34	32	30.6	29	92	80.6	67	13	5	0	29.6	29.5	29.4	0
19	36	32.7	30	30	21	16	79	62.5	52	21	9.5	3	29.7	29.6	29.5	0.19
20	34	29.9	25	27	24.2	19	86	79.7	69	17	11	7	29.6	29.4	29.3	0.01
21	25	20.5	17	19	10.8	5	81	66.1	52	18	12.8	6	29.7	29.6	29.5	0.06
22	15	9.2	3	11	0.8	-3	100	69.2	54	17	5.4	0	29.9	29.8	29.8	0
23	37	28.9	10	31	19.4	2	85	68.7	44	17	11.2	3	29.9	29.6	29.5	0
24	37	35.5	32	33	29.9	24	86	80.3	72	16	8.8	5	29.7	29.6	29.4	0.08
25	32	31.4	31	25	23.1	20	79	71.8	61	6	2	0	29.8	29.7	29.7	0
26	35	32	29	25	22.9	22	75	69.3	61	9	4.8	0	29.8	29.8	29.7	0
27	40	35	29	30	26.3	22	78	70.7	63	12	6.6	3	29.7	29.6	29.4	0
28	57	47.1	38	47	40.1	30	86	76.8	68	14	8.8	3	29.4	29.4	29.4	0.03
29	62	49.2	39	54	44.4	36	93	83.8	67	16	6.9	0	29.4	29.1	28.7	0
30	56	43	38	46	34.7	32	83	72.7	61	37	23.3	12	29.1	28.9	28.7	0.55
31	46	37.1	30	38	32.4	27	93	83.3	68	17	5.7	0	29.2	29.1	28.9	0.13

Appendix C

Laboratory Analytical Data Reports and Data Validation Reports

Laboratory Data Reports

February 2024 PM Event

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **ARCADIS US Inc - Clifton Park, NY**

Project NFARS-Niagara Falls Air Base
Workorder 3347404
Report ID 307899 on 3/15/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Feb 27, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Andy Vitolins - Arcadis
Erika Denkenberger - Arcadis
Katherine Clubine - Arcadis
Corey Averill - Arcadis

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3347404001	MW5-5D-20240226	Ground Water	02/26/2024 09:25	02/27/2024 09:18	CBC	Collected By Client
3347404002	RW5-2-20240226	Ground Water	02/26/2024 09:35	02/27/2024 09:18	CBC	Collected By Client
3347404003	RW5-1-20240226	Ground Water	02/26/2024 08:30	02/27/2024 09:18	CBC	Collected By Client
3347404004	MW5-1DA-20240226	Ground Water	02/26/2024 08:45	02/27/2024 09:18	CBC	Collected By Client
3347404005	PW10-1-20240226	Ground Water	02/26/2024 10:25	02/27/2024 09:18	CBC	Collected By Client
3347404006	MW10-7-20240226	Ground Water	02/26/2024 10:15	02/27/2024 09:18	CBC	Collected By Client
3347404007	MW10-1DA-20240226	Ground Water	02/26/2024 10:00	02/27/2024 09:18	CBC	Collected By Client
3347404008	MW10-10D-20240226	Ground Water	02/26/2024 10:45	02/27/2024 09:18	CBC	Collected By Client
3347404009	MW10-11D-20240226	Ground Water	02/26/2024 10:35	02/27/2024 09:18	CBC	Collected By Client
3347404010	DUP-01-20240226	Ground Water	02/26/2024 00:00	02/27/2024 09:18	CBC	Collected By Client
3347404011	Trip Blank	Ground Water	02/26/2024 00:00	02/27/2024 09:18	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Bromomethane. The RPD was reported as 31.9 and the upper control limit is 20.
2	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 205 and the control limits were 64 to 133.
3	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The RPD was reported as 21.4 and the upper control limit is 20.
4	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Carbon Disulfide. The % Recovery was reported as 161 and the control limits were 64 to 133.
5	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 219 and the control limits were 60 to 138.
6	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 180 and the control limits were 60 to 138.
7	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Chloromethane. The RPD was reported as 23.3 and the upper control limit is 20.
8	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Vinyl Chloride. The % Recovery was reported as 14.3 and the control limits were 58 to 137.

Detected Results Summary

Client Sample ID	MW5-5D-20240226	Collected	02/26/2024 09:25
Lab Sample ID	3347404001	Lab Receipt	02/27/2024 09:18

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
LIGHT HYDROCARBON GASES							
Ethane	2.2J	ug/L	5.2	2.6	0.56	RSK 175	#
Methane	469	ug/L	2.6	1.6	0.53	RSK 175	#
VOLATILE ORGANICS							
Carbon Disulfide	1.5	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	5.4	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	0.57J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	2.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	4.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
WET CHEMISTRY							
Total Organic Carbon (TOC)	3.8	mg/L	1.0	0.50	0.27	SW846 9060A	#

Detected Results Summary

Client Sample ID	RW5-2-20240226	Collected	02/26/2024 09:35
Lab Sample ID	3347404002	Lab Receipt	02/27/2024 09:18

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
LIGHT HYDROCARBON GASES							
Ethane	28.4	ug/L	5.2	2.6	0.56	RSK 175	#
Ethene	2.7J	ug/L	7.1	3.6	0.81	RSK 175	#
Methane	5970	ug/L	2.6	1.6	0.53	RSK 175	#
VOLATILE ORGANICS							
Chloromethane	0.64J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.92J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	0.72J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	10	ug/L	1.0	0.75	0.33	SW846 8260C	#
WET CHEMISTRY							
Total Organic Carbon (TOC)	8.8	mg/L	5.0	2.5	1.4	SW846 9060A	#

Detected Results Summary

Client Sample ID	RW5-1-20240226	Collected	02/26/2024 08:30
Lab Sample ID	3347404003	Lab Receipt	02/27/2024 09:18

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
LIGHT HYDROCARBON GASES							
Ethane	21.1	ug/L	5.2	2.6	0.56	RSK 175	#
Ethene	71.2	ug/L	7.1	3.6	0.81	RSK 175	#
Methane	6680	ug/L	2.6	1.6	0.53	RSK 175	#
VOLATILE ORGANICS							
Carbon Disulfide	4.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	218	ug/L	5.0	3.8	1.7	SW846 8260C	#
Toluene	3.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	3.5	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	1.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	189	ug/L	1.0	0.75	0.33	SW846 8260C	#
WET CHEMISTRY							
Total Organic Carbon (TOC)	7.3	mg/L	5.0	2.5	1.4	SW846 9060A	#

Detected Results Summary

Client Sample ID	MW5-1DA-20240226	Collected	02/26/2024 08:45
Lab Sample ID	3347404004	Lab Receipt	02/27/2024 09:18

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
LIGHT HYDROCARBON GASES							
Methane	1.5J	ug/L	2.6	1.6	0.53	RSK 175	#
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	0.76J	ug/L	1.0	0.75	0.33	SW846 8260C	#
WET CHEMISTRY							
Total Organic Carbon (TOC)	3.0	mg/L	1.0	0.50	0.27	SW846 9060A	#

Detected Results Summary

Client Sample ID	PW10-1-20240226	Collected	02/26/2024 10:25
Lab Sample ID	3347404005	Lab Receipt	02/27/2024 09:18

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
LIGHT HYDROCARBON GASES							
Methane	0.86J	ug/L	2.6	1.6	0.53	RSK 175	#
WET CHEMISTRY							
Total Organic Carbon (TOC)	6.6	mg/L	1.0	0.50	0.27	SW846 9060A	#

Detected Results Summary

Client Sample ID	MW10-7-20240226	Collected	02/26/2024 10:15
Lab Sample ID	3347404006	Lab Receipt	02/27/2024 09:18

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
LIGHT HYDROCARBON GASES							
Ethane	2.7J	ug/L	5.2	2.6	0.56	RSK 175	#
Methane	7540	ug/L	2.6	1.6	0.53	RSK 175	#
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	0.62J	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	0.70J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	0.69J	ug/L	1.0	0.75	0.33	SW846 8260C	#
WET CHEMISTRY							
Total Organic Carbon (TOC)	68.9	mg/L	10.0	5.0	2.7	SW846 9060A	#

Detected Results Summary

Client Sample ID	MW10-1DA-20240226	Collected	02/26/2024 10:00
Lab Sample ID	3347404007	Lab Receipt	02/27/2024 09:18

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
LIGHT HYDROCARBON GASES							
Ethane	43.0	ug/L	5.2	2.6	0.56	RSK 175	#
Methane	7190	ug/L	2.6	1.6	0.53	RSK 175	#
VOLATILE ORGANICS							
Benzene	2.4	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.38J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	1.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
WET CHEMISTRY							
Total Organic Carbon (TOC)	10.2	mg/L	5.0	2.5	1.4	SW846 9060A	#

Detected Results Summary

Client Sample ID	MW10-10D-20240226	Collected	02/26/2024 10:45
Lab Sample ID	3347404008	Lab Receipt	02/27/2024 09:18

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
LIGHT HYDROCARBON GASES							
Ethane	14.9	ug/L	5.2	2.6	0.56	RSK 175	#
Ethene	7.7	ug/L	7.1	3.6	0.81	RSK 175	#
Methane	8450	ug/L	2.6	1.6	0.53	RSK 175	#
VOLATILE ORGANICS							
Acetone	3.7J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Benzene	1.5	ug/L	1.0	0.75	0.33	SW846 8260C	#
Carbon Disulfide	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	101	ug/L	1.0	0.75	0.33	SW846 8260C	#
Ethylbenzene	0.36J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methyl acetate	3.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methyl cyclohexane	0.95J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methylene Chloride	0.87J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	5.7	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	1.9	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	8.6	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	5.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
WET CHEMISTRY							
Total Organic Carbon (TOC)	2260	mg/L	500	250	135	SW846 9060A	#

Detected Results Summary

Client Sample ID	MW10-11D-20240226	Collected	02/26/2024 10:35
Lab Sample ID	3347404009	Lab Receipt	02/27/2024 09:18

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
LIGHT HYDROCARBON GASES							
Methane	2.9	ug/L	2.6	1.6	0.53	RSK 175	#
WET CHEMISTRY							
Total Organic Carbon (TOC)	8.8	mg/L	1.0	0.50	0.27	SW846 9060A	#

Detected Results Summary

Client Sample ID	DUP-01-20240226	Collected	02/26/2024 00:00
Lab Sample ID	3347404010	Lab Receipt	02/27/2024 09:18

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
LIGHT HYDROCARBON GASES							
Ethane	2.4J	ug/L	5.2	2.6	0.56	RSK 175	#
Ethene	1.0J	ug/L	7.1	3.6	0.81	RSK 175	#
Methane	553	ug/L	2.6	1.6	0.53	RSK 175	#
VOLATILE ORGANICS							
Carbon Disulfide	0.76J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	5.2	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	0.53J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	2.4	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	3.9	ug/L	1.0	0.75	0.33	SW846 8260C	#
WET CHEMISTRY							
Total Organic Carbon (TOC)	5.2	mg/L	5.0	2.5	1.4	SW846 9060A	#

Results

Client Sample ID	MW5-5D-20240226	Collected	02/26/2024 09:25
Lab Sample ID	3347404001	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.2J	J	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 09:29	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 09:29	JTH	E
Methane	469		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 09:29	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:01	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:01	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:01	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:01	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Carbon Disulfide	1.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
cis-1,2-Dichloroethene	5.4		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A

Results

Client Sample ID	MW5-5D-20240226	Collected	02/26/2024 09:25
Lab Sample ID	3347404001	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 13:01	TMP	A
trans-1,2-Dichloroethene	0.57J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Trichloroethene	2.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Vinyl Chloride	4.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	85.2%	81 – 118	03/01/2024 13:01	
4-Bromofluorobenzene	460-00-4	108%	85 – 114	03/01/2024 13:01	
Dibromofluoromethane	1868-53-7	97%	80 – 119	03/01/2024 13:01	
Toluene-d8	2037-26-5	105%	89 – 112	03/01/2024 13:01	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	3.8		mg/L	1.0	0.50	0.27	SW846 9060A	1	03/06/2024 01:33	PAG	G

Results

Client Sample ID	RW5-2-20240226	Collected	02/26/2024 09:35
Lab Sample ID	3347404002	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	28.4		ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 09:42	JTH	E
Ethene	2.7J	J	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 09:42	JTH	E
Methane	5970		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 09:42	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:21	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:21	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:21	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:21	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Chloromethane	0.64J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
cis-1,2-Dichloroethene	0.92J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A

Results

Client Sample ID	RW5-2-20240226	Collected	02/26/2024 09:35
Lab Sample ID	3347404002	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Toluene	0.72J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 13:21	TMP	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Vinyl Chloride	10		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	81.7%	81 – 118	03/01/2024 13:21	
4-Bromofluorobenzene	460-00-4	103%	85 – 114	03/01/2024 13:21	
Dibromofluoromethane	1868-53-7	92.7%	80 – 119	03/01/2024 13:21	
Toluene-d8	2037-26-5	99.4%	89 – 112	03/01/2024 13:21	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	8.8		mg/L	5.0	2.5	1.4	SW846 9060A	5	03/06/2024 01:33	PAG	G

Results

Client Sample ID	RW5-1-20240226	Collected	02/26/2024 08:30
Lab Sample ID	3347404003	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	21.1		ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 12:02	JTH	K
Ethene	71.2		ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 12:02	JTH	K
Methane	6680		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 12:02	JTH	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:40	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:40	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:40	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:40	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Bromomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Carbon Disulfide	4.3	2,3,4	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Chloroethane	0.75U	U,5,6	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Chloromethane	0.75U	U,7	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
cis-1,2-Dichloroethene	218		ug/L	5.0	3.8	1.7	SW846 8260C	5	03/11/2024 19:41	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A

Results

Client Sample ID	RW5-1-20240226	Collected	02/26/2024 08:30
Lab Sample ID	3347404003	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Toluene	3.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 13:40	TMP	A
trans-1,2-Dichloroethene	3.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Trichloroethene	1.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Vinyl Chloride	189	8	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.2%	81 – 118	03/11/2024 19:41	
1,2-Dichloroethane-d4	17060-07-0	81.9%	81 – 118	03/01/2024 13:40	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	03/11/2024 19:41	
4-Bromofluorobenzene	460-00-4	99.1%	85 – 114	03/01/2024 13:40	
Dibromofluoromethane	1868-53-7	98.9%	80 – 119	03/11/2024 19:41	
Dibromofluoromethane	1868-53-7	92.8%	80 – 119	03/01/2024 13:40	
Toluene-d8	2037-26-5	99.7%	89 – 112	03/11/2024 19:41	
Toluene-d8	2037-26-5	98.5%	89 – 112	03/01/2024 13:40	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	7.3		mg/L	5.0	2.5	1.4	SW846 9060A	5	03/06/2024 01:33	PAG	Q

Results

Client Sample ID	MW5-1DA-20240226	Collected	02/26/2024 08:45
Lab Sample ID	3347404004	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.6U	U	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 09:55	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 09:55	JTH	E
Methane	1.5J	J	ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 09:55	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:00	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:00	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:00	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:00	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
cis-1,2-Dichloroethene	0.76J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A

Results

Client Sample ID	MW5-1DA-20240226	Collected	02/26/2024 08:45
Lab Sample ID	3347404004	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 14:00	TMP	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	82.3%	81 – 118	03/01/2024 14:00	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	03/01/2024 14:00	
Dibromofluoromethane	1868-53-7	93.1%	80 – 119	03/01/2024 14:00	
Toluene-d8	2037-26-5	100%	89 – 112	03/01/2024 14:00	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	3.0		mg/L	1.0	0.50	0.27	SW846 9060A	1	03/06/2024 01:33	PAG	G

Results

Client Sample ID	PW10-1-20240226	Collected	02/26/2024 10:25
Lab Sample ID	3347404005	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.6U	U	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 10:07	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 10:07	JTH	E
Methane	0.86J	J	ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 10:07	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:00	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:00	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:00	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:00	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A

Results

Client Sample ID	PW10-1-20240226	Collected	02/26/2024 10:25
Lab Sample ID	3347404005	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/11/2024 19:00	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.4%	81 – 118	03/11/2024 19:00	
4-Bromofluorobenzene	460-00-4	104%	85 – 114	03/11/2024 19:00	
Dibromofluoromethane	1868-53-7	97.7%	80 – 119	03/11/2024 19:00	
Toluene-d8	2037-26-5	101%	89 – 112	03/11/2024 19:00	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	6.6		mg/L	1.0	0.50	0.27	SW846 9060A	1	03/06/2024 01:33	PAG	G

Results

Client Sample ID	MW10-7-20240226	Collected	02/26/2024 10:15
Lab Sample ID	3347404006	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.7J	J	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 10:23	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 10:23	JTH	E
Methane	7540		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 10:23	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:40	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:40	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:40	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:40	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
cis-1,2-Dichloroethene	0.62J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A

Results

Client Sample ID	MW10-7-20240226	Collected	02/26/2024 10:15
Lab Sample ID	3347404006	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 14:40	TMP	A
trans-1,2-Dichloroethene	0.70J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Vinyl Chloride	0.69J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	84.4%	81 – 118	03/01/2024 14:40	
4-Bromofluorobenzene	460-00-4	104%	85 – 114	03/01/2024 14:40	
Dibromofluoromethane	1868-53-7	95.4%	80 – 119	03/01/2024 14:40	
Toluene-d8	2037-26-5	101%	89 – 112	03/01/2024 14:40	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	68.9		mg/L	10.0	5.0	2.7	SW846 9060A	10	03/06/2024 01:33	PAG	G

Results

Client Sample ID	MW10-1DA-20240226	Collected	02/26/2024 10:00
Lab Sample ID	3347404007	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	43.0		ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 10:36	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 10:36	JTH	E
Methane	7190		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 10:36	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:00	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:00	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:00	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:00	TMP	A
Benzene	2.4		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
cis-1,2-Dichloroethene	0.38J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A

Results

Client Sample ID	MW10-1DA-20240226	Collected	02/26/2024 10:00
Lab Sample ID	3347404007	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 15:00	TMP	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Vinyl Chloride	1.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	84.1%	81 – 118	03/01/2024 15:00	
4-Bromofluorobenzene	460-00-4	99.2%	85 – 114	03/01/2024 15:00	
Dibromofluoromethane	1868-53-7	94.7%	80 – 119	03/01/2024 15:00	
Toluene-d8	2037-26-5	100%	89 – 112	03/01/2024 15:00	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	10.2		mg/L	5.0	2.5	1.4	SW846 9060A	5	03/06/2024 01:33	PAG	G

Results

Client Sample ID	MW10-10D-20240226	Collected	02/26/2024 10:45
Lab Sample ID	3347404008	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	14.9		ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 10:51	JTH	E
Ethene	7.7		ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 10:51	JTH	E
Methane	8450		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 10:51	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:20	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:20	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:20	ILY	A
Acetone	3.7J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:20	ILY	A
Benzene	1.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Carbon Disulfide	0.42J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
cis-1,2-Dichloroethene	101		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Ethylbenzene	0.36J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Methyl acetate	3.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Methyl cyclohexane	0.95J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A

Results

Client Sample ID	MW10-10D-20240226	Collected	02/26/2024 10:45
Lab Sample ID	3347404008	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Methylene Chloride	0.87J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Toluene	5.7		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/11/2024 19:20	ILY	A
trans-1,2-Dichloroethene	1.9		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Trichloroethene	8.6		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Vinyl Chloride	5.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.8%	81 – 118	03/11/2024 19:20	
4-Bromofluorobenzene	460-00-4	94.4%	85 – 114	03/11/2024 19:20	
Dibromofluoromethane	1868-53-7	102%	80 – 119	03/11/2024 19:20	
Toluene-d8	2037-26-5	102%	89 – 112	03/11/2024 19:20	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	2260		mg/L	500	250	135	SW846 9060A	500	03/07/2024 00:00	PAG	G

Results

Client Sample ID	MW10-11D-20240226	Collected	02/26/2024 10:35
Lab Sample ID	3347404009	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.6U	U	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 11:04	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 11:04	JTH	E
Methane	2.9		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 11:04	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:20	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:20	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:20	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:20	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A

Results

Client Sample ID	MW10-11D-20240226	Collected	02/26/2024 10:35
Lab Sample ID	3347404009	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 15:20	TMP	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	82.9%	81 – 118	03/01/2024 15:20	
4-Bromofluorobenzene	460-00-4	111%	85 – 114	03/01/2024 15:20	
Dibromofluoromethane	1868-53-7	94.5%	80 – 119	03/01/2024 15:20	
Toluene-d8	2037-26-5	103%	89 – 112	03/01/2024 15:20	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	8.8		mg/L	1.0	0.50	0.27	SW846 9060A	1	03/06/2024 01:33	PAG	G

Results

Client Sample ID	DUP-01-20240226	Collected	02/26/2024 00:00
Lab Sample ID	3347404010	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.4J	J	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 11:18	JTH	E
Ethene	1.0J	J	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 11:18	JTH	E
Methane	553		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 11:18	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:40	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:40	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:40	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:40	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Carbon Disulfide	0.76J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
cis-1,2-Dichloroethene	5.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A

Results

Client Sample ID	DUP-01-20240226	Collected	02/26/2024 00:00
Lab Sample ID	3347404010	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 15:40	TMP	A
trans-1,2-Dichloroethene	0.53J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Trichloroethene	2.4		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Vinyl Chloride	3.9		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	85.2%	81 – 118	03/01/2024 15:40	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	03/01/2024 15:40	
Dibromofluoromethane	1868-53-7	96.3%	80 – 119	03/01/2024 15:40	
Toluene-d8	2037-26-5	101%	89 – 112	03/01/2024 15:40	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	5.2		mg/L	5.0	2.5	1.4	SW846 9060A	5	03/06/2024 01:33	PAG	G

Results

Client Sample ID	Trip Blank	Collected	02/26/2024 00:00
Lab Sample ID	3347404011	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 12:41	TMP	C
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 12:41	TMP	C
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 12:41	TMP	C
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 12:41	TMP	C
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 12:41	TMP	C
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C

Results

Client Sample ID	Trip Blank	Collected	02/26/2024 00:00
Lab Sample ID	3347404011	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	83.9%	81 – 118	03/01/2024 12:41	
4-Bromofluorobenzene	460-00-4	106%	85 – 114	03/01/2024 12:41	
Dibromofluoromethane	1868-53-7	94.7%	80 – 119	03/01/2024 12:41	
Toluene-d8	2037-26-5	104%	89 – 112	03/01/2024 12:41	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3347404001	MW5-5D-20240226	RSK 175	N/A	
		SW846 8260C	N/A	
		SW846 9060A	N/A	
3347404002	RW5-2-20240226	RSK 175	N/A	
		SW846 8260C	N/A	
		SW846 9060A	N/A	
3347404003	RW5-1-20240226	RSK 175	N/A	
		SW846 8260C	N/A	
		SW846 8260C	N/A	
		SW846 9060A	N/A	
3347404004	MW5-1DA-20240226	RSK 175	N/A	
		SW846 8260C	N/A	
		SW846 9060A	N/A	
3347404005	PW10-1-20240226	RSK 175	N/A	
		SW846 8260C	N/A	
		SW846 9060A	N/A	
3347404006	MW10-7-20240226	RSK 175	N/A	
		SW846 8260C	N/A	
		SW846 9060A	N/A	
3347404007	MW10-1DA-20240226	RSK 175	N/A	
		SW846 8260C	N/A	
		SW846 9060A	N/A	
3347404008	MW10-10D-20240226	RSK 175	N/A	
		SW846 8260C	N/A	
		SW846 9060A	N/A	
3347404009	MW10-11D-20240226	RSK 175	N/A	
		SW846 8260C	N/A	
		SW846 9060A	N/A	
3347404010	DUP-01-20240226	RSK 175	N/A	
		SW846 8260C	N/A	
		SW846 9060A	N/A	
3347404011	Trip Blank	SW846 8260C	N/A	

QUALITY CONTROL SAMPLES

LIGHT HYDROCARBON GASES

QC Batch

QC Batch	1152204	Prep Method	N/A
Date	N/A	Analysis Method	RSK 175
Tech.			

Associated Samples

3347404007	3347404001	3347404002	3347404003
3347404004	3347404005	3347404006	3347404008
3347404009	3347404010		

Method Blank 3794086 (MB) Created on 03/06/2024 07:13 For QC Batch 1152204

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Ethane	74-84-0	BLK	2.6U	ug/L	5.2	U
Ethene	74-85-1	BLK	3.6U	ug/L	7.1	U
Methane	74-82-8	BLK	0.63J	ug/L	2.6	J

Duplicate 3794093 (DUP) 3347404003 For QC Batch 1152204

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)				Qualifiers
Ethane	74-84-0	DUP	19.52	21.09	RPD	7.73	(Max-20)	
Ethane	74-84-0	DUP	19.52	21.09	RPD	7.73	(Max-20)	
Ethene	74-85-1	DUP	63.66	71.16	RPD	11.10	(Max-20)	
Ethene	74-85-1	DUP	63.66	71.16	RPD	11.10	(Max-20)	
Methane	74-82-8	DUP	6418.50	6678.70	RPD	3.97	(Max-20)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	1149322	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260C
Tech.			

Associated Samples

3347404001	3347404002	3347404003	3347404004
3347404006	3347404007	3347404009	3347404010
3347404011			

Method Blank 3792457 (MB) Created on 03/01/2024 09:51 For QC Batch 1149322

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
1,1,1-Trichloroethane	71-55-6	BLK	0.75U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	0.75U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	0.75U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	0.75U	ug/L	1.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	0.75U	ug/L	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	2.5U	ug/L	5.0	U
1,2-Dibromoethane	106-93-4	BLK	0.75U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	0.75U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	0.75U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	0.75U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	0.75U	ug/L	1.0	U
1,3-Dichloropropene, Total	542-75-6	BLK	1.5U	ug/L	2.0	U
1,4-Dichlorobenzene	106-46-7	BLK	0.75U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	3.8U	ug/L	5.0	U
2-Hexanone	591-78-6	BLK	3.8U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	3.8U	ug/L	5.0	U
Acetone	67-64-1	BLK	3.8U	ug/L	5.0	U
Benzene	71-43-2	BLK	0.75U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	0.75U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	0.75U	ug/L	1.0	U
Bromoform	75-25-2	BLK	0.75U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	0.75U	ug/L	1.0	U
Carbon Disulfide	75-15-0	BLK	0.75U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	0.75U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	0.75U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	0.75U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	0.75U	ug/L	1.0	U
Chloroform	67-66-3	BLK	0.75U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	0.75U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	0.75U	ug/L	1.0	U
Cyclohexane	110-82-7	BLK	0.75U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	0.75U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	0.75U	ug/L	1.0	U
Freon 113	76-13-1	BLK	0.75U	ug/L	1.0	U
Iodomethane	74-88-4	BLK	0.75U	ug/L	1.0	U
Isopropylbenzene	98-82-8	BLK	0.75U	ug/L	1.0	U
Methyl acetate	79-20-9	BLK	0.75U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Methyl cyclohexane	108-87-2	BLK	0.75U	ug/L	1.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	0.75U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	0.75U	ug/L	1.0	U
Styrene	100-42-5	BLK	0.75U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	0.75U	ug/L	1.0	U
Toluene	108-88-3	BLK	0.75U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	2.3U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	0.75U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	0.75U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	0.75U	ug/L	1.0	U
Vinyl Chloride	75-01-4	BLK	0.75U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	25.10	30	83.6	81 - 118	
4-Bromofluorobenzene	460-00-4	BLK	30.50	30	102	85 - 114	
Dibromofluoromethane	1868-53-7	BLK	28.10	30	93.5	80 - 119	
Toluene-d8	2037-26-5	BLK	30.60	30	102	89 - 112	

Lab Control Standard 3792458 (LCS) Created on 03/01/2024 09:51 For QC Batch 1149322

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	LCS	19.40		20	97	74 - 131		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	20.50		20	103	71 - 121		
1,1,2-Trichloroethane	79-00-5	LCS	21.60		20	108	80 - 119		
1,1-Dichloroethane	75-34-3	LCS	19.40		20	97	77 - 125		
1,1-Dichloroethene	75-35-4	LCS	19.90		20	99.7	71 - 131		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.90		20	110	69 - 129		
1,2,4-Trichlorobenzene	120-82-1	LCS	23.20		20	116	69 - 130		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	18		20	90.2	62 - 128		
1,2-Dibromoethane	106-93-4	LCS	21.70		20	108	77 - 121		
1,2-Dichlorobenzene	95-50-1	LCS	21.80		20	109	80 - 119		
1,2-Dichloroethane	107-06-2	LCS	17		20	84.8	73 - 128		
1,2-Dichloropropane	78-87-5	LCS	20.40		20	102	78 - 122		
1,3-Dichlorobenzene	541-73-1	LCS	22.10		20	110	80 - 119		
1,3-Dichloropropene, Total	542-75-6	LCS	40.80		40	102	75 - 124		
1,4-Dichlorobenzene	106-46-7	LCS	21.70		20	108	79 - 118		
2-Butanone	78-93-3	LCS	107		100	107	56 - 143		
2-Hexanone	591-78-6	LCS	89.60		100	89.6	57 - 139		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	86.40		100	86.4	67 - 130		
Acetone	67-64-1	LCS	117		100	117	39 - 160		
Benzene	71-43-2	LCS	21.40		20	107	79 - 120		
Bromochloromethane	74-97-5	LCS	21.40		20	107	78 - 123		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Bromodichloromethane	75-27-4	LCS	19.20		20	95.9	79 - 125		
Bromoform	75-25-2	LCS	21.30		20	107	66 - 130		
Bromomethane	74-83-9	LCS	20.90		20	104	53 - 141		
Carbon Disulfide	75-15-0	LCS	22.20		20	111	64 - 133		
Carbon Tetrachloride	56-23-5	LCS	20		20	100	72 - 136		
Chlorobenzene	108-90-7	LCS	22		20	110	82 - 118		
Chlorodibromomethane	124-48-1	LCS	22.10		20	110	74 - 126		
Chloroethane	75-00-3	LCS	15.10		20	75.7	60 - 138		
Chloroform	67-66-3	LCS	19.40		20	97.1	79 - 124		
Chloromethane	74-87-3	LCS	20.30		20	101	50 - 139		
cis-1,2-Dichloroethene	156-59-2	LCS	19.80		20	99.2	78 - 123		
Cyclohexane	110-82-7	LCS	22		20	110	71 - 130		
Dichlorodifluoromethane	75-71-8	LCS	17.40		20	87	32 - 152		
Ethylbenzene	100-41-4	LCS	22.20		20	111	79 - 121		
Freon 113	76-13-1	LCS	22		20	110	70 - 136		
Iodomethane	74-88-4	LCS	19.80		20	99	69 - 131		
Isopropylbenzene	98-82-8	LCS	23.50		20	118	72 - 131		
Methyl acetate	79-20-9	LCS	21		20	105	56 - 136		
Methyl cyclohexane	108-87-2	LCS	22.10		20	110	72 - 132		
Methyl t-Butyl Ether	1634-04-4	LCS	18.80		20	94.2	71 - 124		
Methylene Chloride	75-09-2	LCS	21.50		20	107	74 - 124		
Styrene	100-42-5	LCS	21.90		20	109	78 - 123		
Tetrachloroethene	127-18-4	LCS	22.70		20	113	74 - 129		
Toluene	108-88-3	LCS	23		20	115	80 - 121		
Total Xylenes	1330-20-7	LCS	66.80		60	111	79 - 121		
trans-1,2-Dichloroethene	156-60-5	LCS	20.30		20	101	75 - 124		
Trichloroethene	79-01-6	LCS	20.30		20	101	79 - 123		
Trichlorofluoromethane	75-69-4	LCS	19.10		20	95.6	65 - 141		
Vinyl Chloride	75-01-4	LCS	18.30		20	91.7	58 - 137		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	25.90	30	86.4	81 - 118	
4-Bromofluorobenzene	460-00-4	LCS	31.90	30	106	85 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.20	30	97.3	80 - 119	
Toluene-d8	2037-26-5	LCS	31.50	30	105	89 - 112	

Matrix Spike 3792571 (MS) 3347404003 For QC Batch 1149322

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3792572 (MSD) 3347404003 For QC Batch 1149322

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	MS	19.60	0	20	97.9	74 - 131		
1,1,1-Trichloroethane	71-55-6	MSD	18.60	0	20	92.9	74 - 131	RPD 5.22 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	20.20	0	20	101	71 - 121		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	18.10	0	20	90.5	71 - 121	RPD 10.80 (Max-20)	
1,1,2-Trichloroethane	79-00-5	MS	21.30	0	20	107	80 - 119		
1,1,2-Trichloroethane	79-00-5	MSD	19.70	0	20	98.7	80 - 119	RPD 7.61 (Max-20)	
1,1-Dichloroethane	75-34-3	MS	19.60	0	20	97.8	77 - 125		
1,1-Dichloroethane	75-34-3	MSD	18.40	0	20	92	77 - 125	RPD 6.09 (Max-20)	
1,1-Dichloroethene	75-35-4	MS	20.70	0	20	104	71 - 131		
1,1-Dichloroethene	75-35-4	MSD	19	0	20	94.9	71 - 131	RPD 8.77 (Max-20)	
1,2,3-Trichlorobenzene	87-61-6	MS	20.80	0	20	104	69 - 129		
1,2,3-Trichlorobenzene	87-61-6	MSD	18.30	0	20	91.4	69 - 129	RPD 12.80 (Max-20)	
1,2,4-Trichlorobenzene	120-82-1	MS	21.70	0	20	108	69 - 130		
1,2,4-Trichlorobenzene	120-82-1	MSD	19.20	0	20	96.2	69 - 130	RPD 12 (Max-20)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	17.90	0	20	89.5	62 - 128		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	16.40	0	20	82	62 - 128	RPD 8.76 (Max-20)	
1,2-Dibromoethane	106-93-4	MS	22.60	0	20	113	77 - 121		
1,2-Dibromoethane	106-93-4	MSD	21.10	0	20	105	77 - 121	RPD 6.92 (Max-20)	
1,2-Dichlorobenzene	95-50-1	MS	21.50	0	20	108	80 - 119		
1,2-Dichlorobenzene	95-50-1	MSD	18.70	0	20	93.5	80 - 119	RPD 14.10 (Max-20)	
1,2-Dichloroethane	107-06-2	MS	16.80	0	20	83.8	73 - 128		
1,2-Dichloroethane	107-06-2	MSD	16	0	20	79.9	73 - 128	RPD 4.66 (Max-20)	
1,2-Dichloropropane	78-87-5	MS	20.10	0	20	101	78 - 122		
1,2-Dichloropropane	78-87-5	MSD	19.70	0	20	98.4	78 - 122	RPD 2.32 (Max-20)	
1,3-Dichlorobenzene	541-73-1	MS	21.20	0	20	106	80 - 119		
1,3-Dichlorobenzene	541-73-1	MSD	18.70	0	20	93.6	80 - 119	RPD 12.40 (Max-20)	
1,3-Dichloropropene, Total	542-75-6	MS	39.50	0	40	98.7	75 - 124		
1,3-Dichloropropene, Total	542-75-6	MSD	35.90	0	40	89.8	75 - 124	RPD 9.39 (Max-20)	
1,4-Dichlorobenzene	106-46-7	MS	21	0	20	105	79 - 118		
1,4-Dichlorobenzene	106-46-7	MSD	18.50	0	20	92.3	79 - 118	RPD 13 (Max-20)	
2-Butanone	78-93-3	MS	98.80	0	100	98.8	56 - 143		
2-Butanone	78-93-3	MSD	97.80	0	100	97.8	56 - 143	RPD 1.05 (Max-20)	
2-Hexanone	591-78-6	MS	85	0	100	85	57 - 139		
2-Hexanone	591-78-6	MSD	81.80	0	100	81.8	57 - 139	RPD 3.85 (Max-20)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	85.10	0	100	85.1	67 - 130		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	81.40	0	100	81.4	67 - 130	RPD 4.47 (Max-20)	
Acetone	67-64-1	MS	95.90	0	100	95.9	39 - 160		
Acetone	67-64-1	MSD	94.70	0	100	94.7	39 - 160	RPD 1.25 (Max-20)	
Benzene	71-43-2	MS	21.50	0	20	107	79 - 120		
Benzene	71-43-2	MSD	20.40	0	20	102	79 - 120	RPD 5.24 (Max-20)	
Bromochloromethane	74-97-5	MS	21.40	0	20	107	78 - 123		
Bromochloromethane	74-97-5	MSD	20.60	0	20	103	78 - 123	RPD 3.90 (Max-20)	
Bromodichloromethane	75-27-4	MS	18.90	0	20	94.3	79 - 125		
Bromodichloromethane	75-27-4	MSD	18.50	0	20	92.5	79 - 125	RPD 1.92 (Max-20)	
Bromoform	75-25-2	MS	20.60	0	20	103	66 - 130		
Bromoform	75-25-2	MSD	18.70	0	20	93.6	66 - 130	RPD 9.68 (Max-20)	
Bromomethane	74-83-9	MS	15.10	0	20	75.5	53 - 141		
Bromomethane	74-83-9	MSD	10.90	0	20	54.7	53 - 141	RPD 31.90* (Max-20)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Carbon Disulfide	75-15-0	MS	45.30	4.30	20	205*	64 - 133		
Carbon Disulfide	75-15-0	MSD	36.60	4.30	20	161*	64 - 133	RPD 21.40* (Max-20)	
Carbon Tetrachloride	56-23-5	MS	20.50	0	20	102	72 - 136		
Carbon Tetrachloride	56-23-5	MSD	18.60	0	20	93.1	72 - 136	RPD 9.62 (Max-20)	
Chlorobenzene	108-90-7	MS	21.90	0	20	109	82 - 118		
Chlorobenzene	108-90-7	MSD	20.10	0	20	101	82 - 118	RPD 8.22 (Max-20)	
Chlorodibromomethane	124-48-1	MS	21.50	0	20	108	74 - 126		
Chlorodibromomethane	124-48-1	MSD	20.20	0	20	101	74 - 126	RPD 6.47 (Max-20)	
Chloroethane	75-00-3	MS	43.90	0	20	219*	60 - 138		
Chloroethane	75-00-3	MSD	36	0	20	180*	60 - 138	RPD 19.60 (Max-20)	
Chloroform	67-66-3	MS	19.30	0	20	96.7	79 - 124		
Chloroform	67-66-3	MSD	17.90	0	20	89.6	79 - 124	RPD 7.60 (Max-20)	
Chloromethane	74-87-3	MS	23.20	0	20	116	50 - 139		
Chloromethane	74-87-3	MSD	18.40	0	20	92	50 - 139	RPD 23.30* (Max-20)	
Cyclohexane	110-82-7	MS	22.10	0	20	110	71 - 130		
Cyclohexane	110-82-7	MSD	20.30	0	20	101	71 - 130	RPD 8.58 (Max-20)	
Dichlorodifluoromethane	75-71-8	MS	18.30	0	20	91.4	32 - 152		
Dichlorodifluoromethane	75-71-8	MSD	16.70	0	20	83.6	32 - 152	RPD 9 (Max-20)	
Ethylbenzene	100-41-4	MS	22.10	0	20	111	79 - 121		
Ethylbenzene	100-41-4	MSD	20.20	0	20	101	79 - 121	RPD 9.14 (Max-20)	
Freon 113	76-13-1	MS	22	0	20	110	70 - 136		
Freon 113	76-13-1	MSD	20.60	0	20	103	70 - 136	RPD 6.49 (Max-20)	
Iodomethane	74-88-4	MS	21	0	20	105	69 - 131		
Iodomethane	74-88-4	MSD	18.10	0	20	90.3	69 - 131	RPD 15.20 (Max-20)	
Isopropylbenzene	98-82-8	MS	23.20	0	20	116	72 - 131		
Isopropylbenzene	98-82-8	MSD	20.30	0	20	101	72 - 131	RPD 13.50 (Max-20)	
Methyl acetate	79-20-9	MS	17.40	0	20	87	56 - 136		
Methyl acetate	79-20-9	MSD	17.20	0	20	86.2	56 - 136	RPD 0.94 (Max-20)	
Methyl cyclohexane	108-87-2	MS	22.20	0	20	111	72 - 132		
Methyl cyclohexane	108-87-2	MSD	19.90	0	20	99.6	72 - 132	RPD 10.90 (Max-20)	
Methyl t-Butyl Ether	1634-04-4	MS	18.70	0	20	93.7	71 - 124		
Methyl t-Butyl Ether	1634-04-4	MSD	17.90	0	20	89.5	71 - 124	RPD 4.57 (Max-20)	
Methylene Chloride	75-09-2	MS	21.80	0	20	109	74 - 124		
Methylene Chloride	75-09-2	MSD	20.70	0	20	104	74 - 124	RPD 5.14 (Max-20)	
Styrene	100-42-5	MS	21.40	0	20	107	78 - 123		
Styrene	100-42-5	MSD	18.60	0	20	92.9	78 - 123	RPD 14.20 (Max-20)	
Tetrachloroethene	127-18-4	MS	20.60	0	20	103	74 - 129		
Tetrachloroethene	127-18-4	MSD	18.70	0	20	93.3	74 - 129	RPD 9.65 (Max-20)	
Toluene	108-88-3	MS	26.40	3.10	20	117	80 - 121		
Toluene	108-88-3	MSD	24	3.10	20	104	80 - 121	RPD 9.69 (Max-20)	
Total Xylenes	1330-20-7	MS	67	0	60	112	79 - 121		
Total Xylenes	1330-20-7	MSD	60.90	0	60	101	79 - 121	RPD 9.66 (Max-20)	
trans-1,2-Dichloroethene	156-60-5	MS	24	3.50	20	102	75 - 124		
trans-1,2-Dichloroethene	156-60-5	MSD	22.90	3.50	20	96.9	75 - 124	RPD 4.69 (Max-20)	
Trichloroethene	79-01-6	MS	21.40	1.10	20	102	79 - 123		
Trichloroethene	79-01-6	MSD	20.40	1.10	20	96.5	79 - 123	RPD 4.84 (Max-20)	
Trichlorofluoromethane	75-69-4	MS	20	0	20	99.8	65 - 141		
Trichlorofluoromethane	75-69-4	MSD	18.60	0	20	92.9	65 - 141	RPD 7.23 (Max-20)	
Vinyl Chloride	75-01-4	MS	208	189	20	NC	58 - 137		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Vinyl Chloride	75-01-4	MSD	191	189	20	NC	58 - 137	RPD 8.10 (Max-20)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	26.40	30	88	81 - 118	
1,2-Dichloroethane-d4	17060-07-0	MSD	25.30	30	84.3	81 - 118	
4-Bromofluorobenzene	460-00-4	MS	32.80	30	109	85 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.30	30	97.7	85 - 114	
Dibromofluoromethane	1868-53-7	MS	30.20	30	101	80 - 119	
Dibromofluoromethane	1868-53-7	MSD	29.10	30	96.9	80 - 119	
Toluene-d8	2037-26-5	MS	32.10	30	107	89 - 112	
Toluene-d8	2037-26-5	MSD	30.40	30	101	89 - 112	

QC Batch

QC Batch	1156741	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260C
Tech.			

Associated Samples

3347404003 3347404005 3347404008

Method Blank 3796682 (MB) Created on 03/11/2024 14:59 For QC Batch 1156741

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
1,1,1-Trichloroethane	71-55-6	BLK	0.75U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	0.75U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	0.75U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	0.75U	ug/L	1.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	0.75U	ug/L	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	2.5U	ug/L	5.0	U
1,2-Dibromoethane	106-93-4	BLK	0.75U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	0.75U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	0.75U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	0.75U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	0.75U	ug/L	1.0	U
1,3-Dichloropropene, Total	542-75-6	BLK	1.5U	ug/L	2.0	U
1,4-Dichlorobenzene	106-46-7	BLK	0.75U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	3.8U	ug/L	5.0	U
2-Hexanone	591-78-6	BLK	3.8U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	3.8U	ug/L	5.0	U
Acetone	67-64-1	BLK	3.8U	ug/L	5.0	U
Benzene	71-43-2	BLK	0.75U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Bromochloromethane	74-97-5	BLK	0.75U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	0.75U	ug/L	1.0	U
Bromoform	75-25-2	BLK	0.75U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	0.75U	ug/L	1.0	U
Carbon Disulfide	75-15-0	BLK	0.75U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	0.75U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	0.75U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	0.75U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	0.75U	ug/L	1.0	U
Chloroform	67-66-3	BLK	0.75U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	0.75U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	0.75U	ug/L	1.0	U
Cyclohexane	110-82-7	BLK	0.75U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	0.75U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	0.75U	ug/L	1.0	U
Freon 113	76-13-1	BLK	0.75U	ug/L	1.0	U
Iodomethane	74-88-4	BLK	0.75U	ug/L	1.0	U
Isopropylbenzene	98-82-8	BLK	0.75U	ug/L	1.0	U
Methyl acetate	79-20-9	BLK	0.75U	ug/L	1.0	U
Methyl cyclohexane	108-87-2	BLK	0.75U	ug/L	1.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	0.75U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	0.75U	ug/L	1.0	U
Styrene	100-42-5	BLK	0.75U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	0.75U	ug/L	1.0	U
Toluene	108-88-3	BLK	0.75U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	2.3U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	0.75U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	0.75U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	0.75U	ug/L	1.0	U
Vinyl Chloride	75-01-4	BLK	0.75U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	29.20	30	97.4	81 - 118	
4-Bromofluorobenzene	460-00-4	BLK	29.40	30	98	85 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.70	30	99	80 - 119	
Toluene-d8	2037-26-5	BLK	30.60	30	102	89 - 112	

Lab Control Standard 3796683 (LCS) Created on 03/11/2024 14:59 For QC Batch 1156741

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	LCS	19.20		20	95.8	74 - 131		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	20.10		20	100	71 - 121		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,2-Trichloroethane	79-00-5	LCS	18.80		20	94	80 - 119		
1,1-Dichloroethane	75-34-3	LCS	19.70		20	98.6	77 - 125		
1,1-Dichloroethene	75-35-4	LCS	23.50		20	118	71 - 131		
1,2,3-Trichlorobenzene	87-61-6	LCS	23.70		20	118	69 - 129		
1,2,4-Trichlorobenzene	120-82-1	LCS	20.70		20	104	69 - 130		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	17.40		20	87	62 - 128		
1,2-Dibromoethane	106-93-4	LCS	18.60		20	92.9	77 - 121		
1,2-Dichlorobenzene	95-50-1	LCS	18.20		20	91	80 - 119		
1,2-Dichloroethane	107-06-2	LCS	19		20	95.1	73 - 128		
1,2-Dichloropropane	78-87-5	LCS	18.30		20	91.6	78 - 122		
1,3-Dichlorobenzene	541-73-1	LCS	17.60		20	88.1	80 - 119		
1,3-Dichloropropene, Total	542-75-6	LCS	36.60		40	91.5	75 - 124		
1,4-Dichlorobenzene	106-46-7	LCS	17.90		20	89.5	79 - 118		
2-Butanone	78-93-3	LCS	92.90		100	92.9	56 - 143		
2-Hexanone	591-78-6	LCS	93		100	93	57 - 139		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	92.10		100	92.1	67 - 130		
Acetone	67-64-1	LCS	107		100	107	39 - 160		
Benzene	71-43-2	LCS	19		20	94.8	79 - 120		
Bromochloromethane	74-97-5	LCS	20		20	99.8	78 - 123		
Bromodichloromethane	75-27-4	LCS	18.70		20	93.5	79 - 125		
Bromoform	75-25-2	LCS	18.40		20	92	66 - 130		
Bromomethane	74-83-9	LCS	21.10		20	106	53 - 141		
Carbon Disulfide	75-15-0	LCS	23.20		20	116	64 - 133		
Carbon Tetrachloride	56-23-5	LCS	18.40		20	91.8	72 - 136		
Chlorobenzene	108-90-7	LCS	17.60		20	87.9	82 - 118		
Chlorodibromomethane	124-48-1	LCS	19		20	94.8	74 - 126		
Chloroethane	75-00-3	LCS	18.80		20	93.8	60 - 138		
Chloroform	67-66-3	LCS	19.60		20	98.1	79 - 124		
Chloromethane	74-87-3	LCS	18.90		20	94.3	50 - 139		
cis-1,2-Dichloroethene	156-59-2	LCS	19.30		20	96.6	78 - 123		
Cyclohexane	110-82-7	LCS	21		20	105	71 - 130		
Dichlorodifluoromethane	75-71-8	LCS	17.20		20	85.8	32 - 152		
Ethylbenzene	100-41-4	LCS	17.80		20	88.8	79 - 121		
Freon 113	76-13-1	LCS	24		20	120	70 - 136		
Iodomethane	74-88-4	LCS	18.60		20	93	69 - 131		
Isopropylbenzene	98-82-8	LCS	19		20	94.9	72 - 131		
Methyl acetate	79-20-9	LCS	22.20		20	111	56 - 136		
Methyl cyclohexane	108-87-2	LCS	18.80		20	94	72 - 132		
Methyl t-Butyl Ether	1634-04-4	LCS	19.60		20	98.1	71 - 124		
Methylene Chloride	75-09-2	LCS	20.60		20	103	74 - 124		
Styrene	100-42-5	LCS	19.10		20	95.7	78 - 123		
Tetrachloroethene	127-18-4	LCS	20.80		20	104	74 - 129		
Toluene	108-88-3	LCS	18.50		20	92.3	80 - 121		
Total Xylenes	1330-20-7	LCS	53		60	88.4	79 - 121		
trans-1,2-Dichloroethene	156-60-5	LCS	20.70		20	104	75 - 124		
Trichloroethene	79-01-6	LCS	20		20	100	79 - 123		
Trichlorofluoromethane	75-69-4	LCS	16.30		20	81.6	65 - 141		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Vinyl Chloride	75-01-4	LCS	16.80		20	83.9	58 - 137		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	29.10	30	96.9	81 - 118	
4-Bromofluorobenzene	460-00-4	LCS	31.10	30	104	85 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.70	30	99	80 - 119	
Toluene-d8	2037-26-5	LCS	29.60	30	98.5	89 - 112	

QUALITY CONTROL SAMPLES

WET CHEMISTRY

QC Batch

QC Batch	1151904	Prep Method	N/A
Date	N/A	Analysis Method	SW846 9060A
Tech.			

Associated Samples

3347404001	3347404002	3347404003	3347404004
3347404005	3347404006	3347404007	3347404009
3347404010			

Matrix Spike 3793916 (MS) 3348013001 (non-Project Sample) For QC Batch 1151904

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3793917 (MSD) 3348013001 (non-Project Sample) For QC Batch 1151904

RESULTS

Compound	CAS No		Result (mg/L)	Orig. Result (mg/L)	Spk Added (mg/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Total Organic Carbon (TOC)	TOC	MS	7.70	1.60	6	103	85 - 115		
Total Organic Carbon (TOC)	TOC	MSD	7.70	1.60	6	102	85 - 115	RPD 0.79 (Max-20)	

Matrix Spike 3793918 (MS) 3347753001 (non-Project Sample) For QC Batch 1151904

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3793919 (MSD) 3347753001 (non-Project Sample) For QC Batch 1151904

RESULTS

Compound	CAS No		Result (mg/L)	Orig. Result (mg/L)	Spk Added (mg/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Total Organic Carbon (TOC)	TOC	MS	7.90	1.70	6	103	85 - 115		
Total Organic Carbon (TOC)	TOC	MSD	7.90	1.70	6	104	85 - 115	RPD 0.27 (Max-20)	

Method Blank 3793914 (MB) Created on 03/05/2024 15:19 For QC Batch 1151904

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Total Organic Carbon (TOC)	TOC	BLK	0.50U	mg/L	1.0	U

Lab Control Standard 3793915 (LCSLOW) Created on 03/05/2024 15:19 For QC Batch 1151904

RESULTS

Compound	CAS No		Result (mg/L)	Orig. Result (mg/L)	Spk Added (mg/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Total Organic Carbon (TOC)	TOC	LCS	0.98		1	97.8	85 - 115		J

QUALITY CONTROL SAMPLES

WET CHEMISTRY (cont.)

QC Batch

QC Batch	1152588	Prep Method	N/A
Date	N/A	Analysis Method	SW846 9060A
Tech.			

Associated Samples

3347404008

Matrix Spike 3794577 (MS) 3348392001 (non-Project Sample) For QC Batch 1152588

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3794578 (MSD) 3348392001 (non-Project Sample) For QC Batch 1152588

RESULTS

Compound	CAS No		Result (mg/L)	Orig. Result (mg/L)	Spk Added (mg/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Total Organic Carbon (TOC)	TOC	MS	6.30	0.11	6	103	85 - 115		
Total Organic Carbon (TOC)	TOC	MSD	6.20	0.11	6	102	85 - 115	RPD 0.45 (Max-20)	

Matrix Spike 3794579 (MS) 3348313009 (non-Project Sample) For QC Batch 1152588

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3794580 (MSD) 3348313009 (non-Project Sample) For QC Batch 1152588

RESULTS

Compound	CAS No		Result (mg/L)	Orig. Result (mg/L)	Spk Added (mg/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Total Organic Carbon (TOC)	TOC	MS	65.70	13.30	60	87.4	85 - 115		
Total Organic Carbon (TOC)	TOC	MSD	65.90	13.30	60	87.7	85 - 115	RPD 0.29 (Max-20)	

Method Blank 3794575 (MB) Created on 03/06/2024 15:00 For QC Batch 1152588

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Total Organic Carbon (TOC)	TOC	BLK	0.50U	mg/L	1.0	U

Lab Control Standard 3794576 (LCSLOW) Created on 03/06/2024 15:00 For QC Batch 1152588

RESULTS

Compound	CAS No		Result (mg/L)	Orig. Result (mg/L)	Spk Added (mg/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Total Organic Carbon (TOC)	TOC	LCS	1		1	103	85 - 115		

QUALITY CONTROL SAMPLES

WET CHEMISTRY (cont.)

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3347404001	MW5-5D-20240226	N/A	N/A	N/A		RSK 175	1152204
		N/A	N/A	N/A		SW846 8260C	1149322
		N/A	N/A	N/A		SW846 9060A	1151904
3347404002	RW5-2-20240226	N/A	N/A	N/A		RSK 175	1152204
		N/A	N/A	N/A		SW846 8260C	1149322
		N/A	N/A	N/A		SW846 9060A	1151904
3347404003	RW5-1-20240226	N/A	N/A	N/A		RSK 175	1152204
		N/A	N/A	N/A		SW846 8260C	1156741
		N/A	N/A	N/A		SW846 8260C	1149322
		N/A	N/A	N/A		SW846 9060A	1151904
3347404004	MW5-1DA-20240226	N/A	N/A	N/A		RSK 175	1152204
		N/A	N/A	N/A		SW846 8260C	1149322
		N/A	N/A	N/A		SW846 9060A	1151904
3347404005	PW10-1-20240226	N/A	N/A	N/A		RSK 175	1152204
		N/A	N/A	N/A		SW846 8260C	1156741
		N/A	N/A	N/A		SW846 9060A	1151904
3347404006	MW10-7-20240226	N/A	N/A	N/A		RSK 175	1152204
		N/A	N/A	N/A		SW846 8260C	1149322
		N/A	N/A	N/A		SW846 9060A	1151904
3347404007	MW10-1DA-20240226	N/A	N/A	N/A		RSK 175	1152204
		N/A	N/A	N/A		SW846 8260C	1149322
		N/A	N/A	N/A		SW846 9060A	1151904
3347404008	MW10-10D-20240226	N/A	N/A	N/A		RSK 175	1152204
		N/A	N/A	N/A		SW846 8260C	1156741
		N/A	N/A	N/A		SW846 9060A	1152588
3347404009	MW10-11D-20240226	N/A	N/A	N/A		RSK 175	1152204
		N/A	N/A	N/A		SW846 8260C	1149322
		N/A	N/A	N/A		SW846 9060A	1151904
3347404010	DUP-01-20240226	N/A	N/A	N/A		RSK 175	1152204
		N/A	N/A	N/A		SW846 8260C	1149322
		N/A	N/A	N/A		SW846 9060A	1151904
3347404011	Trip Blank	N/A	N/A	N/A		SW846 8260C	1149322

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

3347404

Logged By: MJE
PM: SJB

COC #:

ALS Quote #:

1 of 2

Client Name: Arcadis

Address: 110 West Fayette St
Syracuse, NY 13202

Contact: Corey Averill

Phone#: 315-415-4394

Project Name/#: NFARS - Niagara Falls AirBase

Bill To:

Purchase Order #: 30036646

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? [ ]

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Container Type	Container Size	Preservative	DOD 8260C	DOD RSK-175	DOD TOC 9060A
							CG	AG	AG			
							40mL	40mL	40mL			
							HCl	HCl	HCl			
										Enter Number of Containers Per Sample or Field Results Below.		
1	RW5-5D-20240226	02/26/24	0925		G	GW				3	2	2
2	RW5-2-20240226	02/26/24	0935		G	GW				3	2	2
3	RW5-1-20240226	02/26/24	0830		G	GW				9	6	6
4	MW5-1DA-20240226	02/26/24	0845		G	GW				3	2	2
5	PW10-1-20240226	02/26/24	1025		G	GW				3	2	2
6	MW10-7-20240226	02/26/24	1015		G	GW				3	2	2
7	MW10-1DA-20240226	02/26/24	1000		G	GW				3	2	2
8	MW10-10D-20240226	02/26/24	1045		G	GW				3	2	2
9	MW10-11D-20240226	02/26/24	1035		G	GW				3	2	2
10	DUP-01-20240226	02/26/24	—		G	GW				3	2	2

Circle Sample Collector: ALS Tech / Client
Name: ID:

Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
2/26/24	1430	1	Arcadis	2	FEDEX
		3	FEDEX	4	DD/ALS 2/27/24 0918
		5		6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: DP Therm ID: 523 WO Temp (°C) 3°

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	(Y)	N	NA
Sample Custody Seal Intact	Y	N	(NA)
Received on Ice	(Y)	N	NA
Coolers & Samples Intact	(Y)	N	
Correct Containers Provided	(Y)	N	
Sample Label/COC Agree	(Y)	N	
Adequate Sample Volumes	(Y)	N	
VOA only: Trip Blank	(Y)	N	NA
NJ ≤ 4 days?	Y	(N)	

Deviations? (NO) YES
If YES, list below
1 TB Broken on arrival
DP 2/27/24

Client contact:
Date/Tech:

Courier/Tracking # 2714 3218 1023

Sample(s) for Radiation testing? Y N Rad Screen (uCi)
Reportable SDWA Sample(s)? Y N New Source? Y N
SDWA State of Origin? New Source Contact:
PWSID #
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
MS/MSD collected at RW5-1-20240226

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [X] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] ____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type:

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 07.06.2023

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3347404 2 of 2
ALS Quote #:

Client Name: Arcadis
Address: 110 West Fayette St, Syracuse, NY 13202
Contact: Corey Averill
Phone#: 315-415-4394
Project Name/#: NFARS - Niagara Falls Air Base
Bill To:
Purchase Order #: 30036646
TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [ ]

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Container Type	Container Size	Preservative	DOD 8260C	Enter Number of Containers Per Sample or Field Results Below.
1	Trip Blank	—	—		G		CG	40mL	HCl	6 5	one TB Broken on Arrival.
2											
3											
4											
5											
6											
7											
8											
9											
10											

DP 2/27/24

Circle Sample Collector: ALS Tech / Client
Name: ID:

Comments:

Date:	Time	Relinquished By / Company Name	Received By / Company Name
2/26/24	1430	1 Arcadis	2 FEDEX
		3 FEDEX	4 DD/ALS 2/27/24 0918
		5	6
		7	8
		9	10

Receipt Information (completed by Receiving Lab)
Temp Taken By: Therm ID: WO Temp (°C)
Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA
NJ ≤ 4 days?	Y	N	

Courier/Tracking #

Deviations? NO YES
If YES, list below:

Client contact:
Date/Tech:

Sample(s) for Radiation testing? Y N Rad Screen (uCi)
Reportable SDWA Sample(s)? Y N New Source? Y N
SDWA State of Origin? New Source Contact:
PWSID #
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [X] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 07.06.2023

Susan Scherer

From: Averill, Corey <Corey.Averill@arcadis.com>
Sent: Wednesday, March 6, 2024 11:06 AM
To: Susan Scherer; Fiona Adamsky
Cc: Svensson, Adam
Subject: [EXTERNAL] - FW: Letter of Receipt for WO 3347404
Attachments: letter of receipt_3347404_646159.PDF

CAUTION: This email originated from outside of ALS. Do not click links or open attachments unless you recognize the sender and are sure content is relevant to you.

Hi Susan/Fiona,

I reviewed the attached and have one minor edit - please change RW5-5D to MW5-5D.

Thanks,
Corey

-----Original Message-----
From: ALMDT.LIMSAUTOEMAIL@Alsglobal.com <ALMDT.LIMSAUTOEMAIL@Alsglobal.com>
Sent: Tuesday, February 27, 2024 1:58 PM
To: Averill, Corey <Corey.Averill@arcadis.com>
Subject: Letter of Receipt for WO 3347404

The following reports are attached:

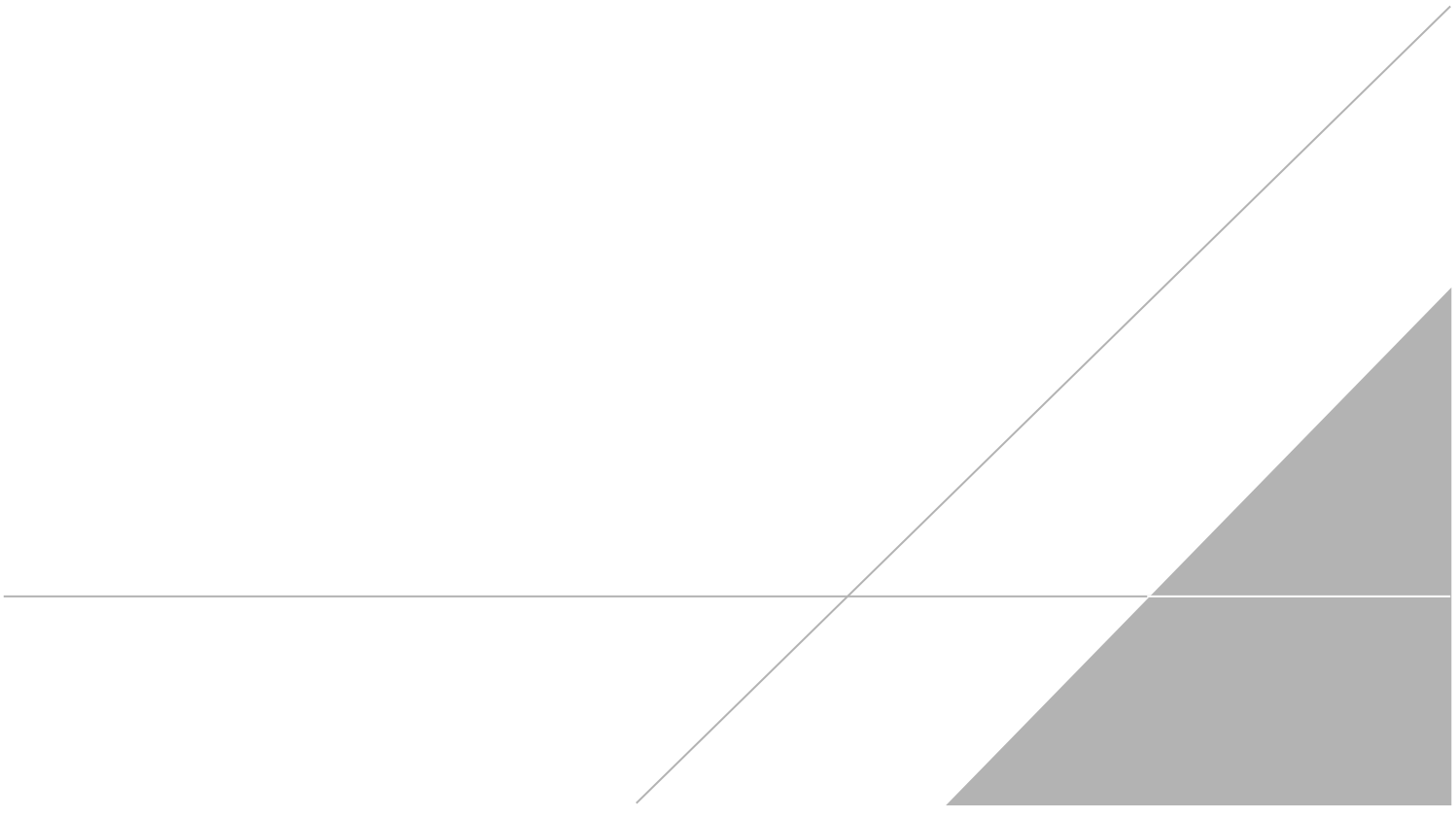
WO 3347404 , Work ID NFARS-Niagara Falls Air Base []

--- End Of List ---

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Laboratory Data Reports

Spring IWGP Event



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 | Fax: 717-944-1430 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **ARCADIS US Inc - Clifton Park, NY**

Project NFARS 30036646
Workorder 3369360
Report ID 342668 on 7/29/2024

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Jul 17, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

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ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Andy Vitolins - Arcadis
Erika Denkenberger - Arcadis
Katherine Clubine - Arcadis
Corey Averill - Arcadis

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3369360001	SW3-15	Ground Water	07/16/2024 07:30	07/17/2024 09:25	CBC	Collected By Client
3369360002	DUP-01-20240716	Ground Water	07/16/2024 00:00	07/17/2024 09:25	CBC	Collected By Client
3369360003	PZ3-6D	Ground Water	07/16/2024 07:40	07/17/2024 09:25	CBC	Collected By Client
3369360004	MW3-3DA	Ground Water	07/16/2024 07:50	07/17/2024 09:25	CBC	Collected By Client
3369360005	SW3-3	Ground Water	07/16/2024 10:15	07/17/2024 09:25	CBC	Collected By Client
3369360006	PZ3-3A	Ground Water	07/16/2024 10:30	07/17/2024 09:25	CBC	Collected By Client
3369360007	MW3-4DA	Ground Water	07/16/2024 10:35	07/17/2024 09:25	CBC	Collected By Client
3369360008	SW3-2	Ground Water	07/16/2024 10:45	07/17/2024 09:25	CBC	Collected By Client
3369360009	SW99-10	Ground Water	07/16/2024 08:40	07/17/2024 09:25	CBC	Collected By Client
3369360010	SW10-7	Ground Water	07/16/2024 09:05	07/17/2024 09:25	CBC	Collected By Client
3369360011	SW10-6	Ground Water	07/16/2024 09:10	07/17/2024 09:25	CBC	Collected By Client
3369360012	SW10-5	Ground Water	07/16/2024 09:15	07/17/2024 09:25	CBC	Collected By Client
3369360013	MW10-3	Ground Water	07/16/2024 09:20	07/17/2024 09:25	CBC	Collected By Client
3369360014	SW10-8	Ground Water	07/16/2024 09:30	07/17/2024 09:25	CBC	Collected By Client
3369360015	PW10-2	Ground Water	07/16/2024 09:40	07/17/2024 09:25	CBC	Collected By Client
3369360016	MW10-7	Ground Water	07/16/2024 09:45	07/17/2024 09:25	CBC	Collected By Client
3369360017	PW10-1	Ground Water	07/16/2024 09:50	07/17/2024 09:25	CBC	Collected By Client
3369360018	PZ10-7	Ground Water	07/16/2024 09:55	07/17/2024 09:25	CBC	Collected By Client
3369360019	MW8-11D	Ground Water	07/16/2024 10:55	07/17/2024 09:25	CBC	Collected By Client
3369360020	PW13-4D	Ground Water	07/16/2024 11:20	07/17/2024 09:25	CBC	Collected By Client
3369360021	MW13-4D	Ground Water	07/16/2024 11:25	07/17/2024 09:25	CBC	Collected By Client
3369360022	MW13-5D	Ground Water	07/16/2024 11:30	07/17/2024 09:25	CBC	Collected By Client
3369360023	PW13-1	Ground Water	07/16/2024 11:35	07/17/2024 09:25	CBC	Collected By Client
3369360024	RW5-1	Ground Water	07/16/2024 11:45	07/17/2024 09:25	CBC	Collected By Client
3369360025	MW5-1DA	Ground Water	07/16/2024 11:50	07/17/2024 09:25	CBC	Collected By Client
3369360026	MW5-6	Ground Water	07/16/2024 12:15	07/17/2024 09:25	CBC	Collected By Client
3369360027	MW5-5D	Ground Water	07/16/2024 12:20	07/17/2024 09:25	CBC	Collected By Client
3369360028	RW5-2	Ground Water	07/16/2024 12:30	07/17/2024 09:25	CBC	Collected By Client
3369360029	RW5-4	Ground Water	07/16/2024 12:35	07/17/2024 09:25	CBC	Collected By Client
3369360030	PZ3-8D	Ground Water	07/16/2024 13:20	07/17/2024 09:25	CBC	Collected By Client
3369360031	PZ3-7D	Ground Water	07/16/2024 13:25	07/17/2024 09:25	CBC	Collected By Client
3369360032	DUP-02-20240716	Ground Water	07/16/2024 00:00	07/17/2024 09:25	CBC	Collected By Client
3369360033	DUP-03-20240716	Ground Water	07/16/2024 00:00	07/17/2024 09:25	CBC	Collected By Client
3369360034	Trip Blank	Ground Water	07/16/2024 00:00	07/17/2024 09:25	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The initial calibration verification for method SW846 8260DOD was outside the control limits for the analyte iodomethane. The % Recovery was reported as 71.83% and the control limits were 80 to 120%.
2	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Bromomethane. The % Recovery was reported as 47.7 and the control limits were 53 to 141.
3	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Bromomethane. The RPD was reported as 24.4 and the upper control limit is 20.
4	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 147 and the control limits were 60 to 138.
5	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 156 and the control limits were 60 to 138.
6	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 52 and the control limits were 69 to 131.
7	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 43.3 and the control limits were 69 to 131.
8	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 159 and the control limits were 60 to 138.
9	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 166 and the control limits were 60 to 138.
10	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 58.3 and the control limits were 69 to 131.
11	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 61.9 and the control limits were 69 to 131.
12	The ICV recovery was 71.83% (limits 80-120%) for method SW846 8260C for the analyte Iodomethane.
13	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Bromomethane. The RPD was reported as 22.3 and the upper control limit is 20.
14	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Carbon Tetrachloride. The % Recovery was reported as 139 and the control limits were 72 to 136.
15	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 49.4 and the control limits were 69 to 131.
16	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Iodomethane. The RPD was reported as 46.9 and the upper control limit is 20.
17	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 30.6 and the control limits were 69 to 131.

Detected Results Summary

Client Sample ID	SW3-15	Collected	07/16/2024 07:30
Lab Sample ID	3369360001	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	4.4J	ug/L	5.0	3.8	1.6	SW846 8260C	#

Detected Results Summary

Client Sample ID	DUP-01-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360002	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	4.5J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Iodomethane	0.50J	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	PZ3-6D	Collected	07/16/2024 07:40
Lab Sample ID	3369360003	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	8.5	ug/L	5.0	3.8	1.6	SW846 8260C	#
Iodomethane	0.43J	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	MW3-3DA	Collected	07/16/2024 07:50
Lab Sample ID	3369360004	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	8.5	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	4.8	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	7.3	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	PZ3-3A	Collected	07/16/2024 10:30
Lab Sample ID	3369360006	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	9.7	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	14.5	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	0.36J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	2.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	9.5	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	MW3-4DA	Collected	07/16/2024 10:35
Lab Sample ID	3369360007	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	8.9	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	6.0	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	4.1	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	SW10-7	Collected	07/16/2024 09:05
Lab Sample ID	3369360010	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.6J	ug/L	5.0	3.8	1.6	SW846 8260C	#

Detected Results Summary

Client Sample ID	SW10-6	Collected	07/16/2024 09:10
Lab Sample ID	3369360011	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	0.51J	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	SW10-5	Collected	07/16/2024 09:15
Lab Sample ID	3369360012	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Trichloroethene	0.90J	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	MW10-3	Collected	07/16/2024 09:20
Lab Sample ID	3369360013	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	11.0	ug/L	5.0	3.8	1.6	SW846 8260C	#

Detected Results Summary

Client Sample ID	SW10-8	Collected	07/16/2024 09:30
Lab Sample ID	3369360014	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	1.5	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	PW10-2	Collected	07/16/2024 09:40
Lab Sample ID	3369360015	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	10.7	ug/L	5.0	3.8	1.6	SW846 8260C	#
Benzene	1.9	ug/L	1.0	0.75	0.33	SW846 8260C	#
Cyclohexane	0.82J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Iodomethane	0.68J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methyl cyclohexane	0.54J	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	MW10-7	Collected	07/16/2024 09:45
Lab Sample ID	3369360016	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
2-Butanone	2.4J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Acetone	11.8	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	0.49J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	0.61J	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	1.0	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	PW10-1	Collected	07/16/2024 09:50
Lab Sample ID	3369360017	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	10.2	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	0.50J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	PZ10-7	Collected	07/16/2024 09:55
Lab Sample ID	3369360018	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	10.9	ug/L	5.0	3.8	1.6	SW846 8260C	#
Iodomethane	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	PW13-4D	Collected	07/16/2024 11:20
Lab Sample ID	3369360020	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	7.4	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	MW13-4D	Collected	07/16/2024 11:25
Lab Sample ID	3369360021	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	5.5	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	MW13-5D	Collected	07/16/2024 11:30
Lab Sample ID	3369360022	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	16.6	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	3.7	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	PW13-1	Collected	07/16/2024 11:35
Lab Sample ID	3369360023	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
1,4-Dichlorobenzene	0.50J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	0.53J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	5.3	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	RW5-1	Collected	07/16/2024 11:45
Lab Sample ID	3369360024	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.2J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	3.0	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	58.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Iodomethane	0.44J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	6.0	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	2.0	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	0.70J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	97.9	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	MW5-1DA	Collected	07/16/2024 11:50
Lab Sample ID	3369360025	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Carbon Disulfide	0.34J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.45J	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	MW5-6	Collected	07/16/2024 12:15
Lab Sample ID	3369360026	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.8J	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	2.6	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	2.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	1.2	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	1.1	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	MW5-5D	Collected	07/16/2024 12:20
Lab Sample ID	3369360027	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
2-Butanone	4.8J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Acetone	4.8J	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	3.2	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	0.34J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	2.1	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	RW5-2	Collected	07/16/2024 12:30
Lab Sample ID	3369360028	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	13.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	2.2	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	26.8	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	RW5-4	Collected	07/16/2024 12:35
Lab Sample ID	3369360029	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	0.46J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	1.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	0.38J	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	PZ3-8D	Collected	07/16/2024 13:20
Lab Sample ID	3369360030	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	10.1	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	0.61J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	0.89J	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	PZ3-7D	Collected	07/16/2024 13:25
Lab Sample ID	3369360031	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	7.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	3.1	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	DUP-02-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360032	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.6J	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	2.4	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	2.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	1.2	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	1.0	ug/L	1.0	0.75	0.33	SW846 8260C	#

Detected Results Summary

Client Sample ID	DUP-03-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360033	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	9.9	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	7.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	3.2	ug/L	1.0	0.75	0.33	SW846 8260C	#

Results

Client Sample ID	SW3-15	Collected	07/16/2024 07:30
Lab Sample ID	3369360001	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
Acetone	4.4J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 21:01	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A

Results

Client Sample ID	SW3-15	Collected	07/16/2024 07:30
Lab Sample ID	3369360001	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	07/18/2024 21:01	
4-Bromofluorobenzene	460-00-4	103%	85 – 114	07/18/2024 21:01	
Dibromofluoromethane	1868-53-7	98.2%	80 – 119	07/18/2024 21:01	
Toluene-d8	2037-26-5	100%	89 – 112	07/18/2024 21:01	

Results

Client Sample ID	DUP-01-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360002	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
Acetone	4.5J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Iodomethane	0.50J	J,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 21:21	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A

Results

Client Sample ID	DUP-01-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360002	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.1%	81 – 118	07/18/2024 21:21	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/18/2024 21:21	
Dibromofluoromethane	1868-53-7	97.7%	80 – 119	07/18/2024 21:21	
Toluene-d8	2037-26-5	101%	89 – 112	07/18/2024 21:21	

Results

Client Sample ID	PZ3-6D	Collected	07/16/2024 07:40
Lab Sample ID	3369360003	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
Acetone	8.5		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Iodomethane	0.43J	J,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 21:41	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A

Results

Client Sample ID	PZ3-6D	Collected	07/16/2024 07:40
Lab Sample ID	3369360003	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.9%	81 – 118	07/18/2024 21:41	
4-Bromofluorobenzene	460-00-4	98.4%	85 – 114	07/18/2024 21:41	
Dibromofluoromethane	1868-53-7	97.3%	80 – 119	07/18/2024 21:41	
Toluene-d8	2037-26-5	99.5%	89 – 112	07/18/2024 21:41	

Results

Client Sample ID	MW3-3DA	Collected	07/16/2024 07:50
Lab Sample ID	3369360004	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
Acetone	8.5		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
cis-1,2-Dichloroethene	4.8		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 22:01	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A

Results

Client Sample ID	MW3-3DA	Collected	07/16/2024 07:50
Lab Sample ID	3369360004	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Vinyl Chloride	7.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	07/18/2024 22:01	
4-Bromofluorobenzene	460-00-4	93.5%	85 – 114	07/18/2024 22:01	
Dibromofluoromethane	1868-53-7	96.7%	80 – 119	07/18/2024 22:01	
Toluene-d8	2037-26-5	96.3%	89 – 112	07/18/2024 22:01	

Results

Client Sample ID	SW3-3	Collected	07/16/2024 10:15
Lab Sample ID	3369360005	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromomethane	0.75U	U,2,3	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chloroethane	0.75U	U,4,5	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Iodomethane	0.75U	U,1,6,7	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 19:23	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A

Results

Client Sample ID	SW3-3	Collected	07/16/2024 10:15
Lab Sample ID	3369360005	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 19:23	
4-Bromofluorobenzene	460-00-4	96.2%	85 – 114	07/19/2024 19:23	
Dibromofluoromethane	1868-53-7	96%	80 – 119	07/19/2024 19:23	
Toluene-d8	2037-26-5	99.5%	89 – 112	07/19/2024 19:23	

Results

Client Sample ID	PZ3-3A	Collected	07/16/2024 10:30
Lab Sample ID	3369360006	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
Acetone	9.7		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chloroethane	0.75U	U,8,9	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chloroform	0.42J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
cis-1,2-Dichloroethene	14.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Iodomethane	0.75U	U,1,10,11	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 17:24	JTH	A
trans-1,2-Dichloroethene	0.36J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A

Results

Client Sample ID	PZ3-3A	Collected	07/16/2024 10:30
Lab Sample ID	3369360006	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	2.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Vinyl Chloride	9.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	81 – 118	07/19/2024 17:24	
4-Bromofluorobenzene	460-00-4	99.2%	85 – 114	07/19/2024 17:24	
Dibromofluoromethane	1868-53-7	101%	80 – 119	07/19/2024 17:24	
Toluene-d8	2037-26-5	102%	89 – 112	07/19/2024 17:24	

Results

Client Sample ID	MW3-4DA	Collected	07/16/2024 10:35
Lab Sample ID	3369360007	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
Acetone	8.9		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
cis-1,2-Dichloroethene	6.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 13:45	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A

Results

Client Sample ID	MW3-4DA	Collected	07/16/2024 10:35
Lab Sample ID	3369360007	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Vinyl Chloride	4.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	07/19/2024 13:45	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 13:45	
Dibromofluoromethane	1868-53-7	97.8%	80 – 119	07/19/2024 13:45	
Toluene-d8	2037-26-5	99.9%	89 – 112	07/19/2024 13:45	

Results

Client Sample ID	SW3-2	Collected	07/16/2024 10:45
Lab Sample ID	3369360008	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 18:24	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A

Results

Client Sample ID	SW3-2	Collected	07/16/2024 10:45
Lab Sample ID	3369360008	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.9%	81 – 118	07/19/2024 18:24	
4-Bromofluorobenzene	460-00-4	95.8%	85 – 114	07/19/2024 18:24	
Dibromofluoromethane	1868-53-7	97%	80 – 119	07/19/2024 18:24	
Toluene-d8	2037-26-5	100%	89 – 112	07/19/2024 18:24	

Results

Client Sample ID	SW99-10	Collected	07/16/2024 08:40
Lab Sample ID	3369360009	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 18:04	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A

Results

Client Sample ID	SW99-10	Collected	07/16/2024 08:40
Lab Sample ID	3369360009	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 18:04	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 18:04	
Dibromofluoromethane	1868-53-7	98.9%	80 – 119	07/19/2024 18:04	
Toluene-d8	2037-26-5	105%	89 – 112	07/19/2024 18:04	

Results

Client Sample ID	SW10-7	Collected	07/16/2024 09:05
Lab Sample ID	3369360010	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
Acetone	3.6J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 17:44	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A

Results

Client Sample ID	SW10-7	Collected	07/16/2024 09:05
Lab Sample ID	3369360010	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 17:44	
4-Bromofluorobenzene	460-00-4	97.4%	85 – 114	07/19/2024 17:44	
Dibromofluoromethane	1868-53-7	96.4%	80 – 119	07/19/2024 17:44	
Toluene-d8	2037-26-5	97.8%	89 – 112	07/19/2024 17:44	

Results

Client Sample ID	SW10-6	Collected	07/16/2024 09:10
Lab Sample ID	3369360011	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
cis-1,2-Dichloroethene	0.51J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 17:04	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A

Results

Client Sample ID	SW10-6	Collected	07/16/2024 09:10
Lab Sample ID	3369360011	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.6%	81 – 118	07/19/2024 17:04	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	07/19/2024 17:04	
Dibromofluoromethane	1868-53-7	93.9%	80 – 119	07/19/2024 17:04	
Toluene-d8	2037-26-5	100%	89 – 112	07/19/2024 17:04	

Results

Client Sample ID	SW10-5	Collected	07/16/2024 09:15
Lab Sample ID	3369360012	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 19:04	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A

Results

Client Sample ID	SW10-5	Collected	07/16/2024 09:15
Lab Sample ID	3369360012	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.90J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.9%	81 – 118	07/19/2024 19:04	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 19:04	
Dibromofluoromethane	1868-53-7	96.4%	80 – 119	07/19/2024 19:04	
Toluene-d8	2037-26-5	99.2%	89 – 112	07/19/2024 19:04	

Results

Client Sample ID	MW10-3	Collected	07/16/2024 09:20
Lab Sample ID	3369360013	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
Acetone	11.0		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 15:25	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A

Results

Client Sample ID	MW10-3	Collected	07/16/2024 09:20
Lab Sample ID	3369360013	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	07/19/2024 15:25	
4-Bromofluorobenzene	460-00-4	96.6%	85 – 114	07/19/2024 15:25	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	07/19/2024 15:25	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 15:25	

Results

Client Sample ID	SW10-8	Collected	07/16/2024 09:30
Lab Sample ID	3369360014	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
cis-1,2-Dichloroethene	1.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 18:44	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A

Results

Client Sample ID	SW10-8	Collected	07/16/2024 09:30
Lab Sample ID	3369360014	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 18:44	
4-Bromofluorobenzene	460-00-4	92.4%	85 – 114	07/19/2024 18:44	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	07/19/2024 18:44	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 18:44	

Results

Client Sample ID	PW10-2	Collected	07/16/2024 09:40
Lab Sample ID	3369360015	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
Acetone	10.7		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
Benzene	1.9		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Cyclohexane	0.82J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Iodomethane	0.68J	J,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methyl cyclohexane	0.54J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 14:45	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A

Results

Client Sample ID	PW10-2	Collected	07/16/2024 09:40
Lab Sample ID	3369360015	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.6%	81 – 118	07/19/2024 14:45	
4-Bromofluorobenzene	460-00-4	93.5%	85 – 114	07/19/2024 14:45	
Dibromofluoromethane	1868-53-7	96.3%	80 – 119	07/19/2024 14:45	
Toluene-d8	2037-26-5	96.1%	89 – 112	07/19/2024 14:45	

Results

Client Sample ID	MW10-7	Collected	07/16/2024 09:45
Lab Sample ID	3369360016	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
2-Butanone	2.4J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
Acetone	11.8		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
cis-1,2-Dichloroethene	0.49J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Toluene	0.61J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 15:05	JTH	A
trans-1,2-Dichloroethene	1.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A

Results

Client Sample ID	MW10-7	Collected	07/16/2024 09:45
Lab Sample ID	3369360016	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95%	81 – 118	07/19/2024 15:05	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	07/19/2024 15:05	
Dibromofluoromethane	1868-53-7	94.2%	80 – 119	07/19/2024 15:05	
Toluene-d8	2037-26-5	97.6%	89 – 112	07/19/2024 15:05	

Results

Client Sample ID	PW10-1	Collected	07/16/2024 09:50
Lab Sample ID	3369360017	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
Acetone	10.2		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Carbon Disulfide	0.50J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
cis-1,2-Dichloroethene	0.42J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 14:25	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A

Results

Client Sample ID	PW10-1	Collected	07/16/2024 09:50
Lab Sample ID	3369360017	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.4%	81 – 118	07/19/2024 14:25	
4-Bromofluorobenzene	460-00-4	96.8%	85 – 114	07/19/2024 14:25	
Dibromofluoromethane	1868-53-7	96.1%	80 – 119	07/19/2024 14:25	
Toluene-d8	2037-26-5	97.5%	89 – 112	07/19/2024 14:25	

Results

Client Sample ID	PZ10-7	Collected	07/16/2024 09:55
Lab Sample ID	3369360018	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
Acetone	10.9		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Iodomethane	0.42J	J,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 14:05	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A

Results

Client Sample ID	PZ10-7	Collected	07/16/2024 09:55
Lab Sample ID	3369360018	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	81 – 118	07/19/2024 14:05	
4-Bromofluorobenzene	460-00-4	99.8%	85 – 114	07/19/2024 14:05	
Dibromofluoromethane	1868-53-7	98.9%	80 – 119	07/19/2024 14:05	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 14:05	

Results

Client Sample ID	MW8-11D	Collected	07/16/2024 10:55
Lab Sample ID	3369360019	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 15:45	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A

Results

Client Sample ID	MW8-11D	Collected	07/16/2024 10:55
Lab Sample ID	3369360019	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.6%	81 – 118	07/19/2024 15:45	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	07/19/2024 15:45	
Dibromofluoromethane	1868-53-7	95%	80 – 119	07/19/2024 15:45	
Toluene-d8	2037-26-5	98.8%	89 – 112	07/19/2024 15:45	

Results

Client Sample ID	PW13-4D	Collected	07/16/2024 11:20
Lab Sample ID	3369360020	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
cis-1,2-Dichloroethene	7.4		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 16:05	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A

Results

Client Sample ID	PW13-4D	Collected	07/16/2024 11:20
Lab Sample ID	3369360020	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.8%	81 – 118	07/19/2024 16:05	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	07/19/2024 16:05	
Dibromofluoromethane	1868-53-7	97.7%	80 – 119	07/19/2024 16:05	
Toluene-d8	2037-26-5	99.9%	89 – 112	07/19/2024 16:05	

Results

Client Sample ID	MW13-4D	Collected	07/16/2024 11:25
Lab Sample ID	3369360021	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
cis-1,2-Dichloroethene	5.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 16:24	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A

Results

Client Sample ID	MW13-4D	Collected	07/16/2024 11:25
Lab Sample ID	3369360021	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.4%	81 – 118	07/19/2024 16:24	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 16:24	
Dibromofluoromethane	1868-53-7	96.5%	80 – 119	07/19/2024 16:24	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 16:24	

Results

Client Sample ID	MW13-5D	Collected	07/16/2024 11:30
Lab Sample ID	3369360022	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
cis-1,2-Dichloroethene	16.6		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Iodomethane	0.75U	U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 16:44	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A

Results

Client Sample ID	MW13-5D	Collected	07/16/2024 11:30
Lab Sample ID	3369360022	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Vinyl Chloride	3.7		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.1%	81 – 118	07/19/2024 16:44	
4-Bromofluorobenzene	460-00-4	95.7%	85 – 114	07/19/2024 16:44	
Dibromofluoromethane	1868-53-7	96.9%	80 – 119	07/19/2024 16:44	
Toluene-d8	2037-26-5	96%	89 – 112	07/19/2024 16:44	

Results

Client Sample ID	PW13-1	Collected	07/16/2024 11:35
Lab Sample ID	3369360023	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,4-Dichlorobenzene	0.50J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Iodomethane	0.75U	U,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 12:53	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A

Results

Client Sample ID	PW13-1	Collected	07/16/2024 11:35
Lab Sample ID	3369360023	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.53J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Vinyl Chloride	5.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.8%	81 – 118	07/25/2024 12:53	
4-Bromofluorobenzene	460-00-4	94.7%	85 – 114	07/25/2024 12:53	
Dibromofluoromethane	1868-53-7	95.9%	80 – 119	07/25/2024 12:53	
Toluene-d8	2037-26-5	97%	89 – 112	07/25/2024 12:53	

Results

Client Sample ID	RW5-1	Collected	07/16/2024 11:45
Lab Sample ID	3369360024	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
Acetone	3.2J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Carbon Disulfide	3.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
cis-1,2-Dichloroethene	58.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Iodomethane	0.44J	J,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Toluene	6.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 13:13	ILY	A
trans-1,2-Dichloroethene	2.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A

Results

Client Sample ID	RW5-1	Collected	07/16/2024 11:45
Lab Sample ID	3369360024	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.70J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Vinyl Chloride	97.9		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.6%	81 – 118	07/25/2024 13:13	
4-Bromofluorobenzene	460-00-4	99.7%	85 – 114	07/25/2024 13:13	
Dibromofluoromethane	1868-53-7	96%	80 – 119	07/25/2024 13:13	
Toluene-d8	2037-26-5	97.6%	89 – 112	07/25/2024 13:13	

Results

Client Sample ID	MW5-1DA	Collected	07/16/2024 11:50
Lab Sample ID	3369360025	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromomethane	0.75U	U,13	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Carbon Disulfide	0.34J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Carbon Tetrachloride	0.75U	U,14	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
cis-1,2-Dichloroethene	0.45J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Iodomethane	0.75U	U,12,15,16,17	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 13:33	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A

Results

Client Sample ID	MW5-1DA	Collected	07/16/2024 11:50
Lab Sample ID	3369360025	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99%	81 – 118	07/25/2024 13:33	
4-Bromofluorobenzene	460-00-4	96.4%	85 – 114	07/25/2024 13:33	
Dibromofluoromethane	1868-53-7	97.2%	80 – 119	07/25/2024 13:33	
Toluene-d8	2037-26-5	97.2%	89 – 112	07/25/2024 13:33	

Results

Client Sample ID	MW5-6	Collected	07/16/2024 12:15
Lab Sample ID	3369360026	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
Acetone	3.8J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
cis-1,2-Dichloroethene	2.6		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Iodomethane	0.75U	U,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Toluene	2.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 13:52	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A

Results

Client Sample ID	MW5-6	Collected	07/16/2024 12:15
Lab Sample ID	3369360026	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	1.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Vinyl Chloride	1.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.7%	81 – 118	07/25/2024 13:52	
4-Bromofluorobenzene	460-00-4	99.3%	85 – 114	07/25/2024 13:52	
Dibromofluoromethane	1868-53-7	94.2%	80 – 119	07/25/2024 13:52	
Toluene-d8	2037-26-5	96.8%	89 – 112	07/25/2024 13:52	

Results

Client Sample ID	MW5-5D	Collected	07/16/2024 12:20
Lab Sample ID	3369360027	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
2-Butanone	4.8J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
Acetone	4.8J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
cis-1,2-Dichloroethene	3.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Iodomethane	0.75U	U,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Toluene	0.34J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 14:12	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A

Results

Client Sample ID	MW5-5D	Collected	07/16/2024 12:20
Lab Sample ID	3369360027	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	2.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.7%	81 – 118	07/25/2024 14:12	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/25/2024 14:12	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	07/25/2024 14:12	
Toluene-d8	2037-26-5	99.9%	89 – 112	07/25/2024 14:12	

Results

Client Sample ID	RW5-2	Collected	07/16/2024 12:30
Lab Sample ID	3369360028	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
cis-1,2-Dichloroethene	13.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Iodomethane	0.75U	U,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Toluene	2.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 14:32	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A

Results

Client Sample ID	RW5-2	Collected	07/16/2024 12:30
Lab Sample ID	3369360028	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Vinyl Chloride	26.8		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.7%	81 – 118	07/25/2024 14:32	
4-Bromofluorobenzene	460-00-4	96.6%	85 – 114	07/25/2024 14:32	
Dibromofluoromethane	1868-53-7	98.3%	80 – 119	07/25/2024 14:32	
Toluene-d8	2037-26-5	98.9%	89 – 112	07/25/2024 14:32	

Results

Client Sample ID	RW5-4	Collected	07/16/2024 12:35
Lab Sample ID	3369360029	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
cis-1,2-Dichloroethene	0.46J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Iodomethane	0.75U	U,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Toluene	1.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 14:52	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A

Results

Client Sample ID	RW5-4	Collected	07/16/2024 12:35
Lab Sample ID	3369360029	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Vinyl Chloride	0.38J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.5%	81 – 118	07/25/2024 14:52	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/25/2024 14:52	
Dibromofluoromethane	1868-53-7	96.7%	80 – 119	07/25/2024 14:52	
Toluene-d8	2037-26-5	99.2%	89 – 112	07/25/2024 14:52	

Results

Client Sample ID	PZ3-8D	Collected	07/16/2024 13:20
Lab Sample ID	3369360030	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
Acetone	10.1		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
cis-1,2-Dichloroethene	0.61J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Iodomethane	0.75U	U,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 15:12	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A

Results

Client Sample ID	PZ3-8D	Collected	07/16/2024 13:20
Lab Sample ID	3369360030	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Vinyl Chloride	0.89J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.6%	81 – 118	07/25/2024 15:12	
4-Bromofluorobenzene	460-00-4	96.3%	85 – 114	07/25/2024 15:12	
Dibromofluoromethane	1868-53-7	95.9%	80 – 119	07/25/2024 15:12	
Toluene-d8	2037-26-5	96%	89 – 112	07/25/2024 15:12	

Results

Client Sample ID	PZ3-7D	Collected	07/16/2024 13:25
Lab Sample ID	3369360031	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
cis-1,2-Dichloroethene	7.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Iodomethane	0.75U	U,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 15:32	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A

Results

Client Sample ID	PZ3-7D	Collected	07/16/2024 13:25
Lab Sample ID	3369360031	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Vinyl Chloride	3.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.2%	81 – 118	07/25/2024 15:32	
4-Bromofluorobenzene	460-00-4	98.8%	85 – 114	07/25/2024 15:32	
Dibromofluoromethane	1868-53-7	93%	80 – 119	07/25/2024 15:32	
Toluene-d8	2037-26-5	95.9%	89 – 112	07/25/2024 15:32	

Results

Client Sample ID	DUP-02-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360032	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
Acetone	3.6J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
cis-1,2-Dichloroethene	2.4		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Iodomethane	0.75U	U,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Toluene	2.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 15:52	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A

Results

Client Sample ID	DUP-02-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360032	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	1.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Vinyl Chloride	1.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99%	81 – 118	07/25/2024 15:52	
4-Bromofluorobenzene	460-00-4	98.9%	85 – 114	07/25/2024 15:52	
Dibromofluoromethane	1868-53-7	96.6%	80 – 119	07/25/2024 15:52	
Toluene-d8	2037-26-5	98.7%	89 – 112	07/25/2024 15:52	

Results

Client Sample ID	DUP-03-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360033	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
Acetone	9.9		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
cis-1,2-Dichloroethene	7.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Iodomethane	0.75U	U,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 16:12	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A

Results

Client Sample ID	DUP-03-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360033	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Vinyl Chloride	3.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96%	81 – 118	07/25/2024 16:12	
4-Bromofluorobenzene	460-00-4	99.9%	85 – 114	07/25/2024 16:12	
Dibromofluoromethane	1868-53-7	94%	80 – 119	07/25/2024 16:12	
Toluene-d8	2037-26-5	98.9%	89 – 112	07/25/2024 16:12	

Results

Client Sample ID	Trip Blank	Collected	07/16/2024 00:00
Lab Sample ID	3369360034	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Iodomethane	0.75U	U,12	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 12:33	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A

Results

Client Sample ID	Trip Blank	Collected	07/16/2024 00:00
Lab Sample ID	3369360034	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.6%	81 – 118	07/25/2024 12:33	
4-Bromofluorobenzene	460-00-4	104%	85 – 114	07/25/2024 12:33	
Dibromofluoromethane	1868-53-7	96.9%	80 – 119	07/25/2024 12:33	
Toluene-d8	2037-26-5	101%	89 – 112	07/25/2024 12:33	

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3369360001	SW3-15	SW846 8260C	N/A	
3369360002	DUP-01-20240716	SW846 8260C	N/A	
3369360003	PZ3-6D	SW846 8260C	N/A	
3369360004	MW3-3DA	SW846 8260C	N/A	
3369360005	SW3-3	SW846 8260C	N/A	
3369360006	PZ3-3A	SW846 8260C	N/A	
3369360007	MW3-4DA	SW846 8260C	N/A	
3369360008	SW3-2	SW846 8260C	N/A	
3369360009	SW99-10	SW846 8260C	N/A	
3369360010	SW10-7	SW846 8260C	N/A	
3369360011	SW10-6	SW846 8260C	N/A	
3369360012	SW10-5	SW846 8260C	N/A	
3369360013	MW10-3	SW846 8260C	N/A	
3369360014	SW10-8	SW846 8260C	N/A	
3369360015	PW10-2	SW846 8260C	N/A	
3369360016	MW10-7	SW846 8260C	N/A	
3369360017	PW10-1	SW846 8260C	N/A	
3369360018	PZ10-7	SW846 8260C	N/A	
3369360019	MW8-11D	SW846 8260C	N/A	
3369360020	PW13-4D	SW846 8260C	N/A	
3369360021	MW13-4D	SW846 8260C	N/A	
3369360022	MW13-5D	SW846 8260C	N/A	
3369360023	PW13-1	SW846 8260C	N/A	
3369360024	RW5-1	SW846 8260C	N/A	
3369360025	MW5-1DA	SW846 8260C	N/A	
3369360026	MW5-6	SW846 8260C	N/A	
3369360027	MW5-5D	SW846 8260C	N/A	
3369360028	RW5-2	SW846 8260C	N/A	
3369360029	RW5-4	SW846 8260C	N/A	
3369360030	PZ3-8D	SW846 8260C	N/A	
3369360031	PZ3-7D	SW846 8260C	N/A	
3369360032	DUP-02-20240716	SW846 8260C	N/A	
3369360033	DUP-03-20240716	SW846 8260C	N/A	
3369360034	Trip Blank	SW846 8260C	N/A	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	1257043	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260C
Tech.			

Associated Samples

3369360001 3369360002 3369360003 3369360004

Method Blank 3854114 (MB) Created on 07/18/2024 14:28 For QC Batch 1257043

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
1,1,1-Trichloroethane	71-55-6	BLK	0.75U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	0.75U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	0.75U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	0.75U	ug/L	1.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	0.75U	ug/L	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	2.5U	ug/L	5.0	U
1,2-Dibromoethane	106-93-4	BLK	0.75U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	0.75U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	0.75U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	0.75U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	0.75U	ug/L	1.0	U
1,3-Dichloropropene, Total	542-75-6	BLK	1.5U	ug/L	2.0	U
1,4-Dichlorobenzene	106-46-7	BLK	0.75U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	3.8U	ug/L	5.0	U
2-Hexanone	591-78-6	BLK	3.8U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	3.8U	ug/L	5.0	U
Acetone	67-64-1	BLK	3.8U	ug/L	5.0	U
Benzene	71-43-2	BLK	0.75U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	0.75U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	0.75U	ug/L	1.0	U
Bromoform	75-25-2	BLK	0.75U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	0.75U	ug/L	1.0	U
Carbon Disulfide	75-15-0	BLK	0.75U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	0.75U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	0.75U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	0.75U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	0.75U	ug/L	1.0	U
Chloroform	67-66-3	BLK	0.75U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	0.75U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	0.75U	ug/L	1.0	U
Cyclohexane	110-82-7	BLK	0.75U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	0.75U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	0.75U	ug/L	1.0	U
Freon 113	76-13-1	BLK	0.75U	ug/L	1.0	U
Iodomethane	74-88-4	BLK	0.75U	ug/L	1.0	U
Isopropylbenzene	98-82-8	BLK	0.75U	ug/L	1.0	U
Methyl acetate	79-20-9	BLK	0.75U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Methyl cyclohexane	108-87-2	BLK	0.75U	ug/L	1.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	0.75U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	0.75U	ug/L	1.0	U
Styrene	100-42-5	BLK	0.75U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	0.75U	ug/L	1.0	U
Toluene	108-88-3	BLK	0.75U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	2.3U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	0.75U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	0.75U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	0.75U	ug/L	1.0	U
Vinyl Chloride	75-01-4	BLK	0.75U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	30.30	30	101	81 - 118	
4-Bromofluorobenzene	460-00-4	BLK	30	30	100	85 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.70	30	99.1	80 - 119	
Toluene-d8	2037-26-5	BLK	30.40	30	101	89 - 112	

Lab Control Standard 3854115 (LCS) Created on 07/18/2024 14:28 For QC Batch 1257043

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	LCS	21.40		20	107	74 - 131		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	21.30		20	106	71 - 121		
1,1,2-Trichloroethane	79-00-5	LCS	21.20		20	106	80 - 119		
1,1-Dichloroethane	75-34-3	LCS	20.50		20	102	77 - 125		
1,1-Dichloroethene	75-35-4	LCS	21.40		20	107	71 - 131		
1,2,3-Trichlorobenzene	87-61-6	LCS	19.90		20	99.5	69 - 129		
1,2,4-Trichlorobenzene	120-82-1	LCS	21.20		20	106	69 - 130		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	19.90		20	99.4	62 - 128		
1,2-Dibromoethane	106-93-4	LCS	20		20	100	77 - 121		
1,2-Dichlorobenzene	95-50-1	LCS	19.90		20	99.7	80 - 119		
1,2-Dichloroethane	107-06-2	LCS	20.10		20	101	73 - 128		
1,2-Dichloropropane	78-87-5	LCS	20.50		20	103	78 - 122		
1,3-Dichlorobenzene	541-73-1	LCS	19.50		20	97.3	80 - 119		
1,3-Dichloropropene, Total	542-75-6	LCS	42		40	105	75 - 124		
1,4-Dichlorobenzene	106-46-7	LCS	19.70		20	98.5	79 - 118		
2-Butanone	78-93-3	LCS	94.50		100	94.5	56 - 143		
2-Hexanone	591-78-6	LCS	111		100	111	57 - 139		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	109		100	109	67 - 130		
Acetone	67-64-1	LCS	119		100	119	39 - 160		
Benzene	71-43-2	LCS	20.30		20	102	79 - 120		
Bromochloromethane	74-97-5	LCS	21.40		20	107	78 - 123		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Bromodichloromethane	75-27-4	LCS	21.20		20	106	79 - 125		
Bromoform	75-25-2	LCS	20.70		20	104	66 - 130		
Bromomethane	74-83-9	LCS	21.40		20	107	53 - 141		
Carbon Disulfide	75-15-0	LCS	20.30		20	102	64 - 133		
Carbon Tetrachloride	56-23-5	LCS	20.40		20	102	72 - 136		
Chlorobenzene	108-90-7	LCS	20.30		20	101	82 - 118		
Chlorodibromomethane	124-48-1	LCS	21.20		20	106	74 - 126		
Chloroethane	75-00-3	LCS	20.80		20	104	60 - 138		
Chloroform	67-66-3	LCS	20.40		20	102	79 - 124		
Chloromethane	74-87-3	LCS	19.30		20	96.7	50 - 139		
cis-1,2-Dichloroethene	156-59-2	LCS	21		20	105	78 - 123		
Cyclohexane	110-82-7	LCS	20.90		20	105	71 - 130		
Dichlorodifluoromethane	75-71-8	LCS	20.50		20	102	32 - 152		
Ethylbenzene	100-41-4	LCS	20.40		20	102	79 - 121		
Freon 113	76-13-1	LCS	21.80		20	109	70 - 136		
Iodomethane	74-88-4	LCS	14.40		20	71.8	69 - 131		
Isopropylbenzene	98-82-8	LCS	22.50		20	113	72 - 131		
Methyl acetate	79-20-9	LCS	19.90		20	99.7	56 - 136		
Methyl cyclohexane	108-87-2	LCS	20.50		20	103	72 - 132		
Methyl t-Butyl Ether	1634-04-4	LCS	21.50		20	108	71 - 124		
Methylene Chloride	75-09-2	LCS	20.50		20	102	74 - 124		
Styrene	100-42-5	LCS	20.90		20	104	78 - 123		
Tetrachloroethene	127-18-4	LCS	20		20	100	74 - 129		
Toluene	108-88-3	LCS	20.20		20	101	80 - 121		
Total Xylenes	1330-20-7	LCS	61		60	102	79 - 121		
trans-1,2-Dichloroethene	156-60-5	LCS	20.30		20	101	75 - 124		
Trichloroethene	79-01-6	LCS	20.20		20	101	79 - 123		
Trichlorofluoromethane	75-69-4	LCS	21.40		20	107	65 - 141		
Vinyl Chloride	75-01-4	LCS	20.40		20	102	58 - 137		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	30.40	30	101	81 - 118	
4-Bromofluorobenzene	460-00-4	LCS	30.40	30	101	85 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.90	30	103	80 - 119	
Toluene-d8	2037-26-5	LCS	30.80	30	103	89 - 112	

QC Batch

QC Batch	1258273	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260C
Tech.			

Associated Samples

3369360015	3369360016	3369360006	3369360007
3369360017	3369360008	3369360018	3369360019
3369360009	3369360020	3369360005	3369360010
3369360021	3369360011	3369360012	3369360013
3369360014	3369360022		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Method Blank 3854499 (MB) Created on 07/19/2024 13:04 For QC Batch 1258273

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
1,1,1-Trichloroethane	71-55-6	BLK	0.75U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	0.75U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	0.75U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	0.75U	ug/L	1.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	0.75U	ug/L	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	2.5U	ug/L	5.0	U
1,2-Dibromoethane	106-93-4	BLK	0.75U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	0.75U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	0.75U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	0.75U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	0.75U	ug/L	1.0	U
1,3-Dichloropropene, Total	542-75-6	BLK	1.5U	ug/L	2.0	U
1,4-Dichlorobenzene	106-46-7	BLK	0.75U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	3.8U	ug/L	5.0	U
2-Hexanone	591-78-6	BLK	3.8U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	3.8U	ug/L	5.0	U
Acetone	67-64-1	BLK	3.8U	ug/L	5.0	U
Benzene	71-43-2	BLK	0.75U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	0.75U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	0.75U	ug/L	1.0	U
Bromoform	75-25-2	BLK	0.75U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	0.75U	ug/L	1.0	U
Carbon Disulfide	75-15-0	BLK	0.75U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	0.75U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	0.75U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	0.75U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	0.75U	ug/L	1.0	U
Chloroform	67-66-3	BLK	0.75U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	0.75U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	0.75U	ug/L	1.0	U
Cyclohexane	110-82-7	BLK	0.75U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	0.75U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	0.75U	ug/L	1.0	U
Freon 113	76-13-1	BLK	0.75U	ug/L	1.0	U
Iodomethane	74-88-4	BLK	0.75U	ug/L	1.0	U
Isopropylbenzene	98-82-8	BLK	0.75U	ug/L	1.0	U
Methyl acetate	79-20-9	BLK	0.75U	ug/L	1.0	U
Methyl cyclohexane	108-87-2	BLK	0.75U	ug/L	1.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	0.75U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	0.75U	ug/L	1.0	U
Styrene	100-42-5	BLK	0.75U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	0.75U	ug/L	1.0	U
Toluene	108-88-3	BLK	0.75U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Total Xylenes	1330-20-7	BLK	2.3U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	0.75U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	0.75U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	0.75U	ug/L	1.0	U
Vinyl Chloride	75-01-4	BLK	0.75U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	29.90	30	99.6	81 - 118	
4-Bromofluorobenzene	460-00-4	BLK	30.20	30	101	85 - 114	
Dibromofluoromethane	1868-53-7	BLK	28.80	30	95.9	80 - 119	
Toluene-d8	2037-26-5	BLK	30.20	30	101	89 - 112	

Lab Control Standard 3854500 (LCS) Created on 07/19/2024 13:04 For QC Batch 1258273

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	LCS	21.70		20	109	74 - 131		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	23.10		20	115	71 - 121		
1,1,2-Trichloroethane	79-00-5	LCS	21.60		20	108	80 - 119		
1,1-Dichloroethane	75-34-3	LCS	20.80		20	104	77 - 125		
1,1-Dichloroethene	75-35-4	LCS	20.60		20	103	71 - 131		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.40		20	107	69 - 129		
1,2,4-Trichlorobenzene	120-82-1	LCS	23.10		20	115	69 - 130		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	21.60		20	108	62 - 128		
1,2-Dibromoethane	106-93-4	LCS	20.60		20	103	77 - 121		
1,2-Dichlorobenzene	95-50-1	LCS	21.70		20	108	80 - 119		
1,2-Dichloroethane	107-06-2	LCS	21.10		20	105	73 - 128		
1,2-Dichloropropane	78-87-5	LCS	21.50		20	108	78 - 122		
1,3-Dichlorobenzene	541-73-1	LCS	21.20		20	106	80 - 119		
1,3-Dichloropropene, Total	542-75-6	LCS	43.60		40	109	75 - 124		
1,4-Dichlorobenzene	106-46-7	LCS	21.50		20	107	79 - 118		
2-Butanone	78-93-3	LCS	119		100	119	56 - 143		
2-Hexanone	591-78-6	LCS	117		100	117	57 - 139		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	114		100	114	67 - 130		
Acetone	67-64-1	LCS	131		100	131	39 - 160		
Benzene	71-43-2	LCS	21		20	105	79 - 120		
Bromochloromethane	74-97-5	LCS	22.20		20	111	78 - 123		
Bromodichloromethane	75-27-4	LCS	22.80		20	114	79 - 125		
Bromoform	75-25-2	LCS	22.60		20	113	66 - 130		
Bromomethane	74-83-9	LCS	20.10		20	100	53 - 141		
Carbon Disulfide	75-15-0	LCS	18		20	89.8	64 - 133		
Carbon Tetrachloride	56-23-5	LCS	22.50		20	112	72 - 136		
Chlorobenzene	108-90-7	LCS	20.60		20	103	82 - 118		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chlorodibromomethane	124-48-1	LCS	21.80		20	109	74 - 126		
Chloroethane	75-00-3	LCS	21.20		20	106	60 - 138		
Chloroform	67-66-3	LCS	21.60		20	108	79 - 124		
Chloromethane	74-87-3	LCS	19.30		20	96.7	50 - 139		
cis-1,2-Dichloroethene	156-59-2	LCS	21.90		20	109	78 - 123		
Cyclohexane	110-82-7	LCS	19.70		20	98.6	71 - 130		
Dichlorodifluoromethane	75-71-8	LCS	20.50		20	102	32 - 152		
Ethylbenzene	100-41-4	LCS	20.50		20	102	79 - 121		
Freon 113	76-13-1	LCS	20.40		20	102	70 - 136		
Iodomethane	74-88-4	LCS	17.10		20	85.6	69 - 131		
Isopropylbenzene	98-82-8	LCS	23.70		20	118	72 - 131		
Methyl acetate	79-20-9	LCS	21.50		20	108	56 - 136		
Methyl cyclohexane	108-87-2	LCS	19.10		20	95.5	72 - 132		
Methyl t-Butyl Ether	1634-04-4	LCS	22.30		20	111	71 - 124		
Methylene Chloride	75-09-2	LCS	21		20	105	74 - 124		
Styrene	100-42-5	LCS	22.70		20	113	78 - 123		
Tetrachloroethene	127-18-4	LCS	19.90		20	99.4	74 - 129		
Toluene	108-88-3	LCS	20.20		20	101	80 - 121		
Total Xylenes	1330-20-7	LCS	62.60		60	104	79 - 121		
trans-1,2-Dichloroethene	156-60-5	LCS	20.50		20	102	75 - 124		
Trichloroethene	79-01-6	LCS	20.60		20	103	79 - 123		
Trichlorofluoromethane	75-69-4	LCS	21.80		20	109	65 - 141		
Vinyl Chloride	75-01-4	LCS	20.90		20	104	58 - 137		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	32.30	30	108	81 - 118	
4-Bromofluorobenzene	460-00-4	LCS	29.50	30	98.3	85 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.80	30	103	80 - 119	
Toluene-d8	2037-26-5	LCS	29	30	96.8	89 - 112	

Matrix Spike 3854550 (MS) 3369360005 For QC Batch 1258273

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3854551 (MSD) 3369360005 For QC Batch 1258273

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	MS	22.90	0	20	115	74 - 131		
1,1,1-Trichloroethane	71-55-6	MSD	23.80	0	20	119	74 - 131	RPD 3.88 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	22.40	0	20	112	71 - 121		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	23	0	20	115	71 - 121	RPD 2.53 (Max-20)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,2-Trichloroethane	79-00-5	MS	20.50	0	20	102	80 - 119		
1,1,2-Trichloroethane	79-00-5	MSD	21.60	0	20	108	80 - 119	RPD 5.45 (Max-20)	
1,1-Dichloroethane	75-34-3	MS	21.70	0	20	108	77 - 125		
1,1-Dichloroethane	75-34-3	MSD	22	0	20	110	77 - 125	RPD 1.60 (Max-20)	
1,1-Dichloroethene	75-35-4	MS	24.30	0	20	121	71 - 131		
1,1-Dichloroethene	75-35-4	MSD	24.50	0	20	122	71 - 131	RPD 0.83 (Max-20)	
1,2,3-Trichlorobenzene	87-61-6	MS	20.40	0	20	102	69 - 129		
1,2,3-Trichlorobenzene	87-61-6	MSD	21.60	0	20	108	69 - 129	RPD 5.90 (Max-20)	
1,2,4-Trichlorobenzene	120-82-1	MS	21.70	0	20	109	69 - 130		
1,2,4-Trichlorobenzene	120-82-1	MSD	22.30	0	20	111	69 - 130	RPD 2.47 (Max-20)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	20.20	0	20	101	62 - 128		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	20.90	0	20	104	62 - 128	RPD 3.03 (Max-20)	
1,2-Dibromoethane	106-93-4	MS	22	0	20	110	77 - 121		
1,2-Dibromoethane	106-93-4	MSD	22.10	0	20	110	77 - 121	RPD 0.07 (Max-20)	
1,2-Dichlorobenzene	95-50-1	MS	20.80	0	20	104	80 - 119		
1,2-Dichlorobenzene	95-50-1	MSD	21.90	0	20	109	80 - 119	RPD 4.98 (Max-20)	
1,2-Dichloroethane	107-06-2	MS	20.20	0	20	101	73 - 128		
1,2-Dichloroethane	107-06-2	MSD	20.80	0	20	104	73 - 128	RPD 2.76 (Max-20)	
1,2-Dichloropropane	78-87-5	MS	21.10	0	20	105	78 - 122		
1,2-Dichloropropane	78-87-5	MSD	21.60	0	20	108	78 - 122	RPD 2.49 (Max-20)	
1,3-Dichlorobenzene	541-73-1	MS	20.60	0	20	103	80 - 119		
1,3-Dichlorobenzene	541-73-1	MSD	21.30	0	20	107	80 - 119	RPD 3.19 (Max-20)	
1,3-Dichloropropene, Total	542-75-6	MS	40.90	0	40	102	75 - 124		
1,3-Dichloropropene, Total	542-75-6	MSD	42.30	0	40	106	75 - 124	RPD 3.34 (Max-20)	
1,4-Dichlorobenzene	106-46-7	MS	20.50	0	20	102	79 - 118		
1,4-Dichlorobenzene	106-46-7	MSD	21.20	0	20	106	79 - 118	RPD 3.18 (Max-20)	
2-Butanone	78-93-3	MS	101	0	100	101	56 - 143		
2-Butanone	78-93-3	MSD	104	0	100	104	56 - 143	RPD 3.51 (Max-20)	
2-Hexanone	591-78-6	MS	105	0	100	105	57 - 139		
2-Hexanone	591-78-6	MSD	108	0	100	108	57 - 139	RPD 3.12 (Max-20)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	106	0	100	106	67 - 130		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	109	0	100	109	67 - 130	RPD 3.22 (Max-20)	
Acetone	67-64-1	MS	101	0	100	101	39 - 160		
Acetone	67-64-1	MSD	100	0	100	100	39 - 160	RPD 0.29 (Max-20)	
Benzene	71-43-2	MS	21.90	0	20	110	79 - 120		
Benzene	71-43-2	MSD	22.30	0	20	111	79 - 120	RPD 1.66 (Max-20)	
Bromochloromethane	74-97-5	MS	21.70	0	20	109	78 - 123		
Bromochloromethane	74-97-5	MSD	22.60	0	20	113	78 - 123	RPD 3.86 (Max-20)	
Bromodichloromethane	75-27-4	MS	21.90	0	20	109	79 - 125		
Bromodichloromethane	75-27-4	MSD	22.60	0	20	113	79 - 125	RPD 3.22 (Max-20)	
Bromoform	75-25-2	MS	20.90	0	20	104	66 - 130		
Bromoform	75-25-2	MSD	21.20	0	20	106	66 - 130	RPD 1.76 (Max-20)	
Bromomethane	74-83-9	MS	9.50	0	20	47.7*	53 - 141		
Bromomethane	74-83-9	MSD	12.20	0	20	60.9	53 - 141	RPD 24.40* (Max-20)	
Carbon Disulfide	75-15-0	MS	22.40	0	20	112	64 - 133		
Carbon Disulfide	75-15-0	MSD	23.20	0	20	116	64 - 133	RPD 3.31 (Max-20)	
Carbon Tetrachloride	56-23-5	MS	23.50	0	20	117	72 - 136		
Carbon Tetrachloride	56-23-5	MSD	23.80	0	20	119	72 - 136	RPD 1.60 (Max-20)	
Chlorobenzene	108-90-7	MS	20.40	0	20	102	82 - 118		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chlorobenzene	108-90-7	MSD	21.10	0	20	106	82 - 118	RPD 3.59 (Max-20)	
Chlorodibromomethane	124-48-1	MS	20.50	0	20	102	74 - 126		
Chlorodibromomethane	124-48-1	MSD	21.10	0	20	105	74 - 126	RPD 2.99 (Max-20)	
Chloroethane	75-00-3	MS	31.10	0	20	156*	60 - 138		
Chloroethane	75-00-3	MSD	29.30	0	20	147*	60 - 138	RPD 5.95 (Max-20)	
Chloroform	67-66-3	MS	21.40	0	20	107	79 - 124		
Chloroform	67-66-3	MSD	22.30	0	20	111	79 - 124	RPD 4.15 (Max-20)	
Chloromethane	74-87-3	MS	15.90	0	20	79.3	50 - 139		
Chloromethane	74-87-3	MSD	17.50	0	20	87.6	50 - 139	RPD 10 (Max-20)	
cis-1,2-Dichloroethene	156-59-2	MS	22.20	0	20	111	78 - 123		
cis-1,2-Dichloroethene	156-59-2	MSD	22.70	0	20	113	78 - 123	RPD 2.03 (Max-20)	
Cyclohexane	110-82-7	MS	22.70	0	20	113	71 - 130		
Cyclohexane	110-82-7	MSD	23.50	0	20	117	71 - 130	RPD 3.43 (Max-20)	
Dichlorodifluoromethane	75-71-8	MS	19.50	0	20	97.3	32 - 152		
Dichlorodifluoromethane	75-71-8	MSD	22.90	0	20	114	32 - 152	RPD 16.20 (Max-20)	
Ethylbenzene	100-41-4	MS	20.30	0	20	101	79 - 121		
Ethylbenzene	100-41-4	MSD	21.40	0	20	107	79 - 121	RPD 5.61 (Max-20)	
Freon 113	76-13-1	MS	24.10	0	20	120	70 - 136		
Freon 113	76-13-1	MSD	24.30	0	20	121	70 - 136	RPD 0.88 (Max-20)	
Iodomethane	74-88-4	MS	8.70	0	20	43.3*	69 - 131		
Iodomethane	74-88-4	MSD	10.40	0	20	52*	69 - 131	RPD 18.10 (Max-20)	
Isopropylbenzene	98-82-8	MS	24.60	0	20	123	72 - 131		
Isopropylbenzene	98-82-8	MSD	25.30	0	20	126	72 - 131	RPD 2.83 (Max-20)	
Methyl acetate	79-20-9	MS	18.40	0	20	92	56 - 136		
Methyl acetate	79-20-9	MSD	18.30	0	20	91.7	56 - 136	RPD 0.31 (Max-20)	
Methyl cyclohexane	108-87-2	MS	21.60	0	20	108	72 - 132		
Methyl cyclohexane	108-87-2	MSD	22.20	0	20	111	72 - 132	RPD 2.56 (Max-20)	
Methyl t-Butyl Ether	1634-04-4	MS	21.30	0	20	107	71 - 124		
Methyl t-Butyl Ether	1634-04-4	MSD	21.90	0	20	110	71 - 124	RPD 2.67 (Max-20)	
Methylene Chloride	75-09-2	MS	21.30	0	20	107	74 - 124		
Methylene Chloride	75-09-2	MSD	22	0	20	110	74 - 124	RPD 3.16 (Max-20)	
Styrene	100-42-5	MS	21.70	0	20	108	78 - 123		
Styrene	100-42-5	MSD	22.60	0	20	113	78 - 123	RPD 4.07 (Max-20)	
Tetrachloroethene	127-18-4	MS	19.70	0	20	98.3	74 - 129		
Tetrachloroethene	127-18-4	MSD	19.90	0	20	99.3	74 - 129	RPD 1.01 (Max-20)	
Toluene	108-88-3	MS	20.70	0	20	103	80 - 121		
Toluene	108-88-3	MSD	21.50	0	20	107	80 - 121	RPD 3.64 (Max-20)	
Total Xylenes	1330-20-7	MS	61.20	0	60	102	79 - 121		
Total Xylenes	1330-20-7	MSD	64	0	60	107	79 - 121	RPD 4.38 (Max-20)	
trans-1,2-Dichloroethene	156-60-5	MS	22	0	20	110	75 - 124		
trans-1,2-Dichloroethene	156-60-5	MSD	22.20	0	20	111	75 - 124	RPD 1.26 (Max-20)	
Trichloroethene	79-01-6	MS	21.60	0	20	108	79 - 123		
Trichloroethene	79-01-6	MSD	22.30	0	20	111	79 - 123	RPD 2.77 (Max-20)	
Trichlorofluoromethane	75-69-4	MS	20.50	0	20	103	65 - 141		
Trichlorofluoromethane	75-69-4	MSD	24	0	20	120	65 - 141	RPD 15.50 (Max-20)	
Vinyl Chloride	75-01-4	MS	19.50	0	20	97.7	58 - 137		
Vinyl Chloride	75-01-4	MSD	22.40	0	20	112	58 - 137	RPD 13.80 (Max-20)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	30.80	30	103	81 - 118	
1,2-Dichloroethane-d4	17060-07-0	MSD	31.50	30	105	81 - 118	
4-Bromofluorobenzene	460-00-4	MS	31.30	30	104	85 - 114	
4-Bromofluorobenzene	460-00-4	MSD	30.30	30	101	85 - 114	
Dibromofluoromethane	1868-53-7	MS	29.50	30	98.4	80 - 119	
Dibromofluoromethane	1868-53-7	MSD	30	30	99.9	80 - 119	
Toluene-d8	2037-26-5	MS	28.90	30	96.3	89 - 112	
Toluene-d8	2037-26-5	MSD	29.40	30	97.9	89 - 112	

Matrix Spike 3854552 (MS) 3369360006 For QC Batch 1258273

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3854553 (MSD) 3369360006 For QC Batch 1258273

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	MS	23.20	0	20	116	74 - 131		
1,1,1-Trichloroethane	71-55-6	MSD	23.30	0	20	116	74 - 131	RPD 0.25 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	22.50	0	20	112	71 - 121		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	22.70	0	20	113	71 - 121	RPD 0.93 (Max-20)	
1,1,2-Trichloroethane	79-00-5	MS	21.50	0	20	108	80 - 119		
1,1,2-Trichloroethane	79-00-5	MSD	21.10	0	20	105	80 - 119	RPD 2.07 (Max-20)	
1,1-Dichloroethane	75-34-3	MS	22	0	20	110	77 - 125		
1,1-Dichloroethane	75-34-3	MSD	21.70	0	20	109	77 - 125	RPD 1.06 (Max-20)	
1,1-Dichloroethene	75-35-4	MS	24.50	0	20	122	71 - 131		
1,1-Dichloroethene	75-35-4	MSD	24.30	0	20	121	71 - 131	RPD 0.83 (Max-20)	
1,2,3-Trichlorobenzene	87-61-6	MS	21.20	0	20	106	69 - 129		
1,2,3-Trichlorobenzene	87-61-6	MSD	21.10	0	20	105	69 - 129	RPD 0.54 (Max-20)	
1,2,4-Trichlorobenzene	120-82-1	MS	22.10	0	20	111	69 - 130		
1,2,4-Trichlorobenzene	120-82-1	MSD	22.40	0	20	112	69 - 130	RPD 1.34 (Max-20)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	21.40	0	20	107	62 - 128		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	20.10	0	20	101	62 - 128	RPD 6.06 (Max-20)	
1,2-Dibromoethane	106-93-4	MS	22.50	0	20	113	77 - 121		
1,2-Dibromoethane	106-93-4	MSD	21.90	0	20	109	77 - 121	RPD 3.02 (Max-20)	
1,2-Dichlorobenzene	95-50-1	MS	21.30	0	20	107	80 - 119		
1,2-Dichlorobenzene	95-50-1	MSD	21.50	0	20	107	80 - 119	RPD 0.67 (Max-20)	
1,2-Dichloroethane	107-06-2	MS	20.40	0	20	102	73 - 128		
1,2-Dichloroethane	107-06-2	MSD	20.60	0	20	103	73 - 128	RPD 1.05 (Max-20)	
1,2-Dichloropropane	78-87-5	MS	21.50	0	20	107	78 - 122		
1,2-Dichloropropane	78-87-5	MSD	21.40	0	20	107	78 - 122	RPD 0.61 (Max-20)	
1,3-Dichlorobenzene	541-73-1	MS	21.20	0	20	106	80 - 119		
1,3-Dichlorobenzene	541-73-1	MSD	21	0	20	105	80 - 119	RPD 0.67 (Max-20)	
1,3-Dichloropropene, Total	542-75-6	MS	42.90	0	40	107	75 - 124		
1,3-Dichloropropene, Total	542-75-6	MSD	41.40	0	40	103	75 - 124	RPD 3.60 (Max-20)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	MS	20.90	0	20	105	79 - 118		
1,4-Dichlorobenzene	106-46-7	MSD	20.90	0	20	104	79 - 118	RPD 0.14 (Max-20)	
2-Butanone	78-93-3	MS	102	0	100	102	56 - 143		
2-Butanone	78-93-3	MSD	102	0	100	102	56 - 143	RPD 0.57 (Max-20)	
2-Hexanone	591-78-6	MS	108	0	100	108	57 - 139		
2-Hexanone	591-78-6	MSD	106	0	100	106	57 - 139	RPD 2.25 (Max-20)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	109	0	100	109	67 - 130		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	107	0	100	107	67 - 130	RPD 1.56 (Max-20)	
Acetone	67-64-1	MS	108	9.70	100	98.6	39 - 160		
Acetone	67-64-1	MSD	110	9.70	100	101	39 - 160	RPD 1.89 (Max-20)	
Benzene	71-43-2	MS	22.20	0	20	111	79 - 120		
Benzene	71-43-2	MSD	22.10	0	20	111	79 - 120	RPD 0.11 (Max-20)	
Bromochloromethane	74-97-5	MS	22.40	0	20	112	78 - 123		
Bromochloromethane	74-97-5	MSD	22.10	0	20	111	78 - 123	RPD 1.17 (Max-20)	
Bromodichloromethane	75-27-4	MS	22.50	0	20	112	79 - 125		
Bromodichloromethane	75-27-4	MSD	22.20	0	20	111	79 - 125	RPD 1.20 (Max-20)	
Bromoform	75-25-2	MS	20.50	0	20	102	66 - 130		
Bromoform	75-25-2	MSD	21	0	20	105	66 - 130	RPD 2.34 (Max-20)	
Bromomethane	74-83-9	MS	12.60	0	20	63.2	53 - 141		
Bromomethane	74-83-9	MSD	13	0	20	65.2	53 - 141	RPD 3.07 (Max-20)	
Carbon Disulfide	75-15-0	MS	24.10	0	20	120	64 - 133		
Carbon Disulfide	75-15-0	MSD	23.60	0	20	118	64 - 133	RPD 1.82 (Max-20)	
Carbon Tetrachloride	56-23-5	MS	24.20	0	20	121	72 - 136		
Carbon Tetrachloride	56-23-5	MSD	24	0	20	120	72 - 136	RPD 0.80 (Max-20)	
Chlorobenzene	108-90-7	MS	21.60	0.33	20	107	82 - 118		
Chlorobenzene	108-90-7	MSD	21	0.33	20	104	82 - 118	RPD 2.80 (Max-20)	
Chlorodibromomethane	124-48-1	MS	21.30	0	20	106	74 - 126		
Chlorodibromomethane	124-48-1	MSD	20.80	0	20	104	74 - 126	RPD 2 (Max-20)	
Chloroethane	75-00-3	MS	33.20	0	20	166*	60 - 138		
Chloroethane	75-00-3	MSD	31.70	0	20	159*	60 - 138	RPD 4.53 (Max-20)	
Chloroform	67-66-3	MS	22.20	0.42	20	109	79 - 124		
Chloroform	67-66-3	MSD	21.90	0.42	20	107	79 - 124	RPD 1.47 (Max-20)	
Chloromethane	74-87-3	MS	17.90	0	20	89.7	50 - 139		
Chloromethane	74-87-3	MSD	16.40	0	20	82.2	50 - 139	RPD 8.77 (Max-20)	
cis-1,2-Dichloroethene	156-59-2	MS	37	14.50	20	113	78 - 123		
cis-1,2-Dichloroethene	156-59-2	MSD	35.70	14.50	20	106	78 - 123	RPD 3.59 (Max-20)	
Cyclohexane	110-82-7	MS	23.40	0	20	117	71 - 130		
Cyclohexane	110-82-7	MSD	22	0	20	110	71 - 130	RPD 5.99 (Max-20)	
Dichlorodifluoromethane	75-71-8	MS	22.70	0	20	113	32 - 152		
Dichlorodifluoromethane	75-71-8	MSD	21.90	0	20	110	32 - 152	RPD 3.53 (Max-20)	
Ethylbenzene	100-41-4	MS	21.50	0	20	108	79 - 121		
Ethylbenzene	100-41-4	MSD	21	0	20	105	79 - 121	RPD 2.55 (Max-20)	
Freon 113	76-13-1	MS	23.90	0	20	119	70 - 136		
Freon 113	76-13-1	MSD	22.40	0	20	112	70 - 136	RPD 6.44 (Max-20)	
Iodomethane	74-88-4	MS	12.40	0	20	61.9*	69 - 131		
Iodomethane	74-88-4	MSD	11.70	0	20	58.3*	69 - 131	RPD 6.10 (Max-20)	
Isopropylbenzene	98-82-8	MS	25	0	20	125	72 - 131		
Isopropylbenzene	98-82-8	MSD	24.90	0	20	124	72 - 131	RPD 0.68 (Max-20)	
Methyl acetate	79-20-9	MS	17.50	0	20	87.5	56 - 136		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Methyl acetate	79-20-9	MSD	18.40	0	20	91.9	56 - 136	RPD 4.93 (Max-20)	
Methyl cyclohexane	108-87-2	MS	22	0	20	110	72 - 132		
Methyl cyclohexane	108-87-2	MSD	21.10	0	20	106	72 - 132	RPD 4.25 (Max-20)	
Methyl t-Butyl Ether	1634-04-4	MS	21.80	0	20	109	71 - 124		
Methyl t-Butyl Ether	1634-04-4	MSD	21.50	0	20	108	71 - 124	RPD 1.32 (Max-20)	
Methylene Chloride	75-09-2	MS	21.90	0	20	109	74 - 124		
Methylene Chloride	75-09-2	MSD	21.60	0	20	108	74 - 124	RPD 1.08 (Max-20)	
Styrene	100-42-5	MS	22.50	0	20	113	78 - 123		
Styrene	100-42-5	MSD	22.90	0	20	115	78 - 123	RPD 1.86 (Max-20)	
Tetrachloroethene	127-18-4	MS	20.20	0	20	101	74 - 129		
Tetrachloroethene	127-18-4	MSD	19.60	0	20	97.9	74 - 129	RPD 3.09 (Max-20)	
Toluene	108-88-3	MS	21.40	0	20	107	80 - 121		
Toluene	108-88-3	MSD	21	0	20	105	80 - 121	RPD 1.59 (Max-20)	
Total Xylenes	1330-20-7	MS	64.20	0	60	107	79 - 121		
Total Xylenes	1330-20-7	MSD	62.40	0	60	104	79 - 121	RPD 2.81 (Max-20)	
trans-1,2-Dichloroethene	156-60-5	MS	22.70	0.36	20	111	75 - 124		
trans-1,2-Dichloroethene	156-60-5	MSD	22.20	0.36	20	109	75 - 124	RPD 1.84 (Max-20)	
Trichloroethene	79-01-6	MS	24.10	2.30	20	109	79 - 123		
Trichloroethene	79-01-6	MSD	24.30	2.30	20	110	79 - 123	RPD 0.93 (Max-20)	
Trichlorofluoromethane	75-69-4	MS	24.20	0	20	121	65 - 141		
Trichlorofluoromethane	75-69-4	MSD	23.30	0	20	116	65 - 141	RPD 3.69 (Max-20)	
Vinyl Chloride	75-01-4	MS	32.40	9.50	20	114	58 - 137		
Vinyl Chloride	75-01-4	MSD	30.90	9.50	20	107	58 - 137	RPD 4.81 (Max-20)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	31.40	30	105	81 - 118	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.50	30	102	81 - 118	
4-Bromofluorobenzene	460-00-4	MS	28.50	30	94.9	85 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.40	30	98	85 - 114	
Dibromofluoromethane	1868-53-7	MS	30.20	30	101	80 - 119	
Dibromofluoromethane	1868-53-7	MSD	29.20	30	97.2	80 - 119	
Toluene-d8	2037-26-5	MS	28.70	30	95.6	89 - 112	
Toluene-d8	2037-26-5	MSD	28.40	30	94.5	89 - 112	

QC Batch

QC Batch	1260753	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260C
Tech.			

Associated Samples

3369360026	3369360027	3369360032	3369360033
3369360028	3369360034	3369360024	3369360030
3369360025	3369360031	3369360023	3369360029

Method Blank 3856991 (MB) Created on 07/25/2024 12:51 For QC Batch 1260753

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
1,1,1-Trichloroethane	71-55-6	BLK	0.75U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	0.75U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	0.75U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	0.75U	ug/L	1.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	0.75U	ug/L	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	2.5U	ug/L	5.0	U
1,2-Dibromoethane	106-93-4	BLK	0.75U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	0.75U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	0.75U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	0.75U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	0.75U	ug/L	1.0	U
1,3-Dichloropropene, Total	542-75-6	BLK	1.5U	ug/L	2.0	U
1,4-Dichlorobenzene	106-46-7	BLK	0.75U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	3.8U	ug/L	5.0	U
2-Hexanone	591-78-6	BLK	3.8U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	3.8U	ug/L	5.0	U
Acetone	67-64-1	BLK	3.8U	ug/L	5.0	U
Benzene	71-43-2	BLK	0.75U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	0.75U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	0.75U	ug/L	1.0	U
Bromoform	75-25-2	BLK	0.75U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	0.75U	ug/L	1.0	U
Carbon Disulfide	75-15-0	BLK	0.75U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	0.75U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	0.75U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	0.75U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	0.75U	ug/L	1.0	U
Chloroform	67-66-3	BLK	0.75U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	0.75U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	0.75U	ug/L	1.0	U
Cyclohexane	110-82-7	BLK	0.75U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	0.75U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	0.75U	ug/L	1.0	U
Freon 113	76-13-1	BLK	0.75U	ug/L	1.0	U
Iodomethane	74-88-4	BLK	0.75U	ug/L	1.0	U
Isopropylbenzene	98-82-8	BLK	0.75U	ug/L	1.0	U
Methyl acetate	79-20-9	BLK	0.75U	ug/L	1.0	U
Methyl cyclohexane	108-87-2	BLK	0.75U	ug/L	1.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	0.75U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	0.75U	ug/L	1.0	U
Styrene	100-42-5	BLK	0.75U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	0.75U	ug/L	1.0	U
Toluene	108-88-3	BLK	0.75U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	2.3U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	0.75U	ug/L	1.0	U

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Trichloroethene	79-01-6	BLK	0.75U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	0.75U	ug/L	1.0	U
Vinyl Chloride	75-01-4	BLK	0.75U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	30.20	30	101	81 - 118	
4-Bromofluorobenzene	460-00-4	BLK	29.50	30	98.3	85 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.40	30	98	80 - 119	
Toluene-d8	2037-26-5	BLK	31.10	30	104	89 - 112	

Lab Control Standard 3856992 (LCS) Created on 07/25/2024 12:51 For QC Batch 1260753

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	LCS	21.90		20	110	74 - 131		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	23		20	115	71 - 121		
1,1,2-Trichloroethane	79-00-5	LCS	21.90		20	110	80 - 119		
1,1-Dichloroethane	75-34-3	LCS	21.10		20	106	77 - 125		
1,1-Dichloroethene	75-35-4	LCS	22.10		20	111	71 - 131		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.50		20	108	69 - 129		
1,2,4-Trichlorobenzene	120-82-1	LCS	22.80		20	114	69 - 130		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	21.20		20	106	62 - 128		
1,2-Dibromoethane	106-93-4	LCS	21.70		20	108	77 - 121		
1,2-Dichlorobenzene	95-50-1	LCS	21.40		20	107	80 - 119		
1,2-Dichloroethane	107-06-2	LCS	20.30		20	102	73 - 128		
1,2-Dichloropropane	78-87-5	LCS	21.30		20	107	78 - 122		
1,3-Dichlorobenzene	541-73-1	LCS	21.50		20	108	80 - 119		
1,3-Dichloropropene, Total	542-75-6	LCS	44.80		40	112	75 - 124		
1,4-Dichlorobenzene	106-46-7	LCS	21.60		20	108	79 - 118		
2-Butanone	78-93-3	LCS	118		100	118	56 - 143		
2-Hexanone	591-78-6	LCS	118		100	118	57 - 139		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	114		100	114	67 - 130		
Acetone	67-64-1	LCS	136		100	136	39 - 160		
Benzene	71-43-2	LCS	21.80		20	109	79 - 120		
Bromochloromethane	74-97-5	LCS	22.20		20	111	78 - 123		
Bromodichloromethane	75-27-4	LCS	22.40		20	112	79 - 125		
Bromoform	75-25-2	LCS	21.70		20	109	66 - 130		
Bromomethane	74-83-9	LCS	21.80		20	109	53 - 141		
Carbon Disulfide	75-15-0	LCS	21.20		20	106	64 - 133		
Carbon Tetrachloride	56-23-5	LCS	21.60		20	108	72 - 136		
Chlorobenzene	108-90-7	LCS	21.80		20	109	82 - 118		
Chlorodibromomethane	124-48-1	LCS	22		20	110	74 - 126		
Chloroethane	75-00-3	LCS	24.70		20	123	60 - 138		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chloroform	67-66-3	LCS	21.50		20	108	79 - 124		
Chloromethane	74-87-3	LCS	20.60		20	103	50 - 139		
cis-1,2-Dichloroethene	156-59-2	LCS	22.10		20	110	78 - 123		
Cyclohexane	110-82-7	LCS	20.90		20	104	71 - 130		
Dichlorodifluoromethane	75-71-8	LCS	21.30		20	107	32 - 152		
Ethylbenzene	100-41-4	LCS	22		20	110	79 - 121		
Freon 113	76-13-1	LCS	21.70		20	109	70 - 136		
Iodomethane	74-88-4	LCS	16.90		20	84.6	69 - 131		
Isopropylbenzene	98-82-8	LCS	24.40		20	122	72 - 131		
Methyl acetate	79-20-9	LCS	21.70		20	109	56 - 136		
Methyl cyclohexane	108-87-2	LCS	20.60		20	103	72 - 132		
Methyl t-Butyl Ether	1634-04-4	LCS	22.20		20	111	71 - 124		
Methylene Chloride	75-09-2	LCS	21.70		20	109	74 - 124		
Styrene	100-42-5	LCS	22.30		20	111	78 - 123		
Tetrachloroethene	127-18-4	LCS	20.80		20	104	74 - 129		
Toluene	108-88-3	LCS	21.40		20	107	80 - 121		
Total Xylenes	1330-20-7	LCS	65.30		60	109	79 - 121		
trans-1,2-Dichloroethene	156-60-5	LCS	21.60		20	108	75 - 124		
Trichloroethene	79-01-6	LCS	20.70		20	104	79 - 123		
Trichlorofluoromethane	75-69-4	LCS	23.20		20	116	65 - 141		
Vinyl Chloride	75-01-4	LCS	22.30		20	111	58 - 137		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	30.90	30	103	81 - 118	
4-Bromofluorobenzene	460-00-4	LCS	29.50	30	98.3	85 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.70	30	99	80 - 119	
Toluene-d8	2037-26-5	LCS	30	30	99.9	89 - 112	

Matrix Spike 3856995 (MS) 3369360025 For QC Batch 1260753

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3856996 (MSD) 3369360025 For QC Batch 1260753

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	MS	23.70	0	20	118	74 - 131		
1,1,1-Trichloroethane	71-55-6	MSD	23.80	0	20	119	74 - 131	RPD 0.56 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	22.40	0	20	112	71 - 121		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.60	0	20	108	71 - 121	RPD 3.86 (Max-20)	
1,1,2-Trichloroethane	79-00-5	MS	21.40	0	20	107	80 - 119		
1,1,2-Trichloroethane	79-00-5	MSD	20.90	0	20	104	80 - 119	RPD 2.26 (Max-20)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1-Dichloroethane	75-34-3	MS	21.80	0	20	109	77 - 125		
1,1-Dichloroethane	75-34-3	MSD	22.20	0	20	111	77 - 125	RPD 1.69 (Max-20)	
1,1-Dichloroethene	75-35-4	MS	23.50	0	20	117	71 - 131		
1,1-Dichloroethene	75-35-4	MSD	23.90	0	20	120	71 - 131	RPD 2.06 (Max-20)	
1,2,3-Trichlorobenzene	87-61-6	MS	20.60	0	20	103	69 - 129		
1,2,3-Trichlorobenzene	87-61-6	MSD	20.40	0	20	102	69 - 129	RPD 1.32 (Max-20)	
1,2,4-Trichlorobenzene	120-82-1	MS	21.90	0	20	110	69 - 130		
1,2,4-Trichlorobenzene	120-82-1	MSD	21.80	0	20	109	69 - 130	RPD 0.35 (Max-20)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	20.20	0	20	101	62 - 128		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	19	0	20	95.2	62 - 128	RPD 5.81 (Max-20)	
1,2-Dibromoethane	106-93-4	MS	21.90	0	20	109	77 - 121		
1,2-Dibromoethane	106-93-4	MSD	20.60	0	20	103	77 - 121	RPD 6 (Max-20)	
1,2-Dichlorobenzene	95-50-1	MS	21.60	0	20	108	80 - 119		
1,2-Dichlorobenzene	95-50-1	MSD	21.20	0	20	106	80 - 119	RPD 2.14 (Max-20)	
1,2-Dichloroethane	107-06-2	MS	20.30	0	20	101	73 - 128		
1,2-Dichloroethane	107-06-2	MSD	20.60	0	20	103	73 - 128	RPD 1.63 (Max-20)	
1,2-Dichloropropane	78-87-5	MS	21.50	0	20	107	78 - 122		
1,2-Dichloropropane	78-87-5	MSD	21.70	0	20	108	78 - 122	RPD 1.04 (Max-20)	
1,3-Dichlorobenzene	541-73-1	MS	21.10	0	20	105	80 - 119		
1,3-Dichlorobenzene	541-73-1	MSD	20.90	0	20	104	80 - 119	RPD 0.81 (Max-20)	
1,3-Dichloropropene, Total	542-75-6	MS	43.10	0	40	108	75 - 124		
1,3-Dichloropropene, Total	542-75-6	MSD	41.60	0	40	104	75 - 124	RPD 3.46 (Max-20)	
1,4-Dichlorobenzene	106-46-7	MS	21.40	0	20	107	79 - 118		
1,4-Dichlorobenzene	106-46-7	MSD	20.70	0	20	103	79 - 118	RPD 3.36 (Max-20)	
2-Butanone	78-93-3	MS	88.50	0	100	88.5	56 - 143		
2-Butanone	78-93-3	MSD	103	0	100	103	56 - 143	RPD 14.60 (Max-20)	
2-Hexanone	591-78-6	MS	107	0	100	107	57 - 139		
2-Hexanone	591-78-6	MSD	102	0	100	102	57 - 139	RPD 4.70 (Max-20)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	110	0	100	110	67 - 130		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	104	0	100	104	67 - 130	RPD 4.78 (Max-20)	
Acetone	67-64-1	MS	102	0	100	102	39 - 160		
Acetone	67-64-1	MSD	102	0	100	102	39 - 160	RPD 0.21 (Max-20)	
Benzene	71-43-2	MS	22.20	0	20	111	79 - 120		
Benzene	71-43-2	MSD	22.50	0	20	112	79 - 120	RPD 1.21 (Max-20)	
Bromochloromethane	74-97-5	MS	22.50	0	20	113	78 - 123		
Bromochloromethane	74-97-5	MSD	23.10	0	20	116	78 - 123	RPD 2.81 (Max-20)	
Bromodichloromethane	75-27-4	MS	22	0	20	110	79 - 125		
Bromodichloromethane	75-27-4	MSD	22.60	0	20	113	79 - 125	RPD 2.72 (Max-20)	
Bromoform	75-25-2	MS	21.10	0	20	105	66 - 130		
Bromoform	75-25-2	MSD	20.40	0	20	102	66 - 130	RPD 3.49 (Max-20)	
Bromomethane	74-83-9	MS	13	0	20	64.9	53 - 141		
Bromomethane	74-83-9	MSD	16.20	0	20	81.2	53 - 141	RPD 22.30* (Max-20)	
Carbon Disulfide	75-15-0	MS	21.60	0.34	20	107	64 - 133		
Carbon Disulfide	75-15-0	MSD	22.50	0.34	20	111	64 - 133	RPD 3.75 (Max-20)	
Carbon Tetrachloride	56-23-5	MS	24.60	0	20	123	72 - 136		
Carbon Tetrachloride	56-23-5	MSD	27.80	0	20	139*	72 - 136	RPD 12.20 (Max-20)	
Chlorobenzene	108-90-7	MS	21.70	0	20	108	82 - 118		
Chlorobenzene	108-90-7	MSD	21	0	20	105	82 - 118	RPD 2.98 (Max-20)	
Chlorodibromomethane	124-48-1	MS	21.30	0	20	106	74 - 126		

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chlorodibromomethane	124-48-1	MSD	20.90	0	20	104	74 - 126	RPD 1.98 (Max-20)	
Chloroethane	75-00-3	MS	26.90	0	20	134	60 - 138		
Chloroethane	75-00-3	MSD	26.70	0	20	134	60 - 138	RPD 0.63 (Max-20)	
Chloroform	67-66-3	MS	22	0	20	110	79 - 124		
Chloroform	67-66-3	MSD	22.10	0	20	111	79 - 124	RPD 0.55 (Max-20)	
Chloromethane	74-87-3	MS	18.10	0	20	90.3	50 - 139		
Chloromethane	74-87-3	MSD	18.10	0	20	90.4	50 - 139	RPD 0.15 (Max-20)	
cis-1,2-Dichloroethene	156-59-2	MS	23.60	0.45	20	116	78 - 123		
cis-1,2-Dichloroethene	156-59-2	MSD	23.80	0.45	20	117	78 - 123	RPD 0.48 (Max-20)	
Cyclohexane	110-82-7	MS	23	0	20	115	71 - 130		
Cyclohexane	110-82-7	MSD	23.50	0	20	118	71 - 130	RPD 2.34 (Max-20)	
Dichlorodifluoromethane	75-71-8	MS	21.80	0	20	109	32 - 152		
Dichlorodifluoromethane	75-71-8	MSD	22.30	0	20	112	32 - 152	RPD 2.46 (Max-20)	
Ethylbenzene	100-41-4	MS	22.30	0	20	111	79 - 121		
Ethylbenzene	100-41-4	MSD	21.80	0	20	109	79 - 121	RPD 2.08 (Max-20)	
Freon 113	76-13-1	MS	23.60	0	20	118	70 - 136		
Freon 113	76-13-1	MSD	24.30	0	20	121	70 - 136	RPD 2.71 (Max-20)	
Iodomethane	74-88-4	MS	6.10	0	20	30.6*	69 - 131		
Iodomethane	74-88-4	MSD	9.90	0	20	49.4*	69 - 131	RPD 46.90* (Max-20)	
Isopropylbenzene	98-82-8	MS	25.20	0	20	126	72 - 131		
Isopropylbenzene	98-82-8	MSD	24.40	0	20	122	72 - 131	RPD 3.27 (Max-20)	
Methyl acetate	79-20-9	MS	18.90	0	20	94.4	56 - 136		
Methyl acetate	79-20-9	MSD	18.80	0	20	94	56 - 136	RPD 0.50 (Max-20)	
Methyl cyclohexane	108-87-2	MS	22	0	20	110	72 - 132		
Methyl cyclohexane	108-87-2	MSD	21.80	0	20	109	72 - 132	RPD 1.06 (Max-20)	
Methyl t-Butyl Ether	1634-04-4	MS	21.70	0	20	108	71 - 124		
Methyl t-Butyl Ether	1634-04-4	MSD	21.90	0	20	109	71 - 124	RPD 0.95 (Max-20)	
Methylene Chloride	75-09-2	MS	21.60	0	20	108	74 - 124		
Methylene Chloride	75-09-2	MSD	22.20	0	20	111	74 - 124	RPD 2.65 (Max-20)	
Styrene	100-42-5	MS	22.80	0	20	114	78 - 123		
Styrene	100-42-5	MSD	22	0	20	110	78 - 123	RPD 3.47 (Max-20)	
Tetrachloroethene	127-18-4	MS	20.30	0	20	101	74 - 129		
Tetrachloroethene	127-18-4	MSD	19.80	0	20	99.2	74 - 129	RPD 2.21 (Max-20)	
Toluene	108-88-3	MS	21.80	0	20	109	80 - 121		
Toluene	108-88-3	MSD	21.20	0	20	106	80 - 121	RPD 2.73 (Max-20)	
Total Xylenes	1330-20-7	MS	65.80	0	60	110	79 - 121		
Total Xylenes	1330-20-7	MSD	64	0	60	107	79 - 121	RPD 2.71 (Max-20)	
trans-1,2-Dichloroethene	156-60-5	MS	21.90	0	20	110	75 - 124		
trans-1,2-Dichloroethene	156-60-5	MSD	22.20	0	20	111	75 - 124	RPD 1.17 (Max-20)	
Trichloroethene	79-01-6	MS	21.70	0	20	108	79 - 123		
Trichloroethene	79-01-6	MSD	22.10	0	20	110	79 - 123	RPD 1.86 (Max-20)	
Trichlorofluoromethane	75-69-4	MS	24	0	20	120	65 - 141		
Trichlorofluoromethane	75-69-4	MSD	24.20	0	20	121	65 - 141	RPD 0.95 (Max-20)	
Vinyl Chloride	75-01-4	MS	22.20	0	20	111	58 - 137		
Vinyl Chloride	75-01-4	MSD	23	0	20	115	58 - 137	RPD 3.56 (Max-20)	

QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	30.60	30	102	81 - 118	
1,2-Dichloroethane-d4	17060-07-0	MSD	31.30	30	104	81 - 118	
4-Bromofluorobenzene	460-00-4	MS	29.20	30	97.5	85 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.20	30	97.4	85 - 114	
Dibromofluoromethane	1868-53-7	MS	29.30	30	97.6	80 - 119	
Dibromofluoromethane	1868-53-7	MSD	30.40	30	101	80 - 119	
Toluene-d8	2037-26-5	MS	28.40	30	94.6	89 - 112	
Toluene-d8	2037-26-5	MSD	29.10	30	96.9	89 - 112	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3369360001	SW3-15	N/A	N/A	N/A		SW846 8260C	1257043
3369360002	DUP-01-20240716	N/A	N/A	N/A		SW846 8260C	1257043
3369360003	PZ3-6D	N/A	N/A	N/A		SW846 8260C	1257043
3369360004	MW3-3DA	N/A	N/A	N/A		SW846 8260C	1257043
3369360005	SW3-3	N/A	N/A	N/A		SW846 8260C	1258273
3369360006	PZ3-3A	N/A	N/A	N/A		SW846 8260C	1258273
3369360007	MW3-4DA	N/A	N/A	N/A		SW846 8260C	1258273
3369360008	SW3-2	N/A	N/A	N/A		SW846 8260C	1258273
3369360009	SW99-10	N/A	N/A	N/A		SW846 8260C	1258273
3369360010	SW10-7	N/A	N/A	N/A		SW846 8260C	1258273
3369360011	SW10-6	N/A	N/A	N/A		SW846 8260C	1258273
3369360012	SW10-5	N/A	N/A	N/A		SW846 8260C	1258273
3369360013	MW10-3	N/A	N/A	N/A		SW846 8260C	1258273
3369360014	SW10-8	N/A	N/A	N/A		SW846 8260C	1258273
3369360015	PW10-2	N/A	N/A	N/A		SW846 8260C	1258273
3369360016	MW10-7	N/A	N/A	N/A		SW846 8260C	1258273
3369360017	PW10-1	N/A	N/A	N/A		SW846 8260C	1258273
3369360018	PZ10-7	N/A	N/A	N/A		SW846 8260C	1258273
3369360019	MW8-11D	N/A	N/A	N/A		SW846 8260C	1258273
3369360020	PW13-4D	N/A	N/A	N/A		SW846 8260C	1258273
3369360021	MW13-4D	N/A	N/A	N/A		SW846 8260C	1258273
3369360022	MW13-5D	N/A	N/A	N/A		SW846 8260C	1258273
3369360023	PW13-1	N/A	N/A	N/A		SW846 8260C	1260753
3369360024	RW5-1	N/A	N/A	N/A		SW846 8260C	1260753
3369360025	MW5-1DA	N/A	N/A	N/A		SW846 8260C	1260753
3369360026	MW5-6	N/A	N/A	N/A		SW846 8260C	1260753
3369360027	MW5-5D	N/A	N/A	N/A		SW846 8260C	1260753
3369360028	RW5-2	N/A	N/A	N/A		SW846 8260C	1260753
3369360029	RW5-4	N/A	N/A	N/A		SW846 8260C	1260753
3369360030	PZ3-8D	N/A	N/A	N/A		SW846 8260C	1260753
3369360031	PZ3-7D	N/A	N/A	N/A		SW846 8260C	1260753
3369360032	DUP-02-20240716	N/A	N/A	N/A		SW846 8260C	1260753
3369360033	DUP-03-20240716	N/A	N/A	N/A		SW846 8260C	1260753
3369360034	Trip Blank	N/A	N/A	N/A		SW846 8260C	1260753

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3369360
Logged By: MJE
PM: SJB
ALS Quote #:
1 of 4

Name: Arcadis
110 W. Fayette, Suite 300
Syracuse, NY 13202

Corey Averill
315-415-4394
Name/#: NFARS - 30036646

Use Order #:
[X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Required: Approved?
[X] corey.averill@arcadis.com

Container Type: CG
Container Size: 40mL
Preservative: HCl
Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	°G or C	**Matrix (See bottom of COC)	8260 VOCs									
						Enter Number of Containers Per Sample or Field Results Below.									
SW3-15	07/16/24	0730		G	GW	3									
DUP-01-20240716	07/16/24	—		G	GW	3									
PZ3-6D	07/16/24	0740		G	GW	3									
MW3-3DA	07/16/24	0750		G	GW	3									
SW3-3	07/16/24	1015		G	GW	9									
PZ3-3A	07/16/24	1030		G	GW	9									
MW3-4DA	07/16/24	1035		G	GW	3									
SW3-2	07/16/24	1045		G	GW	3									
SW99-10	07/16/24	0840		G	GW	3									
SW10-7	07/16/24	0905		G	GW	3									

Sample Collector: ALS Tech / (Client) ID:
Comments:

Temp Taken By: MJE Therm ID: 569 WO Temp (°C) 2°
Receipt Info completed by: MJE
WV Containers 0-6°C Y N (NA)
Cooler Custody Seals Intact Y N (NA) Deviations? (NO) YES
Sample Custody Seal Intact Y N (NA) If YES, list below.
Received on Ice (Y) N NA
Coolers & Samples Intact (Y) N
Correct Containers Provided (Y) N
Sample Label/COC Agree (Y) N
Adequate Sample Volumes (Y) N
VOA only: Trip Blank (Y) N NA
NJ ≤ 4 days? Y (N)
Courier/Tracking # 7063938935837063938935 12 Date/Tech
Client contact:
Sample(s) for Radiation testing? Y (N) Rad Screen (uCi)
Reportable SDWA Sample(s)? Y (N) New Source? Y (N)
SDWA State of Origin?
New Source Contact:
PWSID #
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
MS/MSD collected @ SW3-3 and PZ3-3A

Contains Short Hold Testing YES (NO)
Internal Use: If less than 48 hours - notify lab upon receipt

	Time		Relinquished By / Company Name		Received By / Company Name
7/24	1530	1	Arcadis	2	Fedex
7/24	925	3	Fedex	4	
		5		6	
		7		8	
		9		10	

Data Deliverables: [ ] Standard Lvl 1 [ ] CLP-like [ ] HSCA; [X] Standard Lvl 2 [ ] DOD [ ] Landfill; [ ] Standard Lvl 3 [ ] NJ RED [ ] NJ GW; [ ] Standard Lvl 4 [ ] NJ Full [ ] ____
EDDs: [ ] Excel Summary [ ] Equis [ ] Custom
Sample Disposal: [ ] Lab [X] Special [ ]
EDDS: Format Type
State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL ____ other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05.01.2024

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Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 2 of 4

ALS Quote #:

Name: Arcadis

Address: 110 W. Fayette, Suite 300, Syracuse, NY 13202

Project: Corey Averill

Phone #: 315-415-4394

Project Name/#: NFARS-30036646

P.O.:

Purchase Order #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.

Report Required: Approved?

Email? [X] corey.averill@arcadis.com

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Container Type	Container Size	Preservative	8260 VOCs	Enter Number of Containers Per Sample or Field Results Below.
1 SW10-6	07/16/24	0910		G	GW	CG	40mL	HCl	3	
2 SW10-5	07/16/24	0915		G	GW				3	
3 MW10-3	07/16/24	0920		G	GW				3	
4 SW10-8	07/16/24	0930		G	GW				3	
5 PW10-2	07/16/24	0940		G	GW				3	
6 MW10-7	07/16/24	0945		G	GW				3	
7 PW10-1	07/16/24	0950		G	GW				3	
8 PZ10-7	07/16/24	0955		G	GW				3	
9 MW8-11D	07/16/24	1055		G	GW				3	
10 PW13-4D	07/16/24	1120		G	GW				3	

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

Comments:

Circle Sample Collector: ALS Tech / Client

Name: ID:

Date:	Time	Relinquished By / Company Name		Received By / Company Name
7/16/24	1530	1 Arcadis	2	Fedex
7/17/24	925	3 Fedex	4	
		5	6	
		7	8	
		9	10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by:

WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N

Courier/Tracking #

Deviations? NO YES: If YES, list below

Client contact: Date/Tech

Sample(s) for Radiation testing? Y (N) Rad Screen (uCi)

Reportable SDWA Sample(s)? Y (N) New Source? Y (N)

SDWA State of Origin? New Source Contact:

PWSID #

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES (NO)

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [X] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ]

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

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Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

COC #: 3 of 4

ALS Quote #:

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Name: Arcadis

Address: 110 W. Fayette, Suite 300
Syracuse, NY 13202

Project: Corey Averill

Phone #: 315-415-4394

Project Name/#: NFARS-30036646

P.O.:

Purchase Order #:

TAT: [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Report Required: Approved?

Email? [X] corey.averill@arcadis.com

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	8260 VOCs	Container Type	Container Size	Preservative	Orthophosphate Filtered?	Hexavalent Chromium Filtered?
						ANALYSIS / METHOD REQUESTED					
1 MW13-4D	07/16/24	1125		G	GW	3	GG	40mL	HCl	Yes (No)	Yes (No)
2 MW13-5D	07/16/24	1130		G	GW	3					
3 PW13-1	07/16/24	1135		G	GW	3					
4 RW5-1	07/16/24	1145		G	GW	3					
5 MW5-1DA	07/16/24	1150		G	GW	9					
6 MW5-6	07/16/24	1215		G	GW	3					
7 MW5-5D	07/16/24	1220		G	GW	3					
8 RW5-2	07/16/24	1230		G	GW	3					
9 RW5-4	07/16/24	1235		G	GW	3					
10 PZ3-8D	07/16/24	1320		G	GW	3					

Enter Number of Containers Per Sample or Field Results Below.

Comments:

Circle Sample Collector: ALS Tech / Client

Name: ID:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
7/16/24	1530	1	Arcadis	2	Fedex
7/17/24	925	3	Fedex	4	
		5		6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N

Courier/Tracking #

Deviations? NO YES
If YES, list below

Client contact:
Date/Tech

Sample(s) for Radiation testing? Y (N)
Reportable SDWA Sample(s)? Y (N)
SDWA State of Origin?
PWSID #
PWS Contact: PWS Phone #:

Rad Screen (uCi)
New Source? Y (N)
New Source Contact:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

MS/MSD collected @ MW5-1DA

Contains Short Hold Testing YES (NO)

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [X] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 4 of 4

ALS Quote #:

t Name: Arcadis

ess: 110 W. Fayette, Suite 300
Syracuse, NY 13202

tact: Corey Averill

ne#: 315-415-4394

ject Name/#: NFARS - 30036646

To:

rchase Order #:

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

te Required: Approved?

ail? [X] corey.averill@arcadis.com

	Container Type	CG									
	Container Size	40mL									
	Preservative	HCl									

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	8260 VOCs	Enter Number of Containers Per Sample or Field Results Below.
1	PZ3-7D	07/16/24	1325		G	GW	3	
2	DUP-02-20240716	07/16/24	—		G	GW	3	
3	DUP-03-20240716	07/16/24	—		G	GW	3	
4	TRIPBLANK	—	—		G	TB	6	
5								
6								
7								
8								
9								
10								

Circle Sample Collector: ALS Tech / Client

Name: ID:

Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
7/16/24	1530	1	Arcadis	2	Fedex
7/17/24	925	3	Fedex	4	
		5		6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N

Courier/Tracking #

Deviations? NO YES
If YES, list below

Client contact:
Date/Tech

Sample(s) for Radiation testing? Y (N)
Reportable SDWA Sample(s)? Y (N)

Rad Screen (uCi)

New Source? Y (N)

New Source Contact:

SDWA State of Origin?

PWSID #

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES (NO)

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [X] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ]

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

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ALSI BOTTLE REQUEST FORM

Order ID:	240711032	Date Due:	07/11/24	Completed:	
		Time Due:	17:00		

Date Ordered:	07/11/24	Company Name:	ARCADIS
Time Ordered:	14:54	Requested By:	Adam Svensson
Order Taken By:	Kaleb Brown	Project Name/No.:	ARCADIS/QU802674 NFARS

Method of Delivery:	Fed Ex Ground	Additional Supplies	Labels Trip Blanks Project Specific Labels (See Notes) Chain of Custodies - 6 Coolers Custody Seals - 8
Address:	Adam Svensson 102 Fuller Ave Tonawanda, NY 14150		
Attn:	Residence		
Phone:	(716) 909-9063		

# of Bot.	# in Set	Size	Type	Preservation	Analyses
123	3	40 mL	C - Clear Glass	HCl	DOD 8260C
12	3	40 mL	C - Clear Glass	HCl	Trip Blank DOD 8260C

Special Notes	Please put together the following bottle order for the NFARS event: PN: 30036646 PM: Corey Averill 41 sets for VOCs (28 sets for monitoring wells including QA/QC, 11 sets for surface water samples including QA/QC and 2 extra in case of breakage) Please send the bottleware to Adam?s home address for delivery by July 15th	Sample Point ID's	

ID	Tracking Number	ID	Tracking Number	ID	Tracking Number

7/29/2024 10:31 AM

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For

ARCADIS US Inc

Project ACR593|NFARS 30036646
Workorder 3369360
Report ID 382889 on 1/23/2025 (Revised report. See Project Notations Section.)

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Jul 17, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

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ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Andy Vitolins - Arcadis
Erika Denkenberger - Arcadis
Katherine Clubine - Arcadis
Corey Averill - Arcadis

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

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Certificate of Analysis

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For

ARCADIS US Inc

Project ACR593|NFARS 30036646
Workorder 3369360
Report ID 382889 on 1/23/2025 (Revised report. See Project Notations Section.)

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Jul 17, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

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ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Andy Vitolins - Arcadis
Erika Denkenberger - Arcadis
Katherine Clubine - Arcadis
Corey Averill - Arcadis

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

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Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3369360001	SW3-15	Ground Water	07/16/2024 07:30	07/17/2024 09:25	CBC	Collected By Client
3369360002	DUP-01-20240716	Ground Water	07/16/2024 00:00	07/17/2024 09:25	CBC	Collected By Client
3369360003	PZ3-6D	Ground Water	07/16/2024 07:40	07/17/2024 09:25	CBC	Collected By Client
3369360004	MW3-3DA	Ground Water	07/16/2024 07:50	07/17/2024 09:25	CBC	Collected By Client
3369360005	SW3-3	Ground Water	07/16/2024 10:15	07/17/2024 09:25	CBC	Collected By Client
3369360006	PZ3-3A	Ground Water	07/16/2024 10:30	07/17/2024 09:25	CBC	Collected By Client
3369360007	MW3-4DA	Ground Water	07/16/2024 10:35	07/17/2024 09:25	CBC	Collected By Client
3369360008	SW3-2	Ground Water	07/16/2024 10:45	07/17/2024 09:25	CBC	Collected By Client
3369360009	SW99-10	Ground Water	07/16/2024 08:40	07/17/2024 09:25	CBC	Collected By Client
3369360010	SW10-7	Ground Water	07/16/2024 09:05	07/17/2024 09:25	CBC	Collected By Client
3369360011	SW10-6	Ground Water	07/16/2024 09:10	07/17/2024 09:25	CBC	Collected By Client
3369360012	SW10-5	Ground Water	07/16/2024 09:15	07/17/2024 09:25	CBC	Collected By Client
3369360013	MW10-3	Ground Water	07/16/2024 09:20	07/17/2024 09:25	CBC	Collected By Client
3369360014	SW10-8	Ground Water	07/16/2024 09:30	07/17/2024 09:25	CBC	Collected By Client
3369360015	PW10-2	Ground Water	07/16/2024 09:40	07/17/2024 09:25	CBC	Collected By Client
3369360016	MW10-7	Ground Water	07/16/2024 09:45	07/17/2024 09:25	CBC	Collected By Client
3369360017	PW10-1	Ground Water	07/16/2024 09:50	07/17/2024 09:25	CBC	Collected By Client
3369360018	PZ10-7	Ground Water	07/16/2024 09:55	07/17/2024 09:25	CBC	Collected By Client
3369360019	MW8-11D	Ground Water	07/16/2024 10:55	07/17/2024 09:25	CBC	Collected By Client
3369360020	PW13-4D	Ground Water	07/16/2024 11:20	07/17/2024 09:25	CBC	Collected By Client
3369360021	MW13-4D	Ground Water	07/16/2024 11:25	07/17/2024 09:25	CBC	Collected By Client
3369360022	MW13-5D	Ground Water	07/16/2024 11:30	07/17/2024 09:25	CBC	Collected By Client
3369360023	PW13-1	Ground Water	07/16/2024 11:35	07/17/2024 09:25	CBC	Collected By Client
3369360024	RW5-1	Ground Water	07/16/2024 11:45	07/17/2024 09:25	CBC	Collected By Client
3369360025	MW5-1DA	Ground Water	07/16/2024 11:50	07/17/2024 09:25	CBC	Collected By Client
3369360026	MW5-6	Ground Water	07/16/2024 12:15	07/17/2024 09:25	CBC	Collected By Client
3369360027	MW5-5D	Ground Water	07/16/2024 12:20	07/17/2024 09:25	CBC	Collected By Client
3369360028	RW5-2	Ground Water	07/16/2024 12:30	07/17/2024 09:25	CBC	Collected By Client
3369360029	RW5-4	Ground Water	07/16/2024 12:35	07/17/2024 09:25	CBC	Collected By Client
3369360030	PZ3-8D	Ground Water	07/16/2024 13:20	07/17/2024 09:25	CBC	Collected By Client
3369360031	PZ3-7D	Ground Water	07/16/2024 13:25	07/17/2024 09:25	CBC	Collected By Client
3369360032	DUP-02-20240716	Ground Water	07/16/2024 00:00	07/17/2024 09:25	CBC	Collected By Client
3369360033	DUP-03-20240716	Ground Water	07/16/2024 00:00	07/17/2024 09:25	CBC	Collected By Client
3369360034	Trip Blank	Ground Water	07/16/2024 00:00	07/17/2024 09:25	CBC	Collected By Client

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Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

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Project Notations

P1 This certificate of analysis was modified to include the Level IV data package request based on the email request from Corey Averill on 01/22/25. SJS

We're getting ready to prepare the 2024 Annual Report for NFARS. We have the attached lab reports, but I don't see that we ever received the EDDs. It looks like we forgot to note to split off 10% of the samples for Level IV data package. Would it be possible to provide Level IV data packages for the Site 13 wells (MW13-4D, MW13-5D, PW13-1, and PW13-4D) for each event? Sorry we didn't catch this previously.

Thanks,
Corey

Sample Notations

Lab ID	Sample ID

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Result Notations

Notation Ref.	
1	The initial calibration verification for method SW846 8260DOD was outside the control limits for the analyte iodomethane. The % Recovery was reported as 71.83% and the control limits were 80 to 120%.
2	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Bromomethane. The % Recovery was reported as 47.7 and the control limits were 53 to 141.
3	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Bromomethane. The RPD was reported as 24.4 and the upper control limit is 20.
4	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 156 and the control limits were 60 to 138.
5	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 147 and the control limits were 60 to 138.
6	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 43.3 and the control limits were 69 to 131.
7	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 52 and the control limits were 69 to 131.
8	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 166 and the control limits were 60 to 138.
9	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Chloroethane. The % Recovery was reported as 159 and the control limits were 60 to 138.
10	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 61.9 and the control limits were 69 to 131.
11	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 58.3 and the control limits were 69 to 131.
12	The ICV recovery was 71.83% (limits 80-120%) for method SW846 8260C for the analyte Iodomethane.
13	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Bromomethane. The RPD was reported as 22.3 and the upper control limit is 20.
14	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Carbon Tetrachloride. The % Recovery was reported as 139 and the control limits were 72 to 136.
15	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Iodomethane. The RPD was reported as 46.9 and the upper control limit is 20.
16	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 49.4 and the control limits were 69 to 131.
17	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 30.6 and the control limits were 69 to 131.

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Detected Results Summary

Client Sample ID	SW3-15	Collected	07/16/2024 07:30
Lab Sample ID	3369360001	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	4.4J	ug/L	5.0	3.8	1.6	SW846 8260C	#

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Detected Results Summary

Client Sample ID	DUP-01-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360002	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	4.5J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Iodomethane	0.50J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PZ3-6D	Collected	07/16/2024 07:40
Lab Sample ID	3369360003	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	8.5	ug/L	5.0	3.8	1.6	SW846 8260C	#
Iodomethane	0.43J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW3-3DA	Collected	07/16/2024 07:50
Lab Sample ID	3369360004	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	8.5	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	4.8	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	7.3	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PZ3-3A	Collected	07/16/2024 10:30
Lab Sample ID	3369360006	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	9.7	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	14.5	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	0.36J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	2.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	9.5	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW3-4DA	Collected	07/16/2024 10:35
Lab Sample ID	3369360007	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	8.9	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	6.0	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	4.1	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	SW10-7	Collected	07/16/2024 09:05
Lab Sample ID	3369360010	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.6J	ug/L	5.0	3.8	1.6	SW846 8260C	#

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Detected Results Summary

Client Sample ID	SW10-6	Collected	07/16/2024 09:10
Lab Sample ID	3369360011	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	0.51J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	SW10-5	Collected	07/16/2024 09:15
Lab Sample ID	3369360012	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Trichloroethene	0.90J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW10-3	Collected	07/16/2024 09:20
Lab Sample ID	3369360013	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	11.0	ug/L	5.0	3.8	1.6	SW846 8260C	#

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Detected Results Summary

Client Sample ID	SW10-8	Collected	07/16/2024 09:30
Lab Sample ID	3369360014	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	1.5	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PW10-2	Collected	07/16/2024 09:40
Lab Sample ID	3369360015	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	10.7	ug/L	5.0	3.8	1.6	SW846 8260C	#
Benzene	1.9	ug/L	1.0	0.75	0.33	SW846 8260C	#
Cyclohexane	0.82J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Iodomethane	0.68J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methyl cyclohexane	0.54J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW10-7	Collected	07/16/2024 09:45
Lab Sample ID	3369360016	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
2-Butanone	2.4J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Acetone	11.8	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	0.49J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	0.61J	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	1.0	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PW10-1	Collected	07/16/2024 09:50
Lab Sample ID	3369360017	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	10.2	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	0.50J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PZ10-7	Collected	07/16/2024 09:55
Lab Sample ID	3369360018	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	10.9	ug/L	5.0	3.8	1.6	SW846 8260C	#
Iodomethane	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PW13-4D	Collected	07/16/2024 11:20
Lab Sample ID	3369360020	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	7.4	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW13-4D	Collected	07/16/2024 11:25
Lab Sample ID	3369360021	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	5.5	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW13-5D	Collected	07/16/2024 11:30
Lab Sample ID	3369360022	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	16.6	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	3.7	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PW13-1	Collected	07/16/2024 11:35
Lab Sample ID	3369360023	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
1,4-Dichlorobenzene	0.50J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	0.53J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	5.3	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	RW5-1	Collected	07/16/2024 11:45
Lab Sample ID	3369360024	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.2J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	3.0	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	58.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Iodomethane	0.44J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	6.0	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	2.0	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	0.70J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	97.9	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW5-1DA	Collected	07/16/2024 11:50
Lab Sample ID	3369360025	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Carbon Disulfide	0.34J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.45J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW5-6	Collected	07/16/2024 12:15
Lab Sample ID	3369360026	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.8J	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	2.6	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	2.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	1.2	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	1.1	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW5-5D	Collected	07/16/2024 12:20
Lab Sample ID	3369360027	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
2-Butanone	4.8J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Acetone	4.8J	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	3.2	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	0.34J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	2.1	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	RW5-2	Collected	07/16/2024 12:30
Lab Sample ID	3369360028	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	13.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	2.2	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	26.8	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	RW5-4	Collected	07/16/2024 12:35
Lab Sample ID	3369360029	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	0.46J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	1.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	0.38J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PZ3-8D	Collected	07/16/2024 13:20
Lab Sample ID	3369360030	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	10.1	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	0.61J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	0.89J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PZ3-7D	Collected	07/16/2024 13:25
Lab Sample ID	3369360031	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
cis-1,2-Dichloroethene	7.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	3.1	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	DUP-02-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360032	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.6J	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	2.4	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	2.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	1.2	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	1.0	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	DUP-03-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360033	Lab Receipt	07/17/2024 09:25

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	9.9	ug/L	5.0	3.8	1.6	SW846 8260C	#
cis-1,2-Dichloroethene	7.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	3.2	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Results

Client Sample ID	SW3-15	Collected	07/16/2024 07:30
Lab Sample ID	3369360001	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
Acetone	4.4J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 21:01	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A

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Results

Client Sample ID	SW3-15	Collected	07/16/2024 07:30
Lab Sample ID	3369360001	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	07/18/2024 21:01	
4-Bromofluorobenzene	460-00-4	103%	85 – 114	07/18/2024 21:01	
Dibromofluoromethane	1868-53-7	98.2%	80 – 119	07/18/2024 21:01	
Toluene-d8	2037-26-5	100%	89 – 112	07/18/2024 21:01	

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Results

Client Sample ID	DUP-01-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360002	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
Acetone	4.5J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Iodomethane	0.50J	J,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 21:21	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A

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Results

Client Sample ID	DUP-01-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360002	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.1%	81 – 118	07/18/2024 21:21	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/18/2024 21:21	
Dibromofluoromethane	1868-53-7	97.7%	80 – 119	07/18/2024 21:21	
Toluene-d8	2037-26-5	101%	89 – 112	07/18/2024 21:21	

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Results

Client Sample ID	PZ3-6D	Collected	07/16/2024 07:40
Lab Sample ID	3369360003	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
Acetone	8.5	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Iodomethane	0.43J	J,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 21:41	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A

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Results

Client Sample ID	PZ3-6D	Collected	07/16/2024 07:40
Lab Sample ID	3369360003	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.9%	81 – 118	07/18/2024 21:41	
4-Bromofluorobenzene	460-00-4	98.4%	85 – 114	07/18/2024 21:41	
Dibromofluoromethane	1868-53-7	97.3%	80 – 119	07/18/2024 21:41	
Toluene-d8	2037-26-5	99.5%	89 – 112	07/18/2024 21:41	

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Results

Client Sample ID	MW3-3DA	Collected	07/16/2024 07:50
Lab Sample ID	3369360004	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
Acetone	8.5	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
cis-1,2-Dichloroethene	4.8	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 22:01	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A

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Results

Client Sample ID	MW3-3DA	Collected	07/16/2024 07:50
Lab Sample ID	3369360004	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Vinyl Chloride	7.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	07/18/2024 22:01	
4-Bromofluorobenzene	460-00-4	93.5%	85 – 114	07/18/2024 22:01	
Dibromofluoromethane	1868-53-7	96.7%	80 – 119	07/18/2024 22:01	
Toluene-d8	2037-26-5	96.3%	89 – 112	07/18/2024 22:01	

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Results

Client Sample ID	SW3-3	Collected	07/16/2024 10:15
Lab Sample ID	3369360005	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromomethane	0.75U	U,2,3,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chloroethane	0.75U	U,4,5,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Iodomethane	0.75U	U,1,6,7, P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 19:23	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A

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Results

Client Sample ID	SW3-3	Collected	07/16/2024 10:15
Lab Sample ID	3369360005	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 19:23	
4-Bromofluorobenzene	460-00-4	96.2%	85 – 114	07/19/2024 19:23	
Dibromofluoromethane	1868-53-7	96%	80 – 119	07/19/2024 19:23	
Toluene-d8	2037-26-5	99.5%	89 – 112	07/19/2024 19:23	

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Results

Client Sample ID	PZ3-3A	Collected	07/16/2024 10:30
Lab Sample ID	3369360006	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
Acetone	9.7	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chloroethane	0.75U	U,8,9,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chloroform	0.42J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
cis-1,2-Dichloroethene	14.5	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Iodomethane	0.75U	U,1,10,11,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 17:24	JTH	A
trans-1,2-Dichloroethene	0.36J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A

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Results

Client Sample ID	PZ3-3A	Collected	07/16/2024 10:30
Lab Sample ID	3369360006	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	2.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Vinyl Chloride	9.5	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	81 – 118	07/19/2024 17:24	
4-Bromofluorobenzene	460-00-4	99.2%	85 – 114	07/19/2024 17:24	
Dibromofluoromethane	1868-53-7	101%	80 – 119	07/19/2024 17:24	
Toluene-d8	2037-26-5	102%	89 – 112	07/19/2024 17:24	

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Results

Client Sample ID	MW3-4DA	Collected	07/16/2024 10:35
Lab Sample ID	3369360007	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
Acetone	8.9	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
cis-1,2-Dichloroethene	6.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 13:45	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A

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Results

Client Sample ID	MW3-4DA	Collected	07/16/2024 10:35
Lab Sample ID	3369360007	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Vinyl Chloride	4.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	07/19/2024 13:45	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 13:45	
Dibromofluoromethane	1868-53-7	97.8%	80 – 119	07/19/2024 13:45	
Toluene-d8	2037-26-5	99.9%	89 – 112	07/19/2024 13:45	

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Results

Client Sample ID	SW3-2	Collected	07/16/2024 10:45
Lab Sample ID	3369360008	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 18:24	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A

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Results

Client Sample ID	SW3-2	Collected	07/16/2024 10:45
Lab Sample ID	3369360008	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.9%	81 – 118	07/19/2024 18:24	
4-Bromofluorobenzene	460-00-4	95.8%	85 – 114	07/19/2024 18:24	
Dibromofluoromethane	1868-53-7	97%	80 – 119	07/19/2024 18:24	
Toluene-d8	2037-26-5	100%	89 – 112	07/19/2024 18:24	

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Results

Client Sample ID	SW99-10	Collected	07/16/2024 08:40
Lab Sample ID	3369360009	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 18:04	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A

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Results

Client Sample ID	SW99-10	Collected	07/16/2024 08:40
Lab Sample ID	3369360009	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 18:04	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 18:04	
Dibromofluoromethane	1868-53-7	98.9%	80 – 119	07/19/2024 18:04	
Toluene-d8	2037-26-5	105%	89 – 112	07/19/2024 18:04	

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Results

Client Sample ID	SW10-7	Collected	07/16/2024 09:05
Lab Sample ID	3369360010	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
Acetone	3.6J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 17:44	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A

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Results

Client Sample ID	SW10-7	Collected	07/16/2024 09:05
Lab Sample ID	3369360010	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 17:44	
4-Bromofluorobenzene	460-00-4	97.4%	85 – 114	07/19/2024 17:44	
Dibromofluoromethane	1868-53-7	96.4%	80 – 119	07/19/2024 17:44	
Toluene-d8	2037-26-5	97.8%	89 – 112	07/19/2024 17:44	

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Results

Client Sample ID	SW10-6	Collected	07/16/2024 09:10
Lab Sample ID	3369360011	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
cis-1,2-Dichloroethene	0.51J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 17:04	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A

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Results

Client Sample ID	SW10-6	Collected	07/16/2024 09:10
Lab Sample ID	3369360011	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.6%	81 – 118	07/19/2024 17:04	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	07/19/2024 17:04	
Dibromofluoromethane	1868-53-7	93.9%	80 – 119	07/19/2024 17:04	
Toluene-d8	2037-26-5	100%	89 – 112	07/19/2024 17:04	

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Results

Client Sample ID	SW10-5	Collected	07/16/2024 09:15
Lab Sample ID	3369360012	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 19:04	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A

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Results

Client Sample ID	SW10-5	Collected	07/16/2024 09:15
Lab Sample ID	3369360012	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.90J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.9%	81 – 118	07/19/2024 19:04	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 19:04	
Dibromofluoromethane	1868-53-7	96.4%	80 – 119	07/19/2024 19:04	
Toluene-d8	2037-26-5	99.2%	89 – 112	07/19/2024 19:04	

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Results

Client Sample ID	MW10-3	Collected	07/16/2024 09:20
Lab Sample ID	3369360013	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
Acetone	11.0	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 15:25	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A

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Results

Client Sample ID	MW10-3	Collected	07/16/2024 09:20
Lab Sample ID	3369360013	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	07/19/2024 15:25	
4-Bromofluorobenzene	460-00-4	96.6%	85 – 114	07/19/2024 15:25	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	07/19/2024 15:25	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 15:25	

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Results

Client Sample ID	SW10-8	Collected	07/16/2024 09:30
Lab Sample ID	3369360014	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
cis-1,2-Dichloroethene	1.5	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 18:44	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A

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Results

Client Sample ID	SW10-8	Collected	07/16/2024 09:30
Lab Sample ID	3369360014	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 18:44	
4-Bromofluorobenzene	460-00-4	92.4%	85 – 114	07/19/2024 18:44	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	07/19/2024 18:44	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 18:44	

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Results

Client Sample ID	PW10-2	Collected	07/16/2024 09:40
Lab Sample ID	3369360015	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
Acetone	10.7	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
Benzene	1.9	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Cyclohexane	0.82J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Iodomethane	0.68J	J,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methyl cyclohexane	0.54J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 14:45	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A

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Results

Client Sample ID	PW10-2	Collected	07/16/2024 09:40
Lab Sample ID	3369360015	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.6%	81 – 118	07/19/2024 14:45	
4-Bromofluorobenzene	460-00-4	93.5%	85 – 114	07/19/2024 14:45	
Dibromofluoromethane	1868-53-7	96.3%	80 – 119	07/19/2024 14:45	
Toluene-d8	2037-26-5	96.1%	89 – 112	07/19/2024 14:45	

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Results

Client Sample ID	MW10-7	Collected	07/16/2024 09:45
Lab Sample ID	3369360016	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
2-Butanone	2.4J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
Acetone	11.8	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
cis-1,2-Dichloroethene	0.49J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Toluene	0.61J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 15:05	JTH	A
trans-1,2-Dichloroethene	1.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A

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Results

Client Sample ID	MW10-7	Collected	07/16/2024 09:45
Lab Sample ID	3369360016	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95%	81 – 118	07/19/2024 15:05	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	07/19/2024 15:05	
Dibromofluoromethane	1868-53-7	94.2%	80 – 119	07/19/2024 15:05	
Toluene-d8	2037-26-5	97.6%	89 – 112	07/19/2024 15:05	

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Results

Client Sample ID	PW10-1	Collected	07/16/2024 09:50
Lab Sample ID	3369360017	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
Acetone	10.2	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Carbon Disulfide	0.50J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
cis-1,2-Dichloroethene	0.42J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 14:25	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A

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Results

Client Sample ID	PW10-1	Collected	07/16/2024 09:50
Lab Sample ID	3369360017	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.4%	81 – 118	07/19/2024 14:25	
4-Bromofluorobenzene	460-00-4	96.8%	85 – 114	07/19/2024 14:25	
Dibromofluoromethane	1868-53-7	96.1%	80 – 119	07/19/2024 14:25	
Toluene-d8	2037-26-5	97.5%	89 – 112	07/19/2024 14:25	

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Results

Client Sample ID	PZ10-7	Collected	07/16/2024 09:55
Lab Sample ID	3369360018	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
Acetone	10.9	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Iodomethane	0.42J	J,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 14:05	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A

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Results

Client Sample ID	PZ10-7	Collected	07/16/2024 09:55
Lab Sample ID	3369360018	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	81 – 118	07/19/2024 14:05	
4-Bromofluorobenzene	460-00-4	99.8%	85 – 114	07/19/2024 14:05	
Dibromofluoromethane	1868-53-7	98.9%	80 – 119	07/19/2024 14:05	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 14:05	

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Results

Client Sample ID	MW8-11D	Collected	07/16/2024 10:55
Lab Sample ID	3369360019	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 15:45	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A

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Results

Client Sample ID	MW8-11D	Collected	07/16/2024 10:55
Lab Sample ID	3369360019	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.6%	81 – 118	07/19/2024 15:45	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	07/19/2024 15:45	
Dibromofluoromethane	1868-53-7	95%	80 – 119	07/19/2024 15:45	
Toluene-d8	2037-26-5	98.8%	89 – 112	07/19/2024 15:45	

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Results

Client Sample ID	PW13-4D	Collected	07/16/2024 11:20
Lab Sample ID	3369360020	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
cis-1,2-Dichloroethene	7.4	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 16:05	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A

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Results

Client Sample ID	PW13-4D	Collected	07/16/2024 11:20
Lab Sample ID	3369360020	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.8%	81 – 118	07/19/2024 16:05	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	07/19/2024 16:05	
Dibromofluoromethane	1868-53-7	97.7%	80 – 119	07/19/2024 16:05	
Toluene-d8	2037-26-5	99.9%	89 – 112	07/19/2024 16:05	

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Results

Client Sample ID	MW13-4D	Collected	07/16/2024 11:25
Lab Sample ID	3369360021	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
cis-1,2-Dichloroethene	5.5	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 16:24	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A

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Results

Client Sample ID	MW13-4D	Collected	07/16/2024 11:25
Lab Sample ID	3369360021	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.4%	81 – 118	07/19/2024 16:24	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 16:24	
Dibromofluoromethane	1868-53-7	96.5%	80 – 119	07/19/2024 16:24	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 16:24	

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Results

Client Sample ID	MW13-5D	Collected	07/16/2024 11:30
Lab Sample ID	3369360022	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
cis-1,2-Dichloroethene	16.6	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Iodomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 16:44	JTH	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A

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Results

Client Sample ID	MW13-5D	Collected	07/16/2024 11:30
Lab Sample ID	3369360022	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Vinyl Chloride	3.7	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.1%	81 – 118	07/19/2024 16:44	
4-Bromofluorobenzene	460-00-4	95.7%	85 – 114	07/19/2024 16:44	
Dibromofluoromethane	1868-53-7	96.9%	80 – 119	07/19/2024 16:44	
Toluene-d8	2037-26-5	96%	89 – 112	07/19/2024 16:44	

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Results

Client Sample ID	PW13-1	Collected	07/16/2024 11:35
Lab Sample ID	3369360023	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,4-Dichlorobenzene	0.50J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Iodomethane	0.75U	U,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 12:53	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A

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Results

Client Sample ID	PW13-1	Collected	07/16/2024 11:35
Lab Sample ID	3369360023	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.53J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Vinyl Chloride	5.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.8%	81 – 118	07/25/2024 12:53	
4-Bromofluorobenzene	460-00-4	94.7%	85 – 114	07/25/2024 12:53	
Dibromofluoromethane	1868-53-7	95.9%	80 – 119	07/25/2024 12:53	
Toluene-d8	2037-26-5	97%	89 – 112	07/25/2024 12:53	

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Results

Client Sample ID	RW5-1	Collected	07/16/2024 11:45
Lab Sample ID	3369360024	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
Acetone	3.2J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Carbon Disulfide	3.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
cis-1,2-Dichloroethene	58.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Iodomethane	0.44J	J,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Toluene	6.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 13:13	ILY	A
trans-1,2-Dichloroethene	2.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A

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Results

Client Sample ID	RW5-1	Collected	07/16/2024 11:45
Lab Sample ID	3369360024	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.70J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Vinyl Chloride	97.9	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.6%	81 – 118	07/25/2024 13:13	
4-Bromofluorobenzene	460-00-4	99.7%	85 – 114	07/25/2024 13:13	
Dibromofluoromethane	1868-53-7	96%	80 – 119	07/25/2024 13:13	
Toluene-d8	2037-26-5	97.6%	89 – 112	07/25/2024 13:13	

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Results

Client Sample ID	MW5-1DA	Collected	07/16/2024 11:50
Lab Sample ID	3369360025	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromomethane	0.75U	U,13,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Carbon Disulfide	0.34J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Carbon Tetrachloride	0.75U	U,14,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
cis-1,2-Dichloroethene	0.45J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Iodomethane	0.75U	U,12,15,16,17,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 13:33	ILY	A

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Results

Client Sample ID	MW5-1DA	Collected	07/16/2024 11:50
Lab Sample ID	3369360025	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99%	81 – 118	07/25/2024 13:33	
4-Bromofluorobenzene	460-00-4	96.4%	85 – 114	07/25/2024 13:33	
Dibromofluoromethane	1868-53-7	97.2%	80 – 119	07/25/2024 13:33	
Toluene-d8	2037-26-5	97.2%	89 – 112	07/25/2024 13:33	

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Results

Client Sample ID	MW5-6	Collected	07/16/2024 12:15
Lab Sample ID	3369360026	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
Acetone	3.8J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
cis-1,2-Dichloroethene	2.6	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Iodomethane	0.75U	U,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Toluene	2.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 13:52	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A

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Results

Client Sample ID	MW5-6	Collected	07/16/2024 12:15
Lab Sample ID	3369360026	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	1.2	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Vinyl Chloride	1.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.7%	81 – 118	07/25/2024 13:52	
4-Bromofluorobenzene	460-00-4	99.3%	85 – 114	07/25/2024 13:52	
Dibromofluoromethane	1868-53-7	94.2%	80 – 119	07/25/2024 13:52	
Toluene-d8	2037-26-5	96.8%	89 – 112	07/25/2024 13:52	

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Results

Client Sample ID	MW5-5D	Collected	07/16/2024 12:20
Lab Sample ID	3369360027	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
2-Butanone	4.8J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
Acetone	4.8J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
cis-1,2-Dichloroethene	3.2	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Iodomethane	0.75U	U,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Toluene	0.34J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 14:12	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A

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Results

Client Sample ID	MW5-5D	Collected	07/16/2024 12:20
Lab Sample ID	3369360027	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	2.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.7%	81 – 118	07/25/2024 14:12	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/25/2024 14:12	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	07/25/2024 14:12	
Toluene-d8	2037-26-5	99.9%	89 – 112	07/25/2024 14:12	

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Results

Client Sample ID	RW5-2	Collected	07/16/2024 12:30
Lab Sample ID	3369360028	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
cis-1,2-Dichloroethene	13.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Iodomethane	0.75U	U,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Toluene	2.2	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 14:32	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A

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Results

Client Sample ID	RW5-2	Collected	07/16/2024 12:30
Lab Sample ID	3369360028	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Vinyl Chloride	26.8	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.7%	81 – 118	07/25/2024 14:32	
4-Bromofluorobenzene	460-00-4	96.6%	85 – 114	07/25/2024 14:32	
Dibromofluoromethane	1868-53-7	98.3%	80 – 119	07/25/2024 14:32	
Toluene-d8	2037-26-5	98.9%	89 – 112	07/25/2024 14:32	

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Results

Client Sample ID	RW5-4	Collected	07/16/2024 12:35
Lab Sample ID	3369360029	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
cis-1,2-Dichloroethene	0.46J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Iodomethane	0.75U	U,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Toluene	1.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 14:52	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A

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Results

Client Sample ID	RW5-4	Collected	07/16/2024 12:35
Lab Sample ID	3369360029	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Vinyl Chloride	0.38J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.5%	81 – 118	07/25/2024 14:52	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/25/2024 14:52	
Dibromofluoromethane	1868-53-7	96.7%	80 – 119	07/25/2024 14:52	
Toluene-d8	2037-26-5	99.2%	89 – 112	07/25/2024 14:52	

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Results

Client Sample ID	PZ3-8D	Collected	07/16/2024 13:20
Lab Sample ID	3369360030	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
Acetone	10.1	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
cis-1,2-Dichloroethene	0.61J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Iodomethane	0.75U	U,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 15:12	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A

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Results

Client Sample ID	PZ3-8D	Collected	07/16/2024 13:20
Lab Sample ID	3369360030	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Vinyl Chloride	0.89J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.6%	81 – 118	07/25/2024 15:12	
4-Bromofluorobenzene	460-00-4	96.3%	85 – 114	07/25/2024 15:12	
Dibromofluoromethane	1868-53-7	95.9%	80 – 119	07/25/2024 15:12	
Toluene-d8	2037-26-5	96%	89 – 112	07/25/2024 15:12	

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Results

Client Sample ID	PZ3-7D	Collected	07/16/2024 13:25
Lab Sample ID	3369360031	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
cis-1,2-Dichloroethene	7.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Iodomethane	0.75U	U,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 15:32	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A

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Results

Client Sample ID	PZ3-7D	Collected	07/16/2024 13:25
Lab Sample ID	3369360031	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Vinyl Chloride	3.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.2%	81 – 118	07/25/2024 15:32	
4-Bromofluorobenzene	460-00-4	98.8%	85 – 114	07/25/2024 15:32	
Dibromofluoromethane	1868-53-7	93%	80 – 119	07/25/2024 15:32	
Toluene-d8	2037-26-5	95.9%	89 – 112	07/25/2024 15:32	

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Results

Client Sample ID	DUP-02-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360032	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
Acetone	3.6J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
cis-1,2-Dichloroethene	2.4	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Iodomethane	0.75U	U,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Toluene	2.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 15:52	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A

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Results

Client Sample ID	DUP-02-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360032	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	1.2	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Vinyl Chloride	1.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99%	81 – 118	07/25/2024 15:52	
4-Bromofluorobenzene	460-00-4	98.9%	85 – 114	07/25/2024 15:52	
Dibromofluoromethane	1868-53-7	96.6%	80 – 119	07/25/2024 15:52	
Toluene-d8	2037-26-5	98.7%	89 – 112	07/25/2024 15:52	

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Results

Client Sample ID	DUP-03-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360033	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
Acetone	9.9	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
cis-1,2-Dichloroethene	7.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Iodomethane	0.75U	U,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 16:12	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A

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Results

Client Sample ID	DUP-03-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360033	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Vinyl Chloride	3.2	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96%	81 – 118	07/25/2024 16:12	
4-Bromofluorobenzene	460-00-4	99.9%	85 – 114	07/25/2024 16:12	
Dibromofluoromethane	1868-53-7	94%	80 – 119	07/25/2024 16:12	
Toluene-d8	2037-26-5	98.9%	89 – 112	07/25/2024 16:12	

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Results

Client Sample ID	Trip Blank	Collected	07/16/2024 00:00
Lab Sample ID	3369360034	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Iodomethane	0.75U	U,12,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 12:33	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A

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Results

Client Sample ID	Trip Blank	Collected	07/16/2024 00:00
Lab Sample ID	3369360034	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.6%	81 – 118	07/25/2024 12:33	
4-Bromofluorobenzene	460-00-4	104%	85 – 114	07/25/2024 12:33	
Dibromofluoromethane	1868-53-7	96.9%	80 – 119	07/25/2024 12:33	
Toluene-d8	2037-26-5	101%	89 – 112	07/25/2024 12:33	

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Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3369360001	SW3-15	SW846 8260C	N/A	
3369360002	DUP-01-20240716	SW846 8260C	N/A	
3369360003	PZ3-6D	SW846 8260C	N/A	
3369360004	MW3-3DA	SW846 8260C	N/A	
3369360005	SW3-3	SW846 8260C	N/A	
3369360006	PZ3-3A	SW846 8260C	N/A	
3369360007	MW3-4DA	SW846 8260C	N/A	
3369360008	SW3-2	SW846 8260C	N/A	
3369360009	SW99-10	SW846 8260C	N/A	
3369360010	SW10-7	SW846 8260C	N/A	
3369360011	SW10-6	SW846 8260C	N/A	
3369360012	SW10-5	SW846 8260C	N/A	
3369360013	MW10-3	SW846 8260C	N/A	
3369360014	SW10-8	SW846 8260C	N/A	
3369360015	PW10-2	SW846 8260C	N/A	
3369360016	MW10-7	SW846 8260C	N/A	
3369360017	PW10-1	SW846 8260C	N/A	
3369360018	PZ10-7	SW846 8260C	N/A	
3369360019	MW8-11D	SW846 8260C	N/A	
3369360020	PW13-4D	SW846 8260C	N/A	
3369360021	MW13-4D	SW846 8260C	N/A	
3369360022	MW13-5D	SW846 8260C	N/A	
3369360023	PW13-1	SW846 8260C	N/A	
3369360024	RW5-1	SW846 8260C	N/A	
3369360025	MW5-1DA	SW846 8260C	N/A	
3369360026	MW5-6	SW846 8260C	N/A	
3369360027	MW5-5D	SW846 8260C	N/A	
3369360028	RW5-2	SW846 8260C	N/A	
3369360029	RW5-4	SW846 8260C	N/A	
3369360030	PZ3-8D	SW846 8260C	N/A	
3369360031	PZ3-7D	SW846 8260C	N/A	
3369360032	DUP-02-20240716	SW846 8260C	N/A	
3369360033	DUP-03-20240716	SW846 8260C	N/A	
3369360034	Trip Blank	SW846 8260C	N/A	

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	1257043	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260C
Tech.			

Associated Samples

3369360001 3369360002 3369360003 3369360004

Method Blank 3854114 (MB) Created on 07/18/2024 14:28 For QC Batch 1257043

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
1,1,1-Trichloroethane	71-55-6	BLK	0.75U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	0.75U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	0.75U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	0.75U	ug/L	1.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	0.75U	ug/L	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	2.5U	ug/L	5.0	U
1,2-Dibromoethane	106-93-4	BLK	0.75U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	0.75U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	0.75U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	0.75U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	0.75U	ug/L	1.0	U
1,3-Dichloropropene, Total	542-75-6	BLK	1.5U	ug/L	2.0	U
1,4-Dichlorobenzene	106-46-7	BLK	0.75U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	3.8U	ug/L	5.0	U
2-Hexanone	591-78-6	BLK	3.8U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	3.8U	ug/L	5.0	U
Acetone	67-64-1	BLK	3.8U	ug/L	5.0	U
Benzene	71-43-2	BLK	0.75U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	0.75U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	0.75U	ug/L	1.0	U
Bromoform	75-25-2	BLK	0.75U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	0.75U	ug/L	1.0	U
Carbon Disulfide	75-15-0	BLK	0.75U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	0.75U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	0.75U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	0.75U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	0.75U	ug/L	1.0	U
Chloroform	67-66-3	BLK	0.75U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	0.75U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	0.75U	ug/L	1.0	U
Cyclohexane	110-82-7	BLK	0.75U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	0.75U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	0.75U	ug/L	1.0	U
Freon 113	76-13-1	BLK	0.75U	ug/L	1.0	U
Iodomethane	74-88-4	BLK	0.75U	ug/L	1.0	U
Isopropylbenzene	98-82-8	BLK	0.75U	ug/L	1.0	U
Methyl acetate	79-20-9	BLK	0.75U	ug/L	1.0	U

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VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Methyl cyclohexane	108-87-2	BLK	0.75U	ug/L	1.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	0.75U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	0.75U	ug/L	1.0	U
Styrene	100-42-5	BLK	0.75U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	0.75U	ug/L	1.0	U
Toluene	108-88-3	BLK	0.75U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	2.3U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	0.75U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	0.75U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	0.75U	ug/L	1.0	U
Vinyl Chloride	75-01-4	BLK	0.75U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	30.3	30	101	81 - 118	
4-Bromofluorobenzene	460-00-4	BLK	30	30	100	85 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.7	30	99.1	80 - 119	
Toluene-d8	2037-26-5	BLK	30.4	30	101	89 - 112	

Lab Control Standard 3854115 (LCS) Created on 07/18/2024 14:28 For QC Batch 1257043

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	LCS	21.4		20	107	74 - 131		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	21.3		20	106	71 - 121		
1,1,2-Trichloroethane	79-00-5	LCS	21.2		20	106	80 - 119		
1,1-Dichloroethane	75-34-3	LCS	20.5		20	102	77 - 125		
1,1-Dichloroethene	75-35-4	LCS	21.4		20	107	71 - 131		
1,2,3-Trichlorobenzene	87-61-6	LCS	19.9		20	99.5	69 - 129		
1,2,4-Trichlorobenzene	120-82-1	LCS	21.2		20	106	69 - 130		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	19.9		20	99.4	62 - 128		
1,2-Dibromoethane	106-93-4	LCS	20		20	100	77 - 121		
1,2-Dichlorobenzene	95-50-1	LCS	19.9		20	99.7	80 - 119		
1,2-Dichloroethane	107-06-2	LCS	20.1		20	101	73 - 128		
1,2-Dichloropropane	78-87-5	LCS	20.5		20	103	78 - 122		
1,3-Dichlorobenzene	541-73-1	LCS	19.5		20	97.3	80 - 119		
1,3-Dichloropropene, Total	542-75-6	LCS	42		40	105	75 - 124		
1,4-Dichlorobenzene	106-46-7	LCS	19.7		20	98.5	79 - 118		
2-Butanone	78-93-3	LCS	94.5		100	94.5	56 - 143		
2-Hexanone	591-78-6	LCS	111		100	111	57 - 139		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	109		100	109	67 - 130		
Acetone	67-64-1	LCS	119		100	119	39 - 160		
Benzene	71-43-2	LCS	20.3		20	102	79 - 120		
Bromochloromethane	74-97-5	LCS	21.4		20	107	78 - 123		

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VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Bromodichloromethane	75-27-4	LCS	21.2		20	106	79 - 125		
Bromoform	75-25-2	LCS	20.7		20	104	66 - 130		
Bromomethane	74-83-9	LCS	21.4		20	107	53 - 141		
Carbon Disulfide	75-15-0	LCS	20.3		20	102	64 - 133		
Carbon Tetrachloride	56-23-5	LCS	20.4		20	102	72 - 136		
Chlorobenzene	108-90-7	LCS	20.3		20	101	82 - 118		
Chlorodibromomethane	124-48-1	LCS	21.2		20	106	74 - 126		
Chloroethane	75-00-3	LCS	20.8		20	104	60 - 138		
Chloroform	67-66-3	LCS	20.4		20	102	79 - 124		
Chloromethane	74-87-3	LCS	19.3		20	96.7	50 - 139		
cis-1,2-Dichloroethene	156-59-2	LCS	21		20	105	78 - 123		
Cyclohexane	110-82-7	LCS	20.9		20	105	71 - 130		
Dichlorodifluoromethane	75-71-8	LCS	20.5		20	102	32 - 152		
Ethylbenzene	100-41-4	LCS	20.4		20	102	79 - 121		
Freon 113	76-13-1	LCS	21.8		20	109	70 - 136		
Iodomethane	74-88-4	LCS	14.4		20	71.8	69 - 131		
Isopropylbenzene	98-82-8	LCS	22.5		20	113	72 - 131		
Methyl acetate	79-20-9	LCS	19.9		20	99.7	56 - 136		
Methyl cyclohexane	108-87-2	LCS	20.5		20	103	72 - 132		
Methyl t-Butyl Ether	1634-04-4	LCS	21.5		20	108	71 - 124		
Methylene Chloride	75-09-2	LCS	20.5		20	102	74 - 124		
Styrene	100-42-5	LCS	20.9		20	104	78 - 123		
Tetrachloroethene	127-18-4	LCS	20		20	100	74 - 129		
Toluene	108-88-3	LCS	20.2		20	101	80 - 121		
Total Xylenes	1330-20-7	LCS	61		60	102	79 - 121		
trans-1,2-Dichloroethene	156-60-5	LCS	20.3		20	101	75 - 124		
Trichloroethene	79-01-6	LCS	20.2		20	101	79 - 123		
Trichlorofluoromethane	75-69-4	LCS	21.4		20	107	65 - 141		
Vinyl Chloride	75-01-4	LCS	20.4		20	102	58 - 137		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	30.4	30	101	81 - 118	
4-Bromofluorobenzene	460-00-4	LCS	30.4	30	101	85 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.9	30	103	80 - 119	
Toluene-d8	2037-26-5	LCS	30.8	30	103	89 - 112	

QC Batch

QC Batch	1258273	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260C
Tech.			

Associated Samples

3369360005	3369360006	3369360007	3369360008
3369360009	3369360010	3369360011	3369360012
3369360013	3369360014	3369360015	3369360016
3369360017	3369360018	3369360019	3369360020
3369360021	3369360022		

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

Method Blank 3854499 (MB) Created on 07/19/2024 13:04 For QC Batch 1258273

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
1,1,1-Trichloroethane	71-55-6	BLK	0.75U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	0.75U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	0.75U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	0.75U	ug/L	1.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	0.75U	ug/L	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	2.5U	ug/L	5.0	U
1,2-Dibromoethane	106-93-4	BLK	0.75U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	0.75U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	0.75U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	0.75U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	0.75U	ug/L	1.0	U
1,3-Dichloropropene, Total	542-75-6	BLK	1.5U	ug/L	2.0	U
1,4-Dichlorobenzene	106-46-7	BLK	0.75U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	3.8U	ug/L	5.0	U
2-Hexanone	591-78-6	BLK	3.8U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	3.8U	ug/L	5.0	U
Acetone	67-64-1	BLK	3.8U	ug/L	5.0	U
Benzene	71-43-2	BLK	0.75U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	0.75U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	0.75U	ug/L	1.0	U
Bromoform	75-25-2	BLK	0.75U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	0.75U	ug/L	1.0	U
Carbon Disulfide	75-15-0	BLK	0.75U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	0.75U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	0.75U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	0.75U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	0.75U	ug/L	1.0	U
Chloroform	67-66-3	BLK	0.75U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	0.75U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	0.75U	ug/L	1.0	U
Cyclohexane	110-82-7	BLK	0.75U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	0.75U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	0.75U	ug/L	1.0	U
Freon 113	76-13-1	BLK	0.75U	ug/L	1.0	U
Iodomethane	74-88-4	BLK	0.75U	ug/L	1.0	U
Isopropylbenzene	98-82-8	BLK	0.75U	ug/L	1.0	U
Methyl acetate	79-20-9	BLK	0.75U	ug/L	1.0	U
Methyl cyclohexane	108-87-2	BLK	0.75U	ug/L	1.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	0.75U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	0.75U	ug/L	1.0	U
Styrene	100-42-5	BLK	0.75U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	0.75U	ug/L	1.0	U
Toluene	108-88-3	BLK	0.75U	ug/L	1.0	U

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Total Xylenes	1330-20-7	BLK	2.3U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	0.75U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	0.75U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	0.75U	ug/L	1.0	U
Vinyl Chloride	75-01-4	BLK	0.75U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	29.9	30	99.6	81 - 118	
4-Bromofluorobenzene	460-00-4	BLK	30.2	30	101	85 - 114	
Dibromofluoromethane	1868-53-7	BLK	28.8	30	95.9	80 - 119	
Toluene-d8	2037-26-5	BLK	30.2	30	101	89 - 112	

Lab Control Standard 3854500 (LCS) Created on 07/19/2024 13:04 For QC Batch 1258273

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	LCS	21.7		20	109	74 - 131		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	23.1		20	115	71 - 121		
1,1,2-Trichloroethane	79-00-5	LCS	21.6		20	108	80 - 119		
1,1-Dichloroethane	75-34-3	LCS	20.8		20	104	77 - 125		
1,1-Dichloroethene	75-35-4	LCS	20.6		20	103	71 - 131		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.4		20	107	69 - 129		
1,2,4-Trichlorobenzene	120-82-1	LCS	23.1		20	115	69 - 130		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	21.6		20	108	62 - 128		
1,2-Dibromoethane	106-93-4	LCS	20.6		20	103	77 - 121		
1,2-Dichlorobenzene	95-50-1	LCS	21.7		20	108	80 - 119		
1,2-Dichloroethane	107-06-2	LCS	21.1		20	105	73 - 128		
1,2-Dichloropropane	78-87-5	LCS	21.5		20	108	78 - 122		
1,3-Dichlorobenzene	541-73-1	LCS	21.2		20	106	80 - 119		
1,3-Dichloropropene, Total	542-75-6	LCS	43.6		40	109	75 - 124		
1,4-Dichlorobenzene	106-46-7	LCS	21.5		20	107	79 - 118		
2-Butanone	78-93-3	LCS	119		100	119	56 - 143		
2-Hexanone	591-78-6	LCS	117		100	117	57 - 139		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	114		100	114	67 - 130		
Acetone	67-64-1	LCS	131		100	131	39 - 160		
Benzene	71-43-2	LCS	21		20	105	79 - 120		
Bromochloromethane	74-97-5	LCS	22.2		20	111	78 - 123		
Bromodichloromethane	75-27-4	LCS	22.8		20	114	79 - 125		
Bromoform	75-25-2	LCS	22.6		20	113	66 - 130		
Bromomethane	74-83-9	LCS	20.1		20	100	53 - 141		
Carbon Disulfide	75-15-0	LCS	18		20	89.8	64 - 133		
Carbon Tetrachloride	56-23-5	LCS	22.5		20	112	72 - 136		
Chlorobenzene	108-90-7	LCS	20.6		20	103	82 - 118		

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chlorodibromomethane	124-48-1	LCS	21.8		20	109	74 - 126		
Chloroethane	75-00-3	LCS	21.2		20	106	60 - 138		
Chloroform	67-66-3	LCS	21.6		20	108	79 - 124		
Chloromethane	74-87-3	LCS	19.3		20	96.7	50 - 139		
cis-1,2-Dichloroethene	156-59-2	LCS	21.9		20	109	78 - 123		
Cyclohexane	110-82-7	LCS	19.7		20	98.6	71 - 130		
Dichlorodifluoromethane	75-71-8	LCS	20.5		20	102	32 - 152		
Ethylbenzene	100-41-4	LCS	20.5		20	102	79 - 121		
Freon 113	76-13-1	LCS	20.4		20	102	70 - 136		
Iodomethane	74-88-4	LCS	17.1		20	85.6	69 - 131		
Isopropylbenzene	98-82-8	LCS	23.7		20	118	72 - 131		
Methyl acetate	79-20-9	LCS	21.5		20	108	56 - 136		
Methyl cyclohexane	108-87-2	LCS	19.1		20	95.5	72 - 132		
Methyl t-Butyl Ether	1634-04-4	LCS	22.3		20	111	71 - 124		
Methylene Chloride	75-09-2	LCS	21		20	105	74 - 124		
Styrene	100-42-5	LCS	22.7		20	113	78 - 123		
Tetrachloroethene	127-18-4	LCS	19.9		20	99.4	74 - 129		
Toluene	108-88-3	LCS	20.2		20	101	80 - 121		
Total Xylenes	1330-20-7	LCS	62.6		60	104	79 - 121		
trans-1,2-Dichloroethene	156-60-5	LCS	20.5		20	102	75 - 124		
Trichloroethene	79-01-6	LCS	20.6		20	103	79 - 123		
Trichlorofluoromethane	75-69-4	LCS	21.8		20	109	65 - 141		
Vinyl Chloride	75-01-4	LCS	20.9		20	104	58 - 137		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	32.3	30	108	81 - 118	
4-Bromofluorobenzene	460-00-4	LCS	29.5	30	98.3	85 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.8	30	103	80 - 119	
Toluene-d8	2037-26-5	LCS	29	30	96.8	89 - 112	

Matrix Spike 3854550 (MS) 3369360005 For QC Batch 1258273

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3854551 (MSD) 3369360005 For QC Batch 1258273

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	MS	22.9	0	20	115	74 - 131		
1,1,1-Trichloroethane	71-55-6	MSD	23.8	0	20	119	74 - 131	RPD 3.88 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	22.4	0	20	112	71 - 121		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	23	0	20	115	71 - 121	RPD 2.53 (Max-20)	

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VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,2-Trichloroethane	79-00-5	MS	20.5	0	20	102	80 - 119		
1,1,2-Trichloroethane	79-00-5	MSD	21.6	0	20	108	80 - 119	RPD 5.45 (Max-20)	
1,1-Dichloroethane	75-34-3	MS	21.7	0	20	108	77 - 125		
1,1-Dichloroethane	75-34-3	MSD	22	0	20	110	77 - 125	RPD 1.60 (Max-20)	
1,1-Dichloroethene	75-35-4	MS	24.3	0	20	121	71 - 131		
1,1-Dichloroethene	75-35-4	MSD	24.5	0	20	122	71 - 131	RPD 0.83 (Max-20)	
1,2,3-Trichlorobenzene	87-61-6	MS	20.4	0	20	102	69 - 129		
1,2,3-Trichlorobenzene	87-61-6	MSD	21.6	0	20	108	69 - 129	RPD 5.90 (Max-20)	
1,2,4-Trichlorobenzene	120-82-1	MS	21.7	0	20	109	69 - 130		
1,2,4-Trichlorobenzene	120-82-1	MSD	22.3	0	20	111	69 - 130	RPD 2.47 (Max-20)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	20.2	0	20	101	62 - 128		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	20.9	0	20	104	62 - 128	RPD 3.03 (Max-20)	
1,2-Dibromoethane	106-93-4	MS	22	0	20	110	77 - 121		
1,2-Dibromoethane	106-93-4	MSD	22.1	0	20	110	77 - 121	RPD 0.07 (Max-20)	
1,2-Dichlorobenzene	95-50-1	MS	20.8	0	20	104	80 - 119		
1,2-Dichlorobenzene	95-50-1	MSD	21.9	0	20	109	80 - 119	RPD 4.98 (Max-20)	
1,2-Dichloroethane	107-06-2	MS	20.2	0	20	101	73 - 128		
1,2-Dichloroethane	107-06-2	MSD	20.8	0	20	104	73 - 128	RPD 2.76 (Max-20)	
1,2-Dichloropropane	78-87-5	MS	21.1	0	20	105	78 - 122		
1,2-Dichloropropane	78-87-5	MSD	21.6	0	20	108	78 - 122	RPD 2.49 (Max-20)	
1,3-Dichlorobenzene	541-73-1	MS	20.6	0	20	103	80 - 119		
1,3-Dichlorobenzene	541-73-1	MSD	21.3	0	20	107	80 - 119	RPD 3.19 (Max-20)	
1,3-Dichloropropene, Total	542-75-6	MS	40.9	0	40	102	75 - 124		
1,3-Dichloropropene, Total	542-75-6	MSD	42.3	0	40	106	75 - 124	RPD 3.34 (Max-20)	
1,4-Dichlorobenzene	106-46-7	MS	20.5	0	20	102	79 - 118		
1,4-Dichlorobenzene	106-46-7	MSD	21.2	0	20	106	79 - 118	RPD 3.18 (Max-20)	
2-Butanone	78-93-3	MS	101	0	100	101	56 - 143		
2-Butanone	78-93-3	MSD	104	0	100	104	56 - 143	RPD 3.51 (Max-20)	
2-Hexanone	591-78-6	MS	105	0	100	105	57 - 139		
2-Hexanone	591-78-6	MSD	108	0	100	108	57 - 139	RPD 3.12 (Max-20)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	106	0	100	106	67 - 130		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	109	0	100	109	67 - 130	RPD 3.22 (Max-20)	
Acetone	67-64-1	MS	101	0	100	101	39 - 160		
Acetone	67-64-1	MSD	100	0	100	100	39 - 160	RPD 0.29 (Max-20)	
Benzene	71-43-2	MS	21.9	0	20	110	79 - 120		
Benzene	71-43-2	MSD	22.3	0	20	111	79 - 120	RPD 1.66 (Max-20)	
Bromochloromethane	74-97-5	MS	21.7	0	20	109	78 - 123		
Bromochloromethane	74-97-5	MSD	22.6	0	20	113	78 - 123	RPD 3.86 (Max-20)	
Bromodichloromethane	75-27-4	MS	21.9	0	20	109	79 - 125		
Bromodichloromethane	75-27-4	MSD	22.6	0	20	113	79 - 125	RPD 3.22 (Max-20)	
Bromoform	75-25-2	MS	20.9	0	20	104	66 - 130		
Bromoform	75-25-2	MSD	21.2	0	20	106	66 - 130	RPD 1.76 (Max-20)	
Bromomethane	74-83-9	MS	9.5	0	20	47.7*	53 - 141		
Bromomethane	74-83-9	MSD	12.2	0	20	60.9	53 - 141	RPD 24.40* (Max-20)	
Carbon Disulfide	75-15-0	MS	22.4	0	20	112	64 - 133		
Carbon Disulfide	75-15-0	MSD	23.2	0	20	116	64 - 133	RPD 3.31 (Max-20)	
Carbon Tetrachloride	56-23-5	MS	23.5	0	20	117	72 - 136		
Carbon Tetrachloride	56-23-5	MSD	23.8	0	20	119	72 - 136	RPD 1.60 (Max-20)	
Chlorobenzene	108-90-7	MS	20.4	0	20	102	82 - 118		

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chlorobenzene	108-90-7	MSD	21.1	0	20	106	82 - 118	RPD 3.59 (Max-20)	
Chlorodibromomethane	124-48-1	MS	20.5	0	20	102	74 - 126		
Chlorodibromomethane	124-48-1	MSD	21.1	0	20	105	74 - 126	RPD 2.99 (Max-20)	
Chloroethane	75-00-3	MS	31.1	0	20	156*	60 - 138		
Chloroethane	75-00-3	MSD	29.3	0	20	147*	60 - 138	RPD 5.95 (Max-20)	
Chloroform	67-66-3	MS	21.4	0	20	107	79 - 124		
Chloroform	67-66-3	MSD	22.3	0	20	111	79 - 124	RPD 4.15 (Max-20)	
Chloromethane	74-87-3	MS	15.9	0	20	79.3	50 - 139		
Chloromethane	74-87-3	MSD	17.5	0	20	87.6	50 - 139	RPD 10 (Max-20)	
cis-1,2-Dichloroethene	156-59-2	MS	22.2	0	20	111	78 - 123		
cis-1,2-Dichloroethene	156-59-2	MSD	22.7	0	20	113	78 - 123	RPD 2.03 (Max-20)	
Cyclohexane	110-82-7	MS	22.7	0	20	113	71 - 130		
Cyclohexane	110-82-7	MSD	23.5	0	20	117	71 - 130	RPD 3.43 (Max-20)	
Dichlorodifluoromethane	75-71-8	MS	19.5	0	20	97.3	32 - 152		
Dichlorodifluoromethane	75-71-8	MSD	22.9	0	20	114	32 - 152	RPD 16.20 (Max-20)	
Ethylbenzene	100-41-4	MS	20.3	0	20	101	79 - 121		
Ethylbenzene	100-41-4	MSD	21.4	0	20	107	79 - 121	RPD 5.61 (Max-20)	
Freon 113	76-13-1	MS	24.1	0	20	120	70 - 136		
Freon 113	76-13-1	MSD	24.3	0	20	121	70 - 136	RPD 0.88 (Max-20)	
Iodomethane	74-88-4	MS	8.7	0	20	43.3*	69 - 131		
Iodomethane	74-88-4	MSD	10.4	0	20	52*	69 - 131	RPD 18.10 (Max-20)	
Isopropylbenzene	98-82-8	MS	24.6	0	20	123	72 - 131		
Isopropylbenzene	98-82-8	MSD	25.3	0	20	126	72 - 131	RPD 2.83 (Max-20)	
Methyl acetate	79-20-9	MS	18.4	0	20	92	56 - 136		
Methyl acetate	79-20-9	MSD	18.3	0	20	91.7	56 - 136	RPD 0.31 (Max-20)	
Methyl cyclohexane	108-87-2	MS	21.6	0	20	108	72 - 132		
Methyl cyclohexane	108-87-2	MSD	22.2	0	20	111	72 - 132	RPD 2.56 (Max-20)	
Methyl t-Butyl Ether	1634-04-4	MS	21.3	0	20	107	71 - 124		
Methyl t-Butyl Ether	1634-04-4	MSD	21.9	0	20	110	71 - 124	RPD 2.67 (Max-20)	
Methylene Chloride	75-09-2	MS	21.3	0	20	107	74 - 124		
Methylene Chloride	75-09-2	MSD	22	0	20	110	74 - 124	RPD 3.16 (Max-20)	
Styrene	100-42-5	MS	21.7	0	20	108	78 - 123		
Styrene	100-42-5	MSD	22.6	0	20	113	78 - 123	RPD 4.07 (Max-20)	
Tetrachloroethene	127-18-4	MS	19.7	0	20	98.3	74 - 129		
Tetrachloroethene	127-18-4	MSD	19.9	0	20	99.3	74 - 129	RPD 1.01 (Max-20)	
Toluene	108-88-3	MS	20.7	0	20	103	80 - 121		
Toluene	108-88-3	MSD	21.5	0	20	107	80 - 121	RPD 3.64 (Max-20)	
Total Xylenes	1330-20-7	MS	61.2	0	60	102	79 - 121		
Total Xylenes	1330-20-7	MSD	64	0	60	107	79 - 121	RPD 4.38 (Max-20)	
trans-1,2-Dichloroethene	156-60-5	MS	22	0	20	110	75 - 124		
trans-1,2-Dichloroethene	156-60-5	MSD	22.2	0	20	111	75 - 124	RPD 1.26 (Max-20)	
Trichloroethene	79-01-6	MS	21.6	0	20	108	79 - 123		
Trichloroethene	79-01-6	MSD	22.3	0	20	111	79 - 123	RPD 2.77 (Max-20)	
Trichlorofluoromethane	75-69-4	MS	20.5	0	20	103	65 - 141		
Trichlorofluoromethane	75-69-4	MSD	24	0	20	120	65 - 141	RPD 15.50 (Max-20)	
Vinyl Chloride	75-01-4	MS	19.5	0	20	97.7	58 - 137		
Vinyl Chloride	75-01-4	MSD	22.4	0	20	112	58 - 137	RPD 13.80 (Max-20)	

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	30.8	30	103	81 - 118	
1,2-Dichloroethane-d4	17060-07-0	MSD	31.5	30	105	81 - 118	
4-Bromofluorobenzene	460-00-4	MS	31.3	30	104	85 - 114	
4-Bromofluorobenzene	460-00-4	MSD	30.3	30	101	85 - 114	
Dibromofluoromethane	1868-53-7	MS	29.5	30	98.4	80 - 119	
Dibromofluoromethane	1868-53-7	MSD	30	30	99.9	80 - 119	
Toluene-d8	2037-26-5	MS	28.9	30	96.3	89 - 112	
Toluene-d8	2037-26-5	MSD	29.4	30	97.9	89 - 112	

Matrix Spike 3854552 (MS) 3369360006 For QC Batch 1258273

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3854553 (MSD) 3369360006 For QC Batch 1258273

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	MS	23.2	0	20	116	74 - 131		
1,1,1-Trichloroethane	71-55-6	MSD	23.3	0	20	116	74 - 131	RPD 0.25 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	22.5	0	20	112	71 - 121		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	22.7	0	20	113	71 - 121	RPD 0.93 (Max-20)	
1,1,2-Trichloroethane	79-00-5	MS	21.5	0	20	108	80 - 119		
1,1,2-Trichloroethane	79-00-5	MSD	21.1	0	20	105	80 - 119	RPD 2.07 (Max-20)	
1,1-Dichloroethane	75-34-3	MS	22	0	20	110	77 - 125		
1,1-Dichloroethane	75-34-3	MSD	21.7	0	20	109	77 - 125	RPD 1.06 (Max-20)	
1,1-Dichloroethene	75-35-4	MS	24.5	0	20	122	71 - 131		
1,1-Dichloroethene	75-35-4	MSD	24.3	0	20	121	71 - 131	RPD 0.83 (Max-20)	
1,2,3-Trichlorobenzene	87-61-6	MS	21.2	0	20	106	69 - 129		
1,2,3-Trichlorobenzene	87-61-6	MSD	21.1	0	20	105	69 - 129	RPD 0.54 (Max-20)	
1,2,4-Trichlorobenzene	120-82-1	MS	22.1	0	20	111	69 - 130		
1,2,4-Trichlorobenzene	120-82-1	MSD	22.4	0	20	112	69 - 130	RPD 1.34 (Max-20)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	21.4	0	20	107	62 - 128		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	20.1	0	20	101	62 - 128	RPD 6.06 (Max-20)	
1,2-Dibromoethane	106-93-4	MS	22.5	0	20	113	77 - 121		
1,2-Dibromoethane	106-93-4	MSD	21.9	0	20	109	77 - 121	RPD 3.02 (Max-20)	
1,2-Dichlorobenzene	95-50-1	MS	21.3	0	20	107	80 - 119		
1,2-Dichlorobenzene	95-50-1	MSD	21.5	0	20	107	80 - 119	RPD 0.67 (Max-20)	
1,2-Dichloroethane	107-06-2	MS	20.4	0	20	102	73 - 128		
1,2-Dichloroethane	107-06-2	MSD	20.6	0	20	103	73 - 128	RPD 1.05 (Max-20)	
1,2-Dichloropropane	78-87-5	MS	21.5	0	20	107	78 - 122		
1,2-Dichloropropane	78-87-5	MSD	21.4	0	20	107	78 - 122	RPD 0.61 (Max-20)	
1,3-Dichlorobenzene	541-73-1	MS	21.2	0	20	106	80 - 119		
1,3-Dichlorobenzene	541-73-1	MSD	21	0	20	105	80 - 119	RPD 0.67 (Max-20)	
1,3-Dichloropropene, Total	542-75-6	MS	42.9	0	40	107	75 - 124		
1,3-Dichloropropene, Total	542-75-6	MSD	41.4	0	40	103	75 - 124	RPD 3.60 (Max-20)	

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,4-Dichlorobenzene	106-46-7	MS	20.9	0	20	105	79 - 118		
1,4-Dichlorobenzene	106-46-7	MSD	20.9	0	20	104	79 - 118	RPD 0.14 (Max-20)	
2-Butanone	78-93-3	MS	102	0	100	102	56 - 143		
2-Butanone	78-93-3	MSD	102	0	100	102	56 - 143	RPD 0.57 (Max-20)	
2-Hexanone	591-78-6	MS	108	0	100	108	57 - 139		
2-Hexanone	591-78-6	MSD	106	0	100	106	57 - 139	RPD 2.25 (Max-20)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	109	0	100	109	67 - 130		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	107	0	100	107	67 - 130	RPD 1.56 (Max-20)	
Acetone	67-64-1	MS	108	9.70	100	98.6	39 - 160		
Acetone	67-64-1	MSD	110	9.70	100	101	39 - 160	RPD 1.89 (Max-20)	
Benzene	71-43-2	MS	22.2	0	20	111	79 - 120		
Benzene	71-43-2	MSD	22.1	0	20	111	79 - 120	RPD 0.11 (Max-20)	
Bromochloromethane	74-97-5	MS	22.4	0	20	112	78 - 123		
Bromochloromethane	74-97-5	MSD	22.1	0	20	111	78 - 123	RPD 1.17 (Max-20)	
Bromodichloromethane	75-27-4	MS	22.5	0	20	112	79 - 125		
Bromodichloromethane	75-27-4	MSD	22.2	0	20	111	79 - 125	RPD 1.20 (Max-20)	
Bromoform	75-25-2	MS	20.5	0	20	102	66 - 130		
Bromoform	75-25-2	MSD	21	0	20	105	66 - 130	RPD 2.34 (Max-20)	
Bromomethane	74-83-9	MS	12.6	0	20	63.2	53 - 141		
Bromomethane	74-83-9	MSD	13	0	20	65.2	53 - 141	RPD 3.07 (Max-20)	
Carbon Disulfide	75-15-0	MS	24.1	0	20	120	64 - 133		
Carbon Disulfide	75-15-0	MSD	23.6	0	20	118	64 - 133	RPD 1.82 (Max-20)	
Carbon Tetrachloride	56-23-5	MS	24.2	0	20	121	72 - 136		
Carbon Tetrachloride	56-23-5	MSD	24	0	20	120	72 - 136	RPD 0.80 (Max-20)	
Chlorobenzene	108-90-7	MS	21.6	0.33	20	107	82 - 118		
Chlorobenzene	108-90-7	MSD	21	0.33	20	104	82 - 118	RPD 2.80 (Max-20)	
Chlorodibromomethane	124-48-1	MS	21.3	0	20	106	74 - 126		
Chlorodibromomethane	124-48-1	MSD	20.8	0	20	104	74 - 126	RPD 2 (Max-20)	
Chloroethane	75-00-3	MS	33.2	0	20	166*	60 - 138		
Chloroethane	75-00-3	MSD	31.7	0	20	159*	60 - 138	RPD 4.53 (Max-20)	
Chloroform	67-66-3	MS	22.2	0.42	20	109	79 - 124		
Chloroform	67-66-3	MSD	21.9	0.42	20	107	79 - 124	RPD 1.47 (Max-20)	
Chloromethane	74-87-3	MS	17.9	0	20	89.7	50 - 139		
Chloromethane	74-87-3	MSD	16.4	0	20	82.2	50 - 139	RPD 8.77 (Max-20)	
cis-1,2-Dichloroethene	156-59-2	MS	37	14.50	20	113	78 - 123		
cis-1,2-Dichloroethene	156-59-2	MSD	35.7	14.50	20	106	78 - 123	RPD 3.59 (Max-20)	
Cyclohexane	110-82-7	MS	23.4	0	20	117	71 - 130		
Cyclohexane	110-82-7	MSD	22	0	20	110	71 - 130	RPD 5.99 (Max-20)	
Dichlorodifluoromethane	75-71-8	MS	22.7	0	20	113	32 - 152		
Dichlorodifluoromethane	75-71-8	MSD	21.9	0	20	110	32 - 152	RPD 3.53 (Max-20)	
Ethylbenzene	100-41-4	MS	21.5	0	20	108	79 - 121		
Ethylbenzene	100-41-4	MSD	21	0	20	105	79 - 121	RPD 2.55 (Max-20)	
Freon 113	76-13-1	MS	23.9	0	20	119	70 - 136		
Freon 113	76-13-1	MSD	22.4	0	20	112	70 - 136	RPD 6.44 (Max-20)	
Iodomethane	74-88-4	MS	12.4	0	20	61.9*	69 - 131		
Iodomethane	74-88-4	MSD	11.7	0	20	58.3*	69 - 131	RPD 6.10 (Max-20)	
Isopropylbenzene	98-82-8	MS	25	0	20	125	72 - 131		
Isopropylbenzene	98-82-8	MSD	24.9	0	20	124	72 - 131	RPD 0.68 (Max-20)	
Methyl acetate	79-20-9	MS	17.5	0	20	87.5	56 - 136		

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Methyl acetate	79-20-9	MSD	18.4	0	20	91.9	56 - 136	RPD 4.93 (Max-20)	
Methyl cyclohexane	108-87-2	MS	22	0	20	110	72 - 132		
Methyl cyclohexane	108-87-2	MSD	21.1	0	20	106	72 - 132	RPD 4.25 (Max-20)	
Methyl t-Butyl Ether	1634-04-4	MS	21.8	0	20	109	71 - 124		
Methyl t-Butyl Ether	1634-04-4	MSD	21.5	0	20	108	71 - 124	RPD 1.32 (Max-20)	
Methylene Chloride	75-09-2	MS	21.9	0	20	109	74 - 124		
Methylene Chloride	75-09-2	MSD	21.6	0	20	108	74 - 124	RPD 1.08 (Max-20)	
Styrene	100-42-5	MS	22.5	0	20	113	78 - 123		
Styrene	100-42-5	MSD	22.9	0	20	115	78 - 123	RPD 1.86 (Max-20)	
Tetrachloroethene	127-18-4	MS	20.2	0	20	101	74 - 129		
Tetrachloroethene	127-18-4	MSD	19.6	0	20	97.9	74 - 129	RPD 3.09 (Max-20)	
Toluene	108-88-3	MS	21.4	0	20	107	80 - 121		
Toluene	108-88-3	MSD	21	0	20	105	80 - 121	RPD 1.59 (Max-20)	
Total Xylenes	1330-20-7	MS	64.2	0	60	107	79 - 121		
Total Xylenes	1330-20-7	MSD	62.4	0	60	104	79 - 121	RPD 2.81 (Max-20)	
trans-1,2-Dichloroethene	156-60-5	MS	22.7	0.36	20	111	75 - 124		
trans-1,2-Dichloroethene	156-60-5	MSD	22.2	0.36	20	109	75 - 124	RPD 1.84 (Max-20)	
Trichloroethene	79-01-6	MS	24.1	2.30	20	109	79 - 123		
Trichloroethene	79-01-6	MSD	24.3	2.30	20	110	79 - 123	RPD 0.93 (Max-20)	
Trichlorofluoromethane	75-69-4	MS	24.2	0	20	121	65 - 141		
Trichlorofluoromethane	75-69-4	MSD	23.3	0	20	116	65 - 141	RPD 3.69 (Max-20)	
Vinyl Chloride	75-01-4	MS	32.4	9.50	20	114	58 - 137		
Vinyl Chloride	75-01-4	MSD	30.9	9.50	20	107	58 - 137	RPD 4.81 (Max-20)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	31.4	30	105	81 - 118	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.5	30	102	81 - 118	
4-Bromofluorobenzene	460-00-4	MS	28.5	30	94.9	85 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.4	30	98	85 - 114	
Dibromofluoromethane	1868-53-7	MS	30.2	30	101	80 - 119	
Dibromofluoromethane	1868-53-7	MSD	29.2	30	97.2	80 - 119	
Toluene-d8	2037-26-5	MS	28.7	30	95.6	89 - 112	
Toluene-d8	2037-26-5	MSD	28.4	30	94.5	89 - 112	

QC Batch

QC Batch	1260753	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260C
Tech.			

Associated Samples

3369360023	3369360024	3369360025	3369360026
3369360027	3369360028	3369360029	3369360030
3369360031	3369360032	3369360033	3369360034

Method Blank 3856991 (MB) Created on 07/25/2024 12:51 For QC Batch 1260753

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
1,1,1-Trichloroethane	71-55-6	BLK	0.75U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	0.75U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	0.75U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	0.75U	ug/L	1.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	0.75U	ug/L	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	2.5U	ug/L	5.0	U
1,2-Dibromoethane	106-93-4	BLK	0.75U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	0.75U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	0.75U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	0.75U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	0.75U	ug/L	1.0	U
1,3-Dichloropropene, Total	542-75-6	BLK	1.5U	ug/L	2.0	U
1,4-Dichlorobenzene	106-46-7	BLK	0.75U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	3.8U	ug/L	5.0	U
2-Hexanone	591-78-6	BLK	3.8U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	3.8U	ug/L	5.0	U
Acetone	67-64-1	BLK	3.8U	ug/L	5.0	U
Benzene	71-43-2	BLK	0.75U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	0.75U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	0.75U	ug/L	1.0	U
Bromoform	75-25-2	BLK	0.75U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	0.75U	ug/L	1.0	U
Carbon Disulfide	75-15-0	BLK	0.75U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	0.75U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	0.75U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	0.75U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	0.75U	ug/L	1.0	U
Chloroform	67-66-3	BLK	0.75U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	0.75U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	0.75U	ug/L	1.0	U
Cyclohexane	110-82-7	BLK	0.75U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	0.75U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	0.75U	ug/L	1.0	U
Freon 113	76-13-1	BLK	0.75U	ug/L	1.0	U
Iodomethane	74-88-4	BLK	0.75U	ug/L	1.0	U
Isopropylbenzene	98-82-8	BLK	0.75U	ug/L	1.0	U
Methyl acetate	79-20-9	BLK	0.75U	ug/L	1.0	U
Methyl cyclohexane	108-87-2	BLK	0.75U	ug/L	1.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	0.75U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	0.75U	ug/L	1.0	U
Styrene	100-42-5	BLK	0.75U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	0.75U	ug/L	1.0	U
Toluene	108-88-3	BLK	0.75U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	2.3U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	0.75U	ug/L	1.0	U

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Trichloroethene	79-01-6	BLK	0.75U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	0.75U	ug/L	1.0	U
Vinyl Chloride	75-01-4	BLK	0.75U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	30.2	30	101	81 - 118	
4-Bromofluorobenzene	460-00-4	BLK	29.5	30	98.3	85 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.4	30	98	80 - 119	
Toluene-d8	2037-26-5	BLK	31.1	30	104	89 - 112	

Lab Control Standard 3856992 (LCS) Created on 07/25/2024 12:51 For QC Batch 1260753

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	LCS	21.9		20	110	74 - 131		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	23		20	115	71 - 121		
1,1,2-Trichloroethane	79-00-5	LCS	21.9		20	110	80 - 119		
1,1-Dichloroethane	75-34-3	LCS	21.1		20	106	77 - 125		
1,1-Dichloroethene	75-35-4	LCS	22.1		20	111	71 - 131		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.5		20	108	69 - 129		
1,2,4-Trichlorobenzene	120-82-1	LCS	22.8		20	114	69 - 130		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	21.2		20	106	62 - 128		
1,2-Dibromoethane	106-93-4	LCS	21.7		20	108	77 - 121		
1,2-Dichlorobenzene	95-50-1	LCS	21.4		20	107	80 - 119		
1,2-Dichloroethane	107-06-2	LCS	20.3		20	102	73 - 128		
1,2-Dichloropropane	78-87-5	LCS	21.3		20	107	78 - 122		
1,3-Dichlorobenzene	541-73-1	LCS	21.5		20	108	80 - 119		
1,3-Dichloropropene, Total	542-75-6	LCS	44.8		40	112	75 - 124		
1,4-Dichlorobenzene	106-46-7	LCS	21.6		20	108	79 - 118		
2-Butanone	78-93-3	LCS	118		100	118	56 - 143		
2-Hexanone	591-78-6	LCS	118		100	118	57 - 139		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	114		100	114	67 - 130		
Acetone	67-64-1	LCS	136		100	136	39 - 160		
Benzene	71-43-2	LCS	21.8		20	109	79 - 120		
Bromochloromethane	74-97-5	LCS	22.2		20	111	78 - 123		
Bromodichloromethane	75-27-4	LCS	22.4		20	112	79 - 125		
Bromoform	75-25-2	LCS	21.7		20	109	66 - 130		
Bromomethane	74-83-9	LCS	21.8		20	109	53 - 141		
Carbon Disulfide	75-15-0	LCS	21.2		20	106	64 - 133		
Carbon Tetrachloride	56-23-5	LCS	21.6		20	108	72 - 136		
Chlorobenzene	108-90-7	LCS	21.8		20	109	82 - 118		
Chlorodibromomethane	124-48-1	LCS	22		20	110	74 - 126		
Chloroethane	75-00-3	LCS	24.7		20	123	60 - 138		

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chloroform	67-66-3	LCS	21.5		20	108	79 - 124		
Chloromethane	74-87-3	LCS	20.6		20	103	50 - 139		
cis-1,2-Dichloroethene	156-59-2	LCS	22.1		20	110	78 - 123		
Cyclohexane	110-82-7	LCS	20.9		20	104	71 - 130		
Dichlorodifluoromethane	75-71-8	LCS	21.3		20	107	32 - 152		
Ethylbenzene	100-41-4	LCS	22		20	110	79 - 121		
Freon 113	76-13-1	LCS	21.7		20	109	70 - 136		
Iodomethane	74-88-4	LCS	16.9		20	84.6	69 - 131		
Isopropylbenzene	98-82-8	LCS	24.4		20	122	72 - 131		
Methyl acetate	79-20-9	LCS	21.7		20	109	56 - 136		
Methyl cyclohexane	108-87-2	LCS	20.6		20	103	72 - 132		
Methyl t-Butyl Ether	1634-04-4	LCS	22.2		20	111	71 - 124		
Methylene Chloride	75-09-2	LCS	21.7		20	109	74 - 124		
Styrene	100-42-5	LCS	22.3		20	111	78 - 123		
Tetrachloroethene	127-18-4	LCS	20.8		20	104	74 - 129		
Toluene	108-88-3	LCS	21.4		20	107	80 - 121		
Total Xylenes	1330-20-7	LCS	65.3		60	109	79 - 121		
trans-1,2-Dichloroethene	156-60-5	LCS	21.6		20	108	75 - 124		
Trichloroethene	79-01-6	LCS	20.7		20	104	79 - 123		
Trichlorofluoromethane	75-69-4	LCS	23.2		20	116	65 - 141		
Vinyl Chloride	75-01-4	LCS	22.3		20	111	58 - 137		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	30.9	30	103	81 - 118	
4-Bromofluorobenzene	460-00-4	LCS	29.5	30	98.3	85 - 114	
Dibromofluoromethane	1868-53-7	LCS	29.7	30	99	80 - 119	
Toluene-d8	2037-26-5	LCS	30	30	99.9	89 - 112	

Matrix Spike 3856995 (MS) 3369360025 For QC Batch 1260753

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3856996 (MSD) 3369360025 For QC Batch 1260753

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	MS	23.7	0	20	118	74 - 131		
1,1,1-Trichloroethane	71-55-6	MSD	23.8	0	20	119	74 - 131	RPD 0.56 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	22.4	0	20	112	71 - 121		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	21.6	0	20	108	71 - 121	RPD 3.86 (Max-20)	
1,1,2-Trichloroethane	79-00-5	MS	21.4	0	20	107	80 - 119		
1,1,2-Trichloroethane	79-00-5	MSD	20.9	0	20	104	80 - 119	RPD 2.26 (Max-20)	

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1-Dichloroethane	75-34-3	MS	21.8	0	20	109	77 - 125		
1,1-Dichloroethane	75-34-3	MSD	22.2	0	20	111	77 - 125	RPD 1.69 (Max-20)	
1,1-Dichloroethene	75-35-4	MS	23.5	0	20	117	71 - 131		
1,1-Dichloroethene	75-35-4	MSD	23.9	0	20	120	71 - 131	RPD 2.06 (Max-20)	
1,2,3-Trichlorobenzene	87-61-6	MS	20.6	0	20	103	69 - 129		
1,2,3-Trichlorobenzene	87-61-6	MSD	20.4	0	20	102	69 - 129	RPD 1.32 (Max-20)	
1,2,4-Trichlorobenzene	120-82-1	MS	21.9	0	20	110	69 - 130		
1,2,4-Trichlorobenzene	120-82-1	MSD	21.8	0	20	109	69 - 130	RPD 0.35 (Max-20)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	20.2	0	20	101	62 - 128		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	19	0	20	95.2	62 - 128	RPD 5.81 (Max-20)	
1,2-Dibromoethane	106-93-4	MS	21.9	0	20	109	77 - 121		
1,2-Dibromoethane	106-93-4	MSD	20.6	0	20	103	77 - 121	RPD 6 (Max-20)	
1,2-Dichlorobenzene	95-50-1	MS	21.6	0	20	108	80 - 119		
1,2-Dichlorobenzene	95-50-1	MSD	21.2	0	20	106	80 - 119	RPD 2.14 (Max-20)	
1,2-Dichloroethane	107-06-2	MS	20.3	0	20	101	73 - 128		
1,2-Dichloroethane	107-06-2	MSD	20.6	0	20	103	73 - 128	RPD 1.63 (Max-20)	
1,2-Dichloropropane	78-87-5	MS	21.5	0	20	107	78 - 122		
1,2-Dichloropropane	78-87-5	MSD	21.7	0	20	108	78 - 122	RPD 1.04 (Max-20)	
1,3-Dichlorobenzene	541-73-1	MS	21.1	0	20	105	80 - 119		
1,3-Dichlorobenzene	541-73-1	MSD	20.9	0	20	104	80 - 119	RPD 0.81 (Max-20)	
1,3-Dichloropropene, Total	542-75-6	MS	43.1	0	40	108	75 - 124		
1,3-Dichloropropene, Total	542-75-6	MSD	41.6	0	40	104	75 - 124	RPD 3.46 (Max-20)	
1,4-Dichlorobenzene	106-46-7	MS	21.4	0	20	107	79 - 118		
1,4-Dichlorobenzene	106-46-7	MSD	20.7	0	20	103	79 - 118	RPD 3.36 (Max-20)	
2-Butanone	78-93-3	MS	88.5	0	100	88.5	56 - 143		
2-Butanone	78-93-3	MSD	103	0	100	103	56 - 143	RPD 14.60 (Max-20)	
2-Hexanone	591-78-6	MS	107	0	100	107	57 - 139		
2-Hexanone	591-78-6	MSD	102	0	100	102	57 - 139	RPD 4.70 (Max-20)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	110	0	100	110	67 - 130		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	104	0	100	104	67 - 130	RPD 4.78 (Max-20)	
Acetone	67-64-1	MS	102	0	100	102	39 - 160		
Acetone	67-64-1	MSD	102	0	100	102	39 - 160	RPD 0.21 (Max-20)	
Benzene	71-43-2	MS	22.2	0	20	111	79 - 120		
Benzene	71-43-2	MSD	22.5	0	20	112	79 - 120	RPD 1.21 (Max-20)	
Bromochloromethane	74-97-5	MS	22.5	0	20	113	78 - 123		
Bromochloromethane	74-97-5	MSD	23.1	0	20	116	78 - 123	RPD 2.81 (Max-20)	
Bromodichloromethane	75-27-4	MS	22	0	20	110	79 - 125		
Bromodichloromethane	75-27-4	MSD	22.6	0	20	113	79 - 125	RPD 2.72 (Max-20)	
Bromoform	75-25-2	MS	21.1	0	20	105	66 - 130		
Bromoform	75-25-2	MSD	20.4	0	20	102	66 - 130	RPD 3.49 (Max-20)	
Bromomethane	74-83-9	MS	13	0	20	64.9	53 - 141		
Bromomethane	74-83-9	MSD	16.2	0	20	81.2	53 - 141	RPD 22.30* (Max-20)	
Carbon Disulfide	75-15-0	MS	21.6	0.34	20	107	64 - 133		
Carbon Disulfide	75-15-0	MSD	22.5	0.34	20	111	64 - 133	RPD 3.75 (Max-20)	
Carbon Tetrachloride	56-23-5	MS	24.6	0	20	123	72 - 136		
Carbon Tetrachloride	56-23-5	MSD	27.8	0	20	139*	72 - 136	RPD 12.20 (Max-20)	
Chlorobenzene	108-90-7	MS	21.7	0	20	108	82 - 118		
Chlorobenzene	108-90-7	MSD	21	0	20	105	82 - 118	RPD 2.98 (Max-20)	
Chlorodibromomethane	124-48-1	MS	21.3	0	20	106	74 - 126		

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Chlorodibromomethane	124-48-1	MSD	20.9	0	20	104	74 - 126	RPD 1.98 (Max-20)	
Chloroethane	75-00-3	MS	26.9	0	20	134	60 - 138		
Chloroethane	75-00-3	MSD	26.7	0	20	134	60 - 138	RPD 0.63 (Max-20)	
Chloroform	67-66-3	MS	22	0	20	110	79 - 124		
Chloroform	67-66-3	MSD	22.1	0	20	111	79 - 124	RPD 0.55 (Max-20)	
Chloromethane	74-87-3	MS	18.1	0	20	90.3	50 - 139		
Chloromethane	74-87-3	MSD	18.1	0	20	90.4	50 - 139	RPD 0.15 (Max-20)	
cis-1,2-Dichloroethene	156-59-2	MS	23.6	0.45	20	116	78 - 123		
cis-1,2-Dichloroethene	156-59-2	MSD	23.8	0.45	20	117	78 - 123	RPD 0.48 (Max-20)	
Cyclohexane	110-82-7	MS	23	0	20	115	71 - 130		
Cyclohexane	110-82-7	MSD	23.5	0	20	118	71 - 130	RPD 2.34 (Max-20)	
Dichlorodifluoromethane	75-71-8	MS	21.8	0	20	109	32 - 152		
Dichlorodifluoromethane	75-71-8	MSD	22.3	0	20	112	32 - 152	RPD 2.46 (Max-20)	
Ethylbenzene	100-41-4	MS	22.3	0	20	111	79 - 121		
Ethylbenzene	100-41-4	MSD	21.8	0	20	109	79 - 121	RPD 2.08 (Max-20)	
Freon 113	76-13-1	MS	23.6	0	20	118	70 - 136		
Freon 113	76-13-1	MSD	24.3	0	20	121	70 - 136	RPD 2.71 (Max-20)	
Iodomethane	74-88-4	MS	6.1	0	20	30.6*	69 - 131		
Iodomethane	74-88-4	MSD	9.9	0	20	49.4*	69 - 131	RPD 46.90* (Max-20)	
Isopropylbenzene	98-82-8	MS	25.2	0	20	126	72 - 131		
Isopropylbenzene	98-82-8	MSD	24.4	0	20	122	72 - 131	RPD 3.27 (Max-20)	
Methyl acetate	79-20-9	MS	18.9	0	20	94.4	56 - 136		
Methyl acetate	79-20-9	MSD	18.8	0	20	94	56 - 136	RPD 0.50 (Max-20)	
Methyl cyclohexane	108-87-2	MS	22	0	20	110	72 - 132		
Methyl cyclohexane	108-87-2	MSD	21.8	0	20	109	72 - 132	RPD 1.06 (Max-20)	
Methyl t-Butyl Ether	1634-04-4	MS	21.7	0	20	108	71 - 124		
Methyl t-Butyl Ether	1634-04-4	MSD	21.9	0	20	109	71 - 124	RPD 0.95 (Max-20)	
Methylene Chloride	75-09-2	MS	21.6	0	20	108	74 - 124		
Methylene Chloride	75-09-2	MSD	22.2	0	20	111	74 - 124	RPD 2.65 (Max-20)	
Styrene	100-42-5	MS	22.8	0	20	114	78 - 123		
Styrene	100-42-5	MSD	22	0	20	110	78 - 123	RPD 3.47 (Max-20)	
Tetrachloroethene	127-18-4	MS	20.3	0	20	101	74 - 129		
Tetrachloroethene	127-18-4	MSD	19.8	0	20	99.2	74 - 129	RPD 2.21 (Max-20)	
Toluene	108-88-3	MS	21.8	0	20	109	80 - 121		
Toluene	108-88-3	MSD	21.2	0	20	106	80 - 121	RPD 2.73 (Max-20)	
Total Xylenes	1330-20-7	MS	65.8	0	60	110	79 - 121		
Total Xylenes	1330-20-7	MSD	64	0	60	107	79 - 121	RPD 2.71 (Max-20)	
trans-1,2-Dichloroethene	156-60-5	MS	21.9	0	20	110	75 - 124		
trans-1,2-Dichloroethene	156-60-5	MSD	22.2	0	20	111	75 - 124	RPD 1.17 (Max-20)	
Trichloroethene	79-01-6	MS	21.7	0	20	108	79 - 123		
Trichloroethene	79-01-6	MSD	22.1	0	20	110	79 - 123	RPD 1.86 (Max-20)	
Trichlorofluoromethane	75-69-4	MS	24	0	20	120	65 - 141		
Trichlorofluoromethane	75-69-4	MSD	24.2	0	20	121	65 - 141	RPD 0.95 (Max-20)	
Vinyl Chloride	75-01-4	MS	22.2	0	20	111	58 - 137		
Vinyl Chloride	75-01-4	MSD	23	0	20	115	58 - 137	RPD 3.56 (Max-20)	

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	30.6	30	102	81 - 118	
1,2-Dichloroethane-d4	17060-07-0	MSD	31.3	30	104	81 - 118	
4-Bromofluorobenzene	460-00-4	MS	29.2	30	97.5	85 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.2	30	97.4	85 - 114	
Dibromofluoromethane	1868-53-7	MS	29.3	30	97.6	80 - 119	
Dibromofluoromethane	1868-53-7	MSD	30.4	30	101	80 - 119	
Toluene-d8	2037-26-5	MS	28.4	30	94.6	89 - 112	
Toluene-d8	2037-26-5	MSD	29.1	30	96.9	89 - 112	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3369360001	SW3-15	N/A	N/A	N/A		SW846 8260C	1257043
3369360002	DUP-01-20240716	N/A	N/A	N/A		SW846 8260C	1257043
3369360003	PZ3-6D	N/A	N/A	N/A		SW846 8260C	1257043
3369360004	MW3-3DA	N/A	N/A	N/A		SW846 8260C	1257043
3369360005	SW3-3	N/A	N/A	N/A		SW846 8260C	1258273
3369360006	PZ3-3A	N/A	N/A	N/A		SW846 8260C	1258273
3369360007	MW3-4DA	N/A	N/A	N/A		SW846 8260C	1258273
3369360008	SW3-2	N/A	N/A	N/A		SW846 8260C	1258273
3369360009	SW99-10	N/A	N/A	N/A		SW846 8260C	1258273
3369360010	SW10-7	N/A	N/A	N/A		SW846 8260C	1258273
3369360011	SW10-6	N/A	N/A	N/A		SW846 8260C	1258273
3369360012	SW10-5	N/A	N/A	N/A		SW846 8260C	1258273
3369360013	MW10-3	N/A	N/A	N/A		SW846 8260C	1258273
3369360014	SW10-8	N/A	N/A	N/A		SW846 8260C	1258273
3369360015	PW10-2	N/A	N/A	N/A		SW846 8260C	1258273
3369360016	MW10-7	N/A	N/A	N/A		SW846 8260C	1258273
3369360017	PW10-1	N/A	N/A	N/A		SW846 8260C	1258273
3369360018	PZ10-7	N/A	N/A	N/A		SW846 8260C	1258273
3369360019	MW8-11D	N/A	N/A	N/A		SW846 8260C	1258273
3369360020	PW13-4D	N/A	N/A	N/A		SW846 8260C	1258273
3369360021	MW13-4D	N/A	N/A	N/A		SW846 8260C	1258273
3369360022	MW13-5D	N/A	N/A	N/A		SW846 8260C	1258273
3369360023	PW13-1	N/A	N/A	N/A		SW846 8260C	1260753
3369360024	RW5-1	N/A	N/A	N/A		SW846 8260C	1260753
3369360025	MW5-1DA	N/A	N/A	N/A		SW846 8260C	1260753
3369360026	MW5-6	N/A	N/A	N/A		SW846 8260C	1260753
3369360027	MW5-5D	N/A	N/A	N/A		SW846 8260C	1260753
3369360028	RW5-2	N/A	N/A	N/A		SW846 8260C	1260753
3369360029	RW5-4	N/A	N/A	N/A		SW846 8260C	1260753
3369360030	PZ3-8D	N/A	N/A	N/A		SW846 8260C	1260753
3369360031	PZ3-7D	N/A	N/A	N/A		SW846 8260C	1260753
3369360032	DUP-02-20240716	N/A	N/A	N/A		SW846 8260C	1260753
3369360033	DUP-03-20240716	N/A	N/A	N/A		SW846 8260C	1260753
3369360034	Trip Blank	N/A	N/A	N/A		SW846 8260C	1260753

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3369360
ALS Quote #:
Logged By: MJE
PM: SJB
1 of 4

Name: Arcadis
110 W. Fayette, Suite 300
Syracuse, NY 13202

Corey Averill
315-415-4394
Name/#: NFARS - 30036646

Use Order #:
[X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Required: Approved?
[X] corey.averill@arcadis.com

Container Type	Container Size	Preservative	SDWA Sample Type (see key)	°G or C	**Matrix (See bottom of COC)	8260 VOCs	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm
CG	40mL	HCl		G	GW	3	SW3-15	07/16/24	0730
				G	GW	3	DUP-01-20240716	07/16/24	—
				G	GW	3	PZ3-6D	07/16/24	0740
				G	GW	3	MW3-3DA	07/16/24	0750
				G	GW	9	SW3-3	07/16/24	1015
				G	GW	9	PZ3-3A	07/16/24	1030
				G	GW	3	MW3-4DA	07/16/24	1035
				G	GW	3	SW3-2	07/16/24	1045
				G	GW	3	SW99-10	07/16/24	0840
				G	GW	3	SW10-7	07/16/24	0905

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

Enter Number of Containers Per Sample or Field Results Below.

Sample Collector: ALS Tech / (Client) ID:

Comments:

Temp Taken By: MJE Therm ID: 569 WO Temp (°C) 2°
Receipt Info completed by: MJE
WV Containers 0-6°C Y N (NA)

Cooler Custody Seals Intact	Y	N	(NA)
Sample Custody Seal Intact	Y	N	(NA)
Received on Ice	(Y)	N	NA
Coolers & Samples Intact	(Y)	N	
Correct Containers Provided	(Y)	N	
Sample Label/COC Agree	(Y)	N	
Adequate Sample Volumes	(Y)	N	
VOA only: Trip Blank	(Y)	N	NA

Deviations? (NO) YES
If YES, list below.

NJ ≤ 4 days? Y (N)
Client contact:
Courier/Tracking # 7063938935837063938935 Date/Tech

Sample(s) for Radiation testing? Y (N) Rad Screen (uCi)
Reportable SDWA Sample(s)? Y (N) New Source? Y (N)
SDWA State of Origin? New Source Contact:
PWSID #
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
MS/MSD collected @ SW3-3 and PZ3-3A

Contains Short Hold Testing YES (NO)
Internal Use: If less than 48 hours - notify lab upon receipt

Relinquished By / Company Name	Time	Received By / Company Name
1 Arcadis	1530	2 Fedex
3 Fedex	925	4
5		6
7		8
9		10

Data Deliverables: [ ] Standard Lvl 1 [ ] CLP-like [ ] HSCA; [X] Standard Lvl 2 [ ] DOD [ ] Landfill; [ ] Standard Lvl 3 [ ] NJ RED [ ] NJ GW; [ ] Standard Lvl 4 [ ] NJ Full [ ]

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: [ ] Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

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Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 2 of 4

ALS Quote #:

Name: Arcadis

Address: 110 W. Fayette, Suite 300 Syracuse, NY 13202

Project: Corey Averill

Phone #: 315-415-4394

Project Name/#: NFARS-30036646

P.O.:

Purchase Order #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.

Report Required: Approved?

Email? [X] corey.averill@arcadis.com

Container Type: CG

Container Size: 40mL

Preservative: HCl

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	8260 VOCs	Enter Number of Containers Per Sample or Field Results Below.
1	SW10-6	07/16/24	0910		G	GW	3	
2	SW10-5	07/16/24	0915		G	GW	3	
3	MW10-3	07/16/24	0920		G	GW	3	
4	SW10-8	07/16/24	0930		G	GW	3	
5	PW10-2	07/16/24	0940		G	GW	3	
6	MW10-7	07/16/24	0945		G	GW	3	
7	PW10-1	07/16/24	0950		G	GW	3	
8	PZ10-7	07/16/24	0955		G	GW	3	
9	MW8-11D	07/16/24	1055		G	GW	3	
10	PW13-4D	07/16/24	1120		G	GW	3	

Circle Sample Collector: ALS Tech / Client

Name: ID:

Comments:

Date	Time		Relinquished By / Company Name		Received By / Company Name
7/16/24	1530	1	Arcadis	2	Fedex
7/17/24	925	3	Fedex	4	
		5		6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by:

WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N

Courier/Tracking #

Deviations? NO YES: If YES, list below

Client contact: Date/Tech

Sample(s) for Radiation testing? Y (N)

Reportable SDWA Sample(s)? Y (N)

Rad Screen (uCi)

New Source? Y (N)

New Source Contact:

SDWA State of Origin?

PWSID #

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES (NO)

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [X] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

Rev 05.01 2024

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P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3 of 4

ALS Quote #:

Name: Arcadis

Address: 110 W. Fayette, Suite 300
Syracuse, NY 13202

Project: Corey Averill

Phone #: 315-415-4394

Project Name/#: NFARS-30036646

PO:

Purchase Order #:

TAT: [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Approved? Required:

Report? [X] corey.averill@arcadis.com

Container Type	6G									
Container Size	40mL									
Preservative	HCl									

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	8260 VOCs	Enter Number of Containers Per Sample or Field Results Below.
1	MW13-4D	07/16/24	1125		G	GW	3	
2	MW13-5D	07/16/24	1130		G	GW	3	
3	PW13-1	07/16/24	1135		G	GW	3	
4	RW5-1	07/16/24	1145		G	GW	3	
5	MW5-1DA	07/16/24	1150		G	GW	9	
6	MW5-6	07/16/24	1215		G	GW	3	
7	MW5-5D	07/16/24	1220		G	GW	3	
8	RW5-2	07/16/24	1230		G	GW	3	
9	RW5-4	07/16/24	1235		G	GW	3	
10	PZ3-8D	07/16/24	1320		G	GW	3	

Comments:

Circle Sample Collector: ALS Tech / Client

Name: ID:

Date	Time		Relinquished By / Company Name		Received By / Company Name
7/16/24	1530	1	Arcadis	2	Fedex
7/17/24	925	3	Fedex	4	
		5		6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N

Courier/Tracking #

Deviations? NO YES
If YES, list below

Client contact:
Date/Tech

Sample(s) for Radiation testing? Y (N)
Reportable SDWA Sample(s)? Y (N)
SDWA State of Origin?
PWSID #
PWS Contact: PWS Phone #:

Rad Screen (uCi)
New Source? Y (N)
New Source Contact:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

MS/MSD collected @ MW5-1DA

Contains Short Hold Testing YES (NO)

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [X] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ]

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

Rev 05.01.2024

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 4 of 4

ALS Quote #:

t Name: Arcadis

ess: 110 W. Fayette, Suite 300
Syracuse, NY 13202

tact: Corey Averill

ne#: 315-415-4394

ject Name/#: NFARS - 30036646

To:

rchase Order #:

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

te Required: Approved?

ail? [X] corey.averill@arcadis.com

Container Type: CG
Container Size: 40mL
Preservative: HCl

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	8260 VOCs	Enter Number of Containers Per Sample or Field Results Below.
1	PZ3-7D	07/16/24	1325		G	GW	3	
2	DUP-02-20240716	07/16/24	—		G	GW	3	
3	DUP-03-20240716	07/16/24	—		G	GW	3	
4	TRIPBLANK	—	—		G	TB	6	
5								
6								
7								
8								
9								
10								

Circle Sample Collector: ALS Tech / Client
Name: ID:

Comments:

Date:	Time	Relinquished By / Company Name		Received By / Company Name
7/16/24	1530	1 Arcadis	2	
7/17/24	925	3 Fedex	4	Fedex
		5	6	
		7	8	
		9	10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA
NJ ≤ 4 days?	Y	N	

Courier/Tracking #

Deviations? NO YES
If YES, list below

Client contact:
Date/Tech

Sample(s) for Radiation testing? Y (N)
Reportable SDWA Sample(s)? Y (N)
SDWA State of Origin?
PWSID #
PWS Contact: PWS Phone #:

Rad Screen (uCi)
New Source? Y (N)
New Source Contact:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES (NO)

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [X] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ]

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

Rev 05.01.2024

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

ALSI BOTTLE REQUEST FORM

Order ID:	240711032	Date Due:	07/11/24	Completed:	
		Time Due:	17:00		

Date Ordered:	07/11/24	Company Name:	ARCADIS
Time Ordered:	14:54	Requested By:	Adam Svensson
Order Taken By:	Kaleb Brown	Project Name/No.:	ARCADIS/QU802674 NFARS

Method of Delivery:	Fed Ex Ground	Additional Supplies	Labels Trip Blanks Project Specific Labels (See Notes) Chain of Custodies - 6 Coolers Custody Seals - 8
Address:	Adam Svensson 102 Fuller Ave Tonawanda, NY 14150		
Attn:	Residence		
Phone:	(716) 909-9063		

# of Bot.	# in Set	Size	Type	Preservation	Analyses
123	3	40 mL	C - Clear Glass	HCl	DOD 8260C
12	3	40 mL	C - Clear Glass	HCl	Trip Blank DOD 8260C

Special Notes	Please put together the following bottle order for the NFARS event: PN: 30036646 PM: Corey Averill 41 sets for VOCs (28 sets for monitoring wells including QA/QC, 11 sets for surface water samples including QA/QC and 2 extra in case of breakage) Please send the bottleware to Adam?s home address for delivery by July 15th	Sample Point ID's	

ID	Tracking Number	ID	Tracking Number	ID	Tracking Number

126 of 126

1/23/2025 6:59 AM

Case Narrative

Case Narrative
ACR-593
(3369360)

Sample Management

This report contains the results of the analysis of four (4) ground water samples collected on July 16, 2024. Analytical results and quality control information are summarized in this data package.

Sample Receipt

The sample arrived at ALS - Middletown via courier on July 17, 2024. Upon receipt, the sample was inspected and compared to the Chain of Custody. Sample temperature was documented on the enclosed Chain of Custody. The sample was received intact and properly preserved, unless noted on the enclosed Certificate of Analysis and/or Chain of Custody.

Qualifier Symbol Definitions:

U = Qualifier indicates that the analyte was not detected above the LOD.
J = Qualifier indicates that the analyte value is between the DL and the LOQ.
B = Qualifier indicates that the analyte was detected in the blank.
E = Qualifier indicates that the analyte result exceeds the calibration range.
P = Qualifier indicates that the RPD between the two analytical columns is > 40%.
NSC = Qualifier indicates that spike recoveries were not calculated based on the spiking concentration.

Result Symbol Definitions:

DL = The smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration at the 99% level of confidence.
LOD = The smallest analyte concentration that must be present in a sample in order to be detected at a high level of confidence.
LOQ = The lowest concentration that produces a quantitative result within specified limits of precision or bias.

Manual Integration Symbol Definitions

I = Peak was not integrated properly by chromatographic software. This may be due to baseline irregularities resulting from sample matrix, elevated baseline, or incorrect integration by software on a sample. Integration was adjusted by operator to ensure proper quantitation.

H = The incorrect peak was identified, or the chromatographic software did not identify an analyte peak. Operator manually identified the correct peak as the appropriate target analyte. This flag is automatically assigned by the Target software.

SP = Peak was erroneously split. The operator manually integrated the peak to include all the area of the analyte peak to ensure proper quantitation.

MP = Two peaks were erroneously merged. This may include two discrete peaks separated by a distinguishable valley or a larger peak with a clearly identifiable shoulder. Operator manually split peaks.

AB = Integration of group of adjacent peaks did not follow baseline. Operator manually assigned integration to follow baseline.

NP = Negative spike in the baseline resulted in overstating area of analyte peaks. Analyte peaks were re-assigned.

AC = Integration of aggregate or multi-component analyte to include area off all components of the analyte (i.e., toxaphene).

Manual Integrations

If manual integrations were performed, they are indicated on the raw data quantification files for each method.

Volatile Organics by SW-846 Method 8260C

Sample Handling. Four (4) ground water samples was analyzed by SW-846 Method 8260C for volatile organic compounds. The analysis was performed within holding time.

Initial Calibrations. Initial calibrations were properly analyzed and met method criteria for all target analytes. **Note:** The batch LCS also serves as a second source (ICV).

- In 2324071816ICVQ.D: Iodomethane recovered outside control limits.

Continuing Calibration Verification. Target analytes were recovered within control limits.

Blanks. Target analytes were not detected in the blanks.

Surrogates. All surrogates were recovered within control limits.

Laboratory control samples. Target analytes were recovered within control limits.

Internal Standards. All internal standard results met method criteria.

g | Q | T| | l

o | fi UhQF9D7S

h vx

SSVcSVM

Mfk

Q |

a xu

QSkCHAf VQkl A77ADDBD

7869A6979C



V 84g | Q | T| | l

o K usvfl

XPKcd8558==9=2KMc:C8

p

SSVcSVM

r mbRVMb

hp 8A4BT

o

88=C8=5575 5A46=479 66D75 5A46A479 5CD7: Qh

Q|	k i n	Td	dgT	dgi	TV	Q| T|	k aT	T| |V
6162Nflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
6161772ex sufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	5A46C479 6=D5:	78795A6C	78795A6C683N
6172Nft x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
6172Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
6172Nflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
6172Nflufi s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
617182e flufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
617192e flufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
6182Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	5A46C479 6=D5:	78795A6C	78795A6C683N
6192Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
72L s x	XN f z4V	63=	83B	:35	6	5A46C479 6=D5:	78795A6C	78795A6C683N
72Rx s x	XN f z4V	63=	83B	:35	6	5A46C479 6=D5:	78795A6C	78795A6C683N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Kux x	XN f z4V	63=	83B	:35	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Lx x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
L ufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
L y	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
L x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Mst Nfl vx	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Mst ex sufi flvx	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Mfi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Mfi y	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
ufl26172Nflufi x fix x	A39 z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N



V 84g | Q | T| | l

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XPKcd8558==9=2KMc:C8

p

SSVcSVM

r mbRVMb

hp 8A4BT

o

88=C8=5575 5A46=479 66D75 5A46A479 5CD7: Qh

Q|	k i n	Td	dgT	dgi	TV	Q| T|	k aT	T| |V
Mu fix s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Ofi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
P x 668	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
S v x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
S t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Wx fi sux s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
d x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
ex sufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
e x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
e s i x x	XN f z4V	635	738	835	6	5A46C479 6=D5:	78795A6C	78795A6C683N
s 26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
e flufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N
gfl Mfi flvx	XN f z4V	5388	53A:	635	6	5A46C479 6=D5:	78795A6C	78795A6C683N



V 84g | Q | T| | l

o K usvfl

XPKcd8558==9=2KMc:C8

p

SSVcSVM

r mbRVMb

e p 8A4BT

o

88=C8=5576

5A46=479 66D7: 5A46A479 5CD7:

Qh

Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
6162Nflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
6161 7172ex sufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	5A46C479 6=D79	78795A6C	78795A6C693N
6172Nft x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
6172Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
6172Nflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
6172Nflufi s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
617182e flufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
617192e flufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
6182Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	5A46C479 6=D79	78795A6C	78795A6C693N
6192Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
72L s x	XN f z4V	63=	83B	:35	6	5A46C479 6=D79	78795A6C	78795A6C693N
72Rx s x	XN f z4V	63=	83B	:35	6	5A46C479 6=D79	78795A6C	78795A6C693N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	5A46C479 6=D79	78795A6C	78795A6C693N
Kux x	XN f z4V	63=	83B	:35	6	5A46C479 6=D79	78795A6C	78795A6C693N
Lx x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
L ufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
L y	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
L x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Mst Nfl vx	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Mst ex sufi flvx	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Mfi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Mfi y	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
ufl 26172Nflufi x fix x	:3 z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N



V 84g | Q | T| | l

o K usvfl

XPKcd8558==9=2KMc:C8

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SSVcSVM

r mbRVMb

e p 8A4BT

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88=C8=5576

5A46=479 66D7: 5A46A479 5CD7:

Qh

Q|	k i n	Td	dgT	dgi	TV	Q| T|	k aT	T| |V
M u fix s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Ofi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
P x 668	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
S v x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
S t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Wx fi sux s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
d x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
ex sufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
e x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
e s i x x	XN f z4V	635	738	835	6	5A46C479 6=D79	78795A6C	78795A6C693N
s 26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
e flufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N
gfl Mfi flvx	XN f z4V	5388	53A:	635	6	5A46C479 6=D79	78795A6C	78795A6C693N



V 84g | Q | T| | l

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SSVcSVM

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88=C8=5577 5A46=479 66D85 5A46A479 5CD7: Qh

Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
6162Nflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
6161772ex sufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
6172Nft x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
6172Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
6172Nflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
6172Nflufi s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
617182e flufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
617192e flufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
6182Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
6192Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
72L s x	XN f z4V	63=	83B	:35	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
72Rx s x	XN f z4V	63=	83B	:35	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Kux x	XN f z4V	63=	83B	:35	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Lx x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
L ufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
L y	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
L x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Mst Nfl vx	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Mst ex sufi flvx	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Mfi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Mfi y	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
ufl26172Nflufi x fix x	6=3= z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N



V 84g | Q | T| | l

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88=C8=5577

5A46=479 66D85 5A46A479 5CD7: Qh

Q|	k i n	Td	dgT	dgi	TV	Q| T|	k aT	T| |V
Mu fix s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Ofi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
P x 668	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
S v x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
S t x x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Wx fi sux s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
d x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
ex sufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
e x x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
e s i x x	XN f z4V	635	738	835	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
s 26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
e flufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N
gfl Mfi flvx	83A z4V	5388	53A:	635	6	5A46C479 6=D99	78795A6C	78795A6C6: 3N



V 84g | Q | T| | l

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88=C8=5578

5A46=479 66D8: 5A46A479 5CD7:

Qh

Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
6162Nflufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
6161772ex sufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	5A47:479 67D8	78795A7:	78795A7:5A3N
6172Nft x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
6172Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
6172Nflufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
6172Nflufi s x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
617182e flufi t x x x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
617192e flufi t x x x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
6182Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	5A47:479 67D8	78795A7:	78795A7:5A3N
6192Nflufi t x x x	535 T z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
72L s x	XN f z4V	63=	83B	:35	6	5A47:479 67D8	78795A7:	78795A7:5A3N
72Rx s x	XN f z4V	63=	83B	:35	6	5A47:479 67D8	78795A7:	78795A7:5A3N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Kux x	XN f z4V	63=	83B	:35	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Lx x x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
L ufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
L y	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
L x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Mst Nfl vx	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Mst ex sufi flvx	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Mfi t x x x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Mfi y	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
ufl26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N



V 84g | Q | T| | l

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XPKcd8558==9=2KMc:C8 **SSVcSVM**

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hp 8A48 o

88=C8=5578 5A46=479 66D8: 5A46A479 5CD7: Qh

Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
Mu fix s x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Ofi t x x x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
P x 668	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
S v x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
S t x x x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Wx fi sux s x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
d x x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
ex sufi x fix x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
e x x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
e s i x x	XN f z4V	635	738	835	6	5A47:479 67D8	78795A7:	78795A7:5A3N
s 2617 2Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
e flufi x fix x	538 T z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
e flufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N
gfl Mfi flvx	:38 z4V	5388	53A:	635	6	5A47:479 67D8	78795A7:	78795A7:5A3N



V 84g | Q | T| | l

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8B:99CC h b

Q|	k i n	Td	dgT	dgi	TV	Q| T|	k aT	T| |V
6162Nflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
6161772ex sufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
6172Nft x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
6172Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
6172Nflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
6172Nflufi s x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
617182e flufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
617192e flufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
6182Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
6192Nflufi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
72L s x	XN f z4V	63=	83B	:35	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
72Rx s x	XN f z4V	63=	83B	:35	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Kux x	XN f z4V	63=	83B	:35	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Lx x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
L ufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
L y	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
L x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Mst Nfl vx	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Mst ex sufi flvx	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Mfi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Mfi y	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
ufl26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N

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eR [Rf 89CF9EAuogel6EAH98

8B:99CC hb

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Mu fix s x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Ofi t x x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Px 668	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Sv x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
S t x x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Wx fi sux s x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
d x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
ex sufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
e x x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
e s i x x	XN f z4V	635	738	835	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
s 26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
e flufi x fix x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
e flufi x fis x	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N
gfl Mfi flvx	XN f z4V	5388	53A:	635	6	5A46C479 68D6:	78795A6C	78795A6C5:3N



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6162Nflufi x fix x	753=	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
616162e flufi x fis x	763A	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
616172e flufi x fis x	763=	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
6161772ex sufi x fis x	7836	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
6172Nft 282ufi s x	763=	z4V	63=	73	:35	6	5A46C479 67D58	78795A6C	78795A6C573N
6172Nft x fis x	753=	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
6172Nflufi t x x x	763A	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
6172Nflufi x fis x	7636	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
6172Nflufi s x	763	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
617182e flufi t x x x	7639	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
617192e flufi t x x x	7836	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
6182Nflufi t x x x	7637	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
6182Nflufi x x1e s	983=	z4V	53==	63	735	6	5A46C479 67D58	78795A6C	78795A6C573N
6192Nflufi t x x x	763	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
72L s x	66C	z4V	63=	83B	:35	6	5A46C479 67D58	78795A6C	78795A6C573N
72Rx s x	66A	z4V	63=	83B	:35	6	5A46C479 67D58	78795A6C	78795A6C573N
92Wx fi 272ax s x-WSLU.	669	z4V	63=	83B	:35	6	5A46C479 67D58	78795A6C	78795A6C573N
Kux x	686	z4V	63=	83B	:35	6	5A46C479 67D58	78795A6C	78795A6C573N
Lx x x	7635	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
L ufi x fis x	7737	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
L vflufi x fis x	773B	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
L y	773=	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
L x fis x	7536	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Mst Nfl vx	6B35	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Mst ex sufi flvx	773	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Mfi t x x x	753=	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Mfi vft x fis x	763B	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Mfi x fis x	7637	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Mfi y	763=	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Mfi x fis x	6C3B	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
ufl26172Nflufi x fix x	763C	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N

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Mu fix s x	6C3A	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Nflufi vfl x fis x	753	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Ofi t x x x	753	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
P x 668	7539	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
S v x fis x	6A36	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
S t x x x	783A	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Wx fi sux s x	763	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Wx fi u u fix s x	6C36	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Wx fi 2L Ofix	773B	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
Wx fi x x Mfi flvx	7635	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
d x x	773A	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
ex sufi x fix x	6C3C	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
e x x	7537	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
e s i x x	=73=	z4V	635	73B	835	6	5A46C479 67D58	78795A6C	78795A6C573N
s 26172Nflufi x fix x	753	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
e flufi x fix x	753=	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
e flufi x fis x	763B	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N
gfl Mfi flvx	753C	z4V	5388	53A:	635	6	5A46C479 67D58	78795A6C	78795A6C573N



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6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
6161772ex sufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	5A47:479 67D68	78795A7:	78795A7:5:3N
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617182e flufi tx x x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
617192e flufi tx x x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
6182Nflufi tx x x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	5A47:479 67D68	78795A7:	78795A7:5:3N
6192Nflufi tx x x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
72L s x	XN f z4V	63=	83B	:35	6	5A47:479 67D68	78795A7:	78795A7:5:3N
72Rx s x	XN f z4V	63=	83B	:35	6	5A47:479 67D68	78795A7:	78795A7:5:3N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	5A47:479 67D68	78795A7:	78795A7:5:3N
Kux x	XN f z4V	63=	83B	:35	6	5A47:479 67D68	78795A7:	78795A7:5:3N
Lx x x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
L ufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
L y	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
L x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
Mst Nfl vx	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
Mst ex sufi flvx	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
Mfi tx x x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
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Mfi y	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N
ufl26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A47:479 67D68	78795A7:	78795A7:5:3N

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Mu fix s x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
Ofi t x x x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
Px 668	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
Sv x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
S t x x x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
Wx fi sux s x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
d x x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
ex sufi x fix x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
e x x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
e s i x x	XN f z4V	635	738	835	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
s 26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
e flufi x fix x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
e flufi x fis x	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	
gfl Mfi flvx	XN f z4V	5388	53A:	635	6	5A47:479 67D68		78795A7:	78795A7:5:3N	



V 84g | Q | T| | l

o K usvfl p

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8B:=CC7 h b

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6162Nflufi x fix x	7736	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
616162e flufi x fis x	763C	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
616172e flufi x fis x	763C	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
6161772ex sufi x fis x	7835	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
6172Nft 282ufi s x	7637	z4V	63=	73	:35	6	5A47:479 65D8	78795A7:	78795A7:573N
6172Nft x fis x	763A	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
6172Nflufi t x x x	7639	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
6172Nflufi x fis x	7538	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
6172Nflufi s x	7638	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
617182e flufi t x x x	763	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
617192e flufi t x x x	7738	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
6182Nflufi t x x x	763	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
6182Nflufi x x1e s	9938	z4V	53==	63	735	6	5A47:479 65D8	78795A7:	78795A7:573N
6192Nflufi t x x x	763=	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
72L s x	66B	z4V	63=	83B	:35	6	5A47:479 65D8	78795A7:	78795A7:573N
72Rx s x	66B	z4V	63=	83B	:35	6	5A47:479 65D8	78795A7:	78795A7:573N
92Wx fi 272ax s x-WSLU.	669	z4V	63=	83B	:35	6	5A47:479 65D8	78795A7:	78795A7:573N
Kux x	68=	z4V	63=	83B	:35	6	5A47:479 65D8	78795A7:	78795A7:573N
Lx x x	763B	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
L ufi x fis x	7737	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
L vflufi x fis x	7739	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
L y	763A	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
L x fis x	763B	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Mst Nfl vx	7637	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Mst ex sufi flvx	763=	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Mfi t x x x	763B	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Mfi vft x fis x	7735	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Mfi x fis x	793A	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Mfi y	763	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Mfi x fis x	753=	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
ufl26172Nflufi x fix x	7736	z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N

o K usvfl p

XPKcd8558==9=2KMc:C8 SSVcSVM

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8B: =CC7 h b

Q|	k i n	Td	dgT	dgi	TV	Q| T|	kaT	T| |V
Mu fix s x	753C z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Nflufi vfl x fis x	763B z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Ofi t x x x	7735 z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
P x 668	763A z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
S v x fis x	6=3C z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
S t x x x	7939 z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Wx fi sux s x	763A z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Wx fi u u fix s x	753= z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Wx fi 2L Ofix	7737 z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
Wx fi x x Mfi flvx	763A z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
d x x	7738 z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
ex sufi x fix x	753B z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
e x x	7639 z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
e s i x x	=:38 z4V	635	738	835	6	5A47:479 65D8	78795A7:	78795A7:573N
s 26172Nflufi x fix x	763= z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
e flufi x fix x	753A z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
e flufi x fis x	7837 z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N
gfl Mfi flvx	7738 z4V	5388	53A:	635	6	5A47:479 65D8	78795A7:	78795A7:573N

right solutions.
right partner.

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hp 8A4BT	a	e|	Q| T|	S n	T
88=C8=5575	Wd78	Qh	5A46C479 6=D5:	z4V	6

l |	V aT	k S	l S	, k	i , k d
6172Nflufi x fis x2v9	78795A6C683N	7C3=	85	CC	B6266B
92L t x x x	78795A6C683N	8537	85	656	B:2669
Nft x fis x	78795A6C683N	7C3B	85	CB	B5266C
e x x2vB	78795A6C683N	85	85	655	BC2667

e p 8A4BT	a	e|	Q| T|	S n	T
88=C8=5576	Wd78	Qh	5A46C479 6=D79	z4V	6

l |	V aT	k S	l S	, k	i , k d
6172Nflufi x fis x2v9	78795A6C693N	7C3	85	CB	B6266B
92L t x x x	78795A6C693N	853	85	657	B:2669
Nft x fis x	78795A6C693N	7C	85	CA	B5266C
e x x2vB	78795A6C693N	8537	85	656	BC2667

e p 8A4CT	a	e|	Q| T|	S n	T
88=C8=5577	Wd78	Qh	5A46C479 6=D99	z4V	6

l |	V aT	k S	l S	, k	i , k d
6172Nflufi x fis x2v9	78795A6C6:3N	7C3A	85	CC	B6266B
92L t x x x	78795A6C6:3N	7B3A	85	C=	B:2669
Nft x fis x	78795A6C6:3N	7C36	85	CA	B5266C
e x x2vB	78795A6C6:3N	7B3B	85	C=	BC2667

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e R [Rf 89CF9EAwogel6EAH98 a e| Q| T| S n T

8B:99CC Wd78 hb z4V 6

l	V aT	k S	l S	,k	i ,k d
6172Nflufi xfis x2v9	78795A6C5:3N	7C3C	85	655	B6266B
92L tx x x	78795A6C5:3N	8537	85	656	B:2669
Nft xfis x	78795A6C5:3N	7B3B	85	C=	B5266C
e x x2vB	78795A6C5:3N	8537	85	656	BC2667

dSl [Rf 89CF9EAwogel6EAH9 a e| Q| T| S n T

8B:9:55 Wd78 hb 5A46C479 67D58 z4V 6

l	V aT	k S	l S	,k	i ,k d
6172Nflufi xfis x2v9	78795A6C573N	873B	85	65B	B6266B
92L tx x x	78795A6C573N	7C3	85	CB	B:2669
Nft xfis x	78795A6C573N	853B	85	658	B5266C
e x x2vB	78795A6C573N	7C	85	CA	BC2667

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a	e|	Q| T|	S n	T
88=C8=5578	Wd78	Qh	5A47:4796 7D8	z4V 6

l |	V aT	k S	l S	,k	i ,k d
6172Nflufi x fis x2v9	78795A7:5A3N	7C3=	85	CC	B6266B
92L t x x x	78795A7:5A3N	7B39	85	C:	B:2669
Nft x fis x	78795A7:5A3N	7B3B	85	C=	B5266C
e x x2vB	78795A7:5A3N	7C36	85	CA	BC2667

eR [Rf 89D7ECAuogel6EAHFF

a	e|	Q| T|	S n	T
8B:=CC6	Wd78	h b	z4V	6

l |	V aT	k S	l S	,k	i ,k d
6172Nflufi x fis x2v9	78795A7:5:3N	8537	85	656	B6266B
92L t x x x	78795A7:5:3N	7C3	85	CB	B:2669
Nft x fis x	78795A7:5:3N	7C39	85	CB	B5266C
e x x2vB	78795A7:5:3N	8636	85	659	BC2667

dSl [Rf 89D7ECAuogel6EAHF

a	e|	Q| T|	S n	T
8B:=CC7	Wd78	h b	5A47:4796 5D8	z4V 6

l |	V aT	k S	l S	,k	i ,k d
6172Nflufi x fis x2v9	78795A7:573N	853C	85	658	B6266B
92L t x x x	78795A7:573N	7C3	85	CB	B:2669
Nft x fis x	78795A7:573N	7C3A	85	CC	B5266C
e x x2vB	78795A7:573N	85	85	655	BC2667

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RSRTMaPc			SbUTUMM			
h b		67: B7A8	p	5A46C479 671D58		
Q |	, k d	l Q	dSl k	, k	i	
6162Nflufi x fis x	AA267:	75	753B	PMT		
6162Nflufi x fix x	A62686	75	753=	PMS		
616162e flufi x fis x	A92686	75	763A	PMt		
616172e flufi x fis x	B5266C	75	763=	PMb		
6161772ex sufi x fis x	A62676	75	7836	PPU		
6172Nft 282ufi s x	=7267B	75	763=	PMb		
6172Nft x fis x	AA2676	75	753=	PMS		
6172Nflufi t x x x	B5266C	75	763A	PMb		
6172Nflufi x fis x	A8267B	75	7636	PMU		
6172Nflufi s x	AB2677	75	763	PMb		
617182e flufi t x x x	=C267C	75	7639	PMa		
617192e flufi t x x x	=C2685	75	7836	PPU		
6182Nflufi t x x x	B5266C	75	7637	PMV		
6182Nflufi x x	A: 2679	95	983=	PMt		
6192Nflufi t x x x	AC266B	75	763	PMa		
72L s x	: =2698	655	66C	PPc		
72Rx s x	: A268C	655	66A	PPa		
92Wx fi 272ax s x-WSLU.	=A2685	655	669	PPT		
Kux x	8C26=5	655	686	PSP		
Lx x x	AC2675	75	76	PMU		
L ufi x fis x	AB2678	75	7737	PPP		
L vflufi x fis x	AC267:	75	773B	PPT		
L y	==2685	75	773=	PPS		
L x fis x	: 82696	75	7536	PMM		
Mst Nfl vx	=92688	75	6B	cM		
Mst ex sufi flvx	A7268=	75	773	PPR		
Mfi t x x x	B7266B	75	753=	PMS		
Mfi vft x fis x	A9267=	75	763B	PMt		
Mfi x fis x	=5268B	75	7637	PMV		
Mfi y	AC2679	75	763=	PMb		
Mfi x fis x	: 5268C	75	6C3B	ca		
ufl 26172Nflufi x fix x	AB2678	75	763C	PMt		
M u fix s x	A62685	75	6C3A	cc		
Nflufi vfl x fis x	8726: 7	75	753	PMR		
Ofi t x x x	AC2676	75	753	PMR		

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RSRTMaPc			SbUTUMM			
h b		67: B7A8	p	5A46C479 671D58		
Q |	, k d	l Q	dSl k	, k	i	
P x 668	A5268=	75	7539	PMR		
S v x fis x	=C2686	75	6A36	bV		
S t x x x	A72686	75	783A	PPb		
Wx fi sux s x	: =268=	75	763	PMb		
Wx fi u u fix s x	A72687	75	6C36	cV		
Wx fi 2L Ofix	A62679	75	773B	PPP		
Wx fi x x Mfi flvx	A92679	75	76	PMU		
d x x	AB2678	75	773A	PPS		
ex sufi x fix x	A9267C	75	6C3C	cc		
e x x	B52676	75	7537	PMP		
e s i x x	AC2676	=5	=73=	PMT		
s 26172Nflufi x fix x	A:2679	75	753	PMR		
e flufi x fix x	AC2678	75	753=	PMS		
e flufi x fis x	=:2696	75	763B	PMc		
gfl Mfi flvx	: B268A	75	753C	PMT		

r mbRVMb

RSRTMaRU			SbUVccR		
h b		67=5A: 8	p	5A47: 479 65D8	
Q |	, k d	l Q	dSl k	, k i	
6162Nflufi x fis x	AA267:	75	7636	PMV	
6162Nflufi x fix x	A62686	75	7736	PPP	
616162e flufi x fis x	A92686	75	763C	PPM	
616172e flufi x fis x	B5266C	75	763C	PPM	
6161772ex sufi x fis x	A62676	75	78	PPU	
6172Nft 282ufi s x	=7267B	75	7637	PMV	
6172Nft x fis x	AA2676	75	763A	PMb	
6172Nflufi t x x x	B5266C	75	7639	PMa	
6172Nflufi x fis x	A8267B	75	753B	PMR	
6172Nflufi s x	AB2677	75	763B	PMa	
617182e flufi t x x x	=C267C	75	763	PMb	
617192e flufi t x x x	=C2685	75	773B	PPT	
6182Nflufi t x x x	B5266C	75	763	PMb	
6182Nflufi x x	A:2679	95	993B	PPR	
6192Nflufi t x x x	AC266B	75	763=	PMb	
72L s x	:=2698	655	66B	PPb	
72Rx s x	:A268C	655	66B	PPb	
92Wx fi 272ax s x-WSLU.	=A2685	655	669	PPT	
Kux x	8C26=5	655	68=	PSV	
Lx x x	AC2675	75	763B	PMc	
L ufi x fis x	AB2678	75	7737	PPP	
L vflufi x fis x	AC267:	75	7739	PPR	
L y	==2685	75	763A	PMc	
L x fis x	:82696	75	763B	PMc	
Mst Nfl vx	=92688	75	7637	PMV	
Mst ex sufi flvx	A7268=	75	763=	PMb	
Mfi t x x x	B7266B	75	763B	PMc	
Mfi vft x fis x	A9267=	75	77	PPM	
Mfi x fis x	=5268B	75	793A	PRS	
Mfi y	AC2679	75	763	PMb	
Mfi x fis x	:5268C	75	753=	PMS	
ufl26172Nflufi x fix x	AB2678	75	7736	PPM	
M u fix s x	A62685	75	753C	PMT	
Nflufi vfl x fis x	8726:7	75	763B	PMa	
Ofi t x x x	AC2676	75	77	PPM	

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RSRTMaRU			SbUVccR		
h b		67=5A: 8	p	5A47: 479 65D 8	
Q |	, k d	l Q	dSl k	, k	i
P x 668	A5268=	75	763A	PMt	
S v x fis x	=C2686	75	6=3C	bU	
S t x x x	A72686	75	7939	PRR	
Wx fi sux s x	: =268=	75	763A	PMt	
Wx fi u u fix s x	A72687	75	753=	PMS	
Wx fi 2L Ofix	A62679	75	7737	PPP	
Wx fi x x Mfi flvx	A92679	75	763A	PMt	
d x x	AB2678	75	773B	PPP	
ex sufi x fix x	A9267C	75	753B	PMT	
e x x	B52676	75	7639	PMa	
e s i x x	AC2676	=5	=: 3B	PMt	
s 26172Nflufi x fix x	A: 2679	75	763=	PMb	
e flufi x fix x	AC2678	75	753A	PMT	
e flufi x fis x	=: 2696	75	7837	PPV	
gfl Mfi flvx	: B268A	75	773B	PPP	

right solutions.
right partner.

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e Um[g T RdQf c	e|	Q.| T|	Q.| R|	a aT
AFCBBHH	h b	5A46C479 68D3:	67:B7A8	Wd78

S l| aT	m	d|fi l| aT	V aT	Q.| T|	Q.| R|	a aT
ah 6829N	dKWaVO	88=C8=5575	78795A6C683N	5A46C479 6=D5:	67:B7A8	Wd78
Wh 6829N	dKWaVO	88=C8=5576	78795A6C693N	5A46C479 6=D79	67:B7A8	Wd78
Wh 682 N	dKWaVO	88=C8=5577	78795A6C6:3N	5A46C479 6=D99	67:B7A8	Wd78
VMdy RLX 67:B7A8 lg[Wd4A8C7	VMd	8B:9:55	78795A6C573N	5A46C479 67D58	67:B7A8	Wd78

r mbRVMb

e Um[g T RdQf c	e|	Q.| T|	Q.| R|	a aT
AFCDHH8	h b	5A47:479 67D8	67=5A:8	Wd78

S l| aT	m	d|fi l| aT	V aT	Q.| T|	Q.| R|	a aT
ah 6826	dKWaVO	88=C8=5578	78795A7:5A3N	5A47:479 67D8	67=5A:8	Wd78
VMdy RLX 67=5A:8 lg[Wd4A8CB	VMd	8B:=CC7	78795A7:573N	5A47:479 65D8	67=5A:8	Wd78

right solutions.
right partner.

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m V 78795A6C553N 5A46C479 65D75

6	a Qfi | S	, kQ
HC	Ls x axs 1655* cK	65535
C7	6:355 29535* y s C:	763BC
EC	8535 2=535* y s C:	:73BA
HD	:355 2 C355* y s C:	=36C
8EA	Vx fis 7355* y s 6A9	53B9
8EB	Q xs x fis :5355* y s C:	A93C8
8EC	:355 2 C355* y s 6A9	=3=C
8ED	C:355 26563 55* y s 6A9	A93 9
8EE	:355 2 C355* y s 6A=	:377

* cK 2ax ux cx s flx Kt vs ux

m | | |

	d| fi l | aT m T|	d| fi V aT l | aT
8	6555 ef XO 5A46C65D75	78795A6C55 LPL
9	6B55 MMg 5A46C66D56	78795A6C56 MMg
A	6B56 MMg 5A46C76D58	78795A6C7B MMg
B	8B:9:55 VMd 5A46C67D58	78795A6C57 VMd y RLX 67:B7A8
C	8B:99CC WL 5A46C68D8:	78795A6C5: WL y RLX 67:B7A8
D	88=C8=5575 dKWa 5A46C6=D5:	78795A6C68 ah 6829N
E	88=C8=5576 dKWa 5A46C6=D79	78795A6C69 Wh 6829N
F	88=C8=5577 dKWa 5A46C6=D99	78795A6C6: Wh 682 N

m V 78795A7:553N 5A47:479 5CD8:

6	a Qfi | S	, kQ.
HC	Ls x axs 1655* cK	655355
C7	6:355 295355* y s C:	7738B
EC	855355 2=5355* y s C:	:8376
HD	:355 2 C355* y s C:	=3BA
8EA	Vx fis 7355* y s 6A9	53BC
8EB	Q.xs x fis :5355* y s C:	A83B=
8EC	:355 2 C355* y s 6A9	:3=A
8ED	C:355 26563355* y s 6A9	A73=6
8EE	:355 2 C355* y s 6A=	:36A

* cK 2ax ux cx s flx Kt vs ux

m | | |

	d|fi| aT m T|	d|fi V aT l| aT
8	6555 ef XO 5A47:5CD8:	78795A7:55 LPL
9	6B55 MMg 5A47:65D78	78795A7:56 MMg
A	6B56 MMg 5A47:6AD6	78795A7:77 MMg
B	8B:=CC7 VMd 5A47:65D8	78795A7:57 VMdy RLX 67=5A:8
C	8B:=CC6 WL 5A47:67D88	78795A7:5: WLy RLX 67=5A:8
D	88=C8=5578 dKWa 5A47:67D8	78795A7:5A ah 6826

right solutions.
right partner.

V D

a | S| fi | T| |

o | fi UhQF9D7S

h vx

SSVcSVM

Mfk

Q |

a xu

QSkCHAf VQkl A77ADDBD

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Form 6 Initial Calibration Data

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 23240718

Volatiles by EPA 8260C

Instrument ID MS23
ICAL Start Date 18-JUL-2024 1244
ICAL End Date 18-JUL-2024 1443

Calibration Files

Level1 - 23240718.b\2324071804.D
Level2 - 23240718.b\2324071805.D
Level3 - 23240718.b\2324071806.D
Level4 - 23240718.b\2324071807.D
Level5 - 23240718.b\2324071808.D
Level6 - 23240718.b\2324071809.D
Level8 - 23240718.b\2324071803.D

Compound	0.500 Level 8 / 1.00 Level 1	5.00 Level 2	20.0 Level 3	50.0 Level 4	100 Level 5	200 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Dichlorodifluoromethane	0.383 0.360	0.420	0.401	0.421	0.444	0.429	AVRG		0.408		7.06	
Chloromethane	0.479 0.404	0.409	0.389	0.407	0.423	0.404	AVRG		0.416		7.06	
Vinyl Chloride	0.370 0.345	0.376	0.357	0.373	0.387	0.368	AVRG		0.368		3.72	
Bromomethane	5386 8460	32002	106241	266557	552439	1051738	WLINR	-0.019	5.88		0.999	
Chloroethane	0.184 0.197	0.193	0.191	0.196	0.217	0.210	AVRG		0.198		5.71	
Pentane	0.322 0.247	0.281	0.268	0.250	0.265	0.250	AVRG		0.269		9.80	
Trichlorofluoromethane	0.398 0.385	0.469	0.444	0.468	0.499	0.492	AVRG		0.451		9.83	
Dichlorofluoromethane	0.639 0.531	0.614	0.589	0.550	0.589	0.552	AVRG		0.580		6.61	
Ethyl Ether	0.196 0.157	0.191	0.193	0.182	0.190	0.182	AVRG		0.184		7.15	
1,1-Dichloroethene	0.421 0.342	0.432	0.416	0.390	0.421	0.400	AVRG		0.403		7.53	

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ICAL Start Date 18-JUL-2024 12:44 **ICAL End Date** 18-JUL-2024 14:43

Compound	0.500 Level 8 / 1.00 Level 1	5.00 Level 2	20.0 Level 3	50.0 Level 4	100 Level 5	200 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Freon 113	0.230 0.197	0.252	0.255	0.237	0.251	0.238	AVRG		0.237		8.42	
Carbon Disulfide	0.900 0.720	0.862	0.838	0.792	0.840	0.779	AVRG		0.819		7.27	
Iodomethane	0.137 0.100	0.097	0.114	0.122	0.134	0.124	AVRG		0.118		13.2	
Acrolein	0.059 0.046	0.052	0.058	0.054	0.056	0.054	AVRG		0.054		8.00	
Isopropyl Alcohol	2994 4239	20329	80331	184455	407723	820600	WLINR	-0.025	38.9		0.999	
3-Chloro-1-propene	0.408 0.347	0.456	0.459	0.432	0.458	0.418	AVRG		0.426		9.41	
Methylene Chloride	0.310 0.270	0.318	0.301	0.283	0.300	0.280	AVRG		0.294		5.91	
Acetone	0.038 0.031	0.035	0.036	0.032	0.034	0.033	AVRG		0.034		6.73	
Methyl acetate	1542 1961	10251	41397	93007	200164	390536	WLINR	-0.007	16.0		0.999	
trans-1,2-Dichloroethene	0.423 0.369	0.434	0.411	0.386	0.412	0.385	AVRG		0.403		5.76	
Hexane	0.624 0.536	0.634	0.622	0.588	0.614	0.579	AVRG		0.600		5.74	
Methyl t-Butyl Ether	0.790 0.760	0.928	0.921	0.870	0.915	0.867	AVRG		0.864		7.65	

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tert.- Butyl Alcohol	0.031 0.029	0.039	0.041	0.039	0.042	0.041	AVRG		0.037		13.8	
Acetonitrile	0.058 0.052	0.055	0.057	0.051	0.053	0.052	AVRG		0.054		4.85	
Diisopropyl ether	0.949 0.870	1.09	1.04	0.981	1.03	0.956	AVRG		0.988		7.27	
Chloroprene	0.341 0.336	0.413	0.362	0.334	0.382	0.326	AVRG		0.356		8.87	
1,1-Dichloroethane	0.536 0.462	0.573	0.554	0.516	0.545	0.512	AVRG		0.528		6.84	
Acrylonitrile	0.173 0.139	0.172	0.184	0.170	0.175	0.162	AVRG		0.168		8.61	
Ethyl tert-butyl ether	0.865 0.766	0.984	0.992	0.937	1.00	0.945	AVRG		0.928		9.19	
n-Propanol	0.024 0.021	0.022	0.021	0.020	0.021	0.020	AVRG		0.021		6.39	
Vinyl Acetate	0.055 0.055	0.074	0.075	0.072	0.078	0.074	AVRG		0.069		14.1	
cis-1,2-Dichloroethene	0.382 0.354	0.445	0.432	0.402	0.426	0.402	AVRG		0.406		7.70	
2,2-Dichloropropane	0.401 0.348	0.428	0.426	0.405	0.428	0.406	AVRG		0.406		6.92	
Bromochloromethane	0.135 0.125	0.163	0.158	0.147	0.154	0.143	AVRG		0.147		9.04	

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Cyclohexane	0.447 0.374	0.458	0.432	0.404	0.421	0.396	AVRG		0.419		7.05	
Chloroform	0.546 0.491	0.594	0.577	0.538	0.569	0.536	AVRG		0.550		6.14	
Ethyl Acetate	0.374 0.380	0.402	0.431	0.400	0.424	0.402	AVRG		0.402		5.15	
Methyl acrylate	0.324 0.274	0.346	0.362	0.341	0.356	0.340	AVRG		0.335		8.84	
Carbon Tetrachloride	0.322 0.271	0.381	0.382	0.363	0.393	0.389	AVRG		0.357		12.6	
Tetrahydrofuran	0.114 0.099	0.119	0.125	0.117	0.122	0.115	AVRG		0.116		7.09	
1,1,1-Trichloroethane	0.416 0.374	0.465	0.460	0.434	0.462	0.439	AVRG		0.436		7.49	
2-Butanone	3586 3836	36224	145881	337563	723545	1385120	WLINR	0.018	22.3		0.999	
1,1-Dichloropropene	0.424 0.356	0.429	0.416	0.392	0.412	0.388	AVRG		0.402		6.35	
1-Chlorobutane	0.402 0.299	0.367	0.338	0.321	0.341	0.321	AVRG		0.341		9.98	
Heptane	0.234 0.184	0.223	0.212	0.195	0.201	0.201	AVRG		0.207		8.18	
Benzene	1.18 1.02	1.25	1.18	1.09	1.14	1.05	AVRG		1.13		7.08	

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Compound	0.500 Level 8 1.00 Level 1	5.00 Level 2	20.0 Level 3	50.0 Level 4	100 Level 5	200 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Propionitrile	0.053 0.051	0.062	0.064	0.059	0.060	0.057	AVRG		0.058		8.30	
Methacrylonitrile	0.136 0.131	0.155	0.160	0.149	0.158	0.152	AVRG		0.149		7.59	
tert-Amyl methyl ether	0.812 0.707	0.890	0.892	0.848	0.915	0.863	AVRG		0.847		8.29	
Isobutyl alcohol	1742 2630	14883	83393	181932	404183	823109	QUAD	0.000e+000	0.012	8.576e-006	1.000	
1,2-Dichloroethane	0.486 0.428	0.471	0.458	0.438	0.467	0.442	AVRG		0.456		4.54	
tert-Amyl Alcohol	1924 2787	24768	104778	250435	560222	1137771	WLINR	0.052	28.1		0.999	
Diisobutylene	49587 56125	151626	472333	1042979	2201598	4274181	WLINR	-0.059	1.48		0.999	
Trichloroethene	0.337 0.270	0.330	0.315	0.300	0.317	0.301	AVRG		0.310		7.19	
Methyl cyclohexane	1.07 0.923	1.07	1.07	0.981	1.02	0.954	AVRG		1.01		5.98	
tert-Amyl Ethylether	0.647 0.589	0.744	0.741	0.700	0.755	0.724	AVRG		0.700		8.71	
Dibromomethane	0.192 0.171	0.215	0.215	0.204	0.216	0.208	AVRG		0.203		8.15	
1,2-Dichloropropane	0.315 0.274	0.339	0.323	0.306	0.319	0.299	AVRG		0.311		6.61	

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Bromodichloromethane	0.374 0.318	0.401	0.419	0.399	0.432	0.406	AVRG		0.393		9.51	
Methyl methacrylate	0.333 0.286	0.343	0.354	0.338	0.363	0.347	AVRG		0.338		7.41	
1,4-Dioxane	0.003 0.004	0.005	0.005	0.004	0.005	0.005	AVRG		0.004		13.6	
2-Chloroethylvinyl ether	0.186 0.177	0.239	0.252	0.237	0.248	0.235	AVRG		0.225		13.6	
cis-1,3-Dichloropropene	0.953 0.884	1.08	1.16	1.12	1.18	1.09	AVRG		1.07		10.2	
Octane	0.403 0.349	0.407	0.421	0.390	0.388	0.367	AVRG		0.389		6.32	
Toluene	1.75 1.42	1.64	1.62	1.51	1.58	1.46	AVRG		1.57		7.24	
Chloroacetonitrile	695 1332	10304	62949	158628	365193	747951	WLINR	0.090	19.7		0.997	
2-Nitropropane	5972 12571	80047	371461	926098	2075433	4123391	WLINR	0.051	3.50		0.999	
1,1-Dichloro-2-Propanone	303 849	6436	27372	67514	153322	314412	WLINR	0.064	46.6		0.999	
4-Methyl-2-Pentanone(MIBK)	0.759 0.704	0.880	0.948	0.866	0.880	0.766	AVRG		0.829		10.5	
trans-1,3-Dichloropropene	0.863 0.763	0.997	1.11	1.04	1.13	1.07	AVRG		0.996		13.6	

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Compound	0.500 Level 8 / 1.00 Level 1	5.00 Level 2	20.0 Level 3	50.0 Level 4	100 Level 5	200 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Tetrachloroethene	0.588 0.543	0.586	0.601	0.558	0.587	0.559	AVRG		0.575		3.67	
Ethyl Methacrylate	0.832 0.746	1.03	1.12	1.03	1.09	1.02	AVRG		0.981		14.1	
1,1,2-Trichloroethane	0.537 0.475	0.580	0.587	0.539	0.563	0.523	AVRG		0.543		7.04	
Chlorodibromomethane	0.556 0.525	0.674	0.745	0.714	0.763	0.728	AVRG		0.672		14.1	
1,3-Dichloropropane	1.15 0.992	1.15	1.18	1.10	1.15	1.06	AVRG		1.11		5.88	
1,2-Dibromoethane	0.510 0.506	0.603	0.623	0.569	0.634	0.616	AVRG		0.580		9.18	
2-Hexanone	0.558 0.469	0.617	0.684	0.621	0.639	0.578	AVRG		0.595		11.6	
1-Chlorohexane	1.04 0.789	0.834	0.826	0.752	0.787	0.783	AVRG		0.830		11.7	
Chlorobenzene	1.71 1.55	1.77	1.77	1.62	1.72	1.61	AVRG		1.68		5.18	
Ethylbenzene	0.955 0.817	0.936	0.915	0.852	0.893	0.857	AVRG		0.889		5.58	
1,1,1,2-Tetrachloroethane	0.564 0.496	0.609	0.639	0.599	0.640	0.607	AVRG		0.593		8.43	
mp-Xylene	1.16 1.01	1.15	1.14	1.05	1.10	1.02	AVRG		1.09		5.90	

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o-Xylene	1.10 0.910	1.13	1.13	1.04	1.09	1.03	AVRG		1.06		7.20	
Styrene	1.89 1.71	1.99	2.05	1.94	2.02	1.88	AVRG		1.93		5.93	
Bromoform	0.420 0.371	0.470	0.529	0.525	0.564	0.552	AVRG		0.490		14.8	
Isopropylbenzene	2.93 2.48	2.89	2.81	2.62	2.65	2.40	AVRG		2.68		7.54	
100 1,2-Dichloroethene, Total	0.403 0.362	0.439	0.421	0.394	0.419	0.393	AVRG		0.405		6.19	
Bromobenzene	0.795 0.722	0.823	0.809	0.759	0.796	0.745	AVRG		0.778		4.73	
n-Propylbenzene	0.957 0.742	0.855	0.830	0.786	0.814	0.763	AVRG		0.821		8.69	
1,1,2,2-Tetrachloroethane	0.915 0.862	1.02	1.04	0.985	1.01	0.940	AVRG		0.967		6.63	
o-Chlorotoluene	2.82 2.32	2.54	2.56	2.42	2.53	2.33	AVRG		2.50		6.90	
1,3,5-Trimethylbenzene	2.56 2.19	2.59	2.61	2.51	2.58	2.36	AVRG		2.49		6.23	
1,2,3-Trichloropropane	0.304 0.251	0.321	0.325	0.297	0.307	0.289	AVRG		0.299		8.21	
trans-1,4-Dichloro-2-butene	0.287 0.269	0.278	0.307	0.300	0.331	0.323	AVRG		0.299		7.66	

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p-Chlorotoluene	2.70	2.18	2.38	2.36	2.23	2.30	2.10	AVRG		2.32		8.26	
tert-Butylbenzene	0.656	0.576	0.629	0.597	0.550	0.559	0.524	AVRG		0.584		7.92	
Pentachloroethane	0.450	0.415	0.505	0.523	0.483	0.512	0.492	AVRG		0.483		7.90	
1,2,4-Trimethylbenzene	2.76	2.32	2.68	2.68	2.53	2.58	2.35	AVRG		2.56		6.62	
sec-Butylbenzene	3.68	2.89	3.27	3.23	3.00	3.00	2.70	AVRG		3.11		10.2	
p-Isopropyltoluene	0.744	0.640	0.717	0.715	0.667	0.689	0.643	AVRG		0.688		5.79	
1,3-Dichlorobenzene	1.69	1.40	1.51	1.48	1.40	1.45	1.35	AVRG		1.47		7.62	
1,4-Dichlorobenzene	1.81	1.41	1.54	1.51	1.43	1.49	1.40	AVRG		1.51		9.16	
Benzyl Chloride	1471	2294	17647	84609	206229	460230	941153	WLINR	0.010	2.87		0.999	
n-Butylbenzene	0.801	0.611	0.656	0.656	0.614	0.629	0.587	AVRG		0.650		10.9	
Hexachloroethane	0.486	0.377	0.488	0.498	0.490	0.518	0.495	AVRG		0.479		9.64	
1,2-Dichlorobenzene	1.53	1.30	1.46	1.47	1.38	1.45	1.33	AVRG		1.42		5.78	

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1,2-Dibromo-3-chloropropane	0.178 0.172	0.182	0.190	0.183	0.191	0.185	AVRG		0.183		3.57	
Nitrobenzene	2125 3549	24656	149671	458899	1212604	2685707	QUAD	-0.075	0.084	0.000	0.998	
Hexachlorobutadiene	0.494 0.386	0.374	0.386	0.370	0.364	0.327	AVRG		0.386		13.4	
120 1,3-Dichloropropene, Total	0.908 0.824	1.04	1.13	1.08	1.16	1.08	AVRG		1.03		11.8	
1,2,4-Trichlorobenzene	1.11 0.860	0.903	0.942	0.915	0.925	0.854	AVRG		0.930		9.26	
121 Total Xylenes	1.14 0.975	1.14	1.14	1.04	1.09	1.03	AVRG		1.08		6.13	
Naphthalene	2.44 2.12	2.55	2.81	2.72	2.79	2.55	AVRG		2.57		9.40	
1,2,3-Trichlorobenzene	0.982 0.748	0.898	0.936	0.898	0.943	0.885	AVRG		0.899		8.28	
41 Dibromofluoromethane	0.282 0.272	0.278	0.286	0.276	0.281	0.278	AVRG		0.279		1.69	
51 1,2-Dichloroethane-d4	0.369 0.353	0.358	0.361	0.342	0.353	0.364	AVRG		0.357		2.50	
68 Toluene-d8	2.50 2.43	2.41	2.45	2.37	2.42	2.33	AVRG		2.42		2.18	
92 4-Bromofluorobenzene	0.860 0.878	0.826	0.845	0.848	0.849	0.839	AVRG		0.849		1.91	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

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Form 6I Initial Calibration Verification (ICV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071816ICVQ.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id ICVQ
Data Type MS DATA
File ID 2324071816ICVQ.D
Fraction VOA
SampleType ICV
Inj Date 18-JUL-2024 1702

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Dichlorodifluoromethane	20.0	20.5	102	80-120	
Chloromethane	20.0	19.3	96.7	80-120	
Vinyl Chloride	20.0	20.4	102	80-120	
Bromomethane	20.0	21.4	107	80-120	
Chloroethane	20.0	20.8	104	80-120	
Pentane	20.0	19.6	98.2	80-120	
Trichlorofluoromethane	20.0	21.4	107	80-120	
Dichlorofluoromethane	20.0	20.5	102	80-120	
Ethyl Ether	20.0	20.7	104	80-120	
1,1-Dichloroethene	20.0	21.4	107	80-120	
Freon 113	20.0	21.8	109	80-120	
Carbon Disulfide	20.0	20.3	102	80-120	
Iodomethane	20.0	14.4	71.8	80-120	*
Acrolein	150	177	118	80-120	
Isopropyl Alcohol	100	98.1	98.1	80-120	
3-Chloro-1-propene	20.0	22.6	113	80-120	
Methylene Chloride	20.0	20.5	102	80-120	
Acetone	100	119	119	80-120	
Methyl acetate	20.0	19.9	99.6	80-120	
trans-1,2-Dichloroethene	20.0	20.3	101	80-120	
Hexane	20.0	21.3	106	80-120	
Methyl t-Butyl Ether	20.0	21.5	108	80-120	
tert.- Butyl Alcohol	100	108	108	80-120	
Acetonitrile	100	102	102	80-120	
Diisopropyl ether	20.0	20.8	104	80-120	
Chloroprene	20.0	23.8	119	80-120	
1,1-Dichloroethane	20.0	20.5	102	80-120	
Acrylonitrile	100	100	100	80-120	
Ethyl tert-butyl ether	20.0	21.6	108	80-120	
n-Propanol	200	196	98.0	80-120	
Vinyl acetate	20.0	20.8	104	80-120	
cis-1,2-Dichloroethene	20.0	21.0	105	80-120	
2,2-Dichloropropane	20.0	20.8	104	80-120	
Bromochloromethane	20.0	21.4	107	80-120	

Form 6I Initial Calibration Verification (ICV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071816ICVQ.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id ICVQ
Data Type MS DATA
File ID 2324071816ICVQ.D

Fraction VOA
SampleType ICV
Inj Date 18-JUL-2024 1702

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Cyclohexane	20.0	20.9	105	80-120	
Chloroform	20.0	20.4	102	80-120	
Ethyl acetate	20.0	20.3	102	80-120	
Methyl acrylate	20.0	21.2	106	80-120	
Carbon Tetrachloride	20.0	20.4	102	80-120	
Tetrahydrofuran	100	105	105	80-120	
1,1,1-Trichloroethane	20.0	21.4	107	80-120	
2-Butanone	100	94.5	94.5	80-120	
1,1-Dichloropropene	20.0	20.3	102	80-120	
1-Chlorobutane	20.0	20.0	99.9	80-120	
Heptane	20.0	19.6	98.0	80-120	
Benzene	20.0	20.3	102	80-120	
Propionitrile	100	106	106	80-120	
Methacrylonitrile	20.0	21.3	106	80-120	
tert-amyl methyl E	20.0	21.7	109	80-120	
1,2-Dichloroethane	20.0	20.1	101	80-120	
tert-Amyl Alcohol	100	93.8	93.8	80-120	
Isobutyl alcohol	200	161	80.4	80-120	
Diisobutylene	20.0	20.4	102	80-120	
Trichloroethene	20.0	20.2	101	80-120	
Methyl cyclohexane	20.0	20.5	103	80-120	
tert-Amyl Ethylether	20.0	20.3	101	80-120	
Dibromomethane	20.0	20.9	104	80-120	
1,2-Dichloropropane	20.0	20.5	103	80-120	
Bromodichloromethane	20.0	21.2	106	80-120	
Methyl methacrylate	20.0	20.7	103	80-120	
1,4-Dioxane	500	0.000		80-120	*
2-Chloroethylvinyl ether	20.0	21.9	110	80-120	
cis-1,3-Dichloropropene	20.0	20.5	102	80-120	
Octane	20.0	20.3	101	80-120	
Toluene	20.0	20.2	101	80-120	
Chloroacetonitrile	100	90.8	90.8	80-120	
2-Nitropropane	100	93.5	93.5	80-120	
1,1-Dichloro-2-pro	100	91.3	91.3	80-120	

Form 6I Initial Calibration Verification (ICV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071816ICVQ.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id ICVQ
Data Type MS DATA
File ID 2324071816ICVQ.D
Fraction VOA
SampleType ICV
Inj Date 18-JUL-2024 1702

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
4-Methyl-2-Pentanone(MIBK)	100	109	109	80-120	
Tetrachloroethene	20.0	20.0	100	80-120	
trans-1,3-Dichloropropene	20.0	21.5	108	80-120	
Ethyl methacrylate	20.0	21.5	108	80-120	
1,1,2-Trichloroethane	20.0	21.2	106	80-120	
Chlorodibromomethane	20.0	21.2	106	80-120	
1,3-Dichloropropane	20.0	20.6	103	80-120	
1,2-Dibromoethane	20.0	20.0	100	80-120	
2-Hexanone	100	111	111	80-120	
1-Chlorohexane	20.0	18.7	93.5	80-120	
Chlorobenzene	20.0	20.3	101	80-120	
Ethylbenzene	20.0	20.4	102	80-120	
1,1,1,2-Tetrachloroethane	20.0	21.1	105	80-120	
mp-Xylene	40.0	40.3	101	80-120	
o-Xylene	20.0	20.6	103	80-120	
Styrene	20.0	20.9	104	80-120	
Bromoform	20.0	20.7	104	80-120	
Isopropylbenzene	20.0	22.5	113	80-120	
Bromobenzene	20.0	20.3	101	80-120	
n-Propylbenzene	20.0	19.8	99.2	80-120	
1,1,2,2-Tetrachloroethane	20.0	21.3	106	80-120	
o-Chlorotoluene	20.0	20.4	102	80-120	
1,3,5-Trimethylbenzene	20.0	20.7	104	80-120	
1,2,3-Trichloropropane	20.0	20.8	104	80-120	
trans-1,4-Dichloro-2-butene	20.0	19.5	97.6	80-120	
1,2-Dichloroethene, Total	40.0	41.3	103	80-120	
p-Chlorotoluene	20.0	19.8	99.0	80-120	
tert-Butylbenzene	20.0	20.1	101	80-120	
Pentachloroethane	20.0	20.7	103	80-120	
1,2,4-Trimethylbenzene	20.0	20.4	102	80-120	
sec-Butylbenzene	20.0	20.4	102	80-120	
p-Isopropyltoluene	20.0	19.9	99.4	80-120	
1,3-Dichlorobenzene	20.0	19.5	97.3	80-120	
1,4-Dichlorobenzene	20.0	19.7	98.5	80-120	

Form 6I Initial Calibration Verification (ICV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071816ICVQ.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id ICVQ
Data Type MS DATA
File ID 2324071816ICVQ.D
Fraction VOA
SampleType ICV
Inj Date 18-JUL-2024 1702

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Benzyl Chloride	20.0	18.9	94.5	80-120	
n-Butylbenzene	20.0	19.6	98.2	80-120	
Hexachloroethane	20.0	20.7	103	80-120	
1,2-Dichlorobenzene	20.0	19.9	99.7	80-120	
1,2-Dibromo-3-chloropropane	20.0	19.9	99.4	80-120	
Nitrobenzene	200	162	81.2	80-120	
Hexachlorobutadiene	20.0	20.3	102	80-120	
1,2,4-Trichlorobenzene	20.0	21.2	106	80-120	
Naphthalene	20.0	21.4	107	80-120	
1,2,3-Trichlorobenzene	20.0	19.9	99.6	80-120	
1,3-Dichloropropene, Total	40.0	42.0	105	80-120	
121 TOTAL XYLENES	60.0	61.0	102	80-120	

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Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071901.D

Volatiles by EPA 8260C

Instrument ID ms23.i
Lab File ID 2324071901.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 19-JUL-2024 1101
ICAL Date(s) 18-JUL-2024, 18-JUL-2024
ICAL Times 12:44, 14:43
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dichlorodifluoromethane	0.408	0.447	0.447	0.010	9.58	20.0	Averaged	
Chloromethane	0.416	0.406	0.406	0.100	-2.585	20.0	Averaged	
Vinyl Chloride	0.368	0.387	0.387	0.010	5.15	20.0	Averaged	
Bromomethane	50.0	50.0	5.82	0.010	0.051	20.0	Wt Linear	
Chloroethane	0.198	0.207	0.207	0.010	4.40	20.0	Averaged	
Pentane	0.269	0.262	0.262	0.010	-2.799	20.0	Averaged	
Trichlorofluoromethane	0.451	0.498	0.498	0.010	10.4	20.0	Averaged	
Dichlorofluoromethane	0.580	0.569	0.569	0.010	-1.917	20.0	Averaged	
Ethyl Ether	0.184	0.181	0.181	0.010	-1.672	20.0	Averaged	
1,1-Dichloroethene	0.403	0.404	0.404	0.010	0.291	20.0	Averaged	
Freon 113	0.237	0.246	0.246	0.010	3.85	20.0	Averaged	
Carbon Disulfide	0.819	0.812	0.812	0.010	-0.835	20.0	Averaged	
Iodomethane	0.118	0.112	0.112	0.010	-5.624	20.0	Averaged	
Acrolein	0.054	0.054	0.054	0.000	-0.915	20.0	Averaged	
Isopropyl Alcohol	250	225	43.1	0.000	-10.195	20.0	Wt Linear	
3-Chloro-1-propene	0.426	0.441	0.441	0.010	3.74	20.0	Averaged	
Methylene Chloride	0.294	0.283	0.283	0.010	-3.855	20.0	Averaged	
Acetone	0.034	0.033	0.033	0.000	-4.682	20.0	Averaged	
Methyl acetate	50.0	45.8	17.4	0.005	-8.443	20.0	Wt Linear	
trans-1,2-Dichloroethene	0.403	0.395	0.395	0.010	-1.976	20.0	Averaged	
Hexane	0.600	0.612	0.612	0.010	2.04	20.0	Averaged	
Methyl t-Butyl Ether	0.864	0.856	0.856	0.010	-1.010	20.0	Averaged	
tert.- Butyl Alcohol	0.037	0.036	0.036	0.000	-3.359	20.0	Averaged	
Acetonitrile	0.054	0.050	0.050	0.000	-7.100	20.0	Averaged	
Diisopropyl ether	0.988	0.990	0.990	0.010	0.187	20.0	Averaged	
Chloroprene	0.356	0.368	0.368	0.010	3.44	20.0	Averaged	
1,1-Dichloroethane	0.528	0.524	0.524	0.100	-0.812	20.0	Averaged	
Acrylonitrile	0.168	0.164	0.164	0.000	-2.452	20.0	Averaged	
Ethyl tert-butyl ether	0.928	0.934	0.934	0.010	0.701	20.0	Averaged	
n-Propanol	0.021	0.020	0.020	0.000	-6.937	20.0	Averaged	
Vinyl Acetate	0.069	0.073	0.073	0.010	5.23	20.0	Averaged	
cis-1,2-Dichloroethene	0.406	0.405	0.405	0.010	-0.193	20.0	Averaged	
2,2-Dichloropropane	0.406	0.437	0.437	0.010	7.58	20.0	Averaged	
Bromochloromethane	0.147	0.148	0.148	0.010	0.814	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071901.D

Volatiles by EPA 8260C

Instrument ID ms23.i
Lab File ID 2324071901.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 19-JUL-2024 1101
ICAL Date(s) 18-JUL-2024, 18-JUL-2024
ICAL Times 12:44, 14:43
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Cyclohexane	0.419	0.410	0.410	0.010	-2.065	20.0	Averaged	
Chloroform	0.550	0.539	0.539	0.010	-2.037	20.0	Averaged	
Ethyl Acetate	0.402	0.395	0.395	0.010	-1.590	20.0	Averaged	
Methyl acrylate	0.335	0.329	0.329	0.010	-1.809	20.0	Averaged	
Carbon Tetrachloride	0.357	0.378	0.378	0.010	5.69	20.0	Averaged	
41 Dibromofluoromethane	0.279	0.280	0.280	0.010	0.273	20.0	Averaged	
Tetrahydrofuran	0.116	0.110	0.110	0.000	-4.918	20.0	Averaged	
1,1,1-Trichloroethane	0.436	0.439	0.439	0.010	0.772	20.0	Averaged	
2-Butanone	250	237	23.6	0.000	-5.146	20.0	Wt Linear	
1,1-Dichloropropene	0.402	0.397	0.397	0.010	-1.256	20.0	Averaged	
1-Chlorobutane	0.341	0.330	0.330	0.010	-3.441	20.0	Averaged	
Heptane	0.207	0.205	0.205	0.000	-1.083	20.0	Averaged	
Benzene	1.13	1.10	1.10	0.010	-2.699	20.0	Averaged	
Propionitrile	0.058	0.056	0.056	0.000	-3.322	20.0	Averaged	
Methacrylonitrile	0.149	0.144	0.144	0.010	-3.350	20.0	Averaged	
tert-Amyl methyl ether	0.847	0.845	0.845	0.010	-0.209	20.0	Averaged	
Isobutyl alcohol	500	417	95.3	0.000	-16.655	20.0	Quadratic	
51 1,2-Dichloroethane-d4	0.357	0.386	0.386	0.010	8.25	20.0	Averaged	
1,2-Dichloroethane	0.456	0.434	0.434	0.010	-4.729	20.0	Averaged	
tert-Amyl Alcohol	250	211	33.6	0.002	-15.525	20.0	Wt Linear	
Diisobutylene	50.0	51.0	1.40	0.010	2.09	20.0	Wt Linear	
Trichloroethene	0.310	0.304	0.304	0.010	-1.895	20.0	Averaged	
Methyl cyclohexane	1.01	1.04	1.04	0.005	2.89	20.0	Averaged	
tert-Amyl Ethylether	0.700	0.699	0.699	0.010	-0.159	20.0	Averaged	
Dibromomethane	0.203	0.200	0.200	0.010	-1.617	20.0	Averaged	
1,2-Dichloropropane	0.311	0.302	0.302	0.010	-2.833	20.0	Averaged	
Bromodichloromethane	0.393	0.399	0.399	0.010	1.49	20.0	Averaged	
Methyl methacrylate	0.338	0.330	0.330	0.010	-2.203	20.0	Averaged	
1,4-Dioxane	0.004	0.004	0.004	0.000	-2.456	20.0	Averaged	
2-Chloroethylvinyl ether	0.225	0.207	0.207	0.010	-7.789	20.0	Averaged	
cis-1,3-Dichloropropene	1.07	1.15	1.15	0.010	7.58	20.0	Averaged	
Octane	0.389	0.415	0.415	0.010	6.73	20.0	Averaged	
68 Toluene-d8	2.42	2.47	2.47	0.010	2.23	20.0	Averaged	
Toluene	1.57	1.55	1.55	0.010	-1.176	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071901.D

Volatiles by EPA 8260C

Instrument ID ms23.i
Lab File ID 2324071901.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 19-JUL-2024 1101
ICAL Date(s) 18-JUL-2024, 18-JUL-2024
ICAL Times 12:44, 14:43
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Chloroacetonitrile	250	252	19.7	0.000	0.894	20.0	Wt Linear	
2-Nitropropane	250	238	3.70	0.005	-4.782	20.0	Wt Linear	
1,1-Dichloro-2-Propanone	250	227	51.7	0.001	-9.148	20.0	Wt Linear	
4-Methyl-2-Pentanone(MIBK)	0.829	0.846	0.846	0.010	2.04	20.0	Averaged	
trans-1,3-Dichloropropene	0.996	1.08	1.08	0.010	8.20	20.0	Averaged	
Tetrachloroethene	0.575	0.570	0.570	0.010	-0.902	20.0	Averaged	
Ethyl Methacrylate	0.981	1.03	1.03	0.010	4.99	20.0	Averaged	
1,1,2-Trichloroethane	0.543	0.548	0.548	0.010	0.911	20.0	Averaged	
Chlorodibromomethane	0.672	0.717	0.717	0.010	6.66	20.0	Averaged	
1,3-Dichloropropane	1.11	1.10	1.10	0.010	-0.651	20.0	Averaged	
1,2-Dibromoethane	0.580	0.584	0.584	0.010	0.708	20.0	Averaged	
2-Hexanone	0.595	0.604	0.604	0.010	1.51	20.0	Averaged	
1-Chlorohexane	0.830	0.815	0.815	0.010	-1.825	20.0	Averaged	
Chlorobenzene	1.68	1.67	1.67	0.300	-0.467	20.0	Averaged	
Ethylbenzene	0.889	0.865	0.865	0.010	-2.727	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.593	0.613	0.613	0.010	3.27	20.0	Averaged	
mp-Xylene	1.09	1.07	1.07	0.010	-2.215	20.0	Averaged	
o-Xylene	1.06	1.05	1.05	0.010	-0.662	20.0	Averaged	
Styrene	1.93	2.01	2.01	0.010	4.17	20.0	Averaged	
Bromoform	0.490	0.531	0.531	0.100	8.40	20.0	Averaged	
Isopropylbenzene	2.68	2.70	2.70	0.010	0.721	20.0	Averaged	
100 1,2-Dichloroethene, Total	0.405	0.400	0.400	0.010	-1.081	20.0	Averaged	
92 4-Bromofluorobenzene	0.849	0.882	0.882	0.010	3.83	20.0	Averaged	
Bromobenzene	0.778	0.776	0.776	0.010	-0.271	20.0	Averaged	
n-Propylbenzene	0.821	0.819	0.819	0.010	-0.208	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.967	0.998	0.998	0.300	3.17	20.0	Averaged	
o-Chlorotoluene	2.50	2.55	2.55	0.010	1.95	20.0	Averaged	
1,3,5-Trimethylbenzene	2.49	2.62	2.62	0.010	5.33	20.0	Averaged	
1,2,3-Trichloropropane	0.299	0.303	0.303	0.010	1.33	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.299	0.312	0.312	0.010	4.27	20.0	Averaged	
p-Chlorotoluene	2.32	2.32	2.32	0.010	-0.191	20.0	Averaged	
tert-Butylbenzene	0.584	0.576	0.576	0.010	-1.470	20.0	Averaged	
Pentachloroethane	0.483	0.540	0.540	0.010	11.8	20.0	Averaged	
1,2,4-Trimethylbenzene	2.56	2.65	2.65	0.010	3.80	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071901.D

Volatiles by EPA 8260C

Instrument ID ms23.i
Lab File ID 2324071901.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 19-JUL-2024 1101
ICAL Date(s) 18-JUL-2024, 18-JUL-2024
ICAL Times 12:44, 14:43
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
sec-Butylbenzene	3.11	3.15	3.15	0.010	1.14	20.0	Averaged	
p-Isopropyltoluene	0.688	0.702	0.702	0.010	2.09	20.0	Averaged	
1,3-Dichlorobenzene	1.47	1.47	1.47	0.010	-0.170	20.0	Averaged	
1,4-Dichlorobenzene	1.51	1.48	1.48	0.010	-2.012	20.0	Averaged	
Benzyl Chloride	50.0	51.6	2.80	0.010	3.28	20.0	Wt Linear	
n-Butylbenzene	0.650	0.653	0.653	0.010	0.373	20.0	Averaged	
Hexachloroethane	0.479	0.512	0.512	0.010	6.94	20.0	Averaged	
1,2-Dichlorobenzene	1.42	1.43	1.43	0.010	0.730	20.0	Averaged	
1,2-Dibromo-3-chloropropane	0.183	0.185	0.185	0.010	0.721	20.0	Averaged	
Nitrobenzene	500	438	13.9	0.000	-12.486	20.0	Quadratic	
Hexachlorobutadiene	0.386	0.392	0.392	0.000	1.51	20.0	Averaged	
120 1,3-Dichloropropene, Total	1.03	1.11	1.11	0.010	7.88	20.0	Averaged	
1,2,4-Trichlorobenzene	0.930	0.934	0.934	0.010	0.423	20.0	Averaged	
121 Total Xylenes	1.08	1.06	1.06	0.010	-1.707	20.0	Averaged	
Naphthalene	2.57	2.75	2.75	0.010	6.84	20.0	Averaged	
1,2,3-Trichlorobenzene	0.899	0.930	0.930	0.010	3.46	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071928.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2324071928.D
Fraction VOA
SampleType ENDCCV
Inj Date 19-JUL-2024 2103

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Dichlorodifluoromethane	50.0	50.1	100	50-150	
Chloromethane	50.0	38.4	76.8	50-150	
Vinyl Chloride	50.0	48.6	97.1	50-150	
Bromomethane	50.0	41.5	83.0	50-150	
Chloroethane	50.0	50.8	102	50-150	
Pentane	50.0	42.5	84.9	50-150	
Trichlorofluoromethane	50.0	52.1	104	50-150	
Dichlorofluoromethane	50.0	46.9	93.8	50-150	
Ethyl Ether	50.0	48.5	97.0	50-150	
1,1-Dichloroethene	50.0	47.8	95.7	50-150	
Freon 113	50.0	46.8	93.6	50-150	
Carbon Disulfide	50.0	46.0	92.0	50-150	
Iodomethane	50.0	36.1	72.2	50-150	
Acrolein	250	244	97.6	50-150	
Isopropyl Alcohol	250	220	88.0	50-150	
3-Chloro-1-propene	50.0	47.4	94.8	50-150	
Methylene Chloride	50.0	46.1	92.2	50-150	
Acetone	250	230	92.0	50-150	
Methyl acetate	50.0	46.0	92.0	50-150	
trans-1,2-Dichloroethene	50.0	46.5	93.1	50-150	
Hexane	50.0	43.2	86.4	50-150	
Methyl t-Butyl Ether	50.0	48.7	97.4	50-150	
tert.- Butyl Alcohol	250	245	97.9	50-150	
Acetonitrile	250	227	90.8	50-150	
Diisopropyl ether	50.0	48.3	96.6	50-150	
Chloroprene	50.0	48.4	96.8	50-150	
1,1-Dichloroethane	50.0	47.6	95.2	50-150	
Acrylonitrile	250	241	96.3	50-150	
n-Propanol	500	447	89.3	50-150	
Ethyl tert-butyl ether	50.0	49.2	98.4	50-150	
Vinyl acetate	50.0	50.1	100	50-150	
cis-1,2-Dichloroethene	50.0	48.1	96.2	50-150	
2,2-Dichloropropane	50.0	37.9	75.9	50-150	
Bromochloromethane	50.0	49.1	98.2	50-150	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071928.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2324071928.D
Fraction VOA
SampleType ENDCCV
Inj Date 19-JUL-2024 2103

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Cyclohexane	50.0	45.9	91.8	50-150	
Chloroform	50.0	48.1	96.2	50-150	
Ethyl acetate	50.0	48.9	97.7	50-150	
Methyl acrylate	50.0	48.4	96.9	50-150	
Carbon Tetrachloride	50.0	52.2	104	50-150	
Tetrahydrofuran	250	240	95.9	50-150	
1,1,1-Trichloroethane	50.0	49.1	98.1	50-150	
2-Butanone	250	235	94.0	50-150	
1,1-Dichloropropene	50.0	46.8	93.5	50-150	
1-Chlorobutane	50.0	45.8	91.5	50-150	
Heptane	50.0	36.3	72.5	50-150	
Benzene	50.0	47.2	94.5	50-150	
Propionitrile	250	237	95.0	50-150	
Methacrylonitrile	50.0	48.3	96.6	50-150	
tert-amyl methyl E	50.0	48.5	97.1	50-150	
Isobutyl alcohol	500	419	83.8	50-150	
1,2-Dichloroethane	50.0	46.6	93.3	50-150	
tert-Amyl Alcohol	250	210	84.2	50-150	
Diisobutylene	50.0	45.2	90.4	50-150	
Trichloroethene	50.0	46.1	92.1	50-150	
Methyl cyclohexane	50.0	44.9	89.9	50-150	
tert-Amyl Ethylether	50.0	48.6	97.2	50-150	
Dibromomethane	50.0	48.6	97.2	50-150	
1,2-Dichloropropane	50.0	47.3	94.6	50-150	
Bromodichloromethane	50.0	49.7	99.5	50-150	
Methyl methacrylate	50.0	48.2	96.5	50-150	
1,4-Dioxane	1250	0.000		50-150	*
2-Chloroethylvinyl ether	50.0	42.5	85.0	50-150	
cis-1,3-Dichloropropene	50.0	48.1	96.2	50-150	
Octane	50.0	37.4	74.7	50-150	
Toluene	50.0	46.4	92.7	50-150	
Chloroacetonitrile	250	234	93.4	50-150	
2-Nitropropane	250	230	92.1	50-150	
1,1-Dichloro-2-pro	250	220	87.9	50-150	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071928.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2324071928.D
Fraction VOA
SampleType ENDCCV
Inj Date 19-JUL-2024 2103

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
4-Methyl-2-Pentanone(MIBK)	250	248	99.1	50-150	
Tetrachloroethene	50.0	52.3	105	50-150	
trans-1,3-Dichloropropene	50.0	49.0	98.0	50-150	
Ethyl methacrylate	50.0	50.2	100	50-150	
1,1,2-Trichloroethane	50.0	48.1	96.2	50-150	
Chlorodibromomethane	50.0	50.4	101	50-150	
1,2-Dibromoethane	50.0	48.2	96.5	50-150	
2-Hexanone	250	246	98.5	50-150	
1-Chlorohexane	50.0	41.0	82.0	50-150	
1,3-Dichloropropane	50.0	47.2	94.5	50-150	
Chlorobenzene	50.0	46.9	93.7	50-150	
Ethylbenzene	50.0	45.7	91.3	50-150	
1,1,1,2-Tetrachloroethane	50.0	48.8	97.7	50-150	
mp-Xylene	100	90.4	90.4	50-150	
o-Xylene	50.0	46.2	92.3	50-150	
Styrene	50.0	48.3	96.6	50-150	
Bromoform	50.0	51.4	103	50-150	
Isopropylbenzene	50.0	46.1	92.2	50-150	
Bromobenzene	50.0	47.1	94.1	50-150	
n-Propylbenzene	50.0	44.8	89.5	50-150	
1,1,2,2-Tetrachloroethane	50.0	48.8	97.6	50-150	
o-Chlorotoluene	50.0	46.1	92.2	50-150	
1,2-Dichloroethene, Total	100	94.6	94.6	50-150	
1,3,5-Trimethylbenzene	50.0	47.7	95.4	50-150	
1,2,3-Trichloropropane	50.0	48.3	96.6	50-150	
trans-1,4-Dichloro-2-butene	50.0	40.6	81.2	50-150	
p-Chlorotoluene	50.0	45.3	90.6	50-150	
tert-Butylbenzene	50.0	44.0	88.1	50-150	
Pentachloroethane	50.0	42.6	85.1	50-150	
1,2,4-Trimethylbenzene	50.0	47.2	94.4	50-150	
sec-Butylbenzene	50.0	44.9	89.8	50-150	
p-Isopropyltoluene	50.0	44.3	88.6	50-150	
1,3-Dichlorobenzene	50.0	45.2	90.5	50-150	
1,4-Dichlorobenzene	50.0	44.6	89.2	50-150	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324071928.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2324071928.D
Fraction VOA
SampleType ENDCCV
Inj Date 19-JUL-2024 2103

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Benzyl Chloride	50.0	30.6	61.2	50-150	
n-Butylbenzene	50.0	43.5	87.0	50-150	
Hexachloroethane	50.0	48.0	96.0	50-150	
1,2-Dichlorobenzene	50.0	46.8	93.7	50-150	
1,2-Dibromo-3-chloropropane	50.0	46.1	92.3	50-150	
Nitrobenzene	500	421	84.2	50-150	
Hexachlorobutadiene	50.0	43.3	86.5	50-150	
1,2,4-Trichlorobenzene	50.0	46.0	91.9	50-150	
Naphthalene	50.0	50.9	102	50-150	
1,3-Dichloropropene, Total	100	97.1	97.1	50-150	
1,2,3-Trichlorobenzene	50.0	48.1	96.2	50-150	
121 TOTAL XYLENES	150	137	91.1	50-150	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324072501.D

Volatiles by EPA 8260C

Instrument ID ms23.i
Lab File ID 2324072501.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 25-JUL-2024 1023
ICAL Date(s) 18-JUL-2024, 18-JUL-2024
ICAL Times 12:44, 14:43
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dichlorodifluoromethane	0.408	0.389	0.389	0.010	-4.643	20.0	Averaged	
Chloromethane	0.416	0.383	0.383	0.100	-7.977	20.0	Averaged	
Vinyl Chloride	0.368	0.377	0.377	0.010	2.48	20.0	Averaged	
Bromomethane	50.0	51.6	5.64	0.010	3.14	20.0	Wt Linear	
Chloroethane	0.198	0.219	0.219	0.010	10.4	20.0	Averaged	
Pentane	0.269	0.240	0.240	0.010	-10.874	20.0	Averaged	
Trichlorofluoromethane	0.451	0.466	0.466	0.010	3.49	20.0	Averaged	
Dichlorofluoromethane	0.580	0.553	0.553	0.010	-4.785	20.0	Averaged	
Ethyl Ether	0.184	0.188	0.188	0.010	1.75	20.0	Averaged	
1,1-Dichloroethene	0.403	0.389	0.389	0.010	-3.470	20.0	Averaged	
Carbon Disulfide	0.819	0.774	0.774	0.010	-5.493	20.0	Averaged	
Freon 113	0.237	0.231	0.231	0.010	-2.285	20.0	Averaged	
Iodomethane	0.118	0.112	0.112	0.010	-5.698	20.0	Averaged	
Acrolein	0.054	0.061	0.061	0.000	13.8	20.0	Averaged	
3-Chloro-1-propene	0.426	0.436	0.436	0.010	2.53	20.0	Averaged	
Isopropyl Alcohol	250	264	36.6	0.000	5.74	20.0	Wt Linear	
Methylene Chloride	0.294	0.292	0.292	0.010	-0.769	20.0	Averaged	
Acetone	0.034	0.037	0.037	0.000	9.06	20.0	Averaged	
Methyl acetate	50.0	52.6	15.2	0.005	5.13	20.0	Wt Linear	
trans-1,2-Dichloroethene	0.403	0.389	0.389	0.010	-3.494	20.0	Averaged	
Hexane	0.600	0.589	0.589	0.010	-1.762	20.0	Averaged	
Methyl t-Butyl Ether	0.864	0.912	0.912	0.010	5.55	20.0	Averaged	
tert.- Butyl Alcohol	0.037	0.044	0.044	0.000	17.2	20.0	Averaged	
Acetonitrile	0.054	0.056	0.056	0.000	3.28	20.0	Averaged	
Diisopropyl ether	0.988	1.02	1.02	0.010	3.07	20.0	Averaged	
Chloroprene	0.356	0.350	0.350	0.010	-1.631	20.0	Averaged	
1,1-Dichloroethane	0.528	0.528	0.528	0.100	-0.023	20.0	Averaged	
Acrylonitrile	0.168	0.183	0.183	0.000	9.07	20.0	Averaged	
n-Propanol	0.021	0.020	0.020	0.000	-4.185	20.0	Averaged	
Ethyl tert-butyl ether	0.928	0.979	0.979	0.010	5.54	20.0	Averaged	
Vinyl Acetate	0.069	0.080	0.080	0.010	16.1	20.0	Averaged	
cis-1,2-Dichloroethene	0.406	0.412	0.412	0.010	1.36	20.0	Averaged	
2,2-Dichloropropane	0.406	0.428	0.428	0.010	5.40	20.0	Averaged	
100 1,2-Dichloroethene, Total	0.405	0.400	0.400	0.010	-1.057	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324072501.D

Volatiles by EPA 8260C

Instrument ID ms23.i
Lab File ID 2324072501.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 25-JUL-2024 1023
ICAL Date(s) 18-JUL-2024, 18-JUL-2024
ICAL Times 12:44, 14:43
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromochloromethane	0.147	0.155	0.155	0.010	5.96	20.0	Averaged	
Cyclohexane	0.419	0.394	0.394	0.010	-5.840	20.0	Averaged	
Chloroform	0.550	0.558	0.558	0.010	1.40	20.0	Averaged	
Ethyl Acetate	0.402	0.431	0.431	0.010	7.28	20.0	Averaged	
Methyl acrylate	0.335	0.372	0.372	0.010	11.1	20.0	Averaged	
Carbon Tetrachloride	0.357	0.368	0.368	0.010	3.00	20.0	Averaged	
Tetrahydrofuran	0.116	0.130	0.130	0.000	11.9	20.0	Averaged	
41 Dibromofluoromethane	0.279	0.294	0.294	0.010	5.43	20.0	Averaged	
1,1,1-Trichloroethane	0.436	0.443	0.443	0.010	1.57	20.0	Averaged	
2-Butanone	250	279	20.0	0.000	11.5	20.0	Wt Linear	
1,1-Dichloropropene	0.402	0.394	0.394	0.010	-1.967	20.0	Averaged	
1-Chlorobutane	0.341	0.321	0.321	0.010	-5.914	20.0	Averaged	
Heptane	0.207	0.192	0.192	0.000	-7.221	20.0	Averaged	
Propionitrile	0.058	0.064	0.064	0.000	9.74	20.0	Averaged	
Benzene	1.13	1.13	1.13	0.010	0.115	20.0	Averaged	
Methacrylonitrile	0.149	0.163	0.163	0.010	9.44	20.0	Averaged	
tert-Amyl methyl ether	0.847	0.906	0.906	0.010	6.94	20.0	Averaged	
51 1,2-Dichloroethane-d4	0.357	0.364	0.364	0.010	1.98	20.0	Averaged	
Isobutyl alcohol	500	483	82.1	0.000	-3.362	20.0	Quadratic	
1,2-Dichloroethane	0.456	0.446	0.446	0.010	-2.193	20.0	Averaged	
tert-Amyl Alcohol	250	257	27.5	0.002	2.95	20.0	Wt Linear	
Diisobutylene	50.0	48.8	1.46	0.010	-2.471	20.0	Wt Linear	
Trichloroethene	0.310	0.307	0.307	0.010	-0.884	20.0	Averaged	
Methyl cyclohexane	1.01	0.964	0.964	0.005	-4.799	20.0	Averaged	
tert-Amyl Ethylether	0.700	0.734	0.734	0.010	4.79	20.0	Averaged	
Dibromomethane	0.203	0.215	0.215	0.010	5.63	20.0	Averaged	
1,2-Dichloropropane	0.311	0.315	0.315	0.010	1.32	20.0	Averaged	
Bromodichloromethane	0.393	0.418	0.418	0.010	6.42	20.0	Averaged	
Methyl methacrylate	0.338	0.363	0.363	0.010	7.53	20.0	Averaged	
2-Chloroethylvinyl ether	0.225	0.209	0.209	0.010	-6.802	20.0	Averaged	
cis-1,3-Dichloropropene	1.07	1.17	1.17	0.010	9.56	20.0	Averaged	
Octane	0.389	0.385	0.385	0.010	-0.995	20.0	Averaged	
68 Toluene-d8	2.42	2.50	2.50	0.010	3.46	20.0	Averaged	
Toluene	1.57	1.56	1.56	0.010	-0.508	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324072501.D

Volatiles by EPA 8260C

Instrument ID ms23.i
Lab File ID 2324072501.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 25-JUL-2024 1023
ICAL Date(s) 18-JUL-2024, 18-JUL-2024
ICAL Times 12:44, 14:43
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Chloroacetonitrile	250	273	18.2	0.000	9.19	20.0	Wt Linear	
2-Nitropropane	250	259	3.39	0.005	3.77	20.0	Wt Linear	
1,1-Dichloro-2-Propanone	250	273	43.0	0.001	9.06	20.0	Wt Linear	
4-Methyl-2-Pentanone(MIBK)	0.829	0.958	0.958	0.010	15.6	20.0	Averaged	
trans-1,3-Dichloropropene	0.996	1.12	1.12	0.010	12.7	20.0	Averaged	
Tetrachloroethene	0.575	0.569	0.569	0.010	-0.986	20.0	Averaged	
Ethyl Methacrylate	0.981	1.11	1.11	0.010	13.4	20.0	Averaged	
1,1,2-Trichloroethane	0.543	0.574	0.574	0.010	5.61	20.0	Averaged	
Chlorodibromomethane	0.672	0.754	0.754	0.010	12.3	20.0	Averaged	
1,3-Dichloropropane	1.11	1.16	1.16	0.010	4.90	20.0	Averaged	
1,2-Dibromoethane	0.580	0.632	0.632	0.010	9.02	20.0	Averaged	
2-Hexanone	0.595	0.695	0.695	0.010	16.7	20.0	Averaged	
1-Chlorohexane	0.830	0.786	0.786	0.010	-5.341	20.0	Averaged	
Ethylbenzene	0.889	0.887	0.887	0.010	-0.308	20.0	Averaged	
Chlorobenzene	1.68	1.72	1.72	0.300	2.39	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.593	0.641	0.641	0.010	8.10	20.0	Averaged	
mp-Xylene	1.09	1.10	1.10	0.010	1.26	20.0	Averaged	
120 1,3-Dichloropropene, Total	1.03	1.15	1.15	0.010	11.1	20.0	Averaged	
o-Xylene	1.06	1.09	1.09	0.010	2.59	20.0	Averaged	
Styrene	1.93	2.02	2.02	0.010	5.04	20.0	Averaged	
Bromoform	0.490	0.566	0.566	0.100	15.4	20.0	Averaged	
Isopropylbenzene	2.68	2.71	2.71	0.010	0.940	20.0	Averaged	
92 4-Bromofluorobenzene	0.849	0.865	0.865	0.010	1.88	20.0	Averaged	
121 Total Xylenes	1.08	1.10	1.10	0.010	1.69	20.0	Averaged	
n-Propylbenzene	0.821	0.820	0.820	0.010	-0.127	20.0	Averaged	
Bromobenzene	0.778	0.802	0.802	0.010	3.04	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.967	1.08	1.08	0.300	11.8	20.0	Averaged	
1,3,5-Trimethylbenzene	2.49	2.59	2.59	0.010	4.17	20.0	Averaged	
o-Chlorotoluene	2.50	2.56	2.56	0.010	2.12	20.0	Averaged	
1,2,3-Trichloropropane	0.299	0.328	0.328	0.010	9.59	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.299	0.341	0.341	0.010	13.9	20.0	Averaged	
p-Chlorotoluene	2.32	2.31	2.31	0.010	-0.241	20.0	Averaged	
tert-Butylbenzene	0.584	0.584	0.584	0.010	-0.105	20.0	Averaged	
Pentachloroethane	0.483	0.541	0.541	0.010	11.9	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324072501.D

Volatiles by EPA 8260C

Instrument ID ms23.i
Lab File ID 2324072501.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 25-JUL-2024 1023
ICAL Date(s) 18-JUL-2024, 18-JUL-2024
ICAL Times 12:44, 14:43
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2,4-Trimethylbenzene	2.56	2.65	2.65	0.010	3.50	20.0	Averaged	
sec-Butylbenzene	3.11	3.11	3.11	0.010	0.118	20.0	Averaged	
p-Isopropyltoluene	0.688	0.689	0.689	0.010	0.162	20.0	Averaged	
1,3-Dichlorobenzene	1.47	1.48	1.48	0.010	0.598	20.0	Averaged	
1,4-Dichlorobenzene	1.51	1.52	1.52	0.010	0.601	20.0	Averaged	
n-Butylbenzene	0.650	0.638	0.638	0.010	-1.974	20.0	Averaged	
Benzyl Chloride	50.0	55.4	2.61	0.010	10.8	20.0	Wt Linear	
Hexachloroethane	0.479	0.518	0.518	0.010	8.18	20.0	Averaged	
1,2-Dichlorobenzene	1.42	1.47	1.47	0.010	3.86	20.0	Averaged	
1,2-Dibromo-3-chloropropane	0.183	0.201	0.201	0.010	9.77	20.0	Averaged	
Nitrobenzene	500	505	11.9	0.000	0.948	20.0	Quadratic	
Hexachlorobutadiene	0.386	0.384	0.384	0.000	-0.558	20.0	Averaged	
1,2,4-Trichlorobenzene	0.930	0.956	0.956	0.010	2.79	20.0	Averaged	
Naphthalene	2.57	2.95	2.95	0.010	15.0	20.0	Averaged	
1,2,3-Trichlorobenzene	0.899	0.962	0.962	0.010	7.08	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324072522.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2324072522.D
Fraction VOA
SampleType ENDCCV
Inj Date 25-JUL-2024 1751

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Dichlorodifluoromethane	50.0	46.9	93.7	50-150	
Chloromethane	50.0	39.9	79.8	50-150	
Vinyl Chloride	50.0	50.5	101	50-150	
Bromomethane	50.0	42.9	85.8	50-150	
Chloroethane	50.0	55.1	110	50-150	
Pentane	50.0	39.6	79.2	50-150	
Trichlorofluoromethane	50.0	51.5	103	50-150	
Dichlorofluoromethane	50.0	48.2	96.3	50-150	
Ethyl Ether	50.0	49.5	98.9	50-150	
1,1-Dichloroethene	50.0	48.5	97.0	50-150	
Freon 113	50.0	47.6	95.1	50-150	
Carbon Disulfide	50.0	47.0	93.9	50-150	
Iodomethane	50.0	36.9	73.7	50-150	
Acrolein	250	193	77.4	50-150	
Isopropyl Alcohol	250	247	98.7	50-150	
3-Chloro-1-propene	50.0	48.9	97.8	50-150	
Methylene Chloride	50.0	49.2	98.4	50-150	
Acetone	250	250	99.9	50-150	
Methyl acetate	50.0	49.3	98.6	50-150	
trans-1,2-Dichloroethene	50.0	48.1	96.2	50-150	
Hexane	50.0	45.1	90.2	50-150	
Methyl t-Butyl Ether	50.0	51.6	103	50-150	
tert.- Butyl Alcohol	250	274	110	50-150	
Acetonitrile	250	250	99.9	50-150	
Diisopropyl ether	50.0	50.8	102	50-150	
Chloroprene	50.0	48.9	97.8	50-150	
1,1-Dichloroethane	50.0	50.2	100	50-150	
Acrylonitrile	250	263	105	50-150	
n-Propanol	500	483	96.6	50-150	
Ethyl tert-butyl ether	50.0	52.1	104	50-150	
Vinyl acetate	50.0	53.6	107	50-150	
cis-1,2-Dichloroethene	50.0	50.9	102	50-150	
2,2-Dichloropropane	50.0	43.8	87.6	50-150	
Bromochloromethane	50.0	52.8	106	50-150	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324072522.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2324072522.D
Fraction VOA
SampleType ENDCCV
Inj Date 25-JUL-2024 1751

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Cyclohexane	50.0	47.3	94.6	50-150	
Chloroform	50.0	51.2	102	50-150	
Ethyl acetate	50.0	51.3	102	50-150	
Methyl acrylate	50.0	52.3	105	50-150	
Carbon Tetrachloride	50.0	54.3	109	50-150	
Tetrahydrofuran	250	261	105	50-150	
1,1,1-Trichloroethane	50.0	51.2	102	50-150	
2-Butanone	250	258	103	50-150	
1,1-Dichloropropene	50.0	49.3	98.5	50-150	
1-Chlorobutane	50.0	47.3	94.7	50-150	
Heptane	50.0	40.0	80.0	50-150	
Benzene	50.0	50.4	101	50-150	
Propionitrile	250	259	104	50-150	
Methacrylonitrile	50.0	52.6	105	50-150	
tert-amyl methyl E	50.0	52.6	105	50-150	
Isobutyl alcohol	500	481	96.1	50-150	
1,2-Dichloroethane	50.0	49.0	98.1	50-150	
tert-Amyl Alcohol	250	234	93.5	50-150	
Diisobutylene	50.0	46.8	93.6	50-150	
Trichloroethene	50.0	48.7	97.3	50-150	
Methyl cyclohexane	50.0	46.2	92.5	50-150	
tert-Amyl Ethylether	50.0	51.3	103	50-150	
Dibromomethane	50.0	51.7	103	50-150	
1,2-Dichloropropane	50.0	50.3	101	50-150	
Bromodichloromethane	50.0	52.5	105	50-150	
Methyl methacrylate	50.0	51.4	103	50-150	
1,4-Dioxane	1250	0.000		50-150	*
2-Chloroethylvinyl ether	50.0	37.3	74.7	50-150	
cis-1,3-Dichloropropene	50.0	52.2	104	50-150	
Octane	50.0	41.8	83.7	50-150	
Toluene	50.0	49.5	99.0	50-150	
Chloroacetonitrile	250	260	104	50-150	
2-Nitropropane	250	246	98.6	50-150	
1,1-Dichloro-2-pro	250	251	100	50-150	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324072522.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2324072522.D
Fraction VOA
SampleType ENDCCV
Inj Date 25-JUL-2024 1751

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
4-Methyl-2-Pentanone(MIBK)	250	273	109	50-150	
Tetrachloroethene	50.0	53.7	107	50-150	
trans-1,3-Dichloropropene	50.0	53.8	108	50-150	
Ethyl methacrylate	50.0	55.1	110	50-150	
1,1,2-Trichloroethane	50.0	52.0	104	50-150	
Chlorodibromomethane	50.0	55.4	111	50-150	
1,2-Dibromoethane	50.0	54.0	108	50-150	
2-Hexanone	250	274	110	50-150	
1-Chlorohexane	50.0	44.9	89.8	50-150	
1,3-Dichloropropane	50.0	51.3	102	50-150	
Chlorobenzene	50.0	50.9	102	50-150	
Ethylbenzene	50.0	49.8	99.5	50-150	
1,1,1,2-Tetrachloroethane	50.0	53.4	107	50-150	
mp-Xylene	100	100	100	50-150	
o-Xylene	50.0	51.0	102	50-150	
Styrene	50.0	52.8	106	50-150	
Bromoform	50.0	56.4	113	50-150	
Isopropylbenzene	50.0	50.0	100	50-150	
Bromobenzene	50.0	51.3	103	50-150	
n-Propylbenzene	50.0	48.5	97.0	50-150	
1,1,2,2-Tetrachloroethane	50.0	54.2	108	50-150	
o-Chlorotoluene	50.0	50.3	101	50-150	
1,2-Dichloroethene, Total	100	99.0	99.0	50-150	
1,3,5-Trimethylbenzene	50.0	51.1	102	50-150	
1,2,3-Trichloropropane	50.0	53.0	106	50-150	
trans-1,4-Dichloro-2-butene	50.0	50.3	101	50-150	
p-Chlorotoluene	50.0	49.3	98.6	50-150	
tert-Butylbenzene	50.0	47.9	95.7	50-150	
Pentachloroethane	50.0	49.7	99.3	50-150	
1,2,4-Trimethylbenzene	50.0	50.7	101	50-150	
sec-Butylbenzene	50.0	49.0	98.0	50-150	
p-Isopropyltoluene	50.0	49.0	98.0	50-150	
1,3-Dichlorobenzene	50.0	49.5	99.0	50-150	
1,4-Dichlorobenzene	50.0	49.4	98.8	50-150	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR593|NFARS 30036646

Workorder 3369360

RunID 2324072522.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2324072522.D
Fraction VOA
SampleType ENDCCV
Inj Date 25-JUL-2024 1751

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Benzyl Chloride	50.0	39.9	79.8	50-150	
n-Butylbenzene	50.0	47.1	94.1	50-150	
Hexachloroethane	50.0	53.1	106	50-150	
1,2-Dichlorobenzene	50.0	51.3	103	50-150	
1,2-Dibromo-3-chloropropane	50.0	52.8	106	50-150	
Nitrobenzene	500	459	91.8	50-150	
Hexachlorobutadiene	50.0	46.7	93.4	50-150	
1,2,4-Trichlorobenzene	50.0	50.1	100	50-150	
Naphthalene	50.0	55.6	111	50-150	
1,3-Dichloropropene, Total	100	106	106	50-150	
1,2,3-Trichlorobenzene	50.0	51.7	103	50-150	
121 TOTAL XYLENES	150	151	101	50-150	

right solutions.
right partner.

V F

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SSVcSVM

Mfk

Q |

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r mbRVMb

9A9B7E8H		V fi				S fi 4C				83B4T fi 4 4B				
l| aT	V aT	Q. |	(	km	(	Q. |	(	km	(	Q. |	(	km	(	
lmT4SSo	9A9B7E8H785T	HAFH78		B5AC		B7DD7B		D5AD		ACEDHA		F8BB		
88=C8=5575	78795A6C683N	C757AC		93B=		95A:8:		=3BA		8=B78C		B369		
88=C8=5576	78795A6C693N	C87=55		93B=		95::85		=3B=		8:=67:		B369		
88=C8=5577	78795A6C6:3N	C695A:		93B=		95789:		=3B=		8999C:		B369		
WL28B:99CC	78795A6C5:3N	CA9A:A		93B=		97A:BC		=3BA		8BCB88		B369		
VMd28B:9:55	78795A6C573N	C7A8::		93B:		97CA67		=3B=		8AC655		B369		

KcOKfaaOcVSWSe G0655* ydeNSdKxs
KcOKV[hOcVSWSeG2:5* ydeNSdKxs
ce2cxxfl Sd2Sxsdsvsveflx

cefaaOcVSWSe G0535 ydeNSdce
ceV[hOcVSWSeG2535 ydeNSdce
MMg2Mflflz Msftsflgxflusfl

(2Kxs ceVflflPsz
/2gsx[flvxKxs ceflfl
R2R deN2dsvsv

r mbRVMb

9A9B7E9C		V fi				S fi 4C				83B4T fi 4 4B				
l| aT	V aT	Q |	(	km	(	Q |	(	km	(	Q |	(	km	(	
lmT4SSo	9A9B7E9C785T	EFC7DE		B5AD		ABHCBC		D5AD		A8FDCH		F5BB		
88=C8=5578	78795A7:5A3N	B596BC		93B:		89C=96		=3B=		85CC99		B369		
WL28B:=CC6	78795A7:5:3N	B5A5C=		93B=		8:A668		=3BA		86C::8		B369		
VMd28B:=CC7	78795A7:573N	ACA8=:		93B:		8::96B		=3B=		875CCC		B369		

KcOK faaOc VSWSe G0655* ydeN SdK xs
KcOK V[h Oc VSWSe G2:5* ydeN SdK xs
ce2cx x fl Sd2S x s d s vs vefl x

ce faaOc VSWSe G0535 ydeN Sdce
ce V[h Oc VSWSe G2535 ydeN Sdce
MMg2M fl fl z Ms ft s fl gx fl us fl

(2K xs ce Vfl fl Psz
/2gs x[flvx K xs ce fl fl
R2R deN2d s vs v

d fi

Q | d

o | fi UhQF9D7S

h vx

SSVcSVM

Mfk

Q |

a xu

QSkCHAf VQkl A77ADDBD

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Data File: \\GC01\TargetData\Chem2\ms23.i\23_2024\23240718.b

Rev. 8/07/2022

GCMS ANALYSIS - VOLATILE ORGANICS

DATE(S):	7/18/2024	Analyst:	ILY		SOP ID:	02--8260	
DATA FILE:	23240718xx.d	BFB INJ :	7/18/24 11:36	INSTRUMENT: MS23	METHOD(S)	D8260W	8260C_W	8260DW
BATCH:	23240718.b	12-HOUR ENDING:	7/18/24 23:36	ICAL DATE: 7/18/2024	LIMS BATCH:	73903		

Pos #	Run #	ALS Sample ID (w/ Container ID)	Dilution	Test	pH	HDSP / Wt.	CL^-	Comment	Pos #	Run #	ALS Sample ID (w/ Container ID)	Dilution	Test	pH	HDSP / Wt.	CL^-	Comment
0	00	1000	1	BFB	-	-	-		33	33							
1	01	WP	1	8260	-	-	-		34	34							
2	02	WP	1	8260	-	-	-		35	35							
3	03	VSTD00.5	1	8260	-	-	-		36	36							
4	04	1234	1	8260	-	-	-		37	37							
5	05	1235	1	8260	-	-	-		38	38							
6	06	1236	1	8260	-	-	-		39	39							
7	07	1237	1	8260	-	-	-		40	40							
8	08	1238	1	8260	-	-	-		41	41							
9	09	1239	1	8260	-	-	-		42	42							
10	10	WP	1	8260	-	-	-		43	43							
11	11	WP	1	8260	-	-	-		44	44							
12	12	WP	1	8260	-	-	-		45	45							
13	13	WP	1	8260	-	-	-		46	46							
14	14	3854114	1	8260	-	-	-		47	47							
15	15	WP	1	8260	-	-	-		48	48							
16	16	3854115	1	8260	-	-	-		49	49							
17	17	WP	1	8260	-	-	-		50	50							
18	18	1.0 MDL	1	8260	-	-	-		51	51							
19	19	1.0 MDL	1	8260	-	-	-		52	52							
20	20	0.75 LODQ	1	8260	-	-	-		53	53							
21	21	1.0 LODQ	1	8260	-	-	-		54	54							
22	22	2.5 LODQ	1	8260	-	-	-		55	55							
23	23	5.0 LODQ	1	8260	-	-	-		56	56							
24	24	3367799003-A	1	D8260W V	<2	Y	N	(RR) NB CANCELLED	57	57	PREV RUN VIAL						
25	25	3367799005-A	1	D8260W V	<2	Y	N	(RR) NB CANCELLED	58	58	PREV RUN VIAL						
26	26	3367799002-B	1	D8260W V	<2	N	N	(RR) NB CANCELLED	59	59							
27	27	3367799004-B	1	D8260W V	<2	N	N	(RR) NB CANCELLED	60	60							
28	28	3369360001-A	1	D8260W V	<2	N	N		61	61							
29	29	3369360002-A	1	D8260W V	<2	N	N		62	62							
30	30	3369360003-A	1	D8260W V	<2	N	N		63	63							
31	31	3369360004-A	1	D8260W V	<2	N	N		64	64							
32	32	1801	1	8260	-	-	-		65	65							

IS:	VOA0258	Vnew:	VOA0283
SS:	VOA0259	Vgas:	VOA0299
BFB:	VOA0250	Qvoa:	VOA0270
AF:	VOA0261	Qgas:	VOA0298

ABBREVIATIONS

CO:	Suspect Carryover	SS:	Surrogate Failure	NB:	Needs Batched
LS:	Library Search	IS:	ISTD Failure	AAS:	Autosampler Adds Surrogate (Soil)
RR:	Rerun same dilution	DNR:	Do not Report	(**):	Sample is an RR, DF, or DL
DFx:	Rerun @ less diln x	NU:	Not Used	WP:	Water Blank
DLx:	Rerun @ diln x	AF:	Antifoam was used	COMP:	Composite
HDSP:	Headspase	Cl^-:	Chlorine Check	Wt:	Weight

10ul :	HS972
25ul :	HS994
100ul :	HS986
1 mL :	HS1006
5 mL :	HS997
10 mL :	HS1022

Batch Review Checklist

Rev. 8/07/2022

TARGET BATCH:	23240718.b	**HORIZON BATCH:**	73903			**ICAL DATE(S):**	7/18/2024
INSTRUMENT:	MS23	**METHOD:**	D8260W	8260C_W	8260DW	**SOP ID:**	02--8260

DATA REVIEW

Reviewer 1	Reviewer 2		
CHS	VLM	BFB Reviewed	
PDK	CHS	Calibration/Continuing Calibration reviewed	
PDK	CHS	Continuing Calibration passes +/- ISTD area - CCAL is zeroed	
PDK	CHS	Correct ICAL referenced	
PDK	CHS	Correct start/end times/dates for ICAL	
PDK	CHS	Any elavated reporting limits due to ICAL?	Yes/No: N
CHS	VLM	Blank reviewed.	
CHS	VLM	LCS/second source reviewed	
-	-	MS/MSD reviewed - List failures on native sample	
CHS	VLM	All samples within 12/24-hour tune period?	
CHS	VLM	Compound retention times reviewed	
CHS	VLM	ISTDs for each sample reviewed	
CHS	VLM	Surrogates for each sample reviewed	
-	-	Soil weights/volumes correct	
CHS	VLM	Samples checked for over-range detections and put back in for reanalysis	
CHS	VLM	Spectra and ions have been reviewed for each analyte detected	
-	-	Library search has been performed for clients requesting it	
CHS	VLM	Container IDs in LIMS batch	

REPORTS REVIEW:

VLM	Runlog printed to PDF
CHS	Batch summary printed to PDF
PDK	ICAL Summary printed to PDF
CHS	BFB Reports printed to PDF
CHS	Calibration/CCAL reports printed to PDF
CHS	Reports printed to PDF for all samples (w/ LS if needed)
CHS	Logbook complete - All standard information included
VLM	Tests scheduled in LIMS

Signature	Date	
PDK/CHS	7/18/2024	Data 1st Review
CHS/VLM	7/22/2024,7/25/2024	Data 2nd Review
VLM	7/25/2024	Data Reported
VLM	7/25/2024	Data Approved

COMMENTS:

LL Readback Outliers: Nitrobenzene

MIDL Readback Outliers: None

ICV Outliers(70-130%) : None

DOD ICV Outliers (80-120%) : Iodomethane

GCMS ANALYSIS - VOLATILE ORGANICS

DATE(S):	7/19/2024	Analyst:	JTH		SOP ID:	02--8260	
DATA FILE:	23240719xx.d	BFB INJ :	7/19/24 10:20	INSTRUMENT: MS23	METHOD(S)	D8260W	8260C_W	8260DW
BATCH:	23240719.b	12-HOUR ENDING:	7/19/24 22:20	ICAL DATE: 7/18/2024	LIMS BATCH:	73921		

Pos #	Run #	ALS Sample ID (w/ Container ID)	Dilution	Test	pH	HDSP / Wt.	CL-	Comment	Pos #	Run #	ALS Sample ID (w/ Container ID)	Dilution	Test	pH	HDSP / Wt.	CL-	Comment
0	00	1000	1	BFB	-	-	-		33	33							
1	01	1800	1	8260	-	-	-		34	34							
2	02	3854500	1	8260	-	-	-		35	35							
3	03	WP	1	8260	-	-	-		36	36							
4	04	WP	1	8260	-	-	-		37	37							
5	05	3854499	1	8260	-	-	-		38	38							
6	06	3369360007-A	1	D8260W V	<2	N	N		39	39							
7	07	3369360018-A	1	D8260W V	<2	N	N		40	40							
8	08	3369360017-A	1	D8260W V	<2	N	N		41	41							
9	09	3369360015-A	1	D8260W V	<2	N	N		42	42							
10	10	3369360016-A	1	D8260W V	<2	N	N		43	43							
11	11	3369360013-A	1	D8260W V	<2	N	N		44	44							
12	12	3369360019-A	1	D8260W V	<2	N	N		45	45							
13	13	3369360020-A	1	D8260W V	<2	N	N		46	46							
14	14	3369360021-A	1	D8260W V	<2	N	N		47	47							
15	15	3369360022-A	1	D8260W V	<2	N	N		48	48							
16	16	3369360011-A	1	D8260W V	<2	N	N		49	49							
17	17	3369360006-A	1	D8260W V	<2	N	N	PD MS/D	50	50							
18	18	3369360010-A	1	D8260W V	<2	N	N		51	51							
19	19	3369360009-A	1	D8260W V	<2	N	N		52	52							
20	20	3369360008-A	1	D8260W V	<2	N	N		53	53							
21	21	3369360014-A	1	D8260W V	<2	N	N		54	54							
22	22	3369360012-A	1	D8260W V	<2	N	N		55	55							
23	23	3369360005-A	1	D8260W V	<2	N	N	PD MS/D	56	56							
24	24	3854550	1	D8260W V	<2	N	N	"B"	57	57							
25	25	3854551	1	D8260W V	<2	N	N	"C"	58	58							
26	26	3854552	1	D8260W V	<2	N	N	"B"	59	59							
27	27	3854553	1	D8260W V	<2	N	N	"C"	60	60							
28	28	1801	1	8260	-	-	-		61	61							
29	29								62	62							
30	30								63	63							
31	31								64	64							
32	32								65	65							

IS:	VOA0258	Vnew:	VOA0283
SS:	VOA0259	Vgas:	VOA0299
BFB:	VOA0250	Qvoa:	VOA0270
AF:	VOA0261	Qgas:	VOA0298

ABBREVIATIONS

CO:	Suspect Carryover	SS:	Surrogate Failure	NB:	Needs Batched
LS:	Library Search	IS:	ISTD Failure	AAS:	Autosampler Adds Surrogate (Soil)
RR:	Rerun same dilution	DNR:	Do not Report	(**):	Sample is an RR, DF, or DL
DFx:	Rerun @ less diln x	NU:	Not Used	WP:	Water Blank
DLx:	Rerun @ diln x	AF:	Antifoam was used	COMP:	Composite
HDSP:	Headspase	Cl-:	Chlorine Check	Wt:	Weight

10ul :	HS972
25ul :	HS994
100ul :	HS986
1 mL :	HS1006
5 mL :	HS997
40 mL :	HS1022

Batch Review Checklist

Rev. 8/07/2022

TARGET BATCH:	23240719.b	**HORIZON BATCH:**	73921			**ICAL DATE(S):**	7/18/2024
INSTRUMENT:	MS23	**METHOD:**	D8260W	8260C_W	8260DW	**SOP ID:**	02--8260

DATA REVIEW

Reviewer 1	Reviewer 2		
CHS	VLM	BFB Reviewed	
CHS	VLM	Calibration/Continuing Calibration reviewed	
CHS	VLM	Continuing Calibration passes +/- ISTD area - CCAL is zeroed	
CHS	VLM	Correct ICAL referenced	
CHS	VLM	Correct start/end times/dates for ICAL	
CHS	VLM	Any elavated reporting limits due to ICAL?	Yes/No: N
CHS	VLM	Blank reviewed.	
CHS	VLM	LCS/second source reviewed	
CHS	VLM	MS/MSD reviewed - List failures on native sample	
CHS	VLM	All samples within 12/24-hour tune period?	
CHS	VLM	Compound retention times reviewed	
CHS	VLM	ISTDs for each sample reviewed	
CHS	VLM	Surrogates for each sample reviewed	
-	-	Soil weights/volumes correct	
CHS	VLM	Samples checked for over-range detections and put back in for reanalysis	
CHS	VLM	Spectra and ions have been reviewed for each analyte detected	
-	-	Library search has been performed for clients requesting it	
CHS	VLM	Container IDs in LIMS batch	

REPORTS REVIEW:

VLM	Runlog printed to PDF
CHS	Batch summary printed to PDF
CHS	ICAL Summary printed to PDF
CHS	BFB Reports printed to PDF
CHS	Calibration/CCAL reports printed to PDF
CHS	Reports printed to PDF for all samples (w/ LS if needed)
CHS	Logbook complete - All standard information included
VLM	Tests scheduled in LIMS

Signature	Date	
CHS	7/25/2024	Data 1st Review
VLM	7/25/2024	Data 2nd Review
VLM	7/25/2024	Data Reported
VLM	7/25/2024	Data Approved

COMMENTS:

LL Readback Outliers: Nitrobenzene

MIDL Readback Outliers: None

ICV Outliers(70-130%) : None

DOD ICV Outliers (80-120%) : Iodomethane

Data File: \\GC01\TargetData\Chem2\ms23.i\23_2024\23240725b

Rev. 8/07/2022

GCMS ANALYSIS - VOLATILE ORGANICS

DATE(S):	7/25/2024	Analyst:	ILY		SOP ID:	02--8260	
DATA FILE:	23240725xx.d	BFB INJ :	7/25/24 10:23	INSTRUMENT: MS23	METHOD(S)	D8260W / D8260DW	8260C_W
BATCH:	23240725b	12-HOUR ENDING:	7/25/24 22:23	ICAL DATE: 7/18/2024	LIMS BATCH:	73988 / 73990	

Pos #	Run #	ALS Sample ID (w/ Container ID)	Dilution	Test	pH	HDSP / Wt.	CL^-	Comment	Pos #	Run #	ALS Sample ID (w/ Container ID)	Dilution	Test	pH	HDSP / Wt.	CL^-	Comment
0	00	1000	1	BFB	-	-	-	ICV:IOM 71.83%	33	33							
1	01	1800	1	8260	-	-	-		34	34							
2	02	3856992	1	8260	-	-	-	3856998 "DDOD"	35	35							
3	03	WP	1	8260	-	-	-		36	36							
4	04	WP	1	8260	-	-	-		37	37							
5	05	3856991	1	8260	-	-	-	3856997 "DDOD"	38	38							
6	06	3369360034-A	1	D8260W V	<2	N	N		39	39							
7	07	3369360023-A	1	D8260W V	<2	N	N		40	40							
8	08	3369360024-A	1	D8260W V	<2	N	N		41	41							
9	09	3369360025-A	1	D8260W V	<2	N	N	PD MSD	42	42							
10	10	3369360026-A	1	D8260W V	<2	N	N		43	43							
11	11	3369360027-A	1	D8260W V	<2	N	N		44	44							
12	12	3369360028-A	1	D8260W V	<2	N	N		45	45							
13	13	3369360029-A	1	D8260W V	<2	N	N		46	46							
14	14	3369360030-A	1	D8260W V	<2	N	N		47	47							
15	15	3369360031-A	1	D8260W V	<2	N	N		48	48							
16	16	3369360032-A	1	D8260W V	<2	N	N		49	49							
17	17	3369360033-A	1	D8260W V	<2	N	N		50	50							
18	18	3369612001-D	20	D8260W	<2	N	N	MTX/ODOR DL500	51	51	"DDOD"						
19	19	WP	1	8260	-	-	-		52	52							
20	20	3856995	1	8260	<2	N	N	"B" MS	53	53							
21	21	3856996	1	8260	<2	N	N	"C" MSD	54	54							
22	22	1801	1	8260	-	-	-		55	55							
23	23								56	56							
24	24								57	57							
25	25								58	58							
26	26								59	59							
27	27								60	60							
28	28								61	61							
29	29								62	62							
30	30								63	63							
31	31								64	64							
32	32								65	65							

IS:	VOA0258	Vnew:	VOA0283
SS:	VOA0259	Vgas:	VOA0299
BFB:	VOA0250	Qvoa:	VOA0270
AF:	VOA0301	Qgas:	VOA0300

ABBREVIATIONS

CO:	Suspect Carryover	SS:	Surrogate Failure	NB:	Needs Batched
LS:	Library Search	IS:	ISTD Failure	AAS:	Autosampler Adds Surrogate (Soil)
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DLx:	Rerun @ diln x	AF:	Antifoam was used	COMP:	Composite
HDSP:	Headspase	Cl^-:	Chlorine Check	Wt:	Weight

10ul :	HS972
25ul :	HS994
100ul :	HS986
1 mL :	HS1006
5 mL :	HS1003
10mL :	HS1022

Batch Review Checklist

Rev. 8/07/2022

TARGET BATCH:	23240725b	**HORIZON BATCH:**	73988	73990		**ICAL DATE(S):**	7/18/2024
INSTRUMENT:	MS23	**METHOD:**	D8260W	D8260DW	8260C_W	**SOP ID:**	02--8260

DATA REVIEW

Reviewer 1	Reviewer 2	
CHS	BEH	BFB Reviewed
CHS	BEH	Calibration/Continuing Calibration reviewed
CHS	BEH	Continuing Calibration passes +/- ISTD area - CCAL is zeroed
CHS	BEH	Correct ICAL referenced
CHS	BEH	Correct start/end times/dates for ICAL
CHS	BEH	Any elavated reporting limits due to ICAL? Yes/No: **N**
CHS	BEH	Blank reviewed.
CHS	BEH	LCS/second source reviewed
CHS	BEH	MS/MSD reviewed - List failures on native sample
CHS	BEH	All samples within 12/24-hour tune period?
CHS	BEH	Compound retention times reviewed
CHS	BEH	ISTDs for each sample reviewed
CHS	BEH	Surrogates for each sample reviewed
-	NA	Soil weights/volumes correct
CHS	BEH	Samples checked for over-range detections and put back in for reanalysis
CHS	BEH	Spectra and ions have been reviewed for each analyte detected
-	NA	Library search has been performed for clients requesting it
CHS	BEH	Container IDs in LIMS batch

REPORTS REVIEW:

BEH	Runlog printed to PDF
CHS	Batch summary printed to PDF
CHS	ICAL Summary printed to PDF
CHS	BFB Reports printed to PDF
CHS	Calibration/CCAL reports printed to PDF
CHS	Reports printed to PDF for all samples (w/ LS if needed)
CHS	Logbook complete - All standard information included
BEH	Tests scheduled in LIMS

Signature	Date	
CHS	7/26/2024	Data 1st Review
BEH	7/29/2024	Data 2nd Review
BEH	7/29/2024	Data Reported
BEH	7/29/2024	Data Approved

COMMENTS:

LL Readback Outliers: Nitrobenzene

MIDL Readback Outliers: None

ICV Outliers(70-130%) : None

DOD ICV Outliers (80-120%) : Iodomethane

right solutions.
right partner.

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h vx

SSVcSVM

Mfk

Q |

a xu

QSkCHAf VQkl A77ADDBD

7869A6979C

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ALS Environmental Services

BFB Tune

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071800.D
Lab Smp Id: 1000
Inj Date : 18-JUL-2024 11:36
Operator : ILY Inst ID: ms23.i
Smp Info : 1000
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\bfb288.m
Meth Date : 13-Sep-2023 15:55 bsimms Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAMDTW7026

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
7.249	7.159 (0.000)		95	82792			0.00- 100.00	100.00
7.249	8.129 (0.000)		50	18856			15.00- 40.00	22.78
7.249	8.129 (0.000)		75	45160			30.00- 60.00	54.55
7.249	8.129 (0.000)		96	6281			5.00- 9.00	7.59
7.249	8.129 (0.000)		173	1029			0.00- 2.00	1.63
7.249	8.129 (0.000)		174	62944			50.00- 0.00	76.03
7.249	8.129 (0.000)		175	5184			5.00- 9.00	8.24
7.249	8.129 (0.000)		176	60224			95.00- 101.00	95.68
7.249	8.129 (0.000)		177	4078			5.00- 9.00	6.77

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.78
75	30.00 - 60.00% of mass 95	54.55
96	5.00 - 9.00% of mass 95	7.59
173	Less than 2.00% of mass 174	1.24 (1.63)
174	Greater than 50.00% of mass 95	76.03
175	5.00 - 9.00% of mass 174	6.26 (8.24)
176	95.00 - 101.00% of mass 174	72.74 (95.68)
177	5.00 - 9.00% of mass 176	4.93 (6.77)

Data File: 2324071800.D
Spectrum: Avg. Scans 2179-2181 (7.25), Background Scan 2166
Location of Maximum: 95.00
Number of points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1090	62.00	4089	88.00	3297	135.00	260
37.00	5524	63.00	3668	91.00	557	137.00	145
38.00	4150	64.00	379	92.00	2549	141.00	1001
39.00	1542	67.00	303	93.00	3760	143.00	898
40.00	154	68.00	8998	94.00	10254	144.00	61
43.00	118	69.00	8898	95.00	82792	146.00	73
44.00	997	70.00	900	96.00	6281	148.00	234
45.00	904	72.00	396	97.00	176	150.00	72
46.00	75	73.00	3747	103.00	54	155.00	220
47.00	1117	74.00	14877	104.00	433	157.00	99
48.00	757	75.00	45160	105.00	143	172.00	106
49.00	3777	76.00	3640	106.00	504	173.00	1029
50.00	18856	77.00	588	111.00	50	174.00	62944
51.00	5299	78.00	491	112.00	58	175.00	5184
52.00	139	79.00	3488	116.00	456	176.00	60224
55.00	496	80.00	794	117.00	764	177.00	4078
56.00	1691	81.00	3375	118.00	111	178.00	68
57.00	2725	82.00	873	119.00	443		
58.00	114	83.00	153	128.00	361		
60.00	962	86.00	94	130.00	302		
61.00	4538	87.00	3445	131.00	76		

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071800.D

Date : 18-JUL-2024 11:36

Client ID:

Instrument: ms23.i

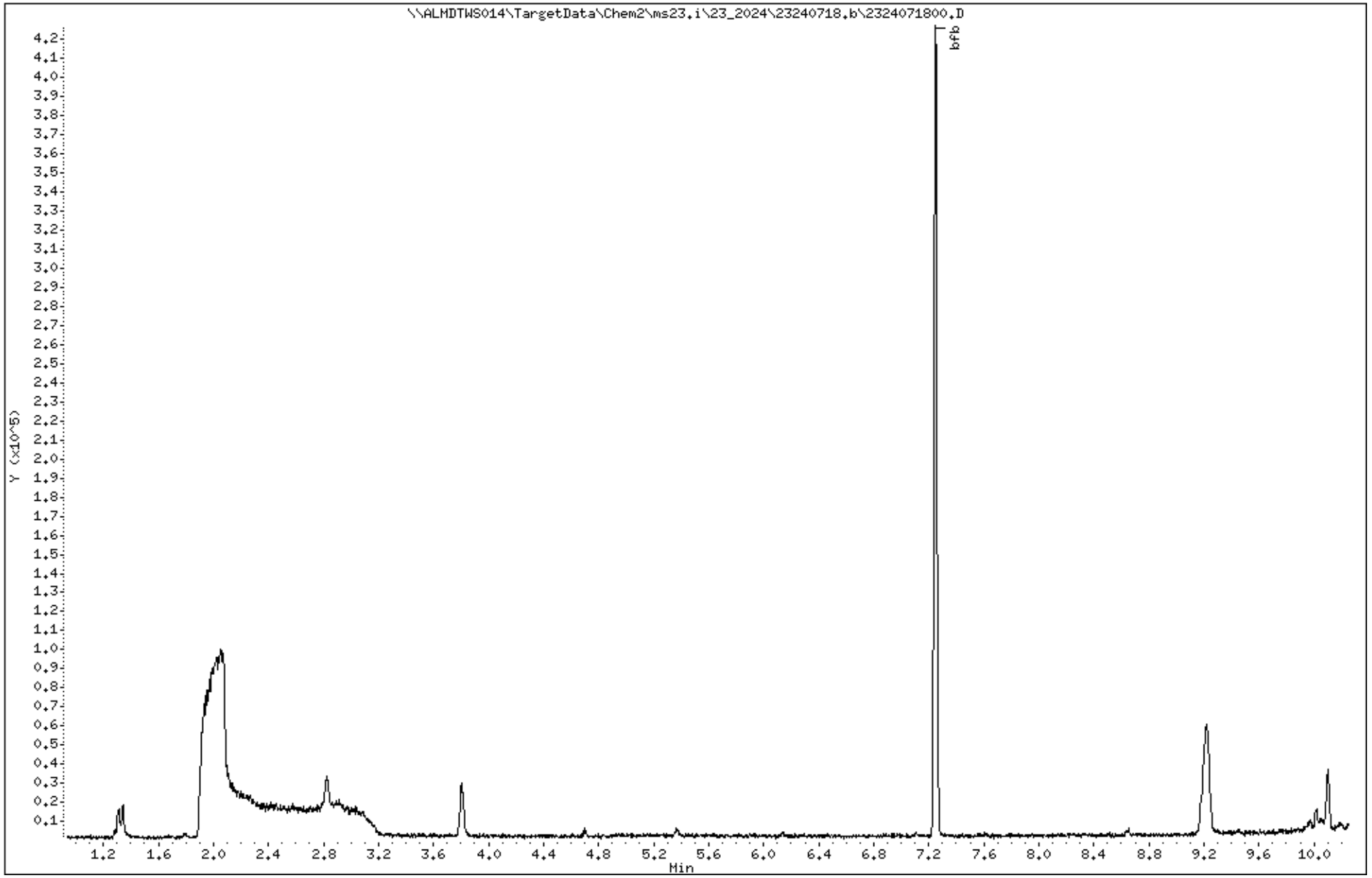
Sample Info: 1000

Volume Injected (uL): 1.0

Operator: ILY

Column phase: DB624

Column diameter: 0.53



Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071800.D
Inj Date : 18-JUL-2024 11:36
InstruID : ms23.i
LabSampID : 1000

NO MANUAL INTEGRATIONS

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071803.D
Lab Smp Id: VSTD00.5
Inj Date : 18-JUL-2024 12:44
Operator : ILY Inst ID: ms23.i
Smp Info : VSTD00.5;;1;1;8;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\23-8260b09.m
Meth Date : 22-Jul-2024 06:29 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 13:23 Cal File: 2324071805.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.629	1.629	(0.374)	6154	0.50000	0.469621(a)	
2	Chloromethane	50	1.785	1.785	(0.410)	7690	0.50000	0.575317(a)	
3	Vinyl Chloride	62	1.855	1.855	(0.426)	5945	0.50000	0.503065(a)	
4	Bromomethane	94	2.075	2.075	(0.477)	5386	0.50000	0.427193(a)	
5	Chloroethane	64	2.150	2.150	(0.494)	2951	0.50000	0.463482(aQ)	
6	Pentane	41	2.245	2.245	(0.516)	5167	0.50000	0.598276(a)	
7	Trichlorofluoromethane	101	2.257	2.257	(0.519)	6381	0.50000	0.441201(a)	
8	Dichlorofluoromethane	67	2.286	2.286	(0.525)	10248	0.50000	0.550086(a)	
9	Ethyl Ether	74	2.445	2.445	(0.562)	3142	0.50000	0.530920(a)	
10	1,1-Dichloroethene	61	2.581	2.581	(0.593)	6752	0.50000	0.522003(a)	
11	Freon 113	101	2.590	2.590	(0.595)	3688	0.50000	0.485095(a)	
12	Carbon Disulfide	76	2.619	2.619	(0.602)	14436	0.50000	0.549426(a)	
13	Iodomethane	127	2.677	2.677	(0.615)	2201	0.50000	0.579692(aQ)	
14	Acrolein	56	2.761	2.761	(0.634)	4708	2.50000	2.71639	
15	Isopropyl Alcohol	45	2.822	2.822	(0.648)	2994	2.50000	2.86925	
16	3-Chloro-1-propene	41	2.851	2.851	(0.655)	6551	0.50000	0.479682(a)	
17	Methylene Chloride	84	2.908	2.908	(0.668)	4967	0.50000	0.525494(a)	
18	Acetone	58	2.920	2.920	(0.671)	3036	2.50000	2.75620	
19	Methyl acetate	74	2.987	2.987	(0.686)	1542	0.50000	0.567085(aQ)	
20	trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	6796	0.50000	0.525455(a)	
21	Hexane	57	3.045	3.045	(0.699)	10021	0.50000	0.520740(a)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.053	3.053	(0.701)	12679	0.50000	0.457034(a)	
	23 tert.- Butyl Alcohol	59	3.068	3.068	(0.705)	2475	2.50000	2.06386	
	24 Acetonitrile	41	3.189	3.189	(0.733)	4661	2.50000	2.68543	
	25 Diisopropyl ether	45	3.247	3.247	(0.746)	15231	0.50000	0.480384(a)	
	26 Chloroprene	53	3.337	3.337	(0.767)	5467	0.50000	0.478263(aM)	MP
	27 1,1-Dichloroethane	63	3.349	3.349	(0.769)	8609	0.50000	0.507641(a)	
	28 Acrylonitrile	53	3.363	3.363	(0.773)	13879	2.50000	2.57479(M)	MP
	29 Ethyl tert-butyl ether	59	3.450	3.450	(0.793)	13880	0.50000	0.466263(a)	
	30 n-Propanol	41	3.450	3.450	(0.793)	3868	5.00000	5.63418(Q)	
	31 Vinyl Acetate	86	3.450	3.450	(0.793)	880	0.50000	0.397309(aQ)	
	32 cis-1,2-Dichloroethene	61	3.638	3.638	(0.836)	6135	0.50000	0.470577(a)	
	33 2,2-Dichloropropane	77	3.705	3.705	(0.851)	6429	0.50000	0.493342(aM)	H
	34 Bromochloromethane	128	3.757	3.757	(0.863)	2172	0.50000	0.461755(aQ)	
	35 Cyclohexane	84	3.780	3.780	(0.868)	7166	0.50000	0.533002(a)	
	36 Chloroform	83	3.780	3.780	(0.868)	8757	0.50000	0.496053(a)	
	37 Ethyl Acetate	43	3.812	3.812	(0.876)	6002	0.50000	0.465395(a)	
	38 Methyl acrylate	55	3.835	3.835	(0.881)	5205	0.50000	0.484340(a)	
	39 Carbon Tetrachloride	117	3.893	3.893	(0.894)	5167	0.50000	0.450720(aM)	MP
$	41 Dibromofluoromethane	113	3.884	3.884	(0.892)	271454	30.0000	30.3331	
	40 Tetrahydrofuran	42	3.890	3.890	(0.894)	9186	2.50000	2.46761(M)	MP
	42 1,1,1-Trichloroethane	97	3.919	3.919	(0.900)	6676	0.50000	0.477337(a)	
	43 2-Butanone	72	3.939	3.939	(0.905)	3586	2.50000	3.04427(Q)	
	44 1,1-Dichloropropene	75	3.988	3.988	(0.916)	6800	0.50000	0.526555(a)	
	45 1-Chlorobutane	41	4.003	4.003	(0.920)	6457	0.50000	0.589347(a)	
	46 Heptane	71	4.081	4.081	(0.937)	3750	0.50000	0.564151(a)	
	47 Benzene	78	4.127	4.127	(0.948)	18955	0.50000	0.522850(a)	
	48 Propionitrile	54	4.107	4.107	(0.943)	4218	2.50000	2.27124	
	49 Methacrylonitrile	67	4.127	4.127	(0.948)	2176	0.50000	0.456369(aM)	H
	50 tert-Amyl methyl ether	73	4.162	4.162	(0.956)	13032	0.50000	0.479508(a)	
	54 Isobutyl alcohol	42	4.162	4.162	(0.956)	1742	5.00000	4.35183(QM)	H
$	51 1,2-Dichloroethane-d4	65	4.197	4.197	(0.964)	355110	30.0000	30.9888	
	52 1,2-Dichloroethane	62	4.235	4.235	(0.973)	7805	0.50000	0.533546(a)	
	53 tert-Amyl Alcohol	59	4.235	4.235	(0.973)	1924	2.50000	3.24627	
*	55 Fluorobenzene	96	4.353	4.353	(1.000)	962861	30.0000		
	56 Diisobutylene	57	4.356	4.356	(1.001)	49587	0.50000	0.506853(aQ)	
	57 Trichloroethene	95	4.457	4.457	(1.024)	5404	0.50000	0.543250(a)	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	7493	0.50000	0.529571(a)	
	59 tert-Amyl Ethylether	59	4.559	4.559	(1.047)	10379	0.50000	0.461897(a)	
	60 Dibromomethane	93	4.712	4.712	(1.082)	3082	0.50000	0.472790(a)	
	61 1,2-Dichloropropane	63	4.776	4.776	(1.097)	5053	0.50000	0.506479(a)	
	62 Bromodichloromethane	83	4.793	4.793	(1.101)	6008	0.50000	0.476628(a)	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	5350	0.50000	0.493667(aM)	IH
	64 1,4-Dioxane	88	4.906	4.906	(1.127)	1324	12.5000	9.56670	
	65 2-Chloroethylvinyl ether	63	5.118	5.118	(1.176)	2979	0.50000	0.413119(a)	
	66 cis-1,3-Dichloropropene	75	5.181	5.181	(0.814)	6664	0.50000	0.446768(a)	
	67 Octane	85	5.190	5.190	(0.816)	2817	0.50000	0.517771(aQ)	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	1047391	30.0000	31.0232	
	69 Toluene	92	5.341	5.341	(0.839)	12211	0.50000	0.557137(a)	
	70 Chloroacetonitrile	75	5.375	5.375	(0.845)	695	2.50000	3.68137(QM)	H
	71 2-Nitropropane	41	5.471	5.471	(0.860)	5972	2.50000	3.03858(Q)	
	72 1,1-Dichloro-2-Propanone	63	5.491	5.491	(0.863)	303	2.50000	2.93969(QM)	H
	73 4-Methyl-2-Pentanone(MIBK)	43	5.555	5.555	(0.873)	26520	2.50000	2.28840	
	75 trans-1,3-Dichloropropene	75	5.595	5.595	(0.879)	6034	0.50000	0.433303(a)	
	74 Tetrachloroethene	164	5.610	5.610	(0.882)	4111	0.50000	0.511674(a)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.665	5.665	(0.890)	5814	0.50000	0.423831(aM)	H
77	1,1,2-Trichloroethane	83	5.705	5.705	(0.897)	3755	0.50000	0.494402(a)	
78	Chlorodibromomethane	129	5.836	5.836	(0.917)	3886	0.50000	0.413720(a)	
79	1,3-Dichloropropane	76	5.896	5.896	(0.927)	8017	0.50000	0.516550(a)	
80	1,2-Dibromoethane	107	6.018	6.018	(0.946)	3566	0.50000	0.439723(a)	
81	2-Hexanone	43	6.119	6.119	(0.962)	19484	2.50000	2.34164	
82	1-Chlorohexane	91	6.334	6.334	(0.995)	7274	0.50000	0.626874(aQ)	
* 83	Chlorobenzene-d5	82	6.363	6.363	(1.000)	419383	30.0000		
84	Chlorobenzene	112	6.377	6.377	(1.002)	11928	0.50000	0.508173(a)	
85	Ethylbenzene	106	6.383	6.383	(1.003)	6677	0.50000	0.537108(aQ)	
86	1,1,1,2-Tetrachloroethane	131	6.412	6.412	(1.008)	3944	0.50000	0.475435(a)	
87	mp-Xylene	106	6.484	6.484	(1.019)	16265	1.00000	1.06749	
88	o-Xylene	106	6.797	6.797	(1.068)	7709	0.50000	0.520022(a)	
89	Styrene	104	6.835	6.835	(0.839)	11898	0.50000	0.491880(a)	
90	Bromoform	173	6.872	6.872	(0.844)	2635	0.50000	0.427926(aM)	H
91	Isopropylbenzene	105	7.029	7.029	(0.863)	18403	0.50000	0.546358(a)	
M 100	1,2-Dichloroethene, Total	61				12931	1.00000	0.996031(a)	
$ 92	4-Bromofluorobenzene	174	7.254	7.254	(0.891)	324183	30.0000	30.3859	
93	Bromobenzene	156	7.353	7.353	(0.903)	4990	0.50000	0.510432(a)	
94	n-Propylbenzene	120	7.347	7.347	(0.902)	6009	0.50000	0.582619(a)	
95	1,1,2,2-Tetrachloroethane	83	7.385	7.385	(0.907)	5744	0.50000	0.472690(aM)	H
96	o-Chlorotoluene	91	7.483	7.483	(0.919)	17735	0.50000	0.563976(a)	
97	1,3,5-Trimethylbenzene	105	7.489	7.489	(0.920)	16088	0.50000	0.514854(a)	
98	1,2,3-Trichloropropane	110	7.509	7.509	(0.922)	1912	0.50000	0.508894(a)	
99	trans-1,4-Dichloro-2-butene	53	7.529	7.529	(0.925)	1805	0.50000	0.480183(aM)	H
101	p-Chlorotoluene	91	7.611	7.611	(0.935)	16928	0.50000	0.580789(a)	
102	tert-Butylbenzene	134	7.749	7.749	(0.952)	4118	0.50000	0.561000(aQ)	
103	Pentachloroethane	117	7.784	7.784	(0.956)	2828	0.50000	0.466006(aQM)	IH
104	1,2,4-Trimethylbenzene	105	7.804	7.804	(0.958)	17348	0.50000	0.540168(a)	
105	sec-Butylbenzene	105	7.894	7.894	(0.969)	23107	0.50000	0.591310(a)	
106	p-Isopropyltoluene	134	8.004	8.004	(0.983)	4675	0.50000	0.540993(a)	
107	1,3-Dichlorobenzene	146	8.085	8.085	(0.993)	10607	0.50000	0.575017(a)	
* 108	1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	376827	30.0000	(Q)	
109	1,4-Dichlorobenzene	146	8.155	8.155	(1.001)	11340	0.50000	0.596288(aQ)	
110	Benzyl Chloride	126	8.343	8.343	(1.025)	1471	0.50000	0.645096(aQ)	
111	n-Butylbenzene	134	8.355	8.355	(1.026)	5029	0.50000	0.615616(aQ)	
112	Hexachloroethane	117	8.494	8.494	(1.043)	3050	0.50000	0.506910(aM)	IH
113	1,2-Dichlorobenzene	146	8.502	8.502	(1.044)	9598	0.50000	0.538728(a)	
114	1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	1121	0.50000	0.487171(a)	
115	Nitrobenzene	77	9.649	9.649	(1.185)	2125	5.00000	28.7179	
116	Hexachlorobutadiene	225	9.715	9.715	(1.193)	3105	0.50000	0.640522(a)	
M 120	1,3-Dichloropropene, Total	75				12698	1.00000	0.880070(a)	
117	1,2,4-Trichlorobenzene	180	9.747	9.747	(1.197)	6978	0.50000	0.597274(a)	
M 121	Total Xylenes	106				23974	1.50000	1.58752	
118	Naphthalene	128	10.014	10.014	(1.230)	15301	0.50000	0.474081(a)	
119	1,2,3-Trichlorobenzene	180	10.164	10.164	(1.248)	6170	0.50000	0.546589(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071803.D

Page 1

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Client ID:

Instrument: ms23.i

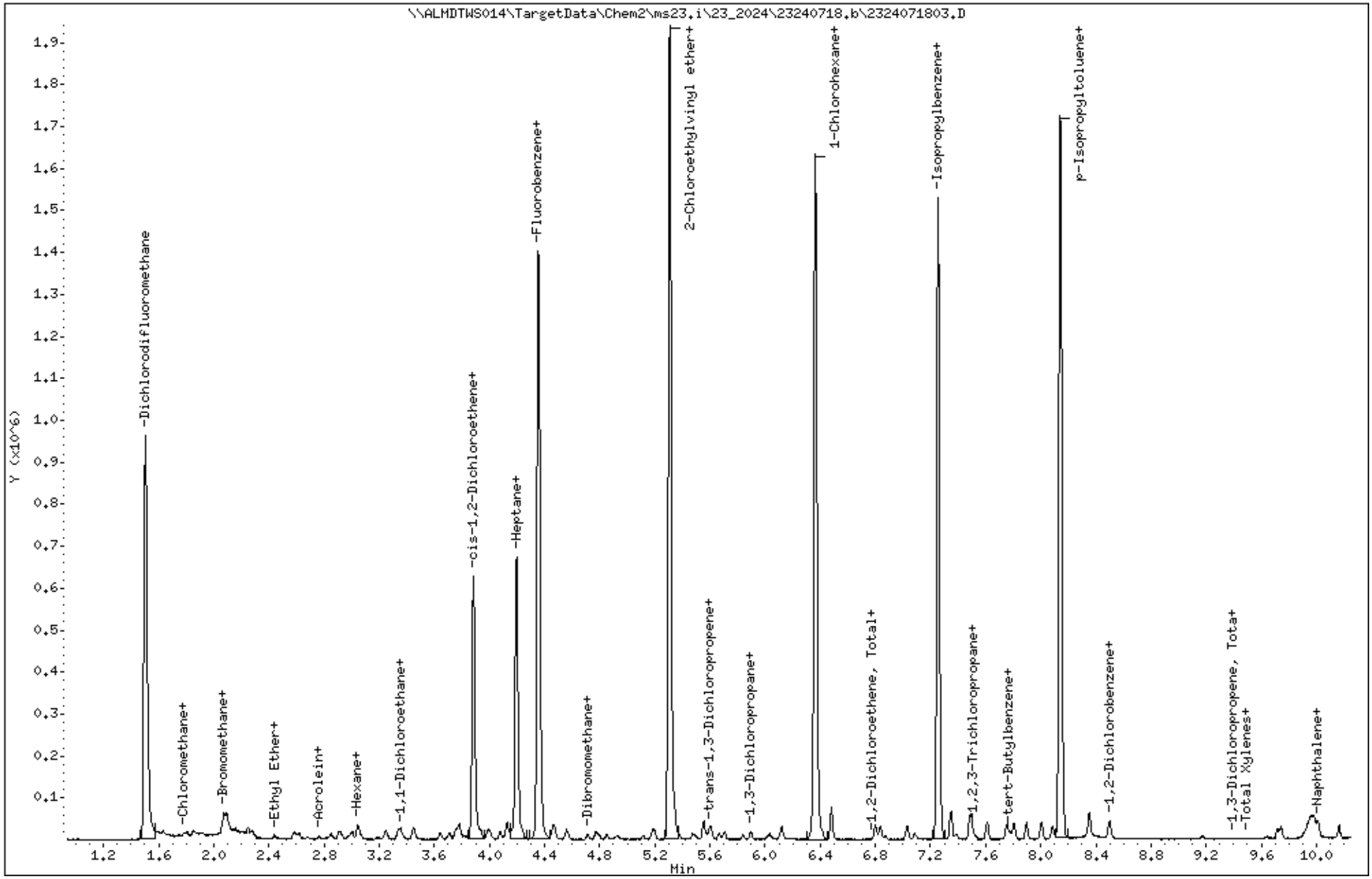
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Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25



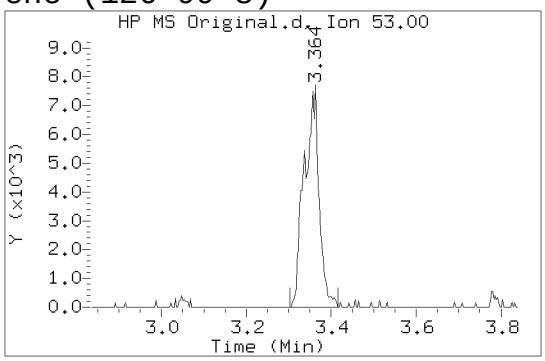
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LabSampID : VSTD00.5

Chloroprene (126-99-8)

Reason Code: MP

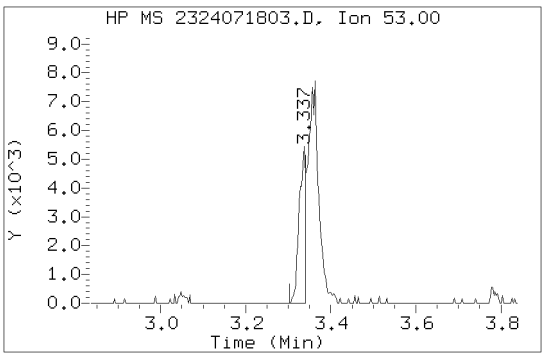
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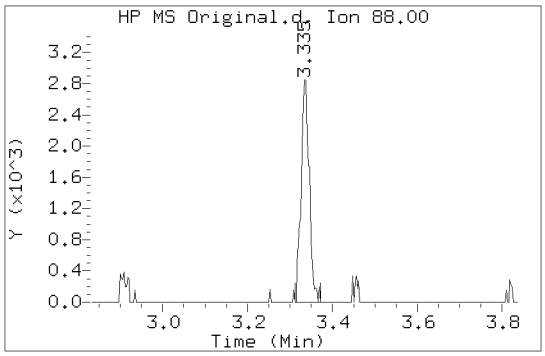
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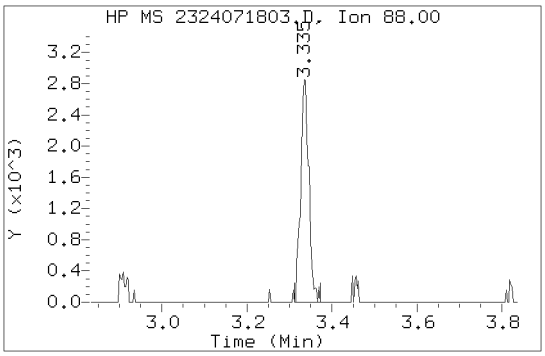
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20:34



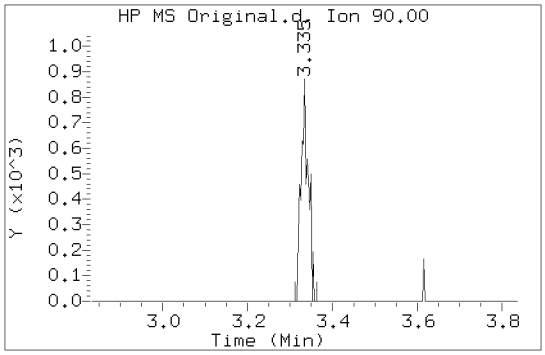
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17:14



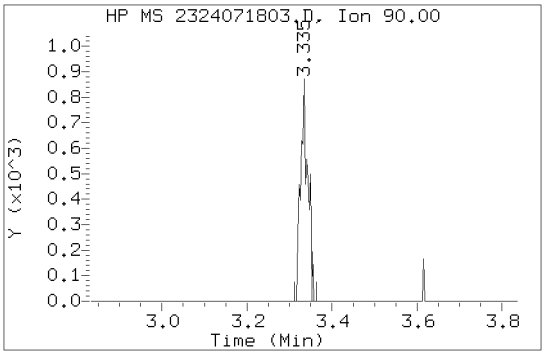
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AFTER

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17:14

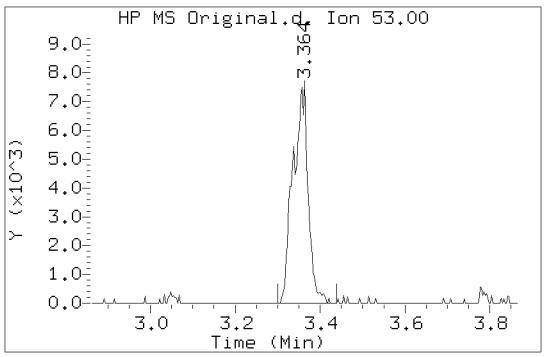


Acrylonitrile (107-13-1)

Reason Code: MP

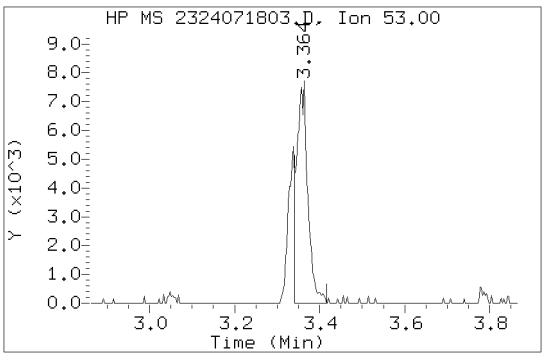
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20:34



AFTER

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7717
25-Jul-2024
17:14



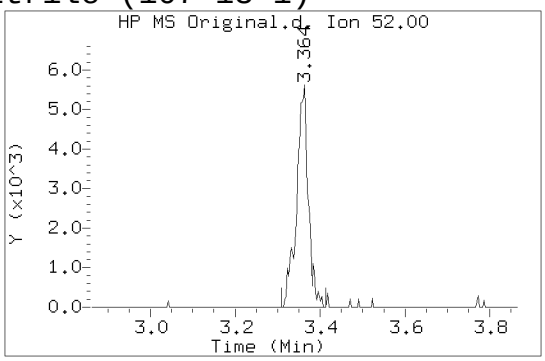
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Acrylonitrile (107-13-1)

Reason Code: MP

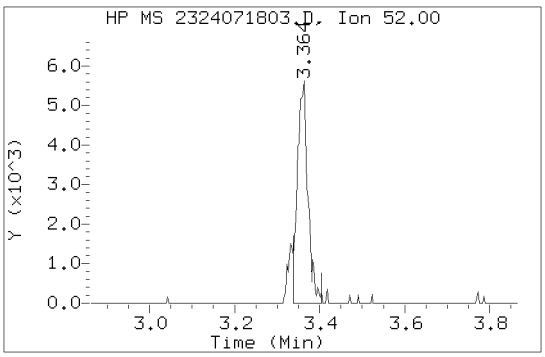
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20:34



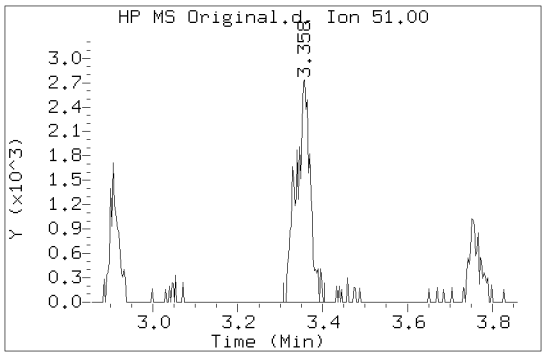
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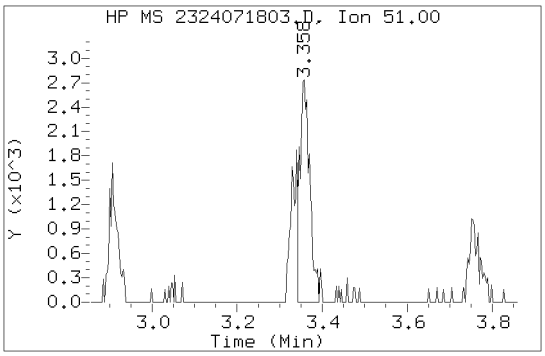
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20:34



AFTER

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25-Jul-2024
17:14

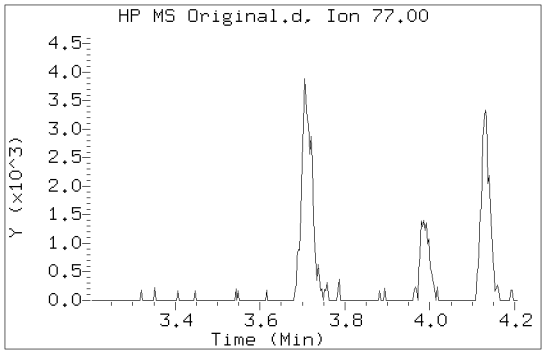


2,2-Dichloropropane (594-20-7)

Reason Code: H

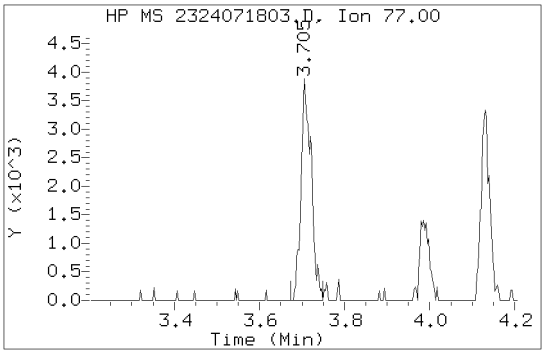
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18-Jul-2024
20:34



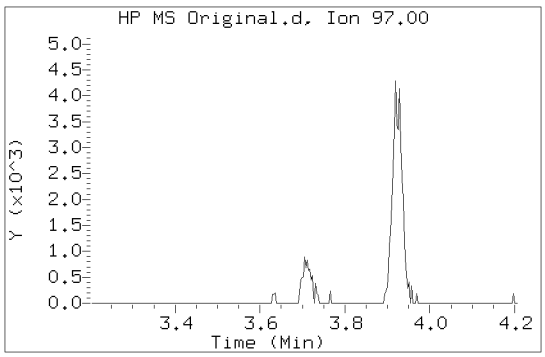
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25-Jul-2024
17:14



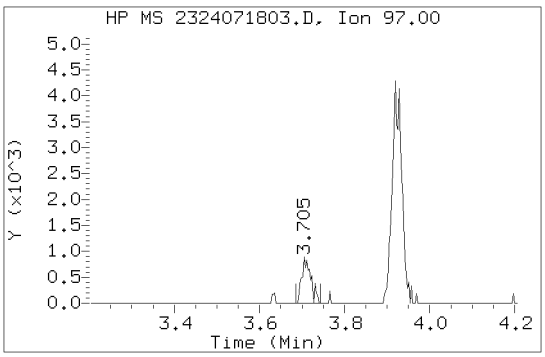
BEFORE

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0
18-Jul-2024
20:34



AFTER

MASS
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HEIGHT
895
25-Jul-2024
17:14



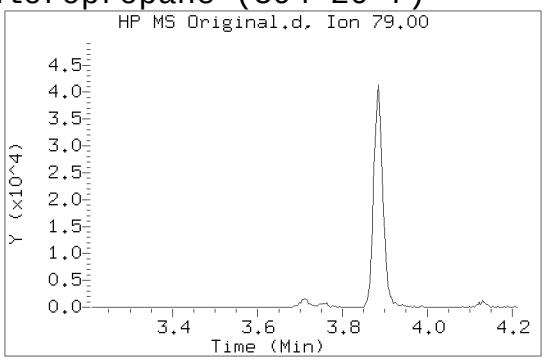
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LabSampID : VSTD00.5

2,2-Dichloropropane (594-20-7)

Reason Code: H

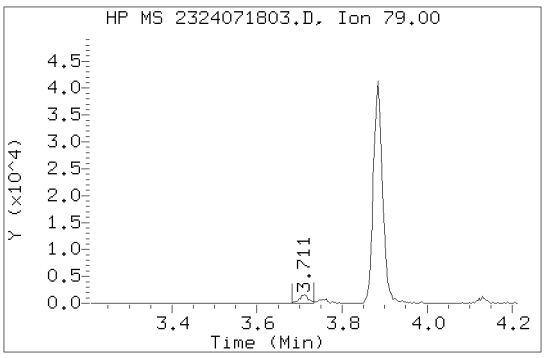
BEFORE

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AFTER

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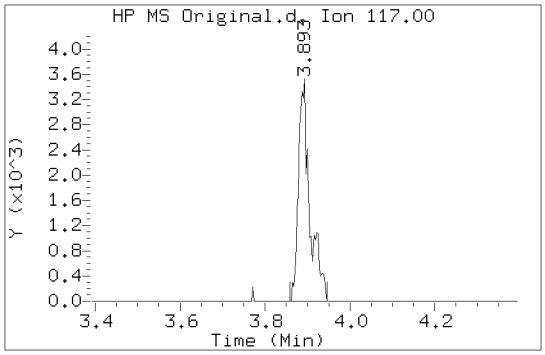


Carbon Tetrachloride (56-23-5)

Reason Code: MP

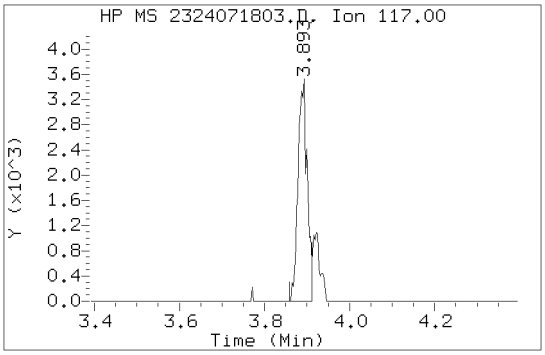
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18-Jul-2024
20:34



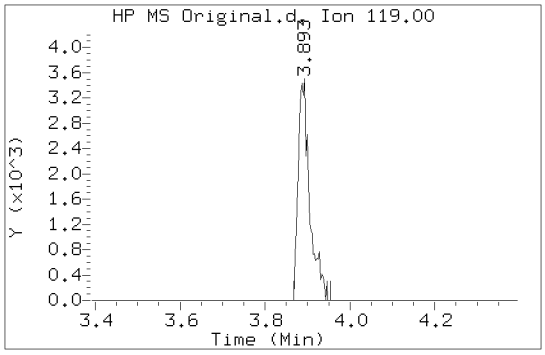
AFTER

MASS
117
AREA
5167
HEIGHT
3525
25-Jul-2024
17:14



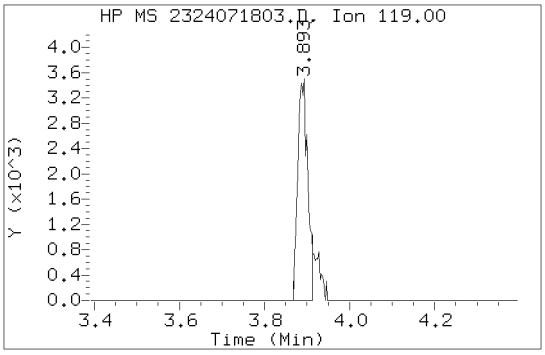
BEFORE

MASS
119
AREA
6538
HEIGHT
3505
18-Jul-2024
20:34



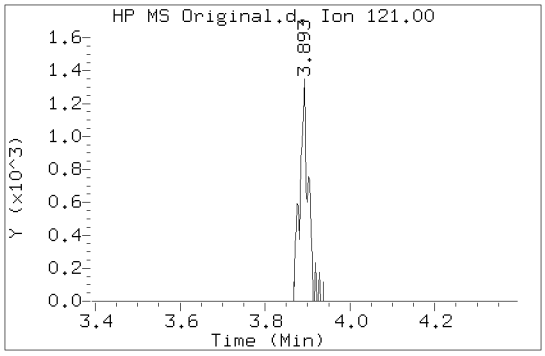
AFTER

MASS
119
AREA
5657
HEIGHT
3505
25-Jul-2024
17:14



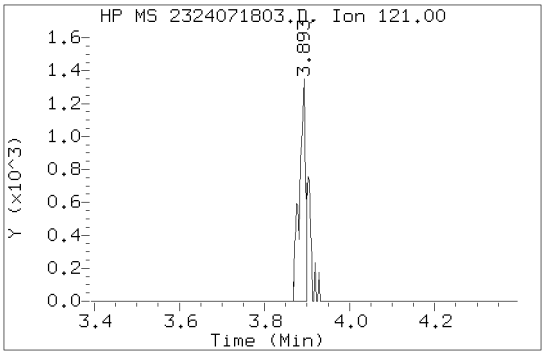
BEFORE

MASS
121
AREA
1828
HEIGHT
1350
18-Jul-2024
20:34



AFTER

MASS
121
AREA
1378
HEIGHT
1350
25-Jul-2024
17:14



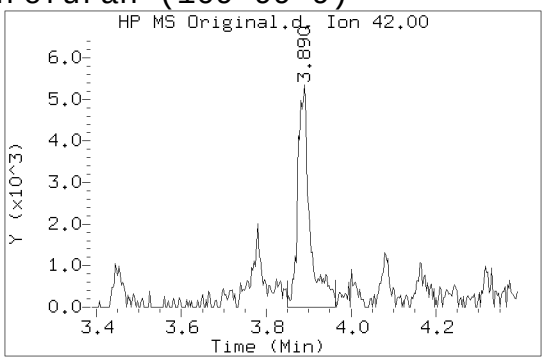
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Inj Date : 18-JUL-2024 12:44
InstruID : ms23.i
LabSampID : VSTD00.5

Tetrahydrofuran (109-99-9)

Reason Code: MP

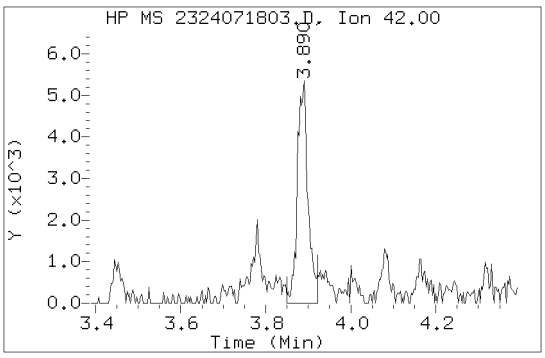
BEFORE

MASS
42
AREA
10506
HEIGHT
5349
18-Jul-2024
20:34



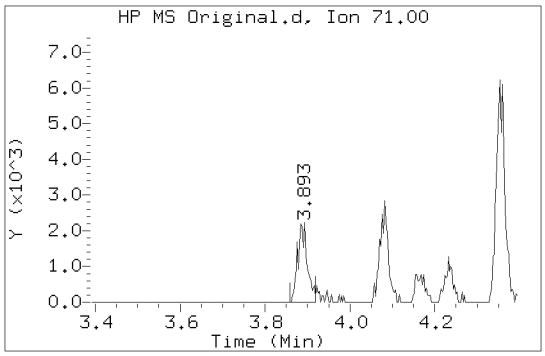
AFTER

MASS
42
AREA
9186
HEIGHT
5349
25-Jul-2024
17:14



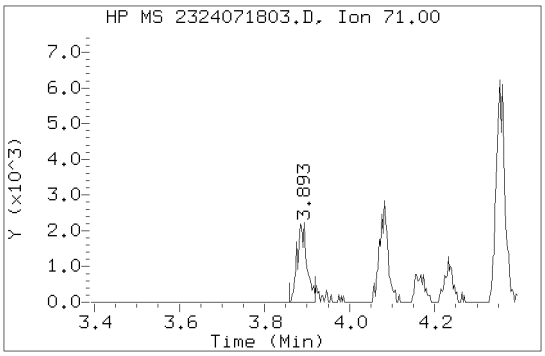
BEFORE

MASS
71
AREA
3492
HEIGHT
2233
18-Jul-2024
20:34



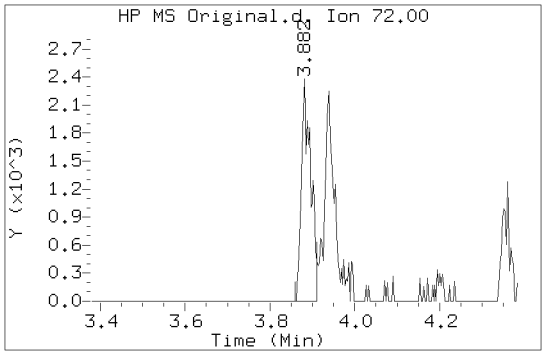
AFTER

MASS
71
AREA
3492
HEIGHT
2233
25-Jul-2024
17:14



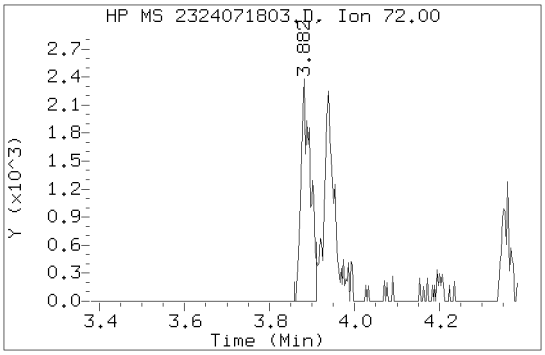
BEFORE

MASS
72
AREA
3600
HEIGHT
2379
18-Jul-2024
20:34



AFTER

MASS
72
AREA
3600
HEIGHT
2379
25-Jul-2024
17:14

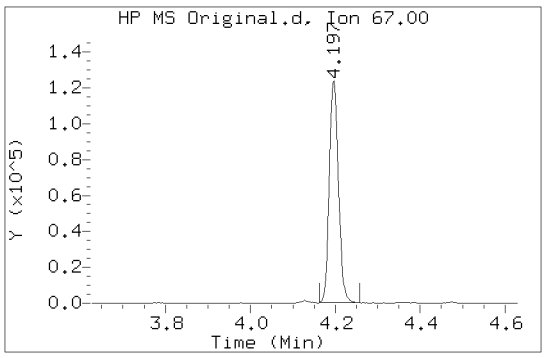


Methacrylonitrile (126-98-7)

Reason Code: H

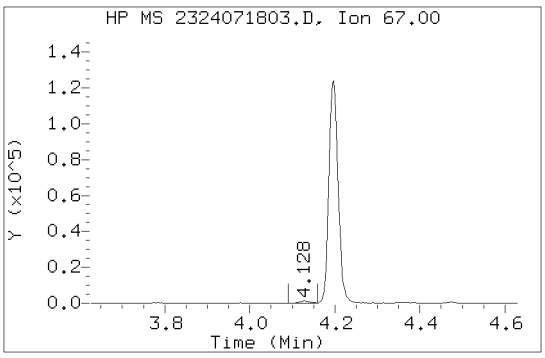
BEFORE

MASS
67
AREA
183859
HEIGHT
123693
18-Jul-2024
20:34



AFTER

MASS
67
AREA
2176
HEIGHT
1660
25-Jul-2024
17:14

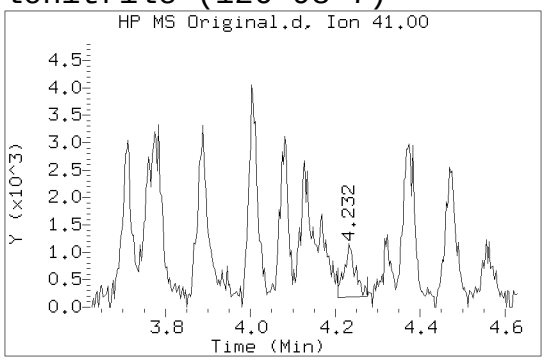


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Inj Date : 18-JUL-2024 12:44
InstruID : ms23.i
LabSampID : VSTD00.5

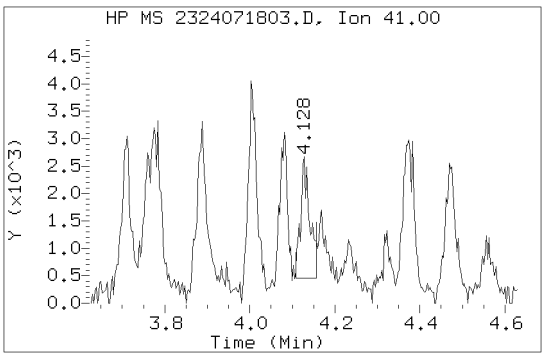
Methacrylonitrile (126-98-7)

Reason Code: H

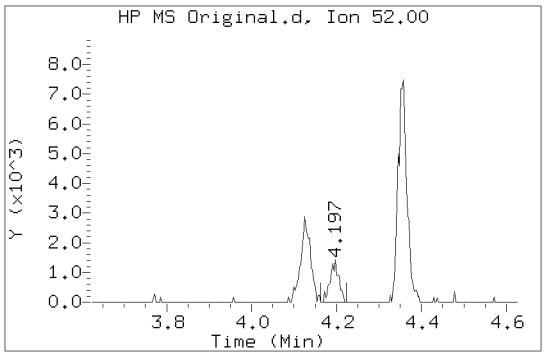
BEFORE
MASS
41
AREA
1740
HEIGHT
977
18-Jul-2024
20:34



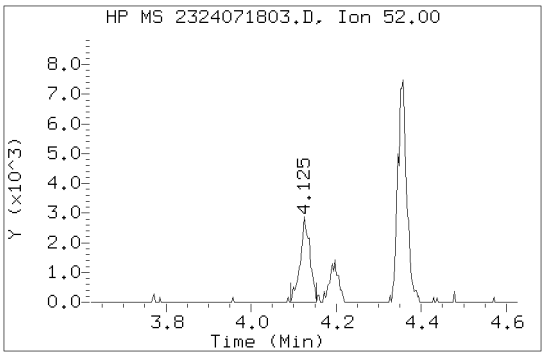
AFTER
MASS
41
AREA
3307
HEIGHT
2221
25-Jul-2024
17:14



BEFORE
MASS
52
AREA
1987
HEIGHT
1433
18-Jul-2024
20:34



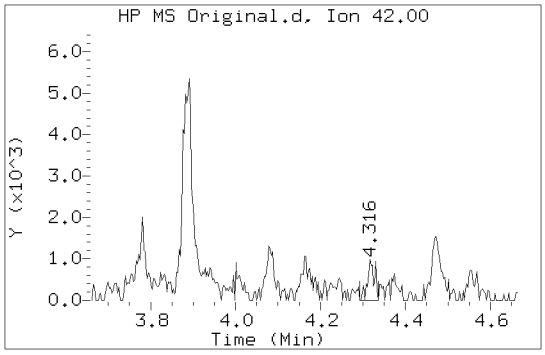
AFTER
MASS
52
AREA
4469
HEIGHT
2868
25-Jul-2024
17:14



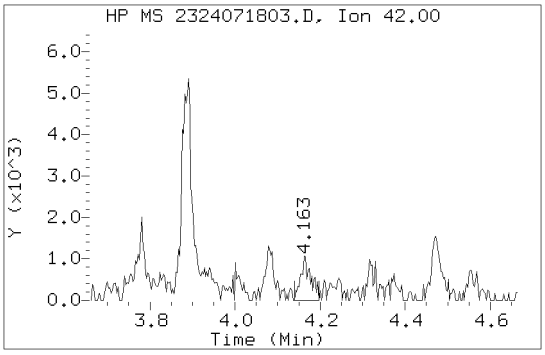
Isobutyl alcohol (78-83-1)

Reason Code: H

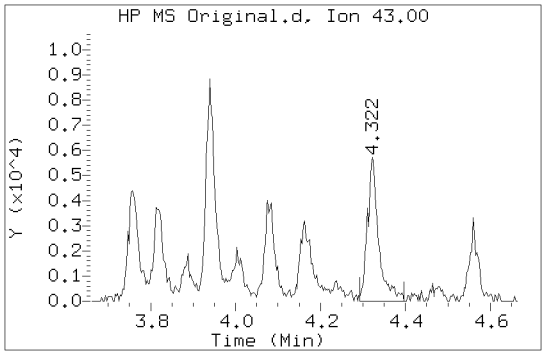
BEFORE
MASS
42
AREA
1132
HEIGHT
988
18-Jul-2024
20:34



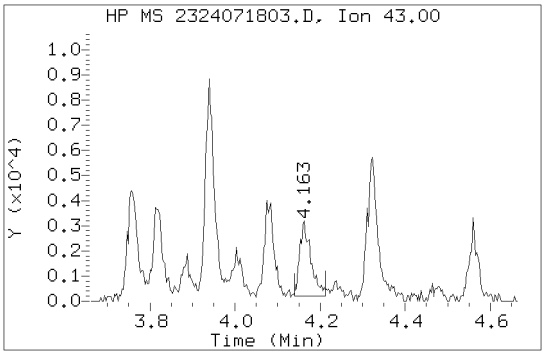
AFTER
MASS
42
AREA
1742
HEIGHT
1062
25-Jul-2024
17:14



BEFORE
MASS
43
AREA
10641
HEIGHT
5717
18-Jul-2024
20:34



AFTER
MASS
43
AREA
5346
HEIGHT
2974
25-Jul-2024
17:14



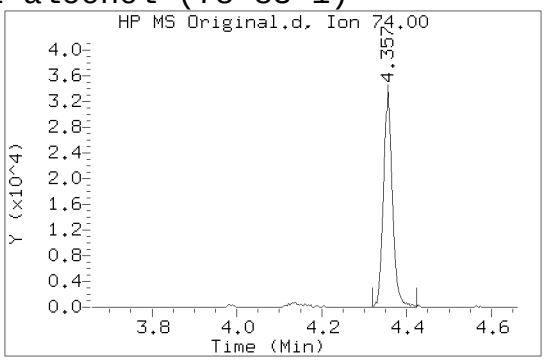
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Inj Date : 18-JUL-2024 12:44
InstruID : ms23.i
LabSampID : VSTD00.5

Isobutyl alcohol (78-83-1)

Reason Code: H

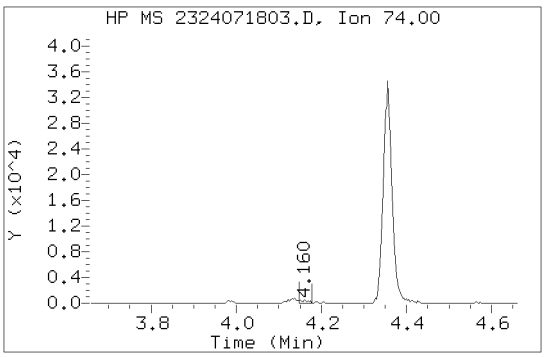
BEFORE

MASS
74
AREA
50522
HEIGHT
34624
18-Jul-2024
20:34



AFTER

MASS
74
AREA
588
HEIGHT
491
25-Jul-2024
17:14

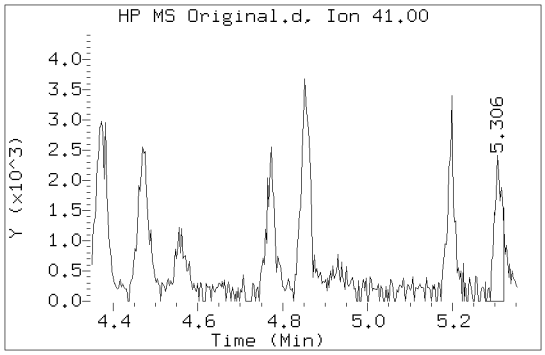


Methyl methacrylate (80-62-6)

Reason Code: IH

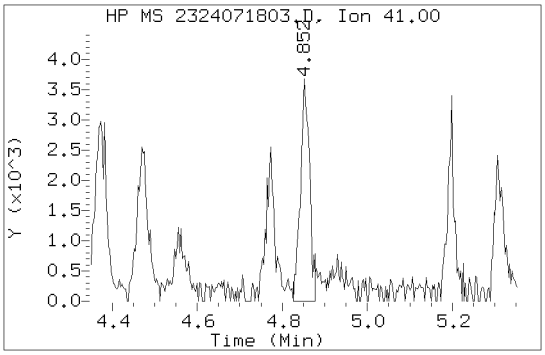
BEFORE

MASS
41
AREA
3032
HEIGHT
2417
18-Jul-2024
20:34



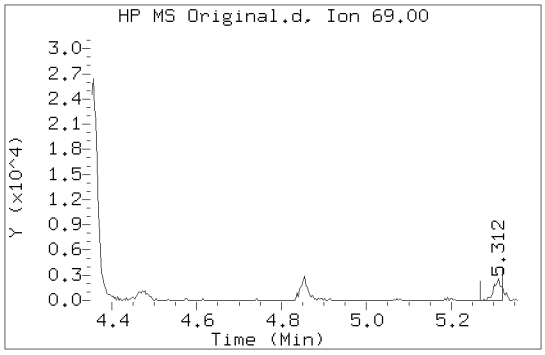
AFTER

MASS
41
AREA
5350
HEIGHT
3678
25-Jul-2024
17:14



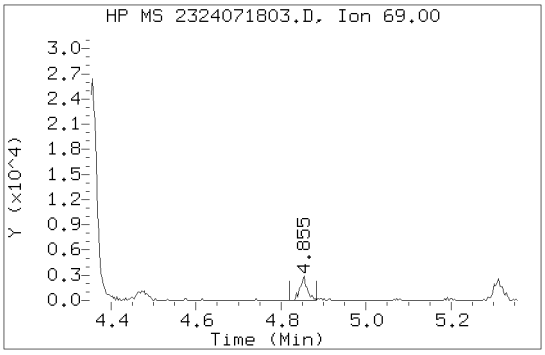
BEFORE

MASS
69
AREA
3111
HEIGHT
2601
18-Jul-2024
20:34



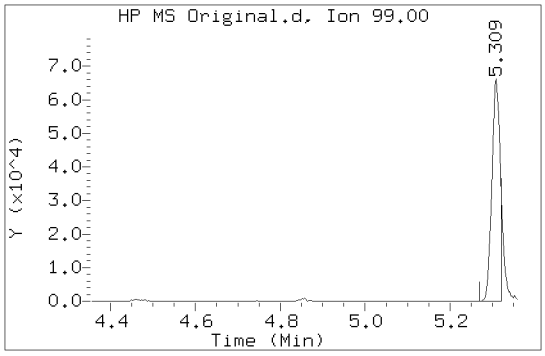
AFTER

MASS
69
AREA
3304
HEIGHT
2907
25-Jul-2024
17:14



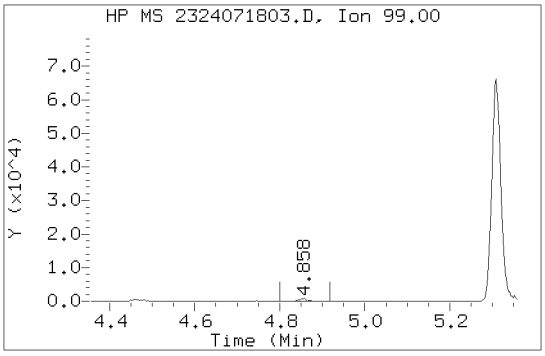
BEFORE

MASS
99
AREA
88520
HEIGHT
66192
18-Jul-2024
20:34



AFTER

MASS
99
AREA
868
HEIGHT
980
25-Jul-2024
17:14



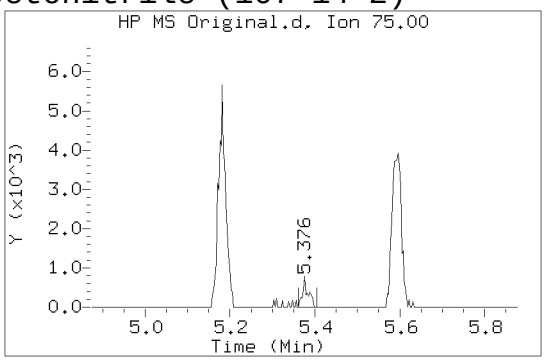
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Inj Date : 18-JUL-2024 12:44
InstruID : ms23.i
LabSampID : VSTD00.5

Chloroacetonitrile (107-14-2)

Reason Code: H

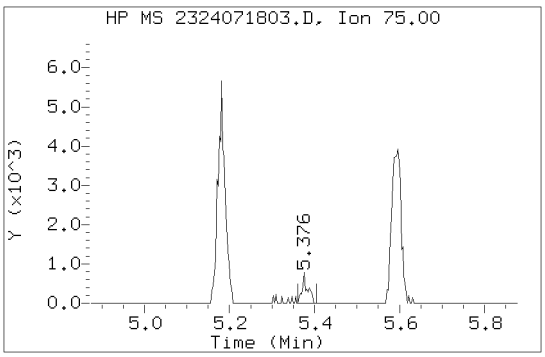
BEFORE

MASS
75
AREA
695
HEIGHT
793
18-Jul-2024
20:34



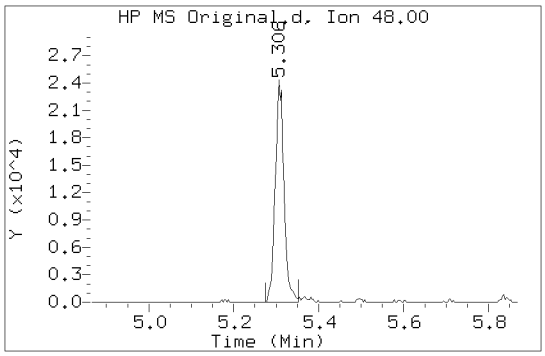
AFTER

MASS
75
AREA
695
HEIGHT
793
25-Jul-2024
17:14



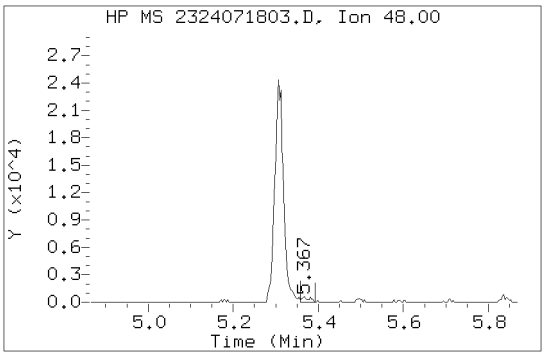
BEFORE

MASS
48
AREA
35068
HEIGHT
24336
18-Jul-2024
20:34



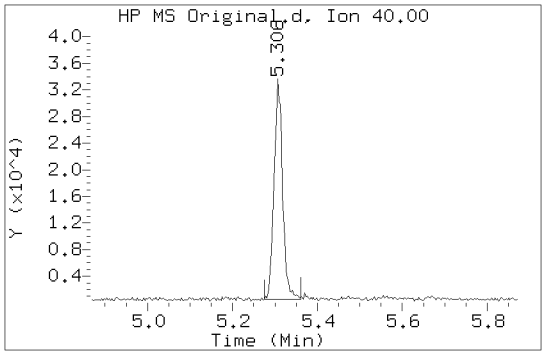
AFTER

MASS
48
AREA
738
HEIGHT
626
25-Jul-2024
17:14



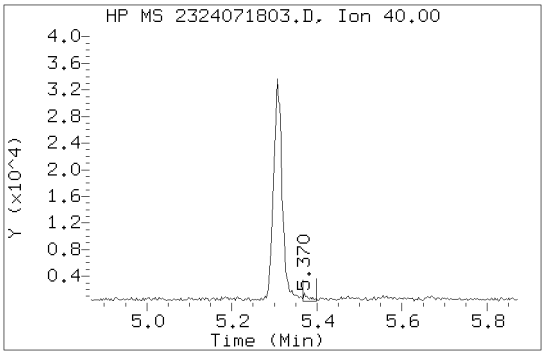
BEFORE

MASS
40
AREA
45731
HEIGHT
33059
18-Jul-2024
20:34



AFTER

MASS
40
AREA
976
HEIGHT
1192
25-Jul-2024
17:14

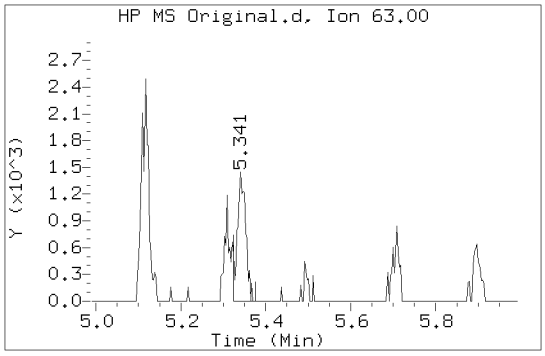


1,1-Dichloro-2-Propanone (513-88-2)

Reason Code: H

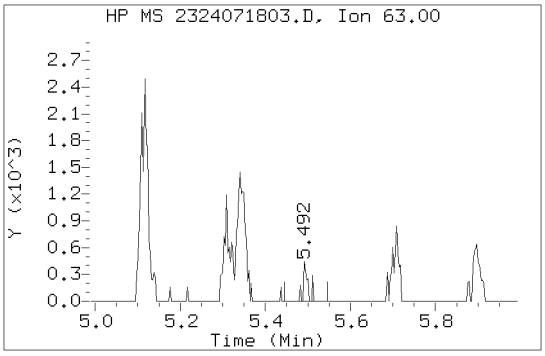
BEFORE

MASS
63
AREA
1974
HEIGHT
1446
18-Jul-2024
20:34



AFTER

MASS
63
AREA
303
HEIGHT
449
25-Jul-2024
17:14

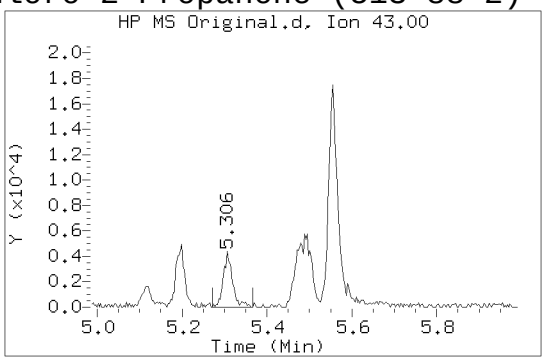


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LabSampID : VSTD00.5

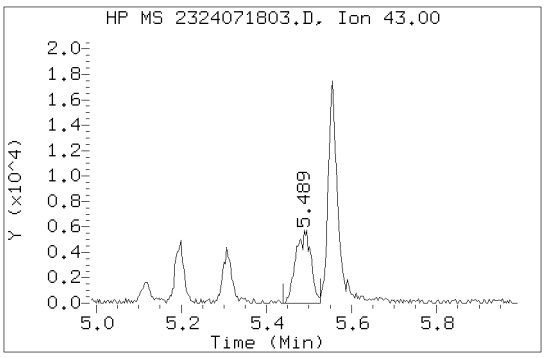
1,1-Dichloro-2-Propanone (513-88-2)

Reason Code: H

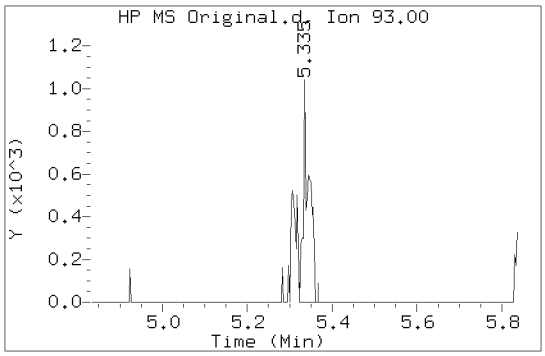
BEFORE
MASS
43
AREA
6489
HEIGHT
4385
18-Jul-2024
20:34



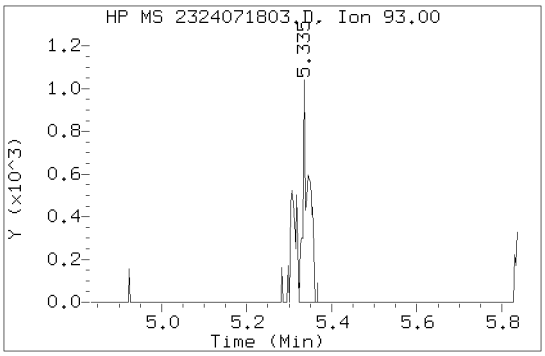
AFTER
MASS
43
AREA
14234
HEIGHT
5773
25-Jul-2024
17:14



BEFORE
MASS
93
AREA
983
HEIGHT
1041
18-Jul-2024
20:34



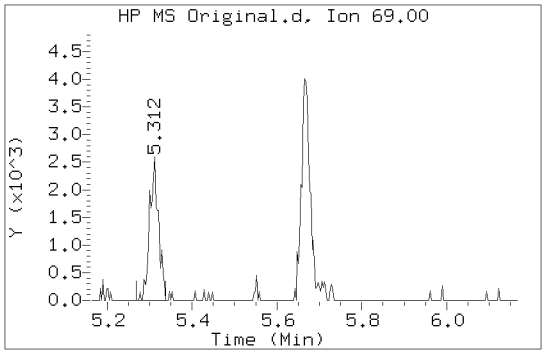
AFTER
MASS
93
AREA
983
HEIGHT
1041
25-Jul-2024
17:14



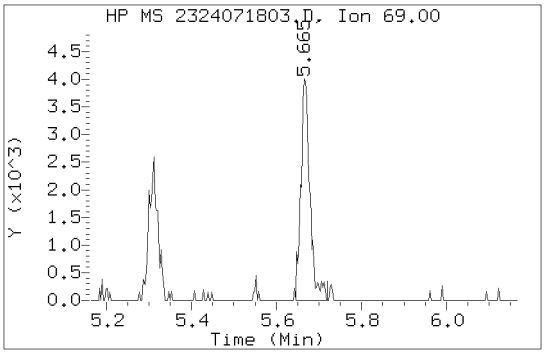
Ethyl Methacrylate (97-63-2)

Reason Code: H

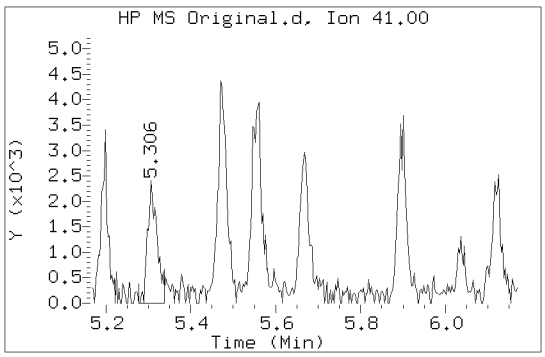
BEFORE
MASS
69
AREA
3654
HEIGHT
2601
18-Jul-2024
20:34



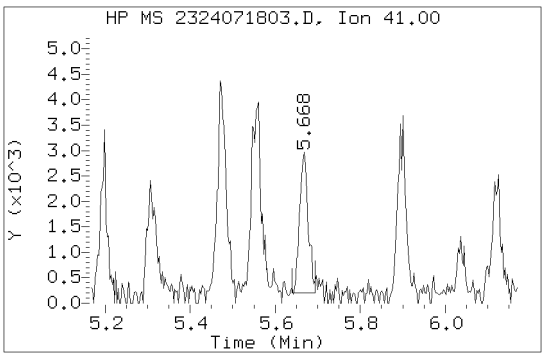
AFTER
MASS
69
AREA
5814
HEIGHT
4011
25-Jul-2024
17:14



BEFORE
MASS
41
AREA
3668
HEIGHT
2417
18-Jul-2024
20:34



AFTER
MASS
41
AREA
3834
HEIGHT
2763
25-Jul-2024
17:14



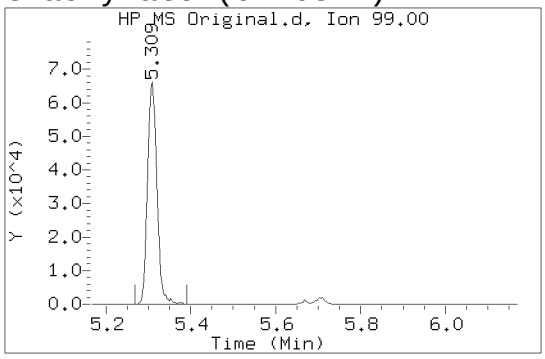
Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071803.D
Inj Date : 18-JUL-2024 12:44
InstruID : ms23.i
LabSampID : VSTD00.5

Ethyl Methacrylate (97-63-2)

Reason Code: H

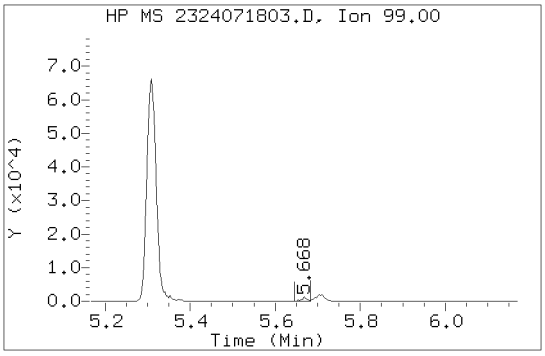
BEFORE

MASS
99
AREA
101229
HEIGHT
66192
18-Jul-2024
20:34



AFTER

MASS
99
AREA
991
HEIGHT
1304
25-Jul-2024
17:14

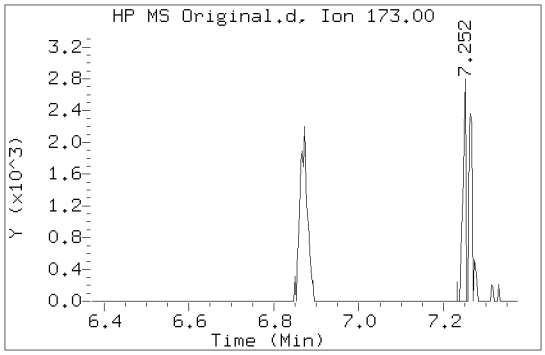


Bromoform (75-25-2)

Reason Code: H

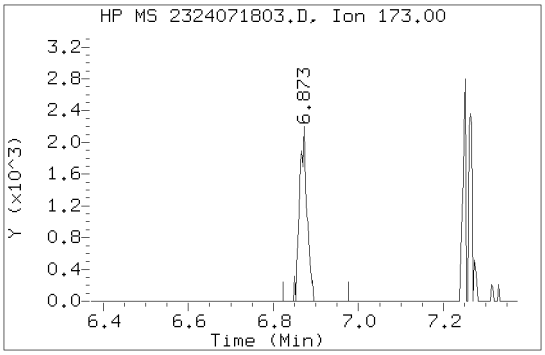
BEFORE

MASS
173
AREA
1422
HEIGHT
2799
18-Jul-2024
20:34



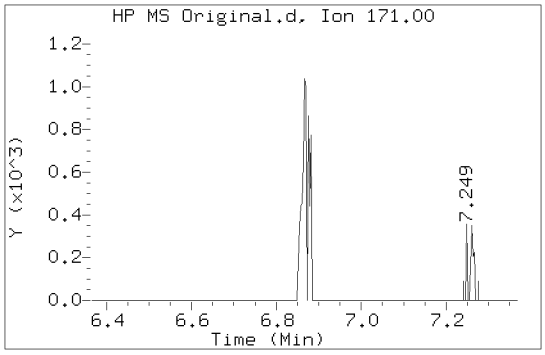
AFTER

MASS
173
AREA
2635
HEIGHT
2204
25-Jul-2024
17:14



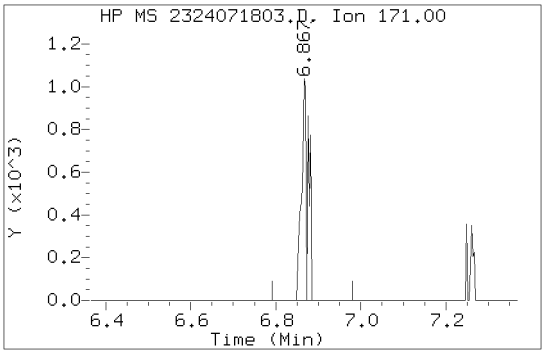
BEFORE

MASS
171
AREA
224
HEIGHT
358
18-Jul-2024
20:34



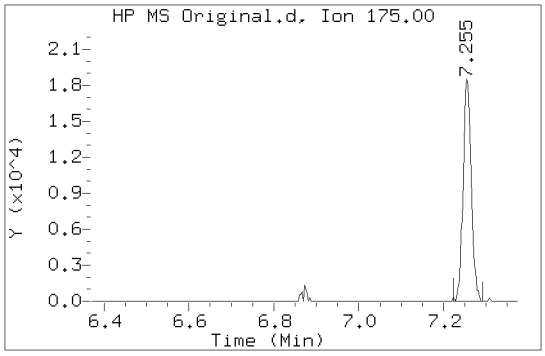
AFTER

MASS
171
AREA
1074
HEIGHT
1037
25-Jul-2024
17:14



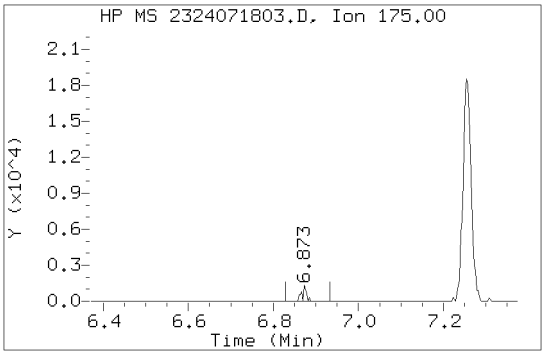
BEFORE

MASS
175
AREA
24818
HEIGHT
18520
18-Jul-2024
20:34



AFTER

MASS
175
AREA
896
HEIGHT
1337
25-Jul-2024
17:14

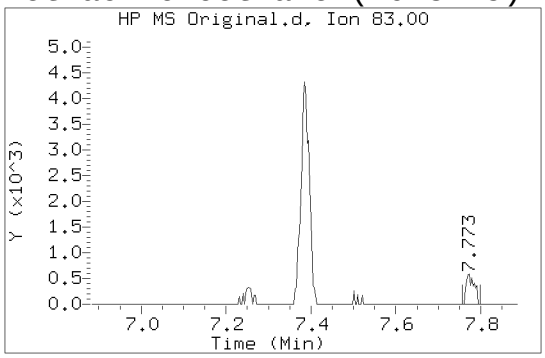


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Inj Date : 18-JUL-2024 12:44
InstruID : ms23.i
LabSampID : VSTD00.5

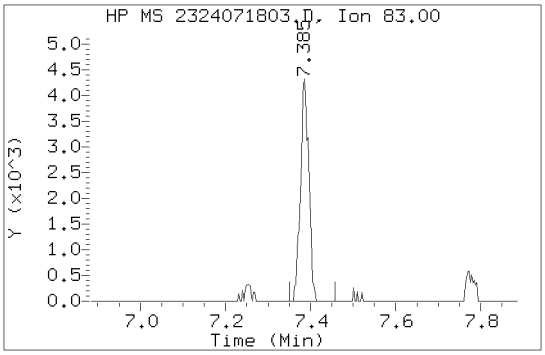
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code: H

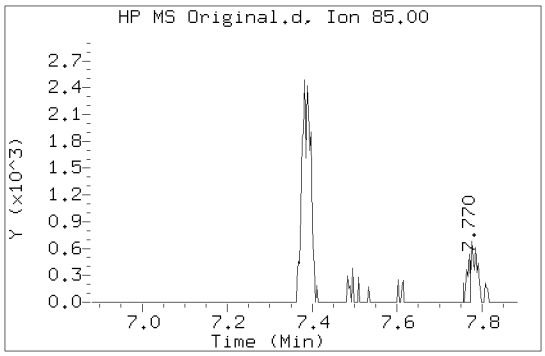
BEFORE
MASS
83
AREA
736
HEIGHT
590
18-Jul-2024
20:34



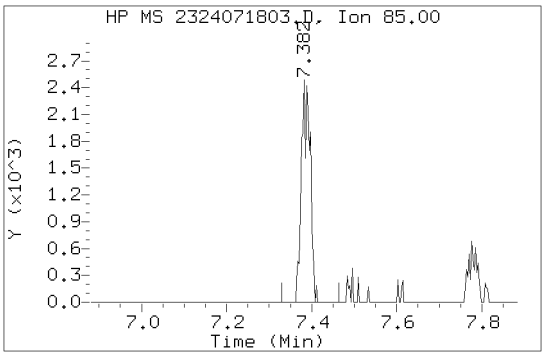
AFTER
MASS
83
AREA
5744
HEIGHT
4318
25-Jul-2024
17:14



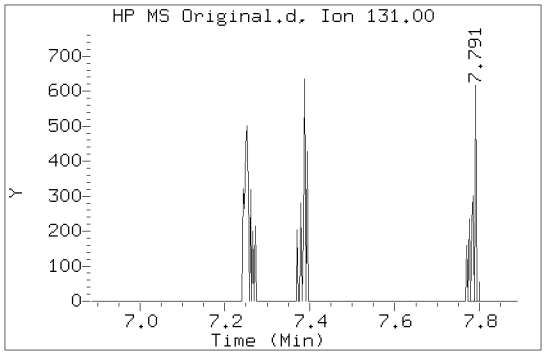
BEFORE
MASS
85
AREA
278
HEIGHT
539
18-Jul-2024
20:34



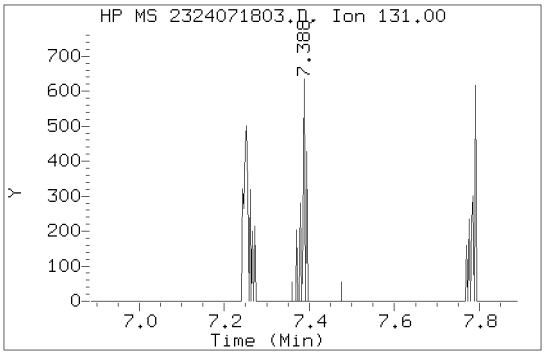
AFTER
MASS
85
AREA
3514
HEIGHT
2487
25-Jul-2024
17:14



BEFORE
MASS
131
AREA
240
HEIGHT
617
18-Jul-2024
20:34



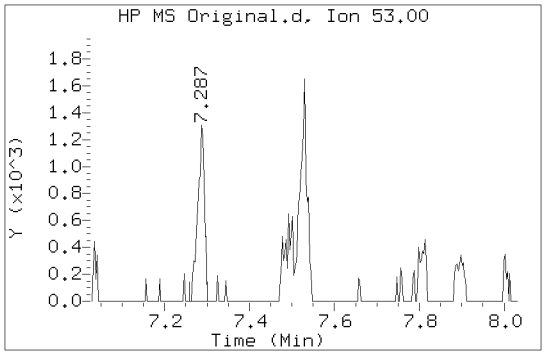
AFTER
MASS
131
AREA
302
HEIGHT
635
25-Jul-2024
17:14



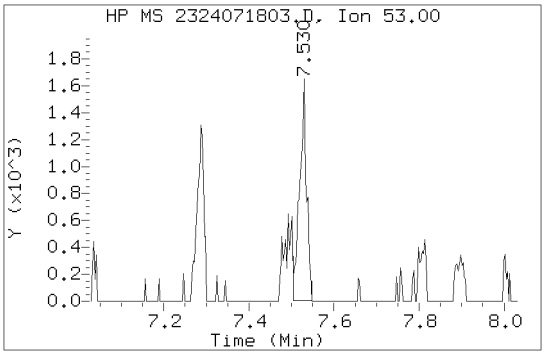
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: H

BEFORE
MASS
53
AREA
1425
HEIGHT
1307
18-Jul-2024
20:34



AFTER
MASS
53
AREA
1805
HEIGHT
1648
25-Jul-2024
17:14

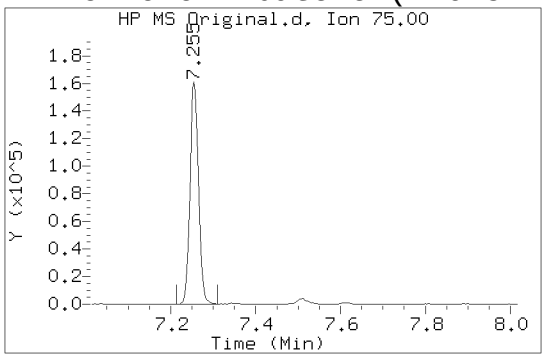


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Inj Date : 18-JUL-2024 12:44
InstruID : ms23.i
LabSampID : VSTD00.5

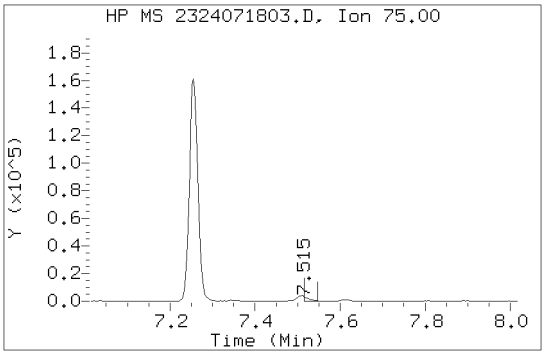
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: H

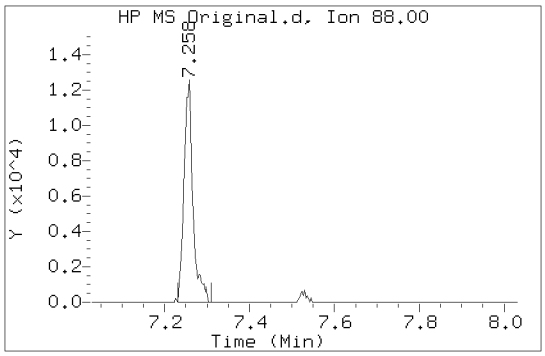
BEFORE
MASS
75
AREA
224740
HEIGHT
161088
18-Jul-2024
20:34



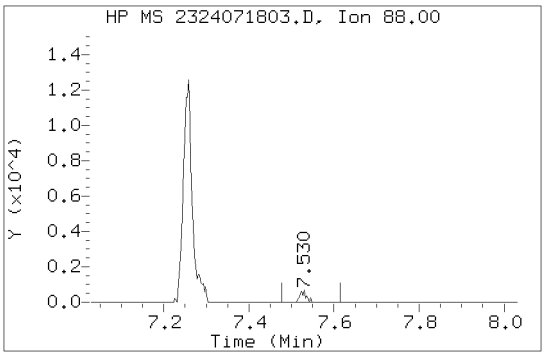
AFTER
MASS
75
AREA
2416
HEIGHT
2920
25-Jul-2024
17:14



BEFORE
MASS
88
AREA
18437
HEIGHT
12574
18-Jul-2024
20:34



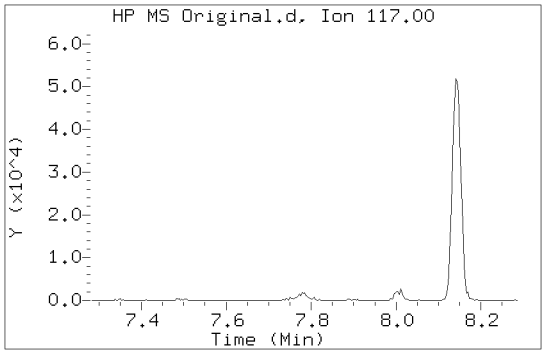
AFTER
MASS
88
AREA
629
HEIGHT
691
25-Jul-2024
17:14



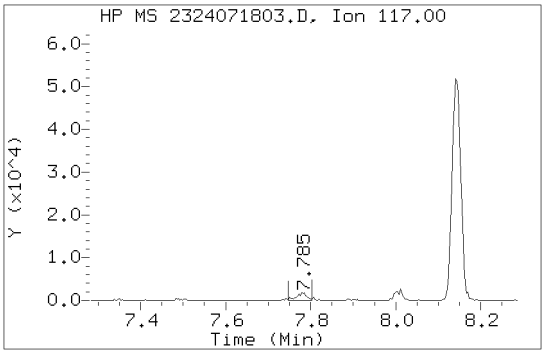
Pentachloroethane (76-01-7)

Reason Code: IH

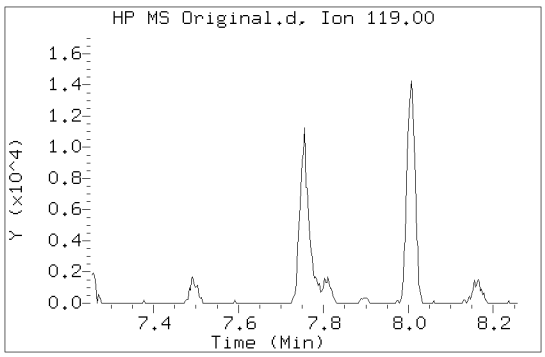
BEFORE
MASS
117
AREA
0
HEIGHT
0
18-Jul-2024
20:34



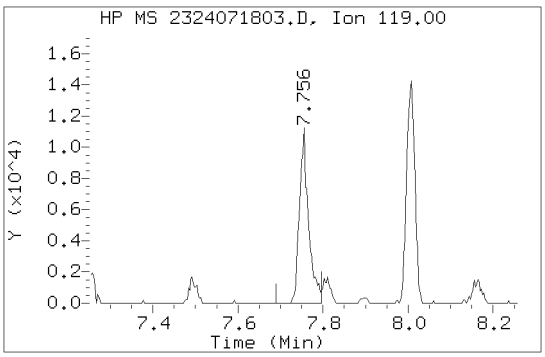
AFTER
MASS
117
AREA
2828
HEIGHT
1779
25-Jul-2024
17:14



BEFORE
MASS
119
AREA
0
HEIGHT
0
18-Jul-2024
20:34



AFTER
MASS
119
AREA
16373
HEIGHT
11259
25-Jul-2024
17:14



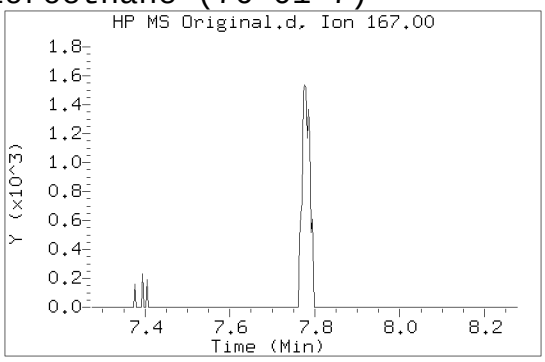
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Inj Date : 18-JUL-2024 12:44
InstruID : ms23.i
LabSampID : VSTD00.5

Pentachloroethane (76-01-7)

Reason Code: IH

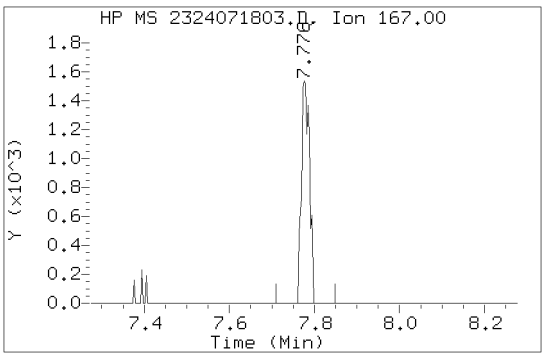
BEFORE

MASS
167
AREA
0
HEIGHT
0
18-Jul-2024
20:34



AFTER

MASS
167
AREA
2024
HEIGHT
1538
25-Jul-2024
17:14

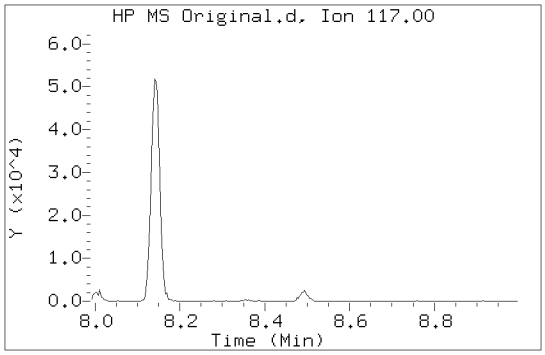


Hexachloroethane (67-72-1)

Reason Code: IH

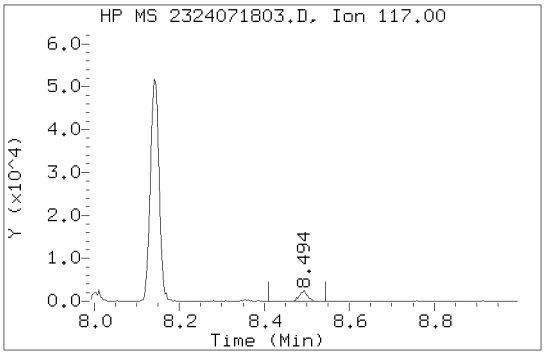
BEFORE

MASS
117
AREA
0
HEIGHT
0
18-Jul-2024
20:34



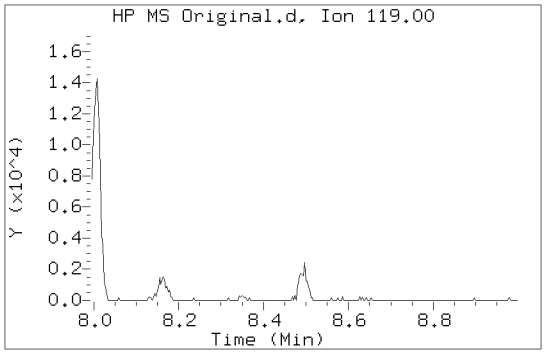
AFTER

MASS
117
AREA
3050
HEIGHT
2502
25-Jul-2024
17:14



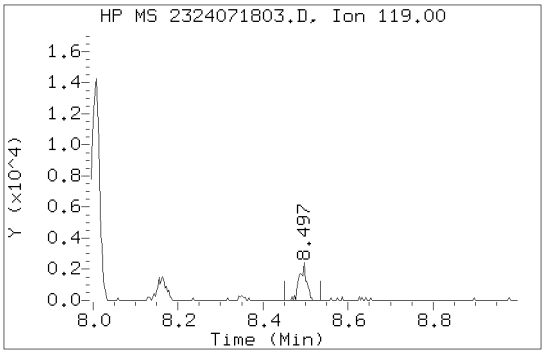
BEFORE

MASS
119
AREA
0
HEIGHT
0
18-Jul-2024
20:34



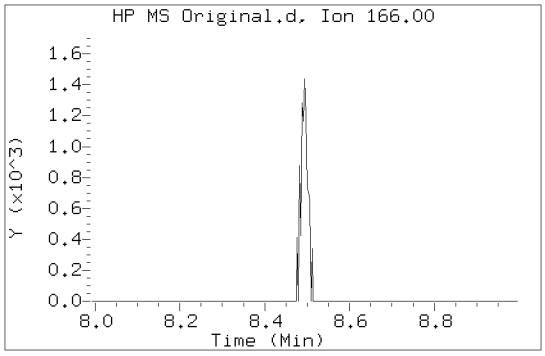
AFTER

MASS
119
AREA
2712
HEIGHT
2415
25-Jul-2024
17:14



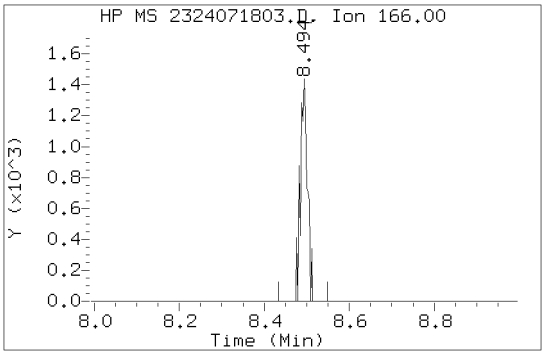
BEFORE

MASS
166
AREA
0
HEIGHT
0
18-Jul-2024
20:34



AFTER

MASS
166
AREA
1603
HEIGHT
1438
25-Jul-2024
17:14



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:14
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240718.b/232407180
Inj Date: 18-JUL-2024 12:44
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071804.D
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Inj Date : 18-JUL-2024 13:03
Operator : ILY Inst ID: ms23.i
Smp Info : 1234;;1;1;1;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\23-8260b09.m
Meth Date : 22-Jul-2024 06:29 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 13:23 Cal File: 2324071805.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.632	1.632	(0.375)	11246	1.00000	0.881068(a)	
2 Chloromethane	50	1.788	1.788	(0.410)	12620	1.00000	0.969306(a)	
3 Vinyl Chloride	62	1.846	1.846	(0.424)	10782	1.00000	0.936682(a)	
4 Bromomethane	94	2.074	2.074	(0.476)	8460	1.00000	1.03210	
5 Chloroethane	64	2.147	2.147	(0.493)	6172	1.00000	0.995201(a)	
6 Pentane	41	2.248	2.248	(0.516)	7715	1.00000	0.917107(a)	
7 Trichlorofluoromethane	101	2.254	2.254	(0.518)	12049	1.00000	0.855302(a)	
8 Dichlorofluoromethane	67	2.277	2.277	(0.523)	16586	1.00000	0.914016(a)	
9 Ethyl Ether	74	2.448	2.448	(0.562)	4908	1.00000	0.851428(aQ)	
10 1,1-Dichloroethene	61	2.581	2.581	(0.593)	10693	1.00000	0.848714(a)	
11 Freon 113	101	2.599	2.599	(0.597)	6149	1.00000	0.830351(a)	
12 Carbon Disulfide	76	2.619	2.619	(0.601)	22506	1.00000	0.879391(a)	
13 Iodomethane	127	2.674	2.674	(0.614)	3129	1.00000	0.846065(a)	
14 Acrolein	56	2.758	2.758	(0.633)	7136	5.00000	4.22700	
15 Isopropyl Alcohol	45	2.816	2.816	(0.646)	4239	5.00000	4.51340	
16 3-Chloro-1-propene	41	2.853	2.853	(0.655)	10854	1.00000	0.815938(a)	
17 Methylene Chloride	84	2.911	2.911	(0.668)	8429	1.00000	0.915527(a)	
18 Acetone	58	2.926	2.926	(0.672)	4856	5.00000	4.52594	
19 Methyl acetate	74	2.984	2.984	(0.685)	1961	1.00000	0.802102(aQ)	
20 trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	11549	1.00000	0.916742(a)	
21 Hexane	57	3.044	3.044	(0.699)	16759	1.00000	0.894085(a)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.050	3.050	(0.700)	23755	1.00000	0.879102(a)	
	23 tert.- Butyl Alcohol	59	3.068	3.068	(0.704)	4567	5.00000	3.90982	
	24 Acetonitrile	41	3.189	3.189	(0.732)	8130	5.00000	4.80891	
	25 Diisopropyl ether	45	3.250	3.250	(0.746)	27192	1.00000	0.880486(a)	
	26 Chloroprene	53	3.334	3.334	(0.765)	10511	1.00000	0.944022(aM)	MP
	27 1,1-Dichloroethane	63	3.348	3.348	(0.769)	14443	1.00000	0.874345(a)	
	28 Acrylonitrile	53	3.357	3.357	(0.771)	21664	5.00000	4.12613(M)	MP
	29 Ethyl tert-butyl ether	59	3.453	3.453	(0.793)	23949	1.00000	0.825942(a)	
	30 n-Propanol	41	3.447	3.447	(0.791)	6622	10.0000	9.90272(Q)	
	31 Vinyl Acetate	86	3.450	3.450	(0.792)	1720	1.00000	0.797252(aQ)	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	11077	1.00000	0.872286(a)	
	33 2,2-Dichloropropane	77	3.710	3.710	(0.852)	10895	1.00000	0.858326(a)	
	34 Bromochloromethane	128	3.757	3.757	(0.862)	3910	1.00000	0.853394(a)	
	35 Cyclohexane	84	3.780	3.780	(0.868)	11704	1.00000	0.893732(a)	
	36 Chloroform	83	3.783	3.783	(0.868)	15357	1.00000	0.893101(a)	
	37 Ethyl Acetate	43	3.820	3.820	(0.877)	11886	1.00000	0.946198(a)	
	38 Methyl acrylate	55	3.829	3.829	(0.879)	8556	1.00000	0.817375(a)	
	39 Carbon Tetrachloride	117	3.890	3.890	(0.893)	8474	1.00000	0.758888(aM)	MP
$	41 Dibromofluoromethane	113	3.884	3.884	(0.892)	254706	30.0000	29.2200	
	40 Tetrahydrofuran	42	3.887	3.887	(0.892)	15530	5.00000	4.28294	
	42 1,1,1-Trichloroethane	97	3.925	3.925	(0.901)	11681	1.00000	0.857451(a)	
	43 2-Butanone	72	3.939	3.939	(0.904)	3836	5.00000	3.28902(Q)	
	44 1,1-Dichloropropene	75	3.985	3.985	(0.915)	11131	1.00000	0.884891(a)	
	45 1-Chlorobutane	41	4.003	4.003	(0.919)	9349	1.00000	0.876045(a)	
	46 Heptane	71	4.084	4.084	(0.938)	5765	1.00000	0.890398(a)	
	47 Benzene	78	4.127	4.127	(0.948)	31897	1.00000	0.903283(a)	
	48 Propionitrile	54	4.110	4.110	(0.944)	7905	5.00000	4.36998	
	49 Methacrylonitrile	67	4.133	4.133	(0.949)	4081	1.00000	0.878708(aM)	H
	50 tert-Amyl methyl ether	73	4.159	4.159	(0.955)	22109	1.00000	0.835170(a)	
	54 Isobutyl alcohol	42	4.162	4.162	(0.955)	2630	10.0000	6.74491(QM)	IH
$	51 1,2-Dichloroethane-d4	65	4.197	4.197	(0.963)	330651	30.0000	29.6232	
	52 1,2-Dichloroethane	62	4.232	4.232	(0.971)	13373	1.00000	0.938531(a)	
	53 tert-Amyl Alcohol	59	4.240	4.240	(0.973)	2787	5.00000	4.06781(Q)	
*	55 Fluorobenzene	96	4.356	4.356	(1.000)	937870	30.0000		
	56 Diisobutylene	57	4.359	4.359	(1.001)	56125	1.00000	0.876152(aQ)	
	57 Trichloroethene	95	4.457	4.457	(1.023)	8438	1.00000	0.870853(a)	
	58 Methyl cyclohexane	83	4.475	4.475	(0.703)	12669	1.00000	0.911871(a)	
	59 tert-Amyl Ethylether	59	4.562	4.562	(1.047)	18427	1.00000	0.841910(a)	
	60 Dibromomethane	93	4.712	4.712	(1.082)	5341	1.00000	0.841161(a)	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.095)	8579	1.00000	0.882816(a)	
	62 Bromodichloromethane	83	4.793	4.793	(1.100)	9953	1.00000	0.810634(a)	
	63 Methyl methacrylate	41	4.854	4.854	(1.114)	8929	1.00000	0.845871(aM)	IH
	64 1,4-Dioxane	88	4.906	4.906	(1.126)	2881	25.0000	21.3717	
	65 2-Chloroethylvinyl ether	63	5.118	5.118	(1.175)	5519	1.00000	0.785752(a)	
	66 cis-1,3-Dichloropropene	75	5.181	5.181	(0.814)	12141	1.00000	0.828941(a)	
	67 Octane	85	5.199	5.199	(0.817)	4787	1.00000	0.896060(aQ)	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	999690	30.0000	30.1554	
	69 Toluene	92	5.340	5.340	(0.839)	19475	1.00000	0.904920(a)	
	70 Chloroacetonitrile	75	5.384	5.384	(0.846)	1332	5.00000	4.61215(QM)	H
	71 2-Nitropropane	41	5.477	5.477	(0.861)	12571	5.00000	4.74943(Q)	
	72 1,1-Dichloro-2-Propanone	63	5.488	5.488	(0.863)	849	5.00000	4.81157(QM)	H
	73 4-Methyl-2-Pentanone(MIBK)	43	5.555	5.555	(0.873)	48347	5.00000	4.24863	
	75 trans-1,3-Dichloropropene	75	5.589	5.589	(0.879)	10479	1.00000	0.766352(a)	
	74 Tetrachloroethene	164	5.610	5.610	(0.882)	7449	1.00000	0.944204(a)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.665	5.665	(0.890)	10236	1.00000	0.759925(aM)	IH
77	1,1,2-Trichloroethane	83	5.708	5.708	(0.897)	6515	1.00000	0.873588(a)	
78	Chlorodibromomethane	129	5.838	5.838	(0.918)	7201	1.00000	0.780763(a)	
79	1,3-Dichloropropane	76	5.899	5.899	(0.927)	13618	1.00000	0.893586(a)	
80	1,2-Dibromoethane	107	6.018	6.018	(0.946)	6950	1.00000	0.872781(a)	
81	2-Hexanone	43	6.119	6.119	(0.962)	32189	5.00000	3.93978	
82	1-Chlorohexane	91	6.336	6.336	(0.996)	10824	1.00000	0.949985(aQ)	
* 83	Chlorobenzene-d5	82	6.363	6.363	(1.000)	411802	30.0000		
84	Chlorobenzene	112	6.380	6.380	(1.003)	21290	1.00000	0.923723(a)	
85	Ethylbenzene	106	6.380	6.380	(1.003)	11220	1.00000	0.919169(a)	
86	1,1,1,2-Tetrachloroethane	131	6.415	6.415	(1.008)	6807	1.00000	0.835665(a)	
87	mp-Xylene	106	6.481	6.481	(1.019)	27665	2.00000	1.84912	
88	o-Xylene	106	6.800	6.800	(1.069)	12487	1.00000	0.857835(a)	
89	Styrene	104	6.837	6.837	(0.840)	20358	1.00000	0.887181(a)	
90	Bromoform	173	6.866	6.866	(0.843)	4425	1.00000	0.757517(a)	
91	Isopropylbenzene	105	7.031	7.031	(0.863)	29560	1.00000	0.925092(a)	
M 100	1,2-Dichloroethene, Total	61				22626	2.00000	1.78903	
$ 92	4-Bromofluorobenzene	174	7.257	7.257	(0.891)	313761	30.0000	31.0008	
93	Bromobenzene	156	7.347	7.347	(0.902)	8604	1.00000	0.927747(a)	
94	n-Propylbenzene	120	7.350	7.350	(0.903)	8840	1.00000	0.903496(a)	
95	1,1,2,2-Tetrachloroethane	83	7.387	7.387	(0.907)	10273	1.00000	0.891150(a)	
96	o-Chlorotoluene	91	7.480	7.480	(0.919)	27664	1.00000	0.927333(a)	
97	1,3,5-Trimethylbenzene	105	7.492	7.492	(0.920)	26146	1.00000	0.882021(a)	
98	1,2,3-Trichloropropane	110	7.509	7.509	(0.922)	2994	1.00000	0.840006(a)	
99	trans-1,4-Dichloro-2-butene	53	7.524	7.524	(0.924)	3204	1.00000	0.898491(aQM)	MP
101	p-Chlorotoluene	91	7.616	7.616	(0.935)	26030	1.00000	0.941408(a)	
102	tert-Butylbenzene	134	7.752	7.752	(0.952)	6867	1.00000	0.986132(aQ)	
103	Pentachloroethane	117	7.778	7.778	(0.955)	4947	1.00000	0.859301(aQM)	MP
104	1,2,4-Trimethylbenzene	105	7.804	7.804	(0.958)	27640	1.00000	0.907212(a)	
105	sec-Butylbenzene	105	7.894	7.894	(0.969)	34416	1.00000	0.928375(a)	
106	p-Isopropyltoluene	134	8.010	8.010	(0.984)	7627	1.00000	0.930369(a)	
107	1,3-Dichlorobenzene	146	8.085	8.085	(0.993)	16628	1.00000	0.950211(a)	
* 108	1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	357479	30.0000	(Q)	
109	1,4-Dichlorobenzene	146	8.152	8.152	(1.001)	16834	1.00000	0.933086(aQ)	
110	Benzyl Chloride	126	8.346	8.346	(1.025)	2294	1.00000	0.861779(aQ)	
111	n-Butylbenzene	134	8.352	8.352	(1.026)	7283	1.00000	0.939788(aQ)	
112	Hexachloroethane	117	8.493	8.493	(1.043)	4495	1.00000	0.787504(aQ)	
113	1,2-Dichlorobenzene	146	8.502	8.502	(1.044)	15519	1.00000	0.918214(a)	
114	1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	2051	1.00000	0.939578(a)	
115	Nitrobenzene	77	9.637	9.637	(1.183)	3549	10.0000	30.2460	
116	Hexachlorobutadiene	225	9.718	9.718	(1.193)	4600	1.00000	1.00028(M)	IH
M 120	1,3-Dichloropropene, Total	75				22620	2.00000	1.59529	
117	1,2,4-Trichlorobenzene	180	9.741	9.741	(1.196)	10250	1.00000	0.924822(a)	
M 121	Total Xylenes	106				40152	3.00000	2.70695	
118	Naphthalene	128	10.011	10.011	(1.229)	25294	1.00000	0.826117(a)	
119	1,2,3-Trichlorobenzene	180	10.164	10.164	(1.248)	8913	1.00000	0.832322(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

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Date : 18-JUL-2024 13:03

Client ID:

Instrument: ms23.i

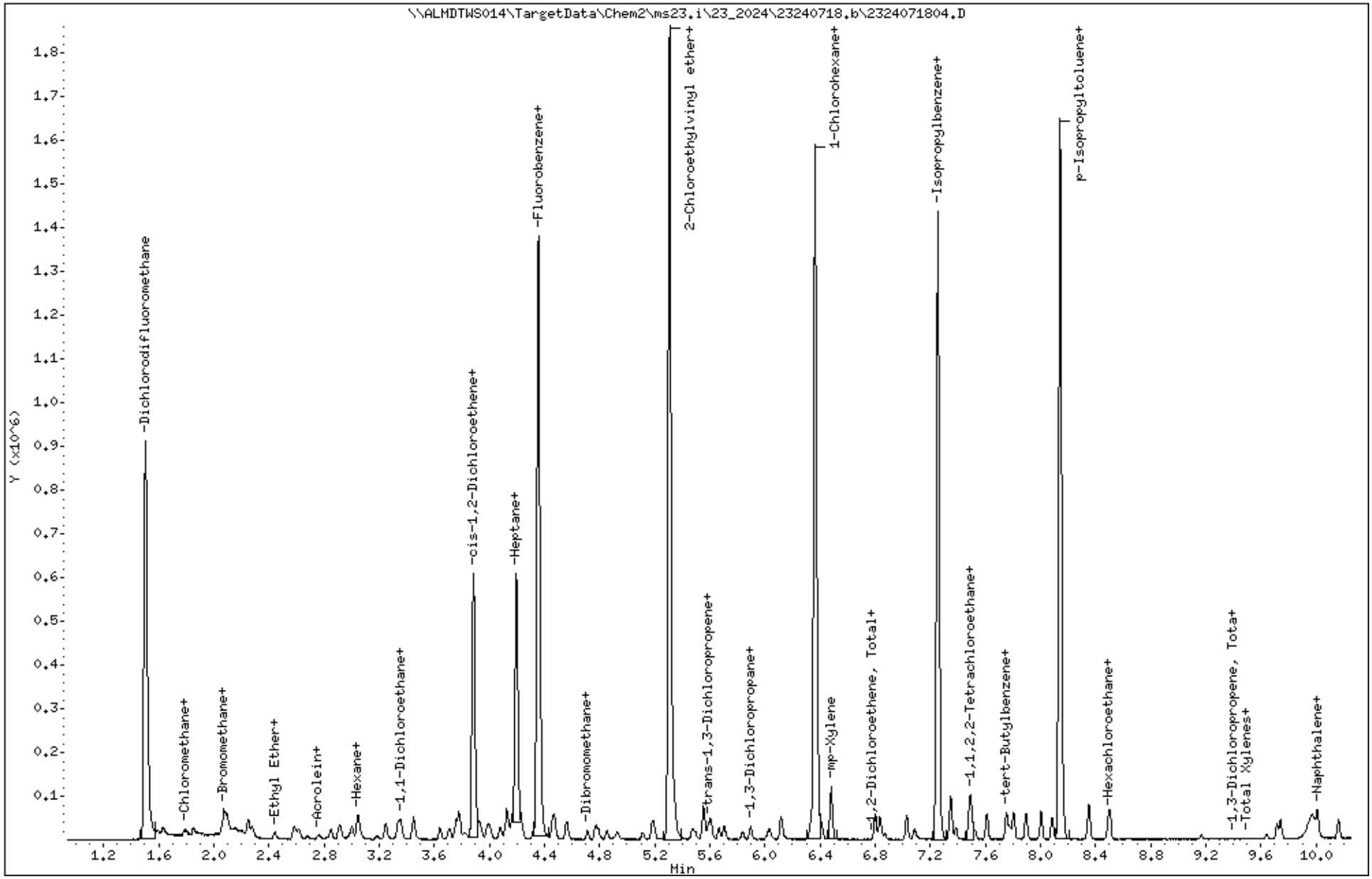
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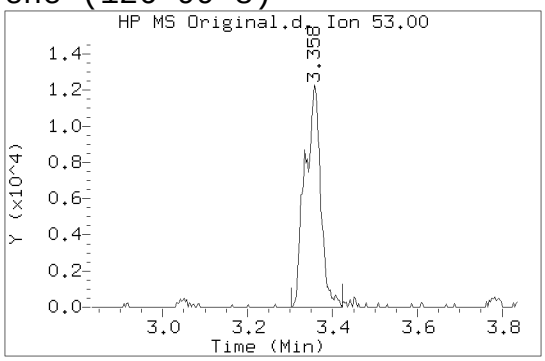
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Chloroprene (126-99-8)

Reason Code: MP

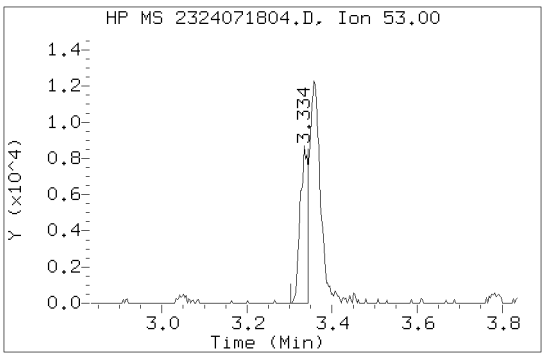
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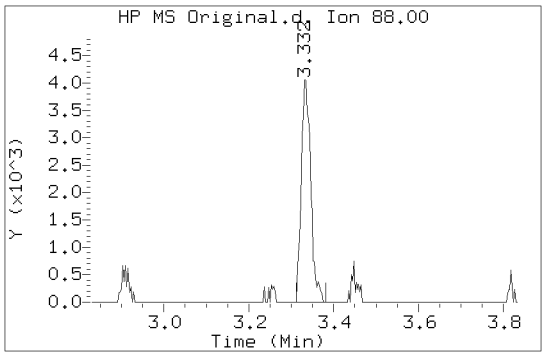
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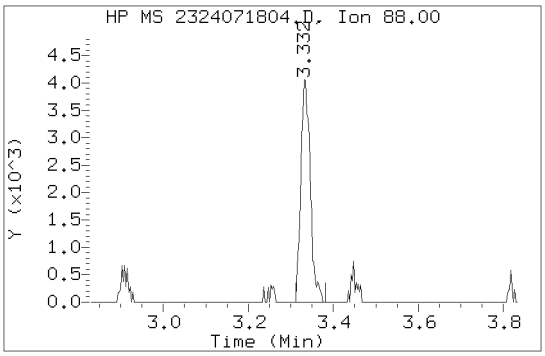
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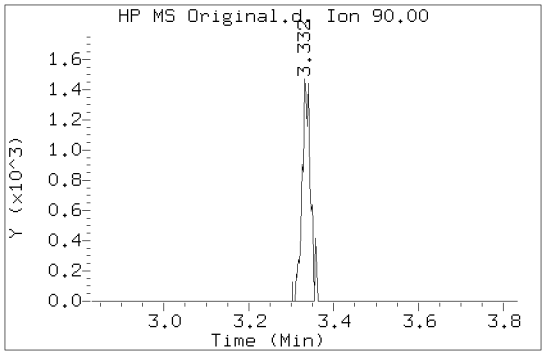
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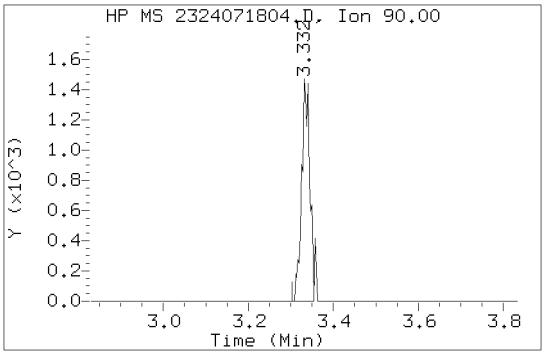
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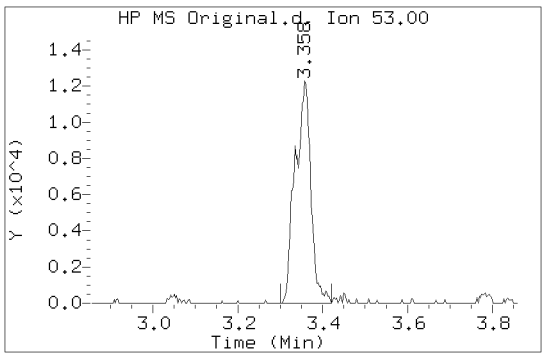


Acrylonitrile (107-13-1)

Reason Code: MP

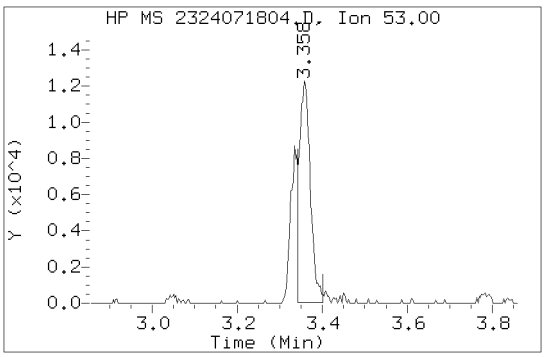
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AFTER

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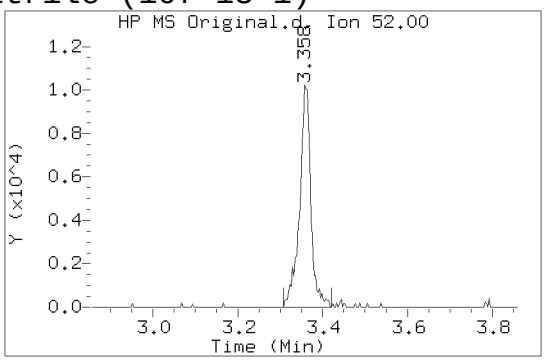


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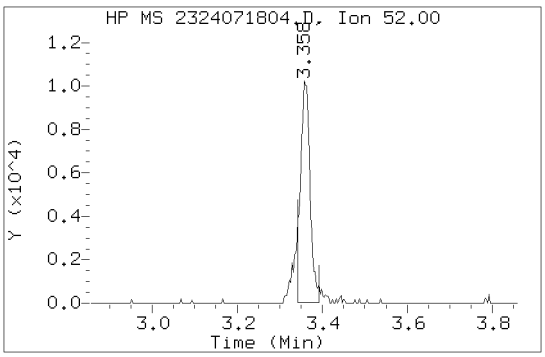
Acrylonitrile (107-13-1)

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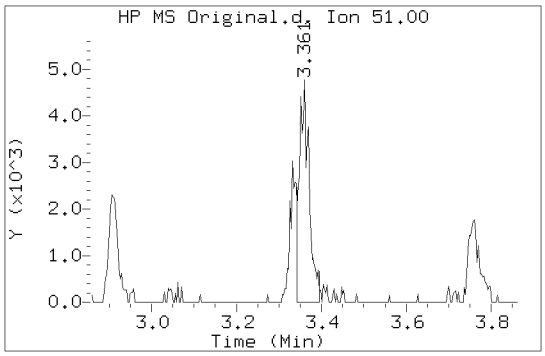
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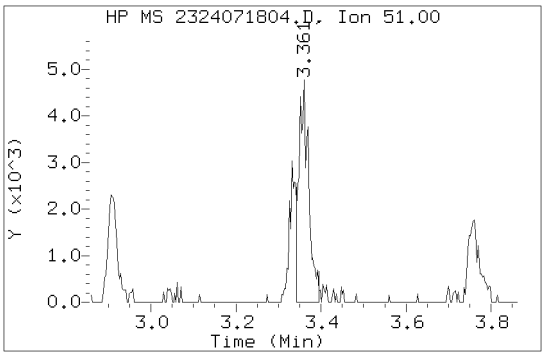
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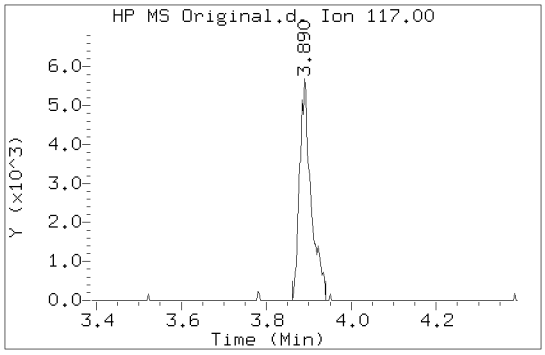
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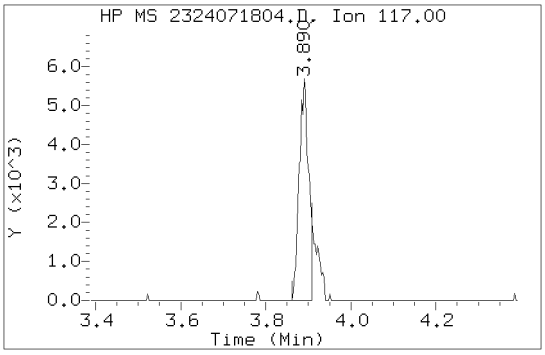
Carbon Tetrachloride (56-23-5)

Reason Code: MP

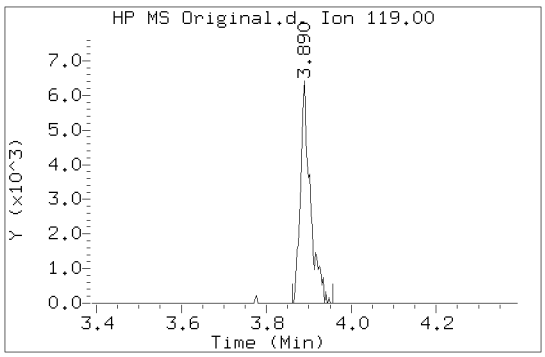
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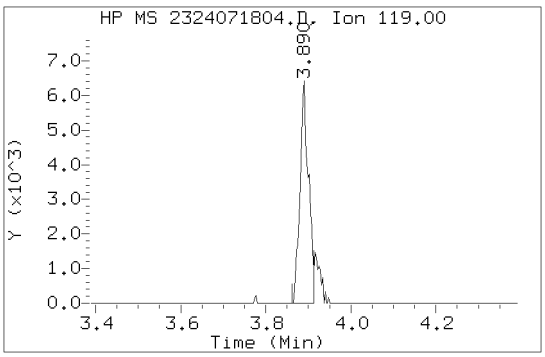
AFTER
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BEFORE
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AFTER
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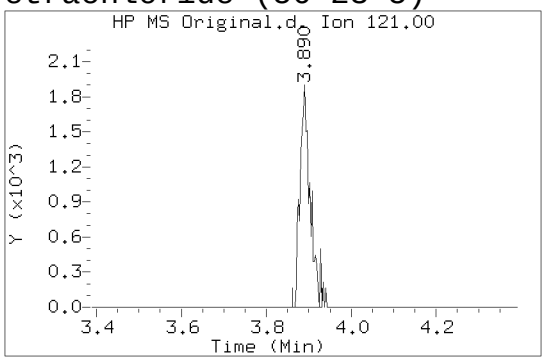
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Carbon Tetrachloride (56-23-5)

Reason Code: MP

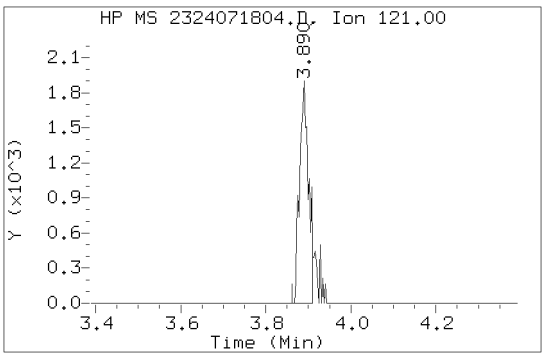
BEFORE

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AFTER

MASS
121
AREA
2755
HEIGHT
1901
25-Jul-2024
17:14

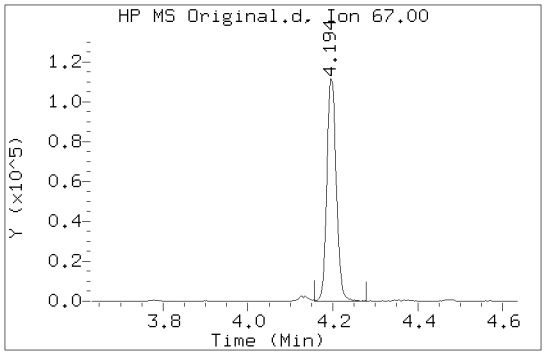


Methacrylonitrile (126-98-7)

Reason Code: H

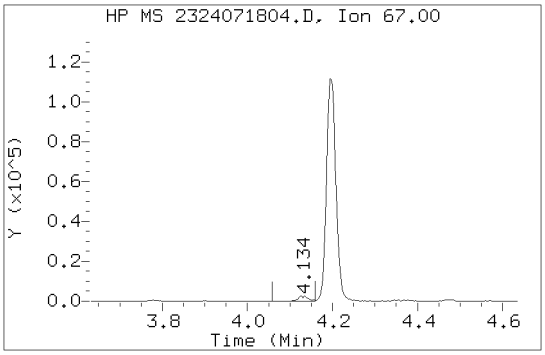
BEFORE

MASS
67
AREA
172690
HEIGHT
111448
18-Jul-2024
20:27



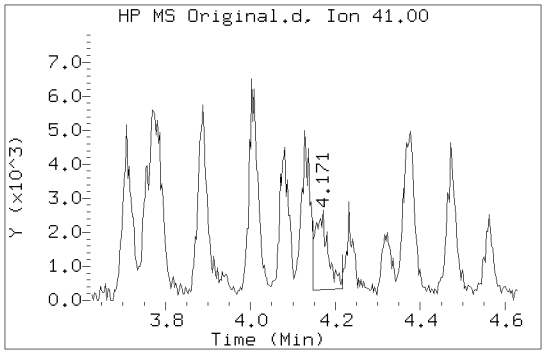
AFTER

MASS
67
AREA
4081
HEIGHT
2614
25-Jul-2024
17:14



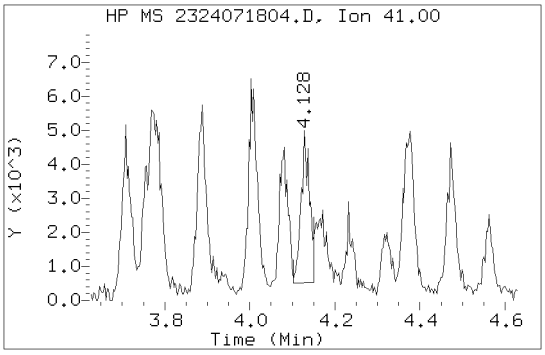
BEFORE

MASS
41
AREA
4877
HEIGHT
2356
18-Jul-2024
20:27



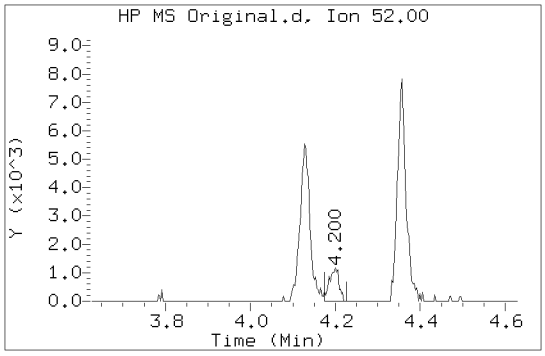
AFTER

MASS
41
AREA
6146
HEIGHT
4484
25-Jul-2024
17:14



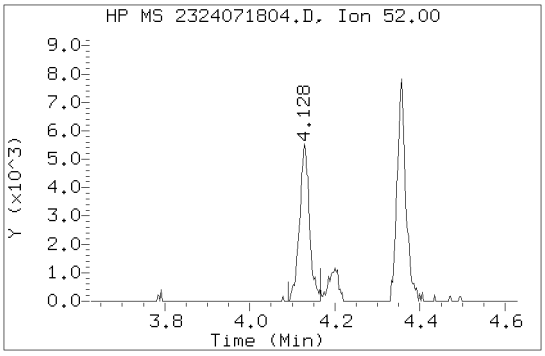
BEFORE

MASS
52
AREA
1855
HEIGHT
1173
18-Jul-2024
20:27



AFTER

MASS
52
AREA
8857
HEIGHT
5549
25-Jul-2024
17:14

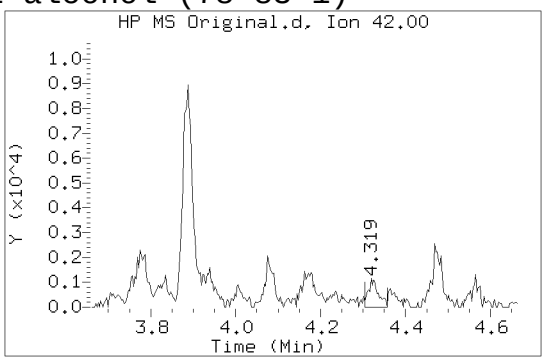


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Inj Date : 18-JUL-2024 13:03
InstruID : ms23.i
LabSampID : 1234

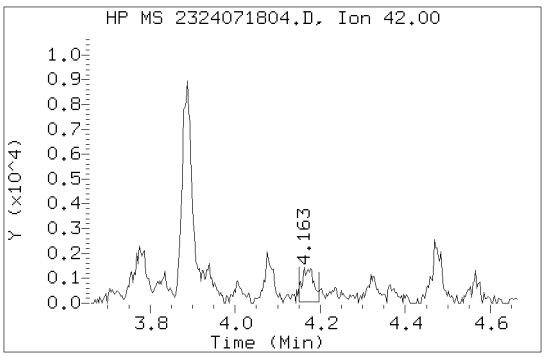
Isobutyl alcohol (78-83-1)

Reason Code: IH

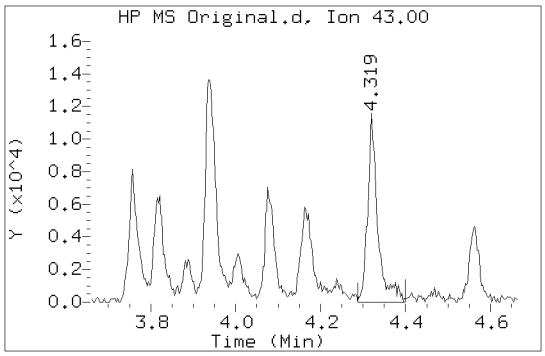
BEFORE
MASS
42
AREA
1878
HEIGHT
1176
18-Jul-2024
20:27



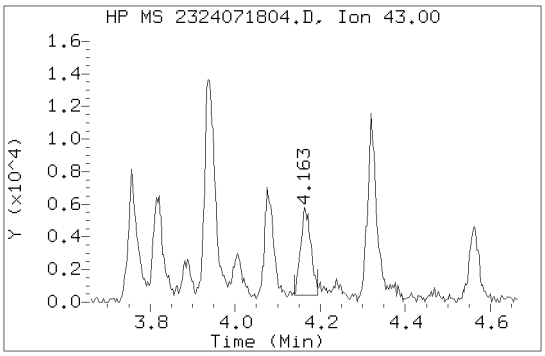
AFTER
MASS
42
AREA
2630
HEIGHT
1401
25-Jul-2024
17:14



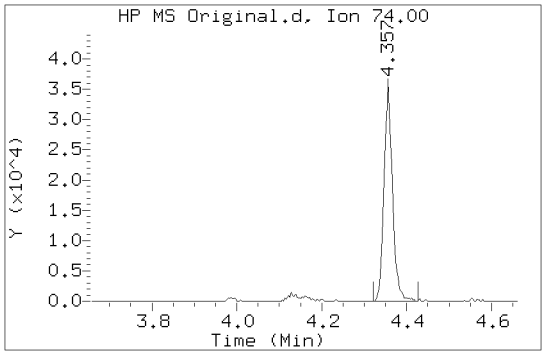
BEFORE
MASS
43
AREA
19259
HEIGHT
11596
18-Jul-2024
20:27



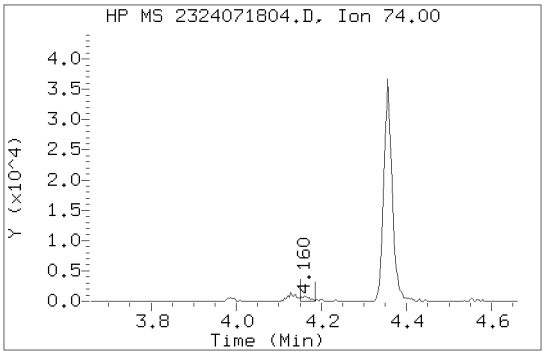
AFTER
MASS
43
AREA
8789
HEIGHT
5377
25-Jul-2024
17:14



BEFORE
MASS
74
AREA
50930
HEIGHT
36712
18-Jul-2024
20:27



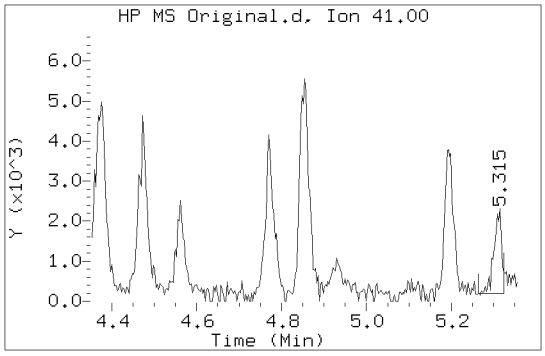
AFTER
MASS
74
AREA
1054
HEIGHT
852
25-Jul-2024
17:14



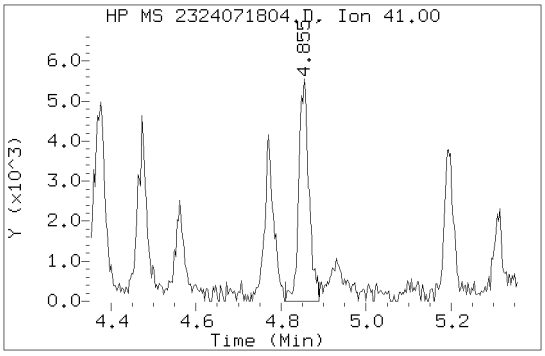
Methyl methacrylate (80-62-6)

Reason Code: IH

BEFORE
MASS
41
AREA
2652
HEIGHT
2124
18-Jul-2024
20:27



AFTER
MASS
41
AREA
8929
HEIGHT
5555
25-Jul-2024
17:14

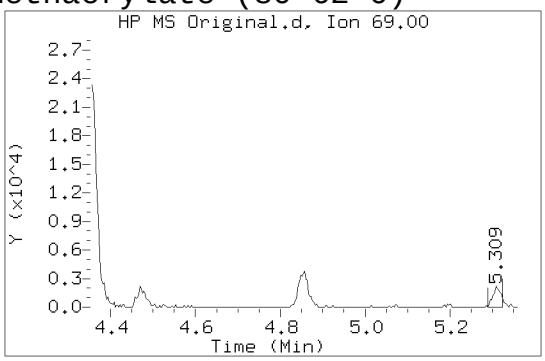


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Inj Date : 18-JUL-2024 13:03
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LabSampID : 1234

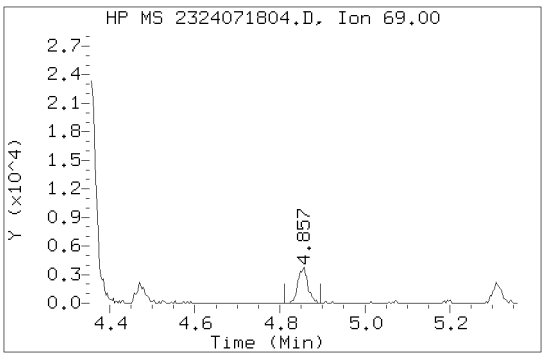
Methyl methacrylate (80-62-6)

Reason Code: IH

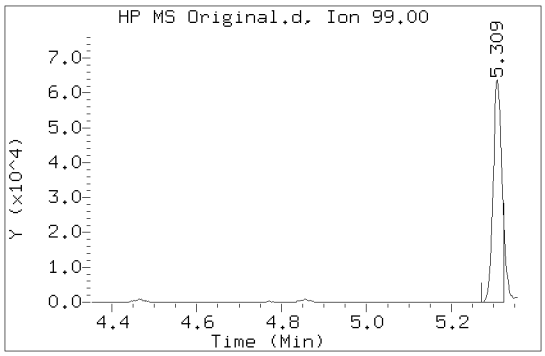
BEFORE
MASS
69
AREA
2769
HEIGHT
2233
18-Jul-2024
20:27



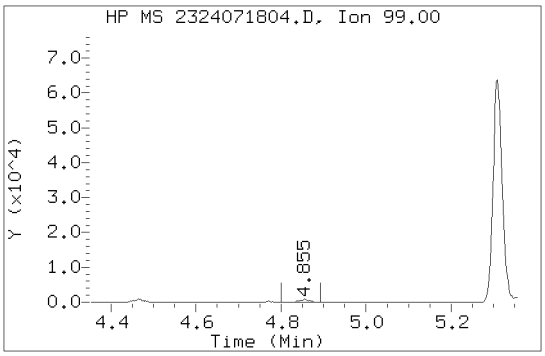
AFTER
MASS
69
AREA
5993
HEIGHT
3800
25-Jul-2024
17:14



BEFORE
MASS
99
AREA
88739
HEIGHT
63744
18-Jul-2024
20:27



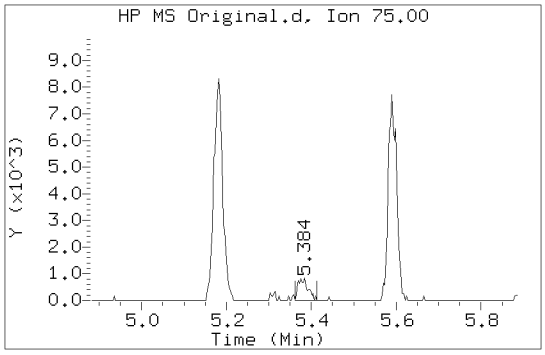
AFTER
MASS
99
AREA
1228
HEIGHT
987
25-Jul-2024
17:14



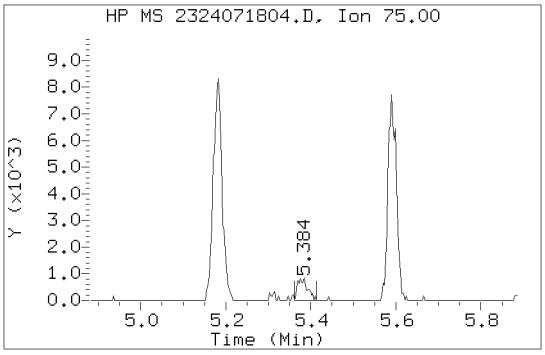
Chloroacetonitrile (107-14-2)

Reason Code: H

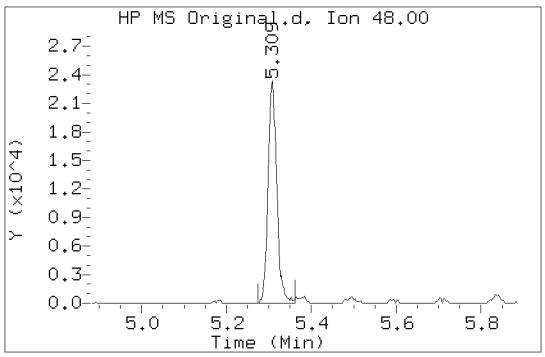
BEFORE
MASS
75
AREA
1332
HEIGHT
833
18-Jul-2024
20:27



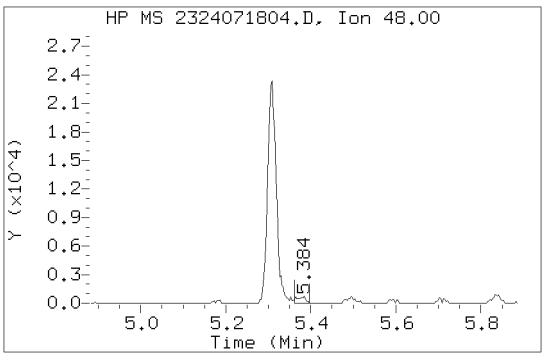
AFTER
MASS
75
AREA
1332
HEIGHT
833
25-Jul-2024
17:14



BEFORE
MASS
48
AREA
33161
HEIGHT
23360
18-Jul-2024
20:27



AFTER
MASS
48
AREA
1023
HEIGHT
771
25-Jul-2024
17:14



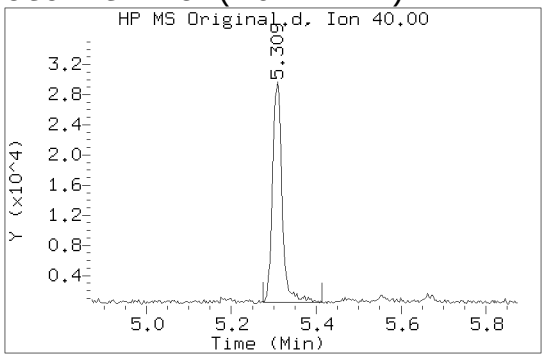
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Inj Date : 18-JUL-2024 13:03
InstruID : ms23.i
LabSampID : 1234

Chloroacetonitrile (107-14-2)

Reason Code: H

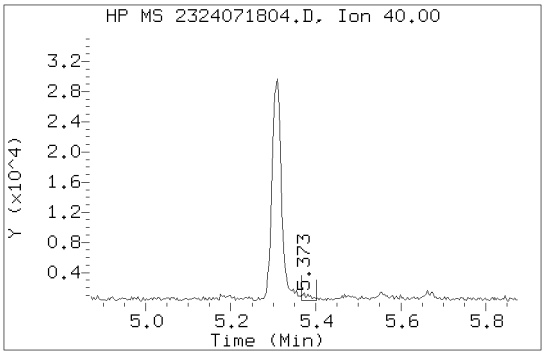
BEFORE

MASS
40
AREA
45584
HEIGHT
29214
18-Jul-2024
20:27



AFTER

MASS
40
AREA
1167
HEIGHT
1017
25-Jul-2024
17:14

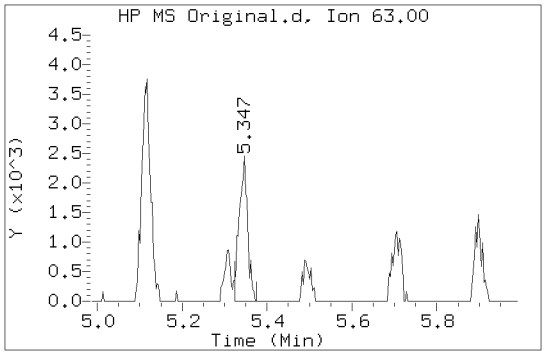


1,1-Dichloro-2-Propanone (513-88-2)

Reason Code: H

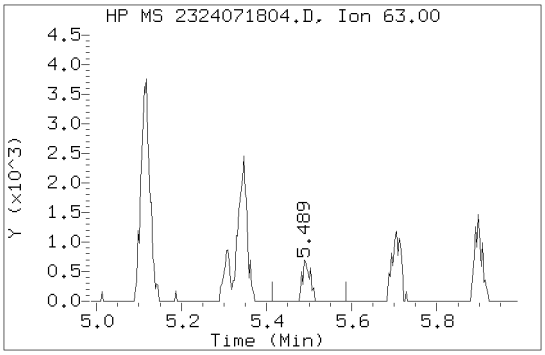
BEFORE

MASS
63
AREA
3333
HEIGHT
2453
18-Jul-2024
20:27



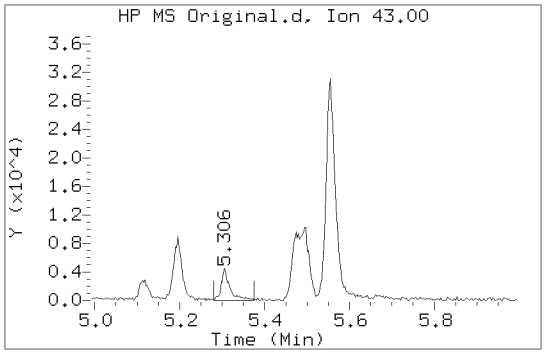
AFTER

MASS
63
AREA
849
HEIGHT
692
25-Jul-2024
17:14



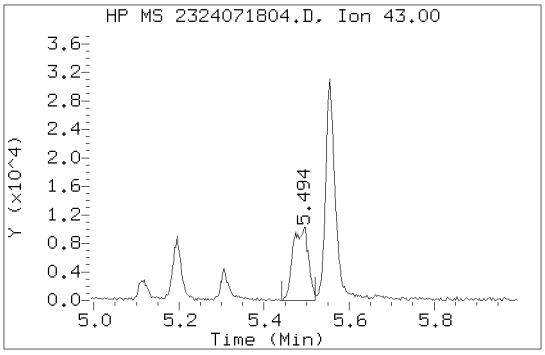
BEFORE

MASS
43
AREA
6308
HEIGHT
4523
18-Jul-2024
20:27



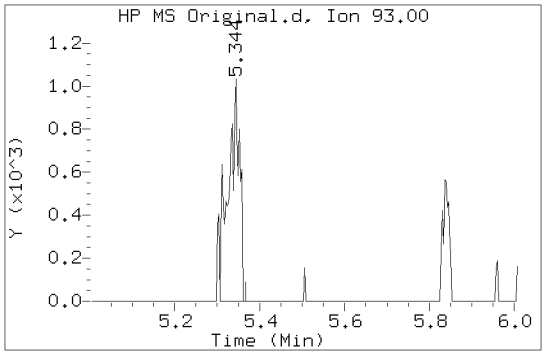
AFTER

MASS
43
AREA
25529
HEIGHT
10289
25-Jul-2024
17:14



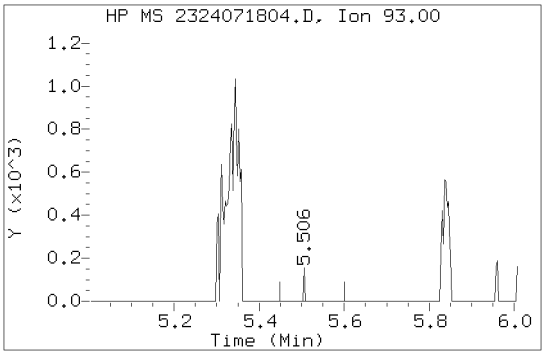
BEFORE

MASS
93
AREA
1940
HEIGHT
1034
18-Jul-2024
20:27



AFTER

MASS
93
AREA
27
HEIGHT
156
25-Jul-2024
17:14

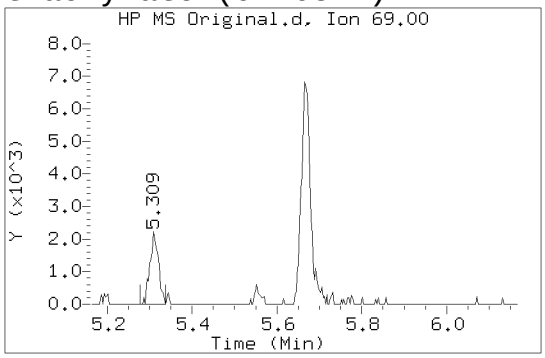


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Inj Date : 18-JUL-2024 13:03
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LabSampID : 1234

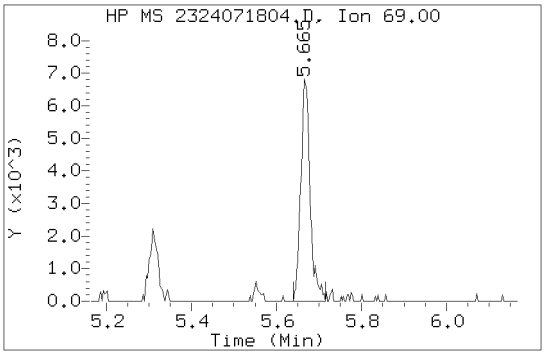
Ethyl Methacrylate (97-63-2)

Reason Code: IH

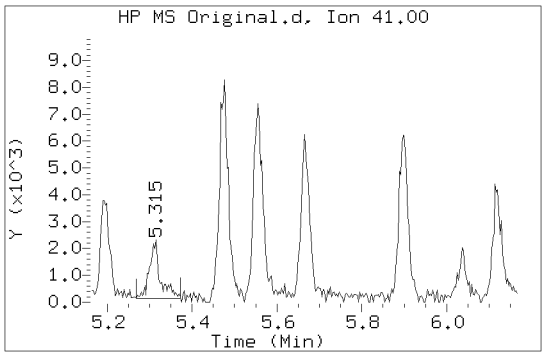
BEFORE
MASS
69
AREA
3051
HEIGHT
2233
18-Jul-2024
20:27



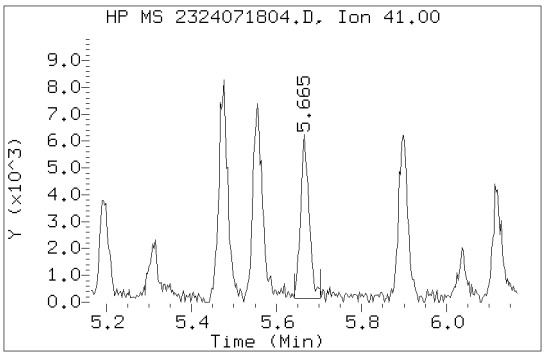
AFTER
MASS
69
AREA
10236
HEIGHT
6826
25-Jul-2024
17:14



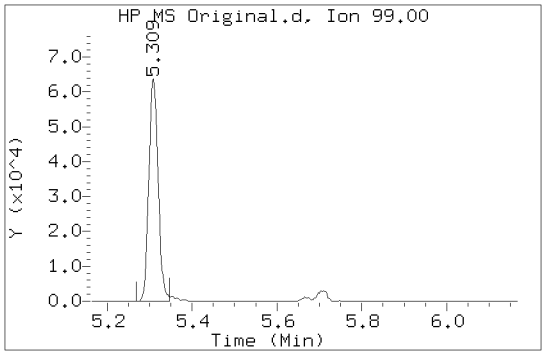
BEFORE
MASS
41
AREA
3718
HEIGHT
2164
18-Jul-2024
20:27



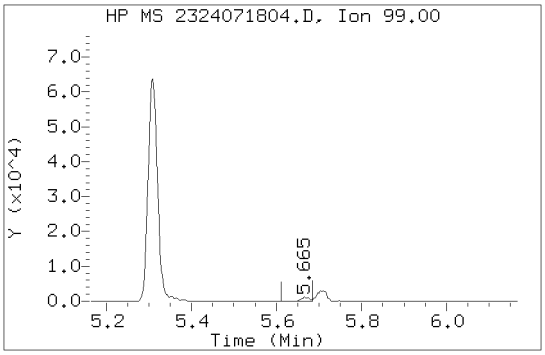
AFTER
MASS
41
AREA
8313
HEIGHT
6111
25-Jul-2024
17:14



BEFORE
MASS
99
AREA
96157
HEIGHT
63744
18-Jul-2024
20:27



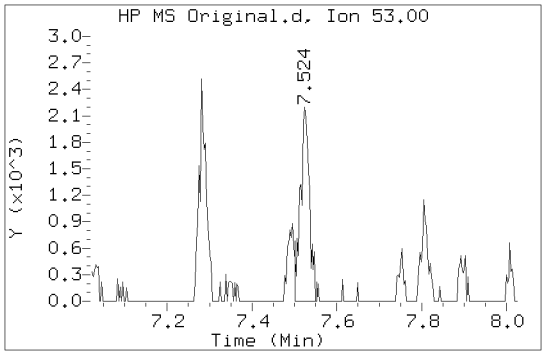
AFTER
MASS
99
AREA
1527
HEIGHT
1236
25-Jul-2024
17:14



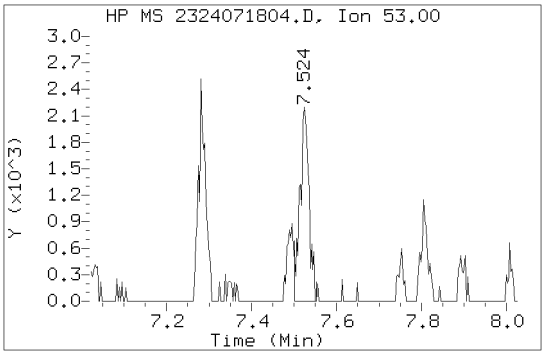
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

BEFORE
MASS
53
AREA
3204
HEIGHT
2196
18-Jul-2024
20:27



AFTER
MASS
53
AREA
3204
HEIGHT
2196
25-Jul-2024
17:14



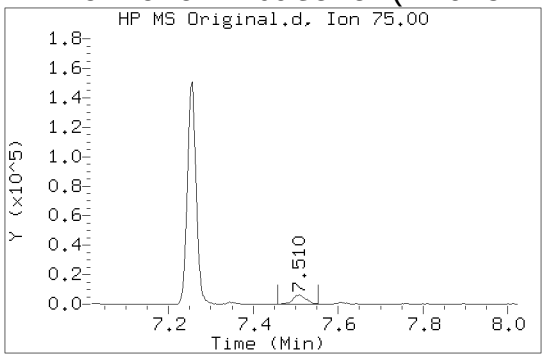
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Inj Date : 18-JUL-2024 13:03
InstruID : ms23.i
LabSampID : 1234

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

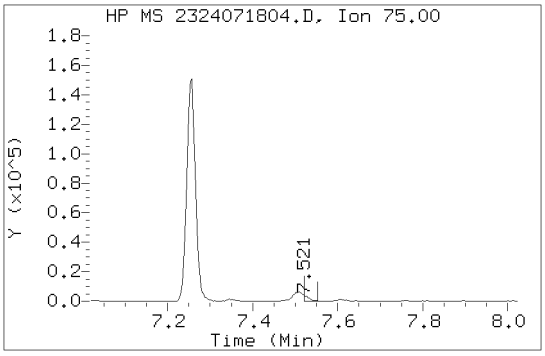
BEFORE

MASS
75
AREA
13365
HEIGHT
6539
18-Jul-2024
20:27



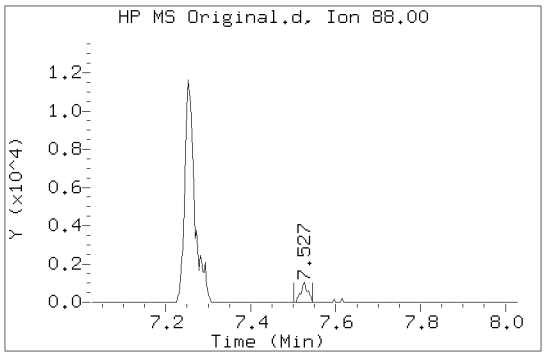
AFTER

MASS
75
AREA
3199
HEIGHT
4021
25-Jul-2024
17:14



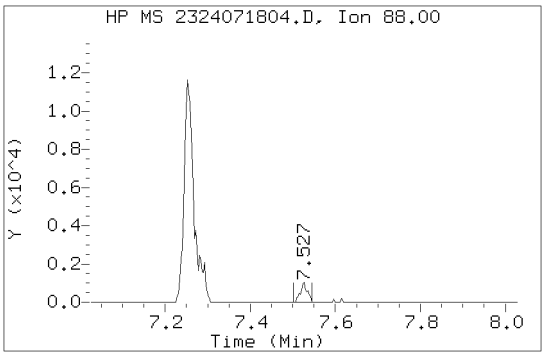
BEFORE

MASS
88
AREA
1134
HEIGHT
1036
18-Jul-2024
20:27



AFTER

MASS
88
AREA
1134
HEIGHT
1036
25-Jul-2024
17:14

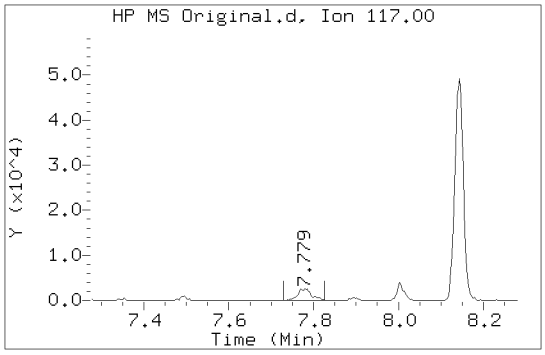


Pentachloroethane (76-01-7)

Reason Code: MP

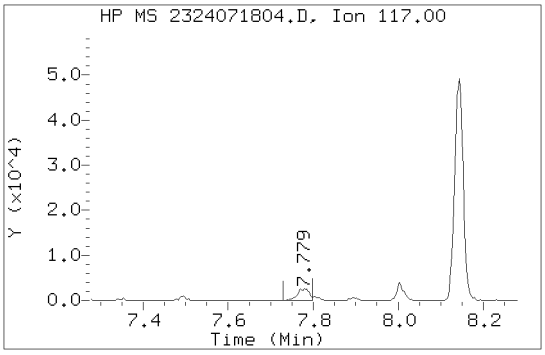
BEFORE

MASS
117
AREA
5674
HEIGHT
2602
18-Jul-2024
20:27



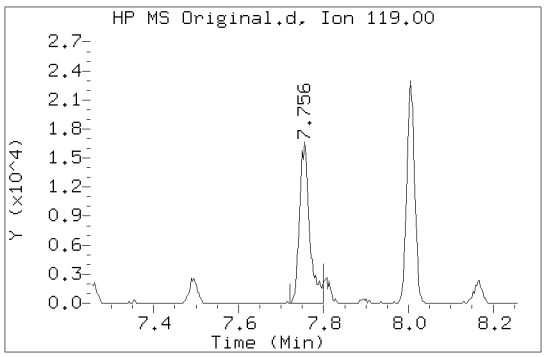
AFTER

MASS
117
AREA
4947
HEIGHT
2602
25-Jul-2024
17:14



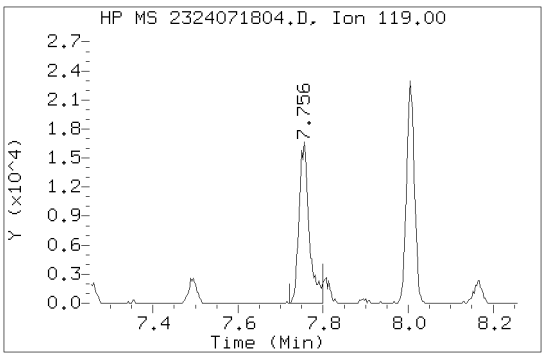
BEFORE

MASS
119
AREA
27456
HEIGHT
16640
18-Jul-2024
20:27



AFTER

MASS
119
AREA
27456
HEIGHT
16640
25-Jul-2024
17:14



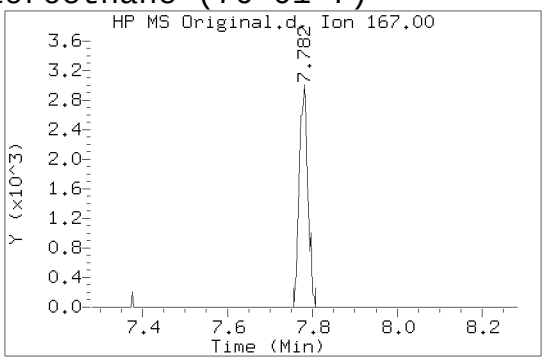
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Inj Date : 18-JUL-2024 13:03
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LabSampID : 1234

Pentachloroethane (76-01-7)

Reason Code: MP

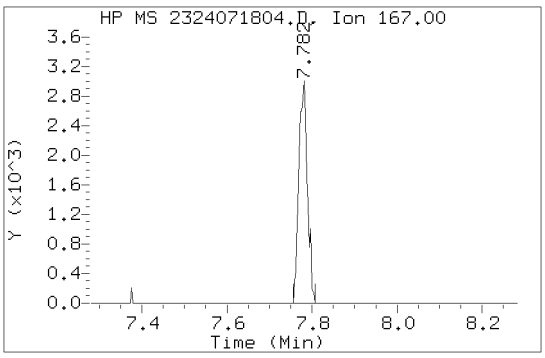
BEFORE

MASS
167
AREA
4114
HEIGHT
3006
18-Jul-2024
20:27



AFTER

MASS
167
AREA
4114
HEIGHT
3006
25-Jul-2024
17:14

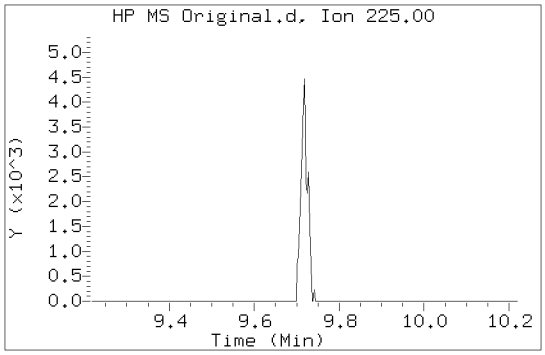


Hexachlorobutadiene (87-68-3)

Reason Code: IH

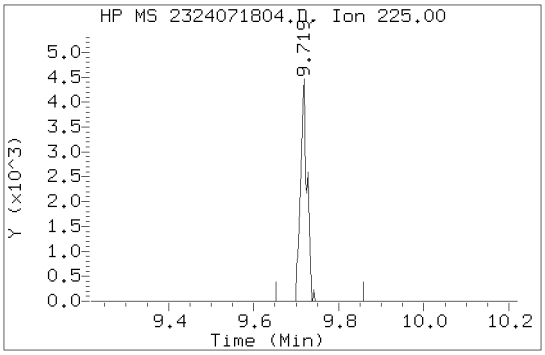
BEFORE

MASS
225
AREA
0
HEIGHT
0
18-Jul-2024
20:27



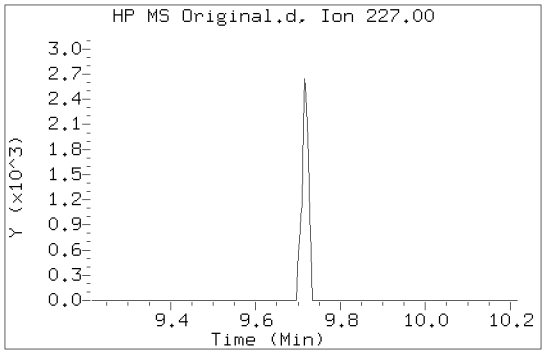
AFTER

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AREA
4600
HEIGHT
4467
25-Jul-2024
17:14



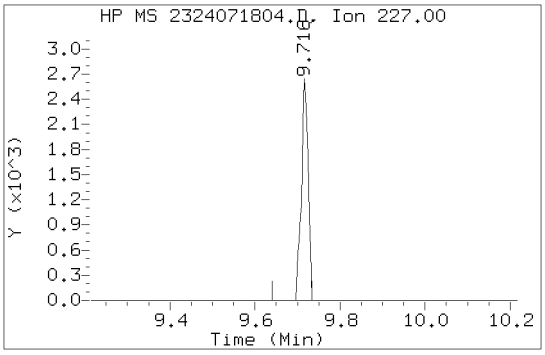
BEFORE

MASS
227
AREA
0
HEIGHT
0
18-Jul-2024
20:27



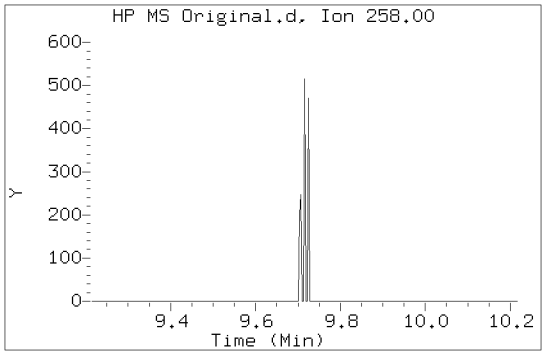
AFTER

MASS
227
AREA
2815
HEIGHT
2645
25-Jul-2024
17:14



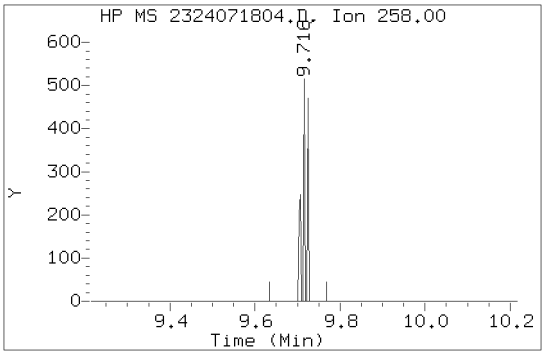
BEFORE

MASS
258
AREA
0
HEIGHT
0
18-Jul-2024
20:27



AFTER

MASS
258
AREA
248
HEIGHT
515
25-Jul-2024
17:14



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:14
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240718.b/232407180
Inj Date: 18-JUL-2024 13:03
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

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Inj Date : 18-JUL-2024 13:23
Operator : ILY Inst ID: ms23.i
Smp Info : 1235;;1;1;2;;;
Misc Info :
Comment :
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Meth Date : 22-Jul-2024 06:29 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 13:23 Cal File: 2324071805.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
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Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

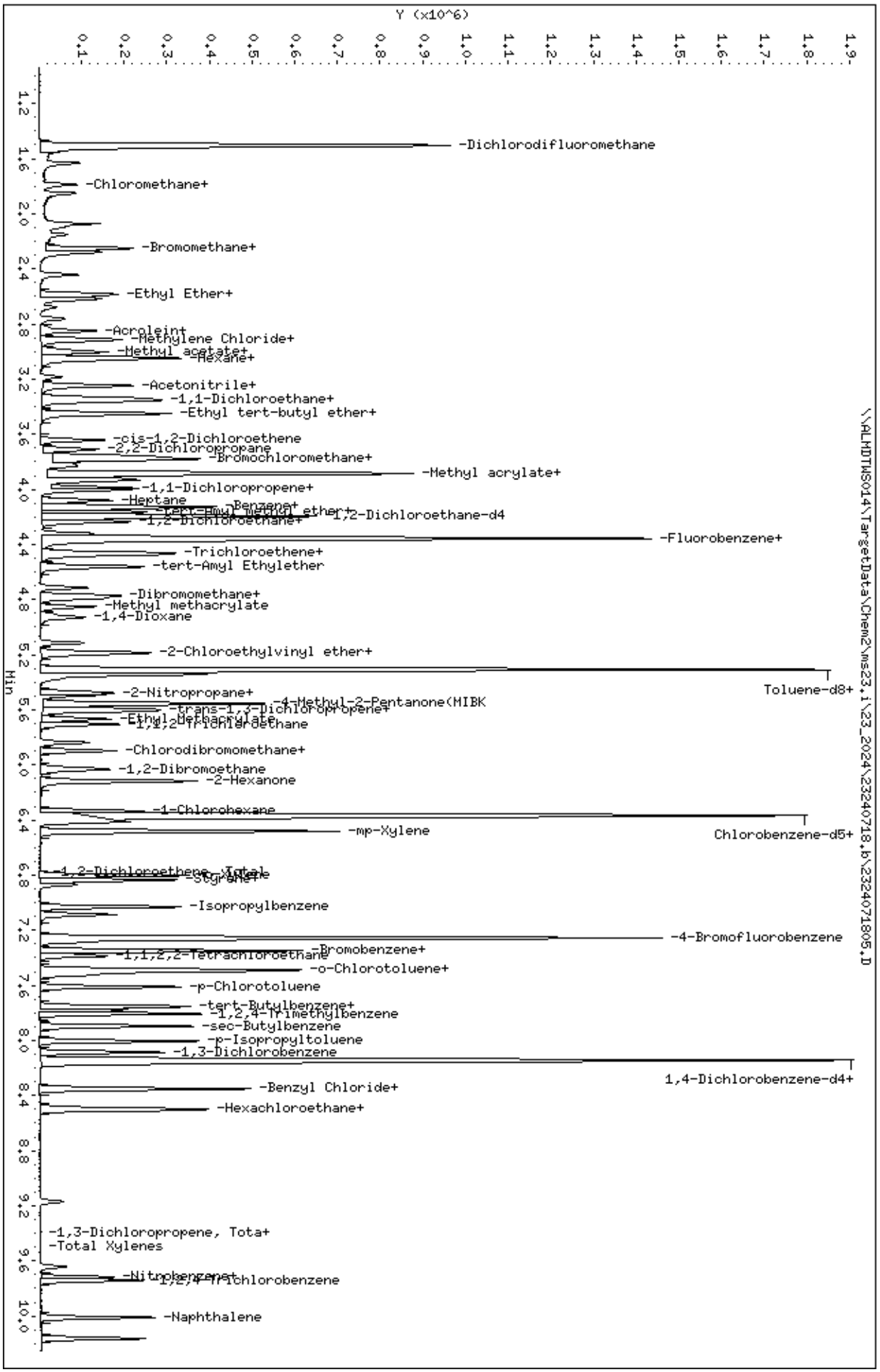
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.634	1.634	(0.375)	65525	5.00000	5.14749	
2	Chloromethane	50	1.788	1.788	(0.410)	63808	5.00000	4.91421	
3	Vinyl Chloride	62	1.849	1.849	(0.424)	58608	5.00000	5.10536	
4	Bromomethane	94	2.072	2.072	(0.476)	32002	5.00000	5.47957	
5	Chloroethane	64	2.150	2.150	(0.494)	30158	5.00000	4.87601(M)	MP
6	Pentane	41	2.251	2.251	(0.517)	43792	5.00000	5.21982	
7	Trichlorofluoromethane	101	2.251	2.251	(0.517)	73085	5.00000	5.20204	
8	Dichlorofluoromethane	67	2.280	2.280	(0.523)	95676	5.00000	5.28679	
9	Ethyl Ether	74	2.442	2.442	(0.561)	29699	5.00000	5.16609	
10	1,1-Dichloroethene	61	2.581	2.581	(0.593)	67289	5.00000	5.35528	
11	Freon 113	101	2.596	2.596	(0.596)	39215	5.00000	5.30990	
12	Carbon Disulfide	76	2.619	2.619	(0.601)	134346	5.00000	5.26363	
13	Iodomethane	127	2.677	2.677	(0.615)	15100	5.00000	4.09404	
14	Acrolein	56	2.764	2.764	(0.634)	40876	25.0000	24.2785	
15	Isopropyl Alcohol	45	2.821	2.821	(0.648)	20329	25.0000	24.5820	
16	3-Chloro-1-propene	41	2.850	2.850	(0.654)	71091	5.00000	5.35869	
17	Methylene Chloride	84	2.908	2.908	(0.668)	49564	5.00000	5.39806	
18	Acetone	58	2.920	2.920	(0.670)	27265	25.0000	25.4808	
19	Methyl acetate	74	2.984	2.984	(0.685)	10251	5.00000	5.06078	
20	trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	67578	5.00000	5.37880	
21	Hexane	57	3.044	3.044	(0.699)	98836	5.00000	5.28716	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.047	3.047	(0.700)	144593	5.00000	5.36548	
	23 tert.- Butyl Alcohol	59	3.068	3.068	(0.704)	30381	25.0000	26.0799	
	24 Acetonitrile	41	3.183	3.183	(0.731)	42679	25.0000	25.3132	
	25 Diisopropyl ether	45	3.250	3.250	(0.746)	169193	5.00000	5.49339	
	26 Chloroprene	53	3.334	3.334	(0.765)	64373	5.00000	5.79721(M)	MP
	27 1,1-Dichloroethane	63	3.346	3.346	(0.768)	89338	5.00000	5.42298	
	28 Acrylonitrile	53	3.357	3.357	(0.771)	133865	25.0000	25.5651(M)	MP
	29 Ethyl tert-butyl ether	59	3.450	3.450	(0.792)	153407	5.00000	5.30498	
	30 n-Propanol	41	3.447	3.447	(0.791)	33992	50.0000	50.9705	
	31 Vinyl Acetate	86	3.453	3.453	(0.793)	11472	5.00000	5.33191(Q)	
	32 cis-1,2-Dichloroethene	61	3.644	3.644	(0.837)	69381	5.00000	5.47840	
	33 2,2-Dichloropropane	77	3.707	3.707	(0.851)	66767	5.00000	5.27429	
	34 Bromochloromethane	128	3.757	3.757	(0.862)	25345	5.00000	5.54679	
	35 Cyclohexane	84	3.777	3.777	(0.867)	71431	5.00000	5.46936	
	36 Chloroform	83	3.783	3.783	(0.868)	92594	5.00000	5.39950	
	37 Ethyl Acetate	43	3.815	3.815	(0.876)	62685	5.00000	5.00365	
	38 Methyl acrylate	55	3.835	3.835	(0.880)	53971	5.00000	5.16997	
	39 Carbon Tetrachloride	117	3.893	3.893	(0.894)	59394	5.00000	5.33346(M)	MP
$	41 Dibromofluoromethane	113	3.884	3.884	(0.892)	259953	30.0000	29.9029	
	40 Tetrahydrofuran	42	3.884	3.884	(0.892)	92987	25.0000	25.7140	
	42 1,1,1-Trichloroethane	97	3.922	3.922	(0.900)	72495	5.00000	5.33598(M)	MP
	43 2-Butanone	72	3.936	3.936	(0.904)	36224	25.0000	26.4645	
	44 1,1-Dichloropropene	75	3.988	3.988	(0.916)	66949	5.00000	5.33674	
	45 1-Chlorobutane	41	4.006	4.006	(0.920)	57144	5.00000	5.36919	
	46 Heptane	71	4.078	4.078	(0.936)	34751	5.00000	5.38182	
	47 Benzene	78	4.127	4.127	(0.947)	194321	5.00000	5.51786	
	48 Propionitrile	54	4.110	4.110	(0.944)	48339	25.0000	26.7949	
	49 Methacrylonitrile	67	4.127	4.127	(0.947)	24109	5.00000	5.20516	
	50 tert-Amyl methyl ether	73	4.165	4.165	(0.956)	138722	5.00000	5.25446	
	54 Isobutyl alcohol	42	4.171	4.171	(0.957)	14883	50.0000	38.2450(Q)	
$	51 1,2-Dichloroethane-d4	65	4.197	4.197	(0.963)	335233	30.0000	30.1152(M)	MP
	52 1,2-Dichloroethane	62	4.237	4.237	(0.973)	73416	5.00000	5.16639	
	53 tert-Amyl Alcohol	59	4.240	4.240	(0.973)	24768	25.0000	23.9088	
*	55 Fluorobenzene	96	4.356	4.356	(1.000)	935332	30.0000		
	56 Diisobutylene	57	4.368	4.368	(1.003)	151626	5.00000	5.40270	
	57 Trichloroethene	95	4.457	4.457	(1.023)	51400	5.00000	5.31918	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	75261	5.00000	5.27237	
	59 tert-Amyl Ethylether	59	4.562	4.562	(1.047)	116003	5.00000	5.31443	
	60 Dibromomethane	93	4.712	4.712	(1.082)	33553	5.00000	5.29865	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.095)	52904	5.00000	5.45882	
	62 Bromodichloromethane	83	4.793	4.793	(1.100)	62488	5.00000	5.10322	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	53448	5.00000	5.07703	
	64 1,4-Dioxane	88	4.909	4.909	(1.127)	17624	125.000	131.092	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.174)	37268	5.00000	5.32032	
	66 cis-1,3-Dichloropropene	75	5.178	5.178	(0.814)	76407	5.00000	5.07746	
	67 Octane	85	5.196	5.196	(0.817)	28684	5.00000	5.22586	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	1020408	30.0000	29.9584	
	69 Toluene	92	5.346	5.346	(0.840)	115904	5.00000	5.24174	
	70 Chloroacetonitrile	75	5.375	5.375	(0.845)	10304	25.0000	17.0741	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	80047	25.0000	21.4163	
	72 1,1-Dichloro-2-Propanone	63	5.494	5.494	(0.863)	6436	25.0000	23.1921(Q)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.555	5.555	(0.873)	310300	25.0000	26.5403	
	75 trans-1,3-Dichloropropene	75	5.592	5.592	(0.879)	70315	5.00000	5.00496	
	74 Tetrachloroethene	164	5.610	5.610	(0.882)	41329	5.00000	5.09879	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.665	5.665	(0.890)	72618	5.00000	5.24722	
77	1,1,2-Trichloroethane	83	5.705	5.705	(0.897)	40880	5.00000	5.33516	
78	Chlorodibromomethane	129	5.838	5.838	(0.918)	47520	5.00000	5.01473	
79	1,3-Dichloropropane	76	5.899	5.899	(0.927)	81121	5.00000	5.18084	
80	1,2-Dibromoethane	107	6.021	6.021	(0.946)	42515	5.00000	5.19645	
81	2-Hexanone	43	6.116	6.116	(0.961)	217664	25.0000	25.9296	
82	1-Chlorohexane	91	6.336	6.336	(0.996)	58784	5.00000	5.02149	
* 83	Chlorobenzene-d5	82	6.362	6.362	(1.000)	423101	30.0000		
84	Chlorobenzene	112	6.377	6.377	(1.002)	125039	5.00000	5.28027	
85	Ethylbenzene	106	6.380	6.380	(1.003)	66004	5.00000	5.26281	
86	1,1,1,2-Tetrachloroethane	131	6.415	6.415	(1.008)	42957	5.00000	5.13280	
87	mp-Xylene	106	6.481	6.481	(1.019)	162127	10.0000	10.5471	
88	o-Xylene	106	6.800	6.800	(1.069)	79352	5.00000	5.30576	
89	Styrene	104	6.834	6.834	(0.839)	126903	5.00000	5.15890	
90	Bromoform	173	6.872	6.872	(0.844)	30050	5.00000	4.79879	
91	Isopropylbenzene	105	7.031	7.031	(0.863)	184486	5.00000	5.38582	
M 100	1,2-Dichloroethene, Total	61				136959	10.0000	10.8572	
$ 92	4-Bromofluorobenzene	174	7.257	7.257	(0.891)	316714	30.0000	29.1910	
93	Bromobenzene	156	7.350	7.350	(0.903)	52554	5.00000	5.28619	
94	n-Propylbenzene	120	7.347	7.347	(0.902)	54612	5.00000	5.20679	
95	1,1,2,2-Tetrachloroethane	83	7.387	7.387	(0.907)	65286	5.00000	5.28301	
96	o-Chlorotoluene	91	7.483	7.483	(0.919)	162178	5.00000	5.07132	
97	1,3,5-Trimethylbenzene	105	7.495	7.495	(0.920)	165739	5.00000	5.21563	
98	1,2,3-Trichloropropane	110	7.506	7.506	(0.922)	20498	5.00000	5.36476	
99	trans-1,4-Dichloro-2-butene	53	7.524	7.524	(0.924)	17728	5.00000	4.63755(M)	MP
101	p-Chlorotoluene	91	7.610	7.610	(0.935)	151783	5.00000	5.12077	
102	tert-Butylbenzene	134	7.749	7.749	(0.952)	40197	5.00000	5.38480(Q)	
103	Pentachloroethane	117	7.778	7.778	(0.955)	32263	5.00000	5.22777(QM)	MP
104	1,2,4-Trimethylbenzene	105	7.804	7.804	(0.958)	170965	5.00000	5.23463	
105	sec-Butylbenzene	105	7.897	7.897	(0.970)	209123	5.00000	5.26226	
106	p-Isopropyltoluene	134	8.004	8.004	(0.983)	45806	5.00000	5.21233	
107	1,3-Dichlorobenzene	146	8.085	8.085	(0.993)	96572	5.00000	5.14801	
* 108	1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	383215	30.0000	(Q)	
109	1,4-Dichlorobenzene	146	8.158	8.158	(1.002)	98277	5.00000	5.08153	
110	Benzyl Chloride	126	8.349	8.349	(1.025)	17647	5.00000	4.27840(Q)	
111	n-Butylbenzene	134	8.354	8.354	(1.026)	41893	5.00000	5.04277(Q)	
112	Hexachloroethane	117	8.493	8.493	(1.043)	31189	5.00000	5.09721	
113	1,2-Dichlorobenzene	146	8.508	8.508	(1.045)	93526	5.00000	5.16203	
114	1,2-Dibromo-3-chloropropane	75	9.165	9.165	(1.125)	11640	5.00000	4.97426	
115	Nitrobenzene	77	9.643	9.643	(1.184)	24656	50.0000	49.5930	
116	Hexachlorobutadiene	225	9.715	9.715	(1.193)	23857	5.00000	4.83936	
M 120	1,3-Dichloropropene, Total	75				146722	10.0000	10.0824	
117	1,2,4-Trichlorobenzene	180	9.744	9.744	(1.197)	57654	5.00000	4.85257	
M 121	Total Xylenes	106				241479	15.0000	15.8529	
118	Naphthalene	128	10.011	10.011	(1.229)	162748	5.00000	4.95847	
119	1,2,3-Trichlorobenzene	180	10.161	10.161	(1.248)	57353	5.00000	4.99610	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.



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Purge Volume: 5.0
Column phase: DB-VRX

Instrument: ms23.i
Operator: ILY
Column diameter: 0.25

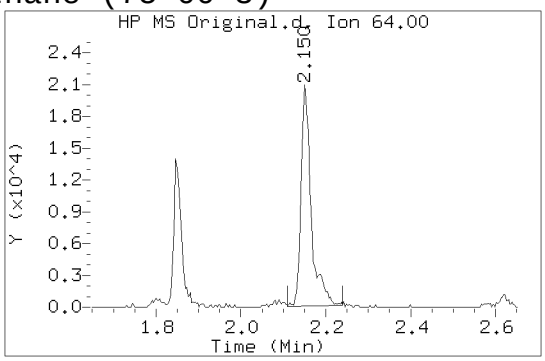
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Inj Date : 18-JUL-2024 13:23
InstruID : ms23.i
LabSampID : 1235

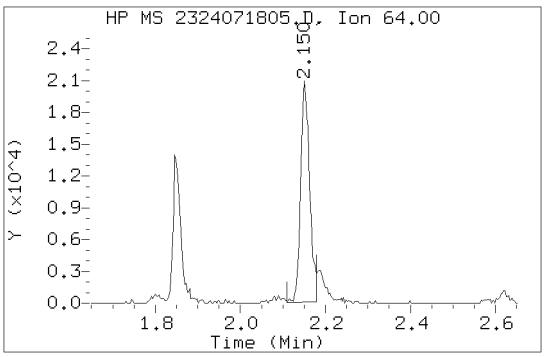
Chloroethane (75-00-3)

Reason Code: MP

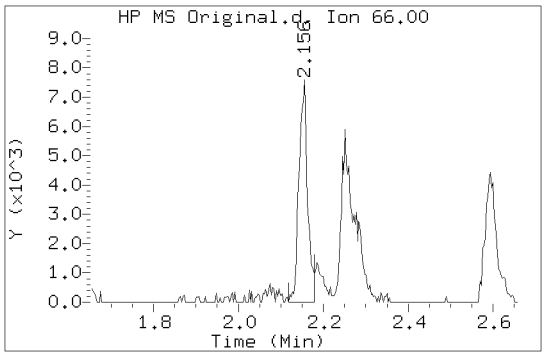
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MASS
64
AREA
34154
HEIGHT
20878
18-Jul-2024
20:23



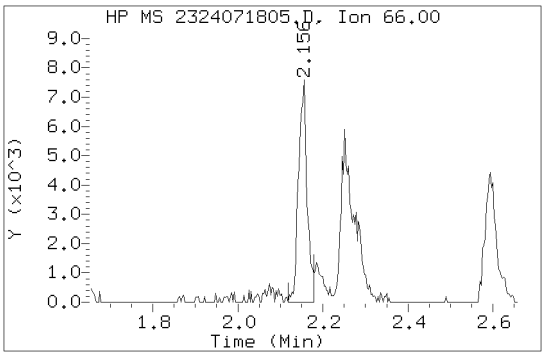
AFTER
MASS
64
AREA
30158
HEIGHT
20878
25-Jul-2024
17:14



BEFORE
MASS
66
AREA
10519
HEIGHT
7588
18-Jul-2024
20:23



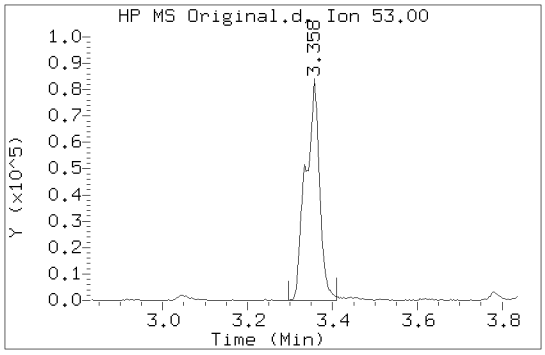
AFTER
MASS
66
AREA
10519
HEIGHT
7588
25-Jul-2024
17:14



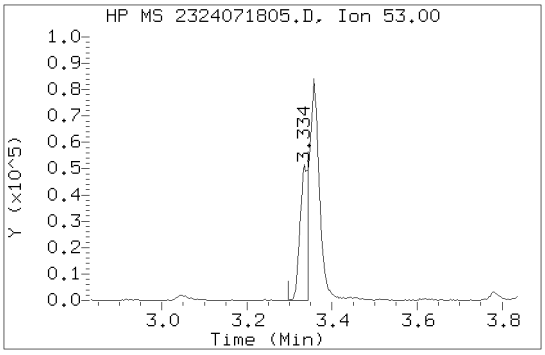
Chloroprene (126-99-8)

Reason Code: MP

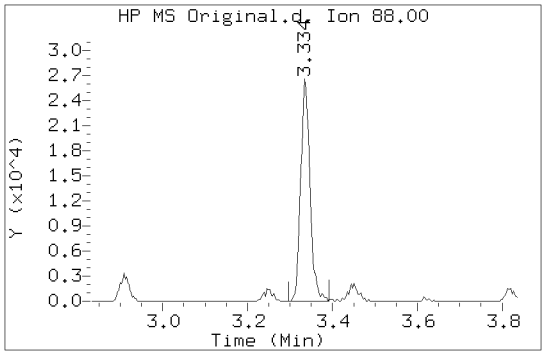
BEFORE
MASS
53
AREA
190273
HEIGHT
84144
18-Jul-2024
20:23



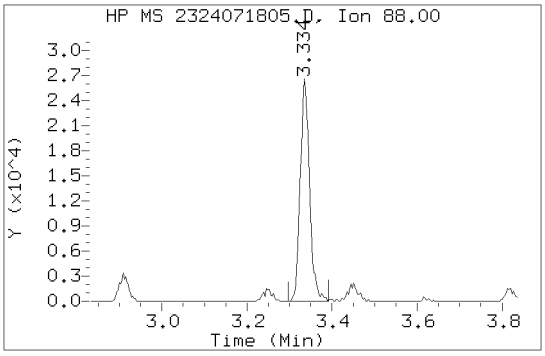
AFTER
MASS
53
AREA
64373
HEIGHT
51576
25-Jul-2024
17:14



BEFORE
MASS
88
AREA
39805
HEIGHT
26592
18-Jul-2024
20:23



AFTER
MASS
88
AREA
39805
HEIGHT
26592
25-Jul-2024
17:14



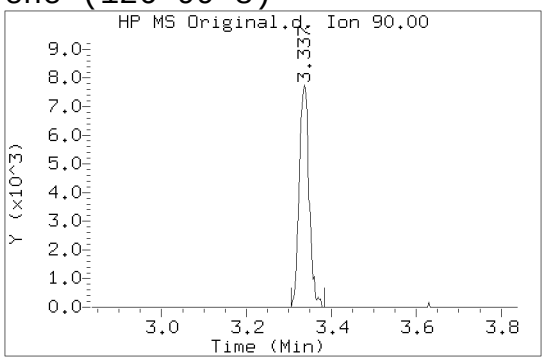
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Inj Date : 18-JUL-2024 13:23
InstruID : ms23.i
LabSampID : 1235

Chloroprene (126-99-8)

Reason Code: MP

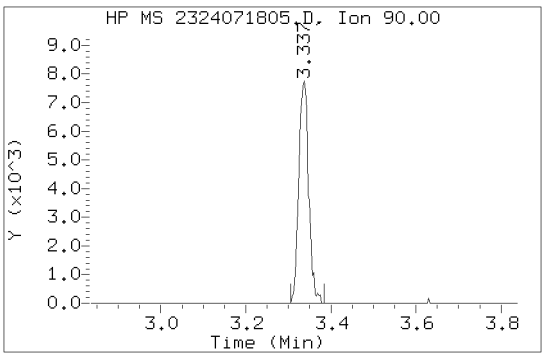
BEFORE

MASS
90
AREA
12305
HEIGHT
7759
18-Jul-2024
20:23



AFTER

MASS
90
AREA
12305
HEIGHT
7759
25-Jul-2024
17:14

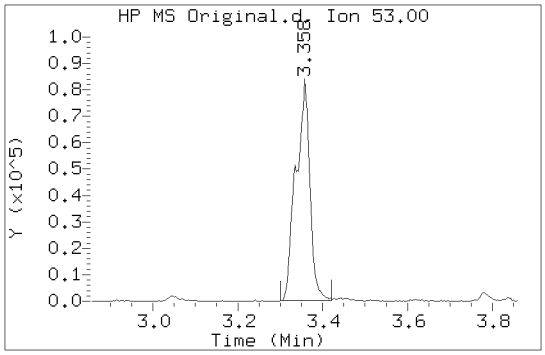


Acrylonitrile (107-13-1)

Reason Code: MP

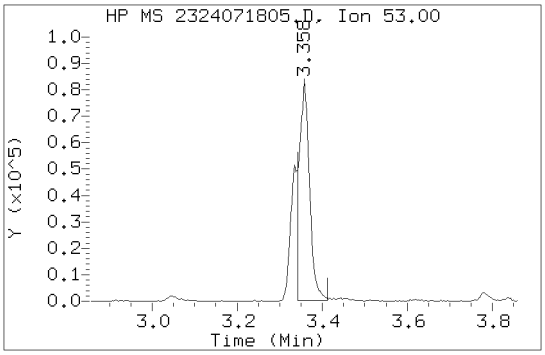
BEFORE

MASS
53
AREA
189732
HEIGHT
83980
18-Jul-2024
20:23



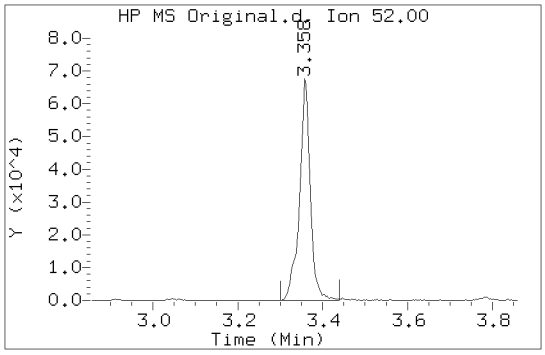
AFTER

MASS
53
AREA
133865
HEIGHT
83954
25-Jul-2024
17:14



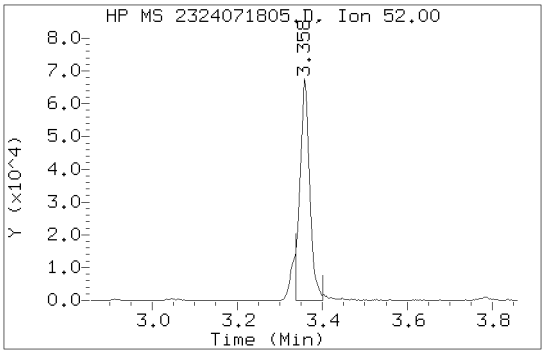
BEFORE

MASS
52
AREA
117623
HEIGHT
67648
18-Jul-2024
20:23



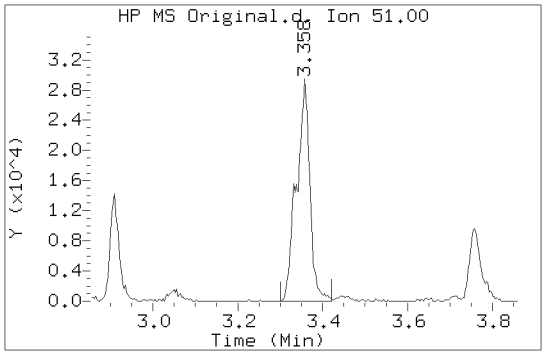
AFTER

MASS
52
AREA
105388
HEIGHT
67557
25-Jul-2024
17:14



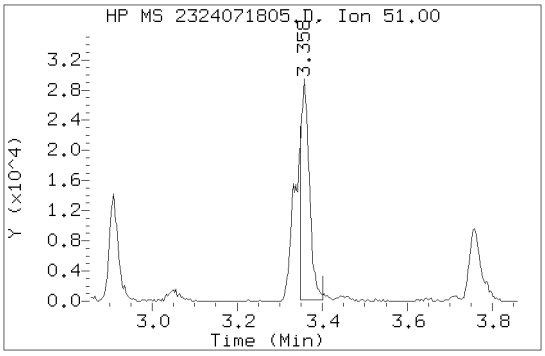
BEFORE

MASS
51
AREA
63663
HEIGHT
29480
18-Jul-2024
20:23



AFTER

MASS
51
AREA
39436
HEIGHT
29329
25-Jul-2024
17:14

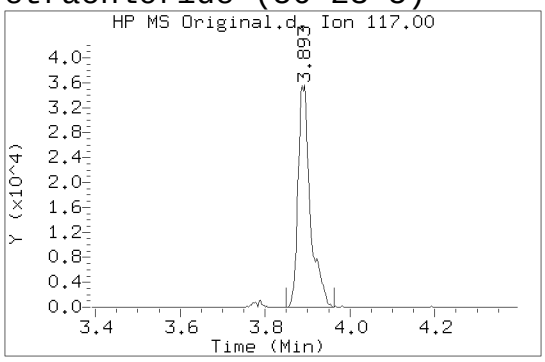


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Inj Date : 18-JUL-2024 13:23
InstruID : ms23.i
LabSampID : 1235

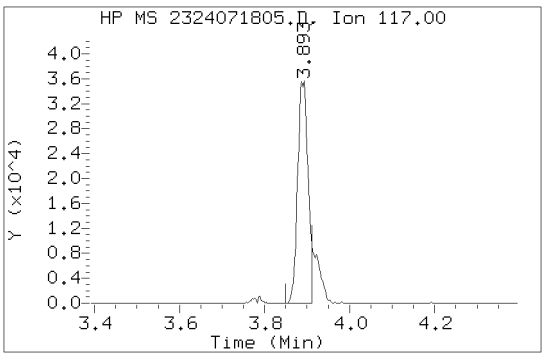
Carbon Tetrachloride (56-23-5)

Reason Code: MP

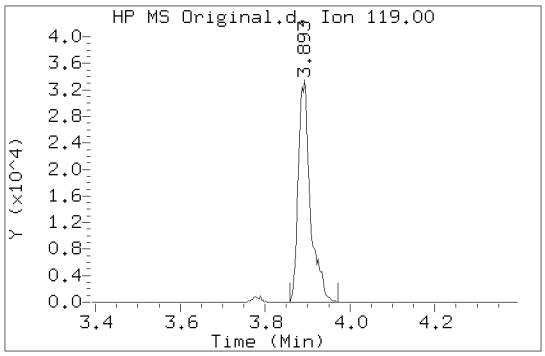
BEFORE
MASS
117
AREA
70598
HEIGHT
35664
18-Jul-2024
20:23



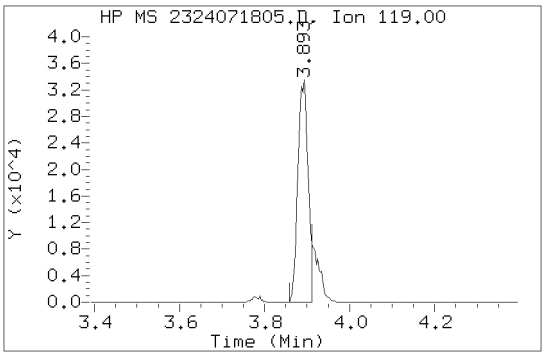
AFTER
MASS
117
AREA
59394
HEIGHT
35664
25-Jul-2024
17:14



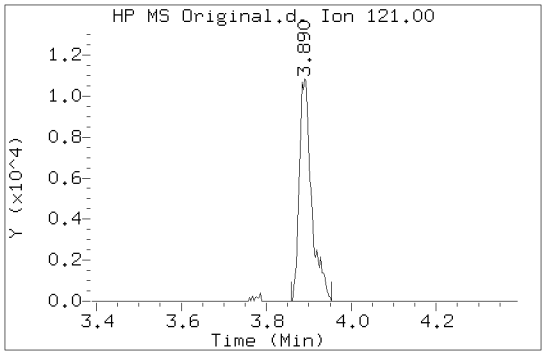
BEFORE
MASS
119
AREA
65429
HEIGHT
33504
18-Jul-2024
20:23



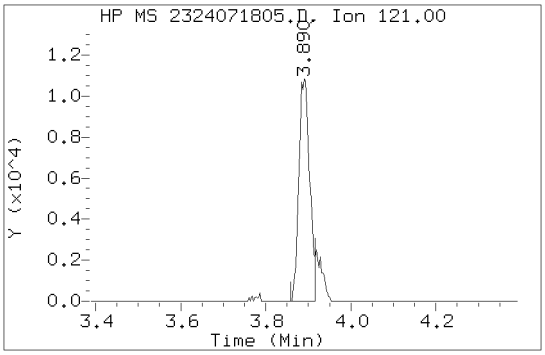
AFTER
MASS
119
AREA
54928
HEIGHT
33504
25-Jul-2024
17:14



BEFORE
MASS
121
AREA
21503
HEIGHT
10838
18-Jul-2024
20:23



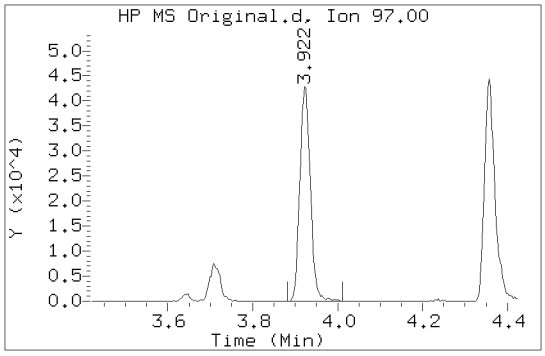
AFTER
MASS
121
AREA
18965
HEIGHT
10838
25-Jul-2024
17:14



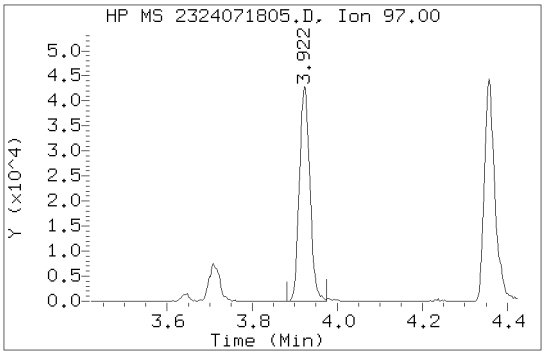
1,1,1-Trichloroethane (71-55-6)

Reason Code: MP

BEFORE
MASS
97
AREA
73011
HEIGHT
42880
18-Jul-2024
20:23



AFTER
MASS
97
AREA
72495
HEIGHT
42880
25-Jul-2024
17:14

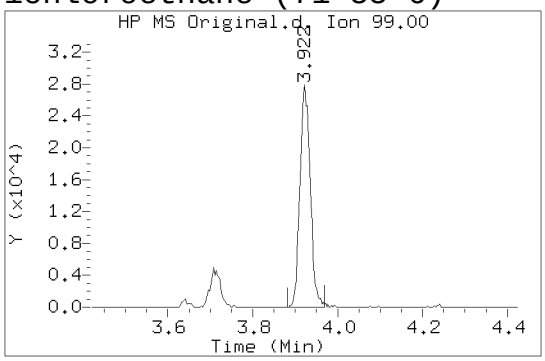


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LabSampID : 1235

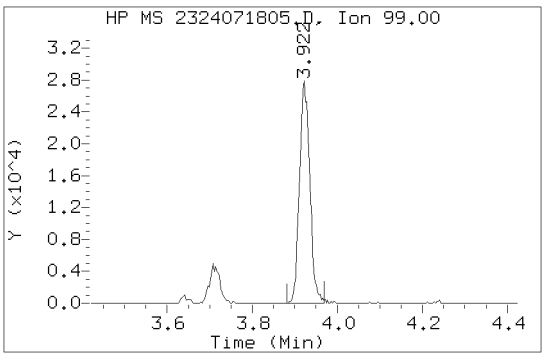
1,1,1-Trichloroethane (71-55-6)

Reason Code: MP

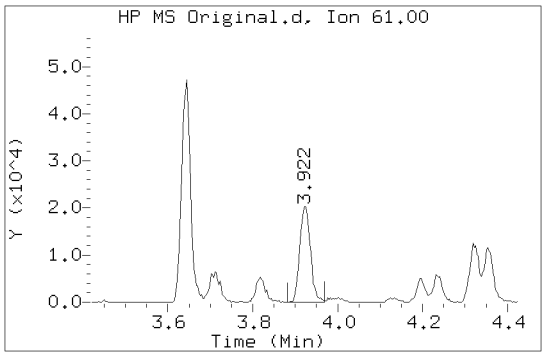
BEFORE
MASS
99
AREA
46439
HEIGHT
27896
18-Jul-2024
20:23



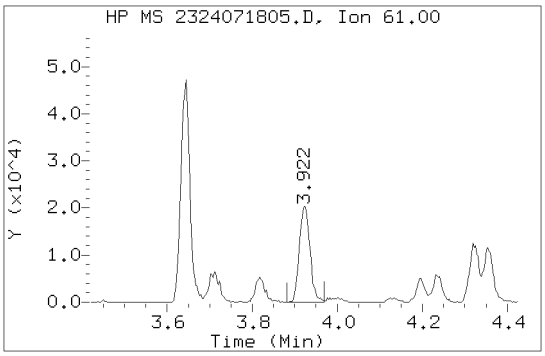
AFTER
MASS
99
AREA
46439
HEIGHT
27896
25-Jul-2024
17:14



BEFORE
MASS
61
AREA
34988
HEIGHT
20352
18-Jul-2024
20:23



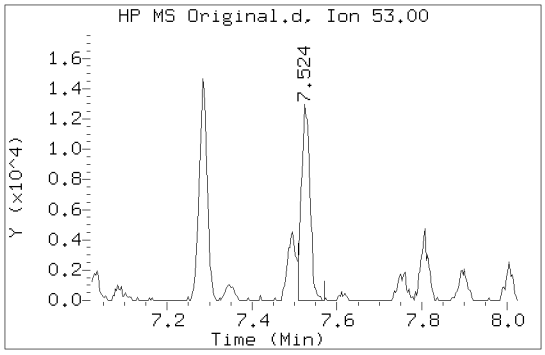
AFTER
MASS
61
AREA
34988
HEIGHT
20352
25-Jul-2024
17:14



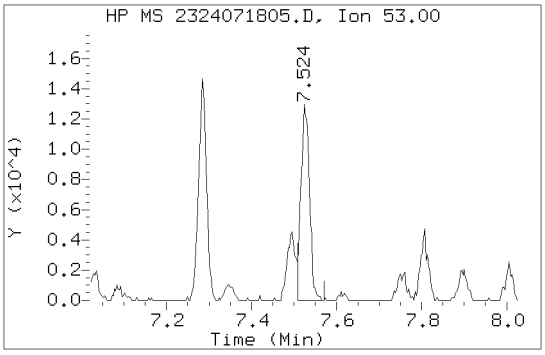
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

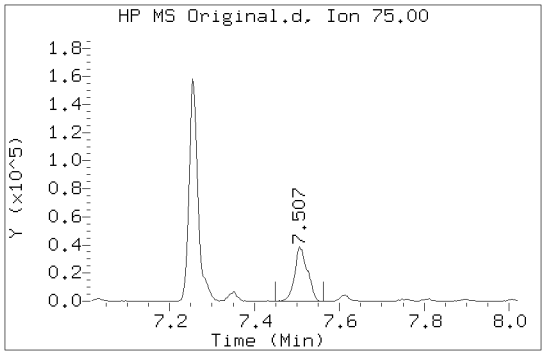
BEFORE
MASS
53
AREA
17728
HEIGHT
12972
18-Jul-2024
20:23



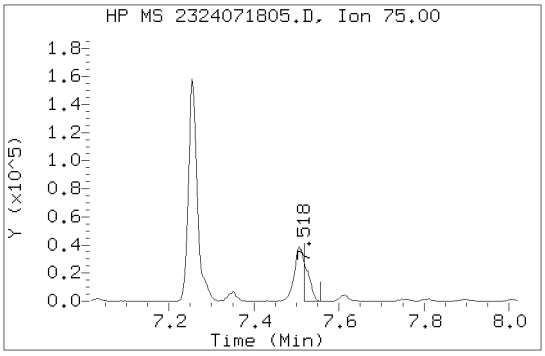
AFTER
MASS
53
AREA
17728
HEIGHT
12972
25-Jul-2024
17:14



BEFORE
MASS
75
AREA
80336
HEIGHT
38968
18-Jul-2024
20:23



AFTER
MASS
75
AREA
26416
HEIGHT
27436
25-Jul-2024
17:14



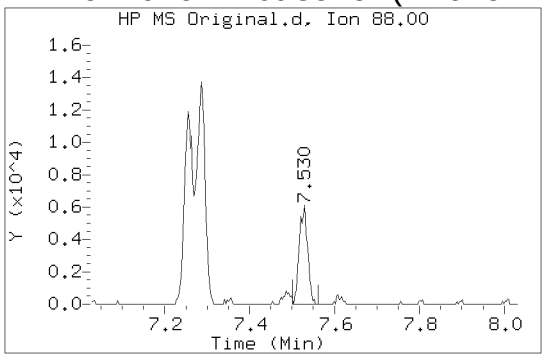
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LabSampID : 1235

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

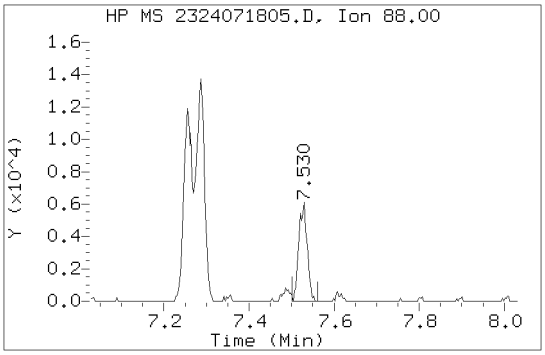
BEFORE

MASS
88
AREA
8126
HEIGHT
6128
18-Jul-2024
20:23



AFTER

MASS
88
AREA
8126
HEIGHT
6128
25-Jul-2024
17:14

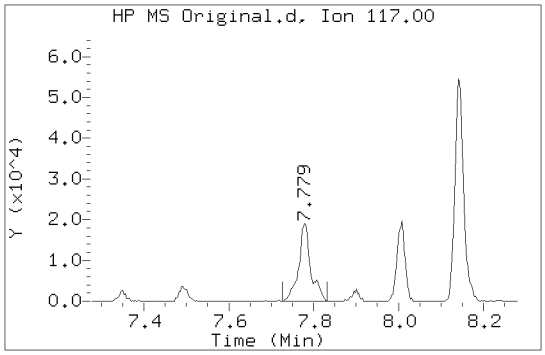


Pentachloroethane (76-01-7)

Reason Code: MP

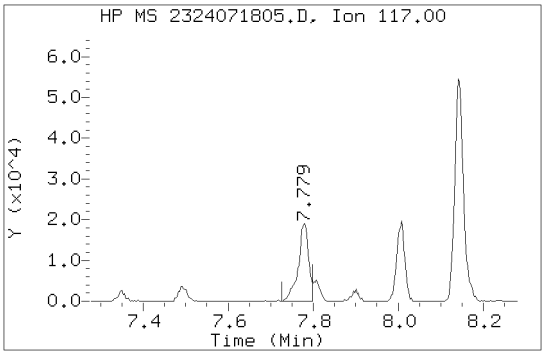
BEFORE

MASS
117
AREA
37277
HEIGHT
19048
18-Jul-2024
20:23



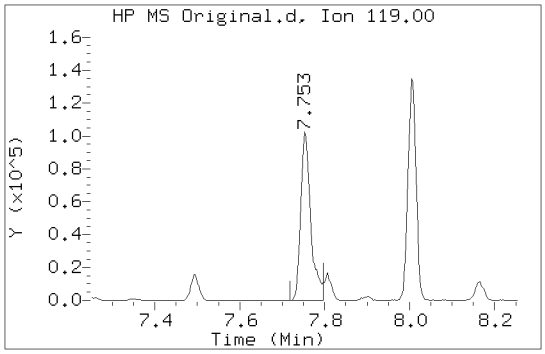
AFTER

MASS
117
AREA
32263
HEIGHT
19048
25-Jul-2024
17:14



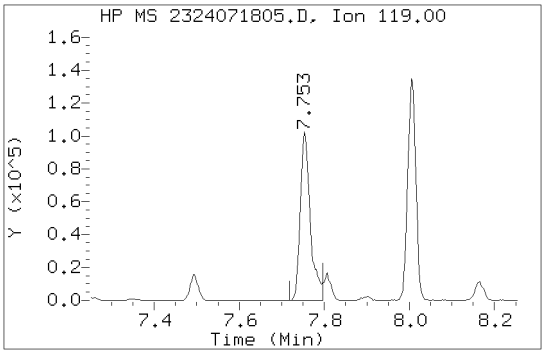
BEFORE

MASS
119
AREA
165940
HEIGHT
102440
18-Jul-2024
20:23



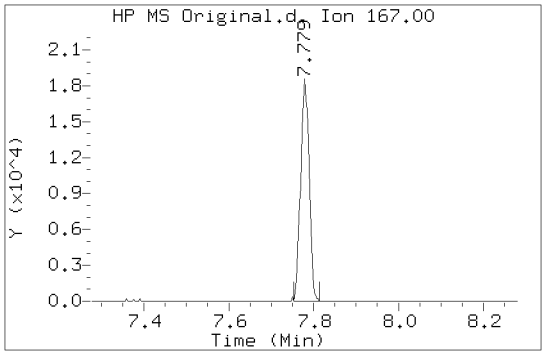
AFTER

MASS
119
AREA
165940
HEIGHT
102440
25-Jul-2024
17:14



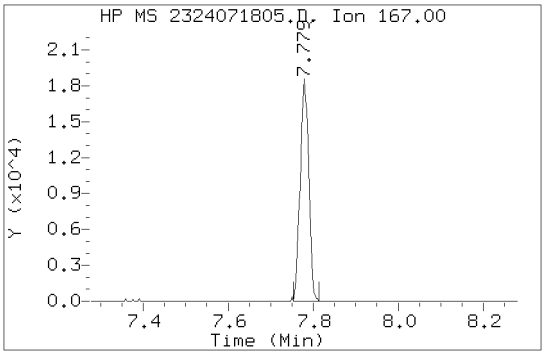
BEFORE

MASS
167
AREA
25579
HEIGHT
18576
18-Jul-2024
20:23



AFTER

MASS
167
AREA
25579
HEIGHT
18576
25-Jul-2024
17:14



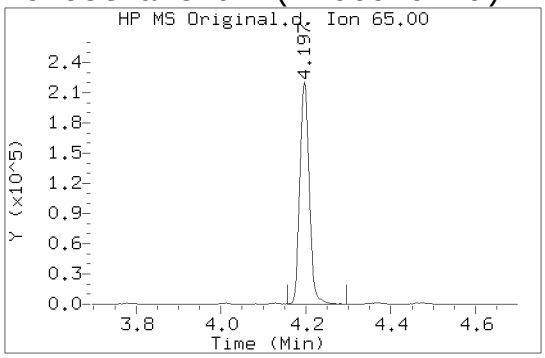
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Inj Date : 18-JUL-2024 13:23
InstruID : ms23.i
LabSampID : 1235

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

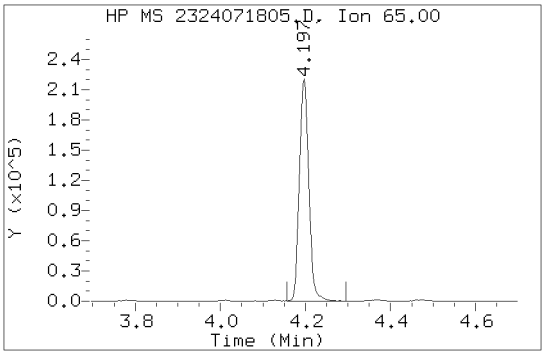
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18-Jul-2024
20:23



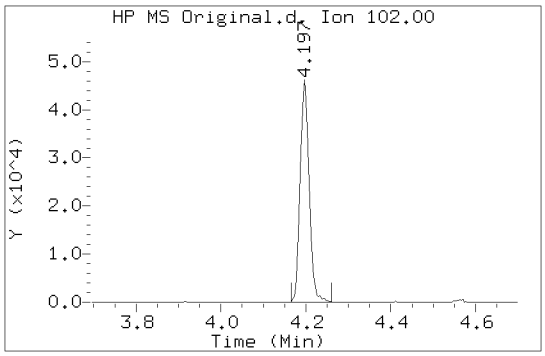
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25-Jul-2024
17:14



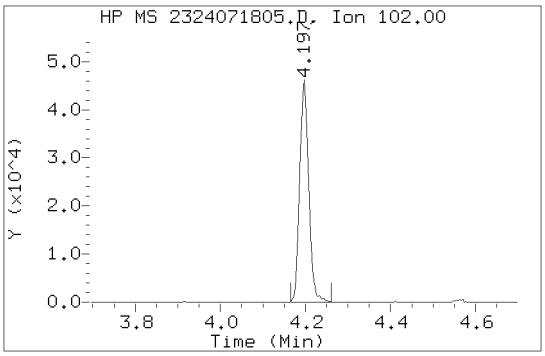
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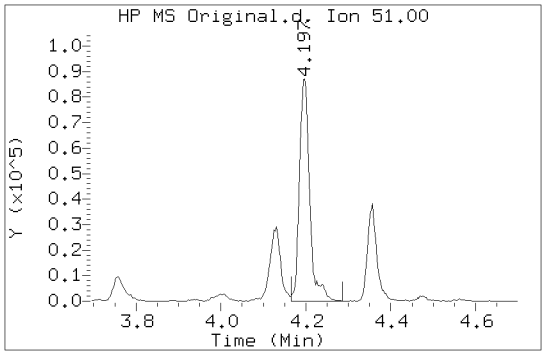
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25-Jul-2024
17:14



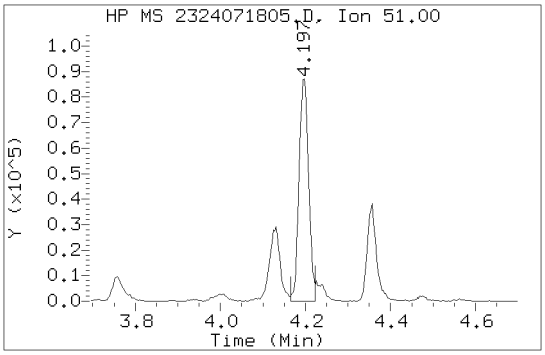
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AFTER

MASS
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HEIGHT
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25-Jul-2024
17:14



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:14
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240718.b/232407180
Inj Date: 18-JUL-2024 13:23
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071806.D
Lab Smp Id: 1236
Inj Date : 18-JUL-2024 13:43
Operator : ILY Inst ID: ms23.i
Smp Info : 1236;;1;1;3;;;
Misc Info :
Comment :
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Meth Date : 22-Jul-2024 06:29 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 13:43 Cal File: 2324071806.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
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Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

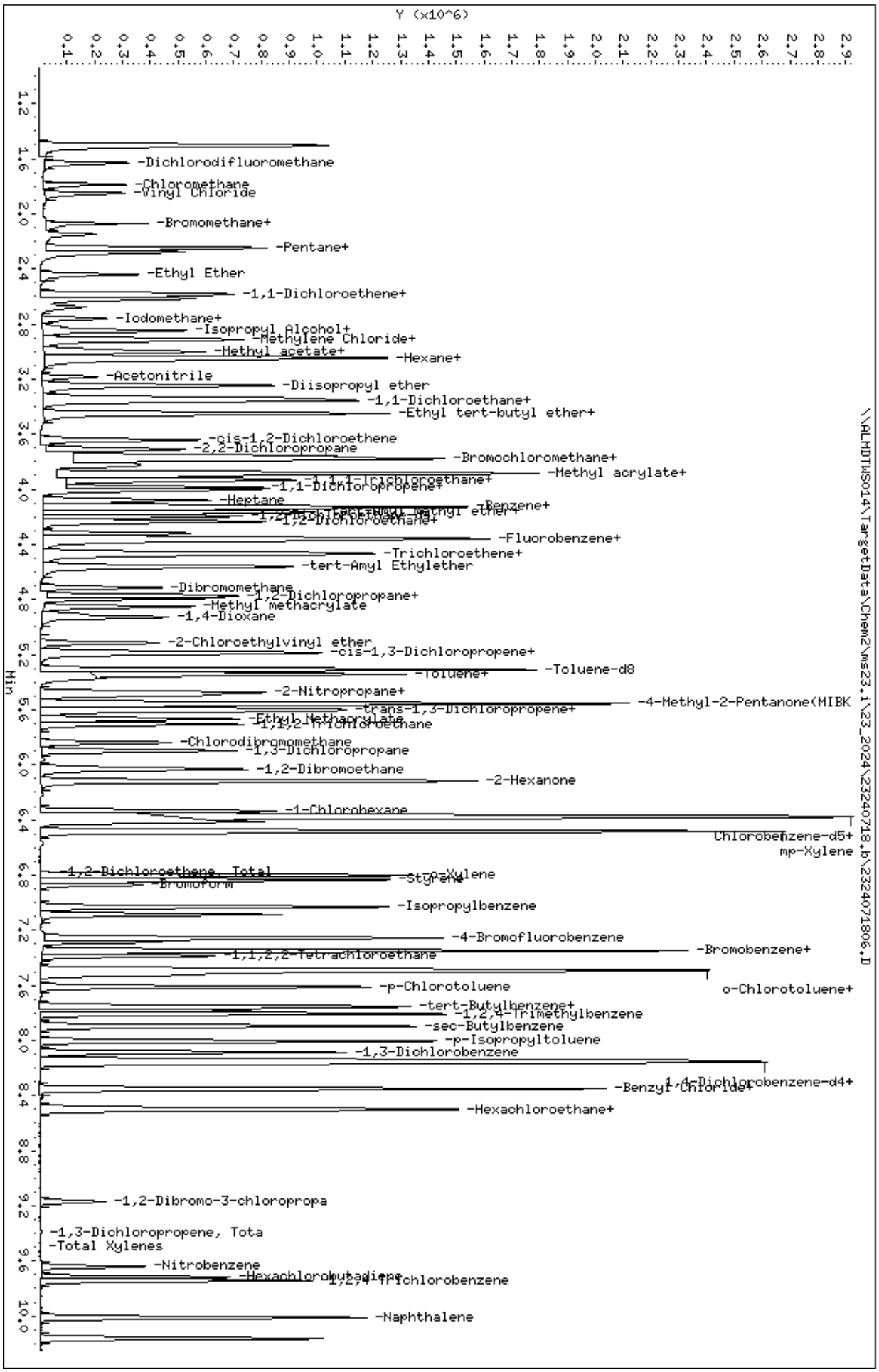
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.632	1.632	(0.375)	246723	20.0000	19.6549	
2	Chloromethane	50	1.788	1.788	(0.411)	239431	20.0000	18.6996	
3	Vinyl Chloride	62	1.849	1.849	(0.424)	219629	20.0000	19.4014	
4	Bromomethane	94	2.072	2.072	(0.476)	106241	20.0000	19.7733	
5	Chloroethane	64	2.150	2.150	(0.494)	117388	20.0000	19.2468(M)	MP
6	Pentane	41	2.245	2.245	(0.516)	165015	20.0000	19.9461	
7	Trichlorofluoromethane	101	2.251	2.251	(0.517)	272803	20.0000	19.6910	
8	Dichlorofluoromethane	67	2.277	2.277	(0.523)	362375	20.0000	20.3058	
9	Ethyl Ether	74	2.439	2.439	(0.560)	118743	20.0000	20.9461	
10	1,1-Dichloroethene	61	2.578	2.578	(0.592)	255541	20.0000	20.6240	
11	Freon 113	101	2.593	2.593	(0.595)	156523	20.0000	21.4924	
12	Carbon Disulfide	76	2.616	2.616	(0.601)	515523	20.0000	20.4825	
13	Iodomethane	127	2.677	2.677	(0.615)	70142	20.0000	19.2853	
14	Acrolein	56	2.761	2.761	(0.634)	177401	100.000	106.852	
15	Isopropyl Alcohol	45	2.822	2.822	(0.648)	80331	100.000	100.778	
16	3-Chloro-1-propene	41	2.848	2.848	(0.654)	282365	20.0000	21.5838	
17	Methylene Chloride	84	2.908	2.908	(0.668)	185326	20.0000	20.4683	
18	Acetone	58	2.920	2.920	(0.670)	111486	100.000	105.658	
19	Methyl acetate	74	2.981	2.981	(0.684)	41397	20.0000	21.3500	
20	trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	252644	20.0000	20.3921	
21	Hexane	57	3.044	3.044	(0.699)	382388	20.0000	20.7437	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.050	3.050	(0.700)	566408	20.0000	21.3140	
	23 tert.- Butyl Alcohol	59	3.065	3.065	(0.704)	125666	100.000	109.394	
	24 Acetonitrile	41	3.183	3.183	(0.731)	175023	100.000	105.269	
	25 Diisopropyl ether	45	3.247	3.247	(0.745)	641861	20.0000	21.1336	
	26 Chloroprene	53	3.337	3.337	(0.766)	222286	20.0000	20.3002(M)	MP
	27 1,1-Dichloroethane	63	3.346	3.346	(0.768)	340836	20.0000	20.9808	
	28 Acrylonitrile	53	3.357	3.357	(0.771)	566005	100.000	109.616(M)	MP
	29 Ethyl tert-butyl ether	59	3.450	3.450	(0.792)	609835	20.0000	21.3858	
	30 n-Propanol	41	3.450	3.450	(0.792)	131773	200.000	200.375(A)	
	31 Vinyl Acetate	86	3.450	3.450	(0.792)	46171	20.0000	21.7614	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	265577	20.0000	21.2656	
	33 2,2-Dichloropropane	77	3.710	3.710	(0.852)	262217	20.0000	21.0057	
	34 Bromochloromethane	128	3.757	3.757	(0.862)	97427	20.0000	21.6223	
	35 Cyclohexane	84	3.780	3.780	(0.868)	265896	20.0000	20.6460	
	36 Chloroform	83	3.780	3.780	(0.868)	354543	20.0000	20.9659	
	37 Ethyl Acetate	43	3.815	3.815	(0.876)	265019	20.0000	21.4523	
	38 Methyl acrylate	55	3.832	3.832	(0.880)	222648	20.0000	21.6282	
	39 Carbon Tetrachloride	117	3.890	3.890	(0.893)	234627	20.0000	21.3657(M)	MP
$	41 Dibromofluoromethane	113	3.884	3.884	(0.892)	264079	30.0000	30.8053	
	40 Tetrahydrofuran	42	3.881	3.881	(0.891)	384560	100.000	107.841	
	42 1,1,1-Trichloroethane	97	3.922	3.922	(0.900)	283073	20.0000	21.1290	
	43 2-Butanone	72	3.936	3.936	(0.904)	145881	100.000	106.375	
	44 1,1-Dichloropropene	75	3.985	3.985	(0.915)	255689	20.0000	20.6689	
	45 1-Chlorobutane	41	4.003	4.003	(0.919)	208056	20.0000	19.8240	
	46 Heptane	71	4.078	4.078	(0.936)	130506	20.0000	20.4958	
	47 Benzene	78	4.130	4.130	(0.948)	723892	20.0000	20.8448	
	48 Propionitrile	54	4.110	4.110	(0.944)	195323	100.000	109.795	
	49 Methacrylonitrile	67	4.130	4.130	(0.948)	98528	20.0000	21.5719	
	50 tert-Amyl methyl ether	73	4.162	4.162	(0.955)	548276	20.0000	21.0599	
	54 Isobutyl alcohol	42	4.168	4.168	(0.957)	83393	200.000	216.431(AQ)	
$	51 1,2-Dichloroethane-d4	65	4.197	4.197	(0.963)	333159	30.0000	30.3504(M)	MP
	52 1,2-Dichloroethane	62	4.234	4.234	(0.972)	281719	20.0000	20.1042	
	53 tert-Amyl Alcohol	59	4.237	4.237	(0.973)	104778	100.000	97.4360	
*	55 Fluorobenzene	96	4.356	4.356	(1.000)	922342	30.0000		
	56 Diisobutylene	57	4.371	4.371	(1.003)	472333	20.0000	20.8942	
	57 Trichloroethene	95	4.460	4.460	(1.024)	193791	20.0000	20.3371	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	286402	20.0000	21.0637	
	59 tert-Amyl Ethylether	59	4.562	4.562	(1.047)	455594	20.0000	21.1660	
	60 Dibromomethane	93	4.715	4.715	(1.082)	132457	20.0000	21.2120	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.095)	198809	20.0000	20.8027	
	62 Bromodichloromethane	83	4.793	4.793	(1.100)	257840	20.0000	21.3536	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	217856	20.0000	20.9856	
	64 1,4-Dioxane	88	4.900	4.900	(1.125)	74687	500.000	563.366(A)	
	65 2-Chloroethylvinyl ether	63	5.112	5.112	(1.173)	155065	20.0000	22.4486	
	66 cis-1,3-Dichloropropene	75	5.178	5.178	(0.814)	310658	20.0000	21.6731	
	67 Octane	85	5.196	5.196	(0.817)	113048	20.0000	21.6224	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	985898	30.0000	30.3879	
	69 Toluene	92	5.343	5.343	(0.840)	434931	20.0000	20.6501	
	70 Chloroacetonitrile	75	5.378	5.378	(0.845)	62949	100.000	94.8721	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	371461	100.000	98.3635	
	72 1,1-Dichloro-2-Propanone	63	5.497	5.497	(0.864)	27372	100.000	96.8642	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.552	5.552	(0.873)	1273256	100.000	114.331	
	75 trans-1,3-Dichloropropene	75	5.592	5.592	(0.879)	297537	20.0000	22.2340	
	74 Tetrachloroethene	164	5.607	5.607	(0.881)	161412	20.0000	20.9061	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.665	5.665	(0.890)	300061	20.0000	22.7624	
77	1,1,2-Trichloroethane	83	5.705	5.705	(0.897)	157614	20.0000	21.5951	
78	Chlorodibromomethane	129	5.838	5.838	(0.918)	200073	20.0000	22.1658	
79	1,3-Dichloropropane	76	5.896	5.896	(0.927)	316264	20.0000	21.2051	
80	1,2-Dibromoethane	107	6.018	6.018	(0.946)	167365	20.0000	21.4760	
81	2-Hexanone	43	6.116	6.116	(0.961)	918521	100.000	114.874	
82	1-Chlorohexane	91	6.334	6.334	(0.995)	221851	20.0000	19.8957	
* 83	Chlorobenzene-d5	82	6.363	6.363	(1.000)	403014	30.0000		
84	Chlorobenzene	112	6.377	6.377	(1.002)	476161	20.0000	21.1100	
85	Ethylbenzene	106	6.383	6.383	(1.003)	245706	20.0000	20.5678	
86	1,1,1,2-Tetrachloroethane	131	6.415	6.415	(1.008)	171593	20.0000	21.5251	
87	mp-Xylene	106	6.481	6.481	(1.019)	613369	40.0000	41.8913	
88	o-Xylene	106	6.803	6.803	(1.069)	302280	20.0000	21.2189	
89	Styrene	104	6.834	6.834	(0.839)	508289	20.0000	21.3039	
90	Bromoform	173	6.869	6.869	(0.844)	130990	20.0000	21.5669	
91	Isopropylbenzene	105	7.031	7.031	(0.863)	695937	20.0000	20.9470	
M 100	1,2-Dichloroethene, Total	61				518221	40.0000	41.6577	
$ 92	4-Bromofluorobenzene	174	7.257	7.257	(0.891)	313964	30.0000	29.8349	
93	Bromobenzene	156	7.350	7.350	(0.903)	200427	20.0000	20.7853	
94	n-Propylbenzene	120	7.350	7.350	(0.903)	205770	20.0000	20.2268	
95	1,1,2,2-Tetrachloroethane	83	7.387	7.387	(0.907)	257013	20.0000	21.4427	
96	o-Chlorotoluene	91	7.486	7.486	(0.919)	634545	20.0000	20.4576	
97	1,3,5-Trimethylbenzene	105	7.495	7.495	(0.920)	647878	20.0000	21.0202	
98	1,2,3-Trichloropropane	110	7.509	7.509	(0.922)	80462	20.0000	21.7116	
99	trans-1,4-Dichloro-2-butene	53	7.524	7.524	(0.924)	76032	20.0000	20.5064(QM)	MP
101	p-Chlorotoluene	91	7.610	7.610	(0.935)	584455	20.0000	20.3295	
102	tert-Butylbenzene	134	7.752	7.752	(0.952)	147934	20.0000	20.4318	
103	Pentachloroethane	117	7.775	7.775	(0.955)	129683	20.0000	21.6649(M)	MP
104	1,2,4-Trimethylbenzene	105	7.807	7.807	(0.959)	663695	20.0000	20.9513	
105	sec-Butylbenzene	105	7.897	7.897	(0.970)	800159	20.0000	20.7592	
106	p-Isopropyltoluene	134	8.004	8.004	(0.983)	177200	20.0000	20.7891	
107	1,3-Dichlorobenzene	146	8.088	8.088	(0.993)	367310	20.0000	20.1875	
* 108	1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	371689	30.0000		
109	1,4-Dichlorobenzene	146	8.155	8.155	(1.001)	374978	20.0000	19.9899	
110	Benzyl Chloride	126	8.346	8.346	(1.025)	84609	20.0000	19.9322(Q)	
111	n-Butylbenzene	134	8.355	8.355	(1.026)	162488	20.0000	20.1656	
112	Hexachloroethane	117	8.494	8.494	(1.043)	123422	20.0000	20.7963	
113	1,2-Dichlorobenzene	146	8.505	8.505	(1.044)	363773	20.0000	20.7005	
114	1,2-Dibromo-3-chloropropane	75	9.171	9.171	(1.126)	47004	20.0000	20.7097	
115	Nitrobenzene	77	9.643	9.643	(1.184)	149671	200.000	168.277	
116	Hexachlorobutadiene	225	9.718	9.718	(1.193)	95544	20.0000	19.9820	
M 120	1,3-Dichloropropene, Total	75				608195	40.0000	43.9071	
117	1,2,4-Trichlorobenzene	180	9.744	9.744	(1.197)	233539	20.0000	20.2658	
M 121	Total Xylenes	106				915649	60.0000	63.1102	
118	Naphthalene	128	10.011	10.011	(1.229)	696388	20.0000	21.8749	
119	1,2,3-Trichlorobenzene	180	10.164	10.164	(1.248)	231839	20.0000	20.8221	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.


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Client ID:
Sample Info: 1236;;1;1;3;;;
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Instrument: ms23.i
Operator: ILY
Column diameter: 0.25
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-Chloromethane
-Vinyl Chloride
-Bromomethane+
-Pentane+
-Ethyl Ether
-1,1-Dichloroethene+
-Iodomethane+
-Isopropyl Alcohol+
-Methylene Chloride+
-Methyl acetate+
-Hexane+
-Acetonitrile
-Diisopropyl ether
-1,1-Dichloroethane+
-Ethyl tert-butyl ether+
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Bromochloromethane+
-Methyl acrylate+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene+
-Heptane
-Benzene+
-1,2-Dichloroethane+
-Fluorobenzene+
-Trichloroethene+
-tert-Amyl Ethylether
-Dibromomethane
-1,2-Dichloropropane+
-Methyl methacrylate
-1,4-Dioxane
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropene+
-Toluene+
-Toluene-d8
-2-Nitropropane+
-4-Methyl-2-Pentanone(MIBK
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane
-Chlorodibromomethane
-1,3-Dichloropropane
-1,2-Dibromoethane
-2-Hexanone
-1-Chlorohexane
Chlorobenzene-d5+
mp-Xylene
-1,2-Dichloroethene, Total
-Bromoform
-Styrene
o-Xylene
-Isopropylbenzene
-4-Bromofluorobenzene
-Bromobenzene+
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-p-Chlorotoluene
o-Chlorotoluene+
-tert-Butylbenzene+
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-p-Isopropyltoluene
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
-Benzyl Chloride+
-Hexachloroethane+
-1,2-Dibromo-3-chloropropa
-1,3-Dichloropropene, Tota
-Total Xylenes
-Nitrobenzene
-Hexachlorobutadiene
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-Naphthalene
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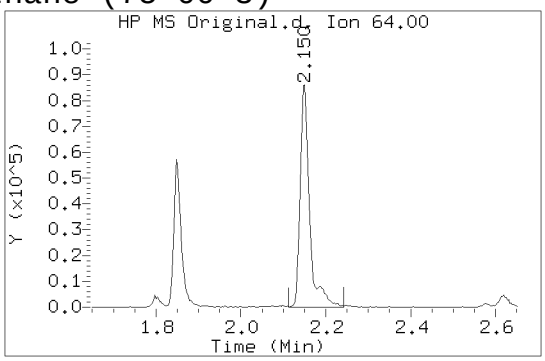
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LabSampID : 1236

Chloroethane (75-00-3)

Reason Code: MP

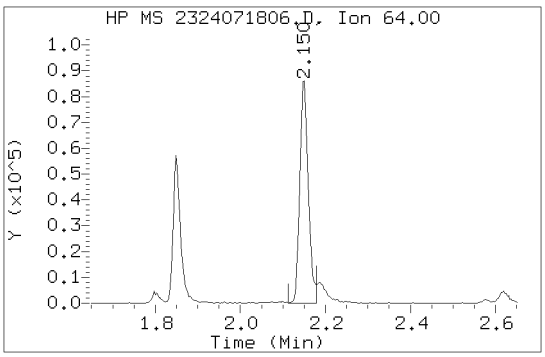
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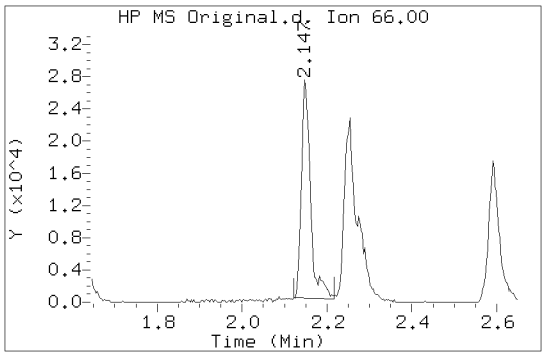
AFTER

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25-Jul-2024
17:14



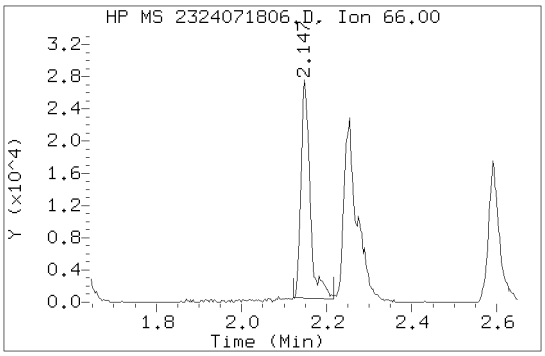
BEFORE

MASS
66
AREA
39445
HEIGHT
27093
18-Jul-2024
20:18



AFTER

MASS
66
AREA
39445
HEIGHT
27093
25-Jul-2024
17:14

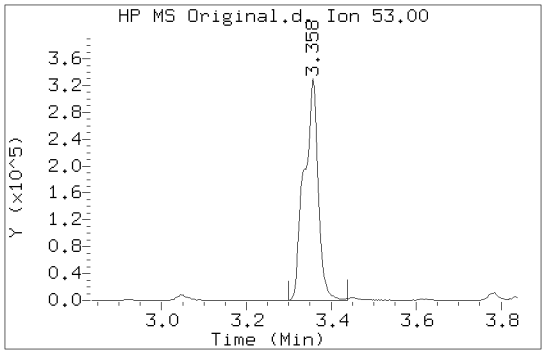


Chloroprene (126-99-8)

Reason Code: MP

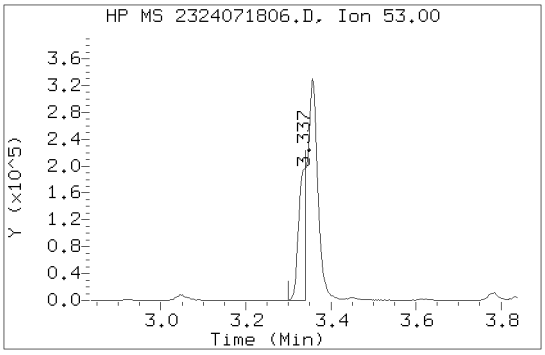
BEFORE

MASS
53
AREA
758096
HEIGHT
329957
18-Jul-2024
20:18



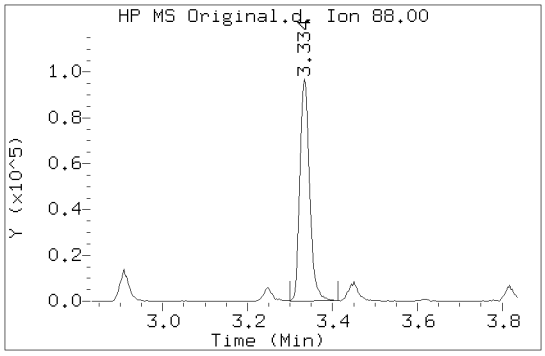
AFTER

MASS
53
AREA
222286
HEIGHT
195749
25-Jul-2024
17:14



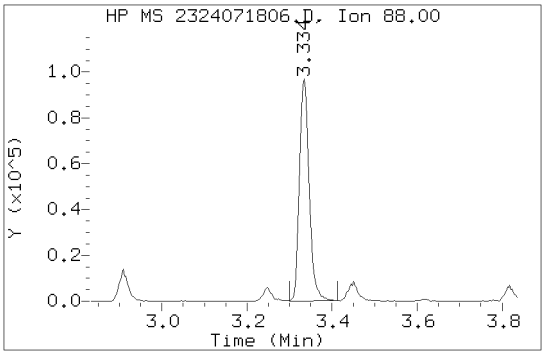
BEFORE

MASS
88
AREA
151601
HEIGHT
96871
18-Jul-2024
20:18



AFTER

MASS
88
AREA
151601
HEIGHT
96871
25-Jul-2024
17:14



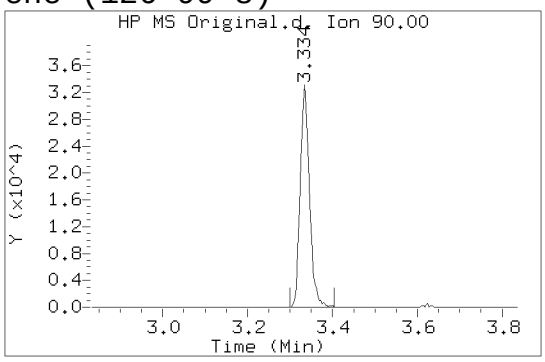
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Inj Date : 18-JUL-2024 13:43
InstruID : ms23.i
LabSampID : 1236

Chloroprene (126-99-8)

Reason Code: MP

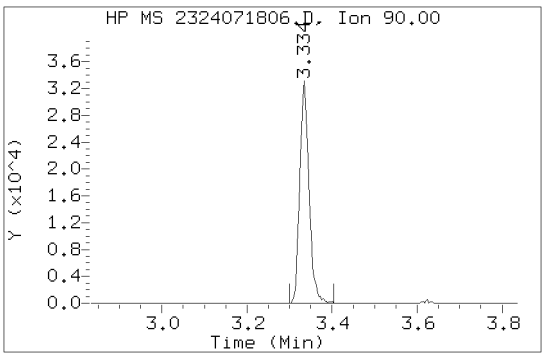
BEFORE

MASS
90
AREA
49100
HEIGHT
33136
18-Jul-2024
20:18



AFTER

MASS
90
AREA
49100
HEIGHT
33136
25-Jul-2024
17:14

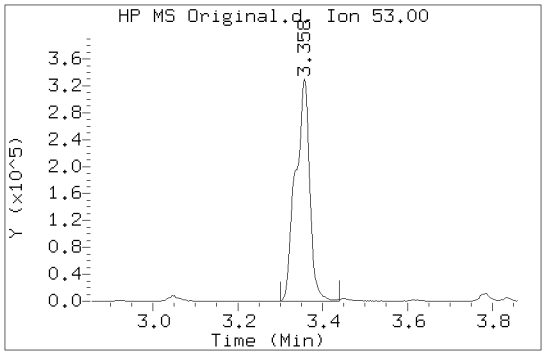


Acrylonitrile (107-13-1)

Reason Code: MP

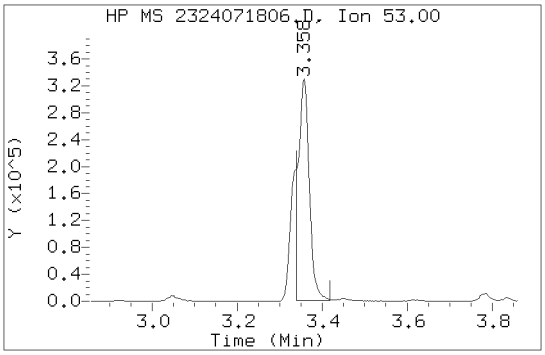
BEFORE

MASS
53
AREA
758096
HEIGHT
329957
18-Jul-2024
20:18



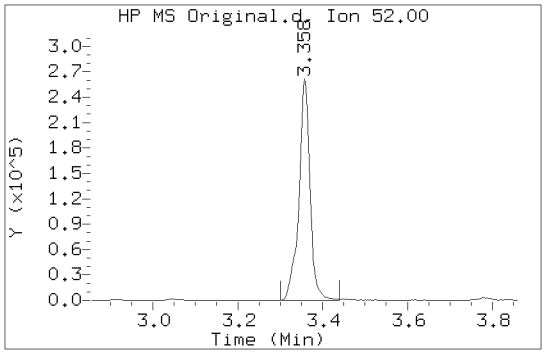
AFTER

MASS
53
AREA
566005
HEIGHT
329730
25-Jul-2024
17:14



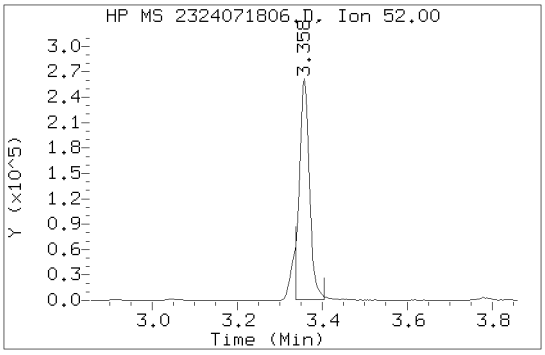
BEFORE

MASS
52
AREA
470192
HEIGHT
261888
18-Jul-2024
20:18



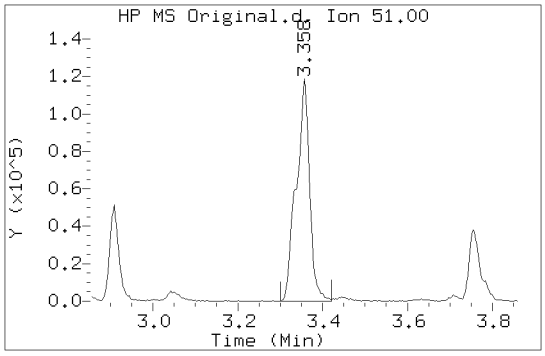
AFTER

MASS
52
AREA
419693
HEIGHT
260991
25-Jul-2024
17:14



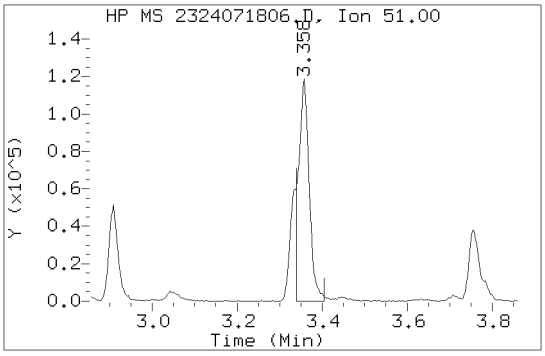
BEFORE

MASS
51
AREA
256874
HEIGHT
118728
18-Jul-2024
20:18



AFTER

MASS
51
AREA
195796
HEIGHT
118634
25-Jul-2024
17:14



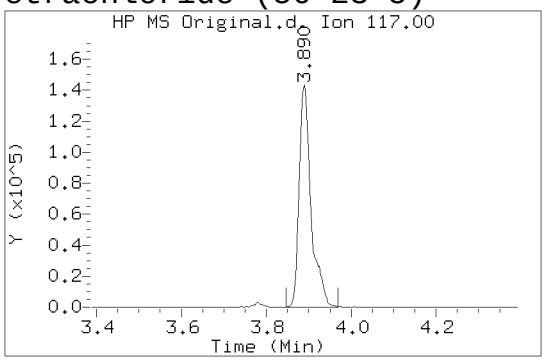
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Inj Date : 18-JUL-2024 13:43
InstruID : ms23.i
LabSampID : 1236

Carbon Tetrachloride (56-23-5)

Reason Code: MP

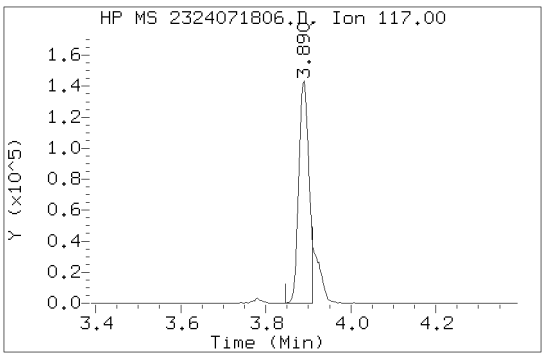
BEFORE

MASS
117
AREA
275500
HEIGHT
143424
18-Jul-2024
20:18



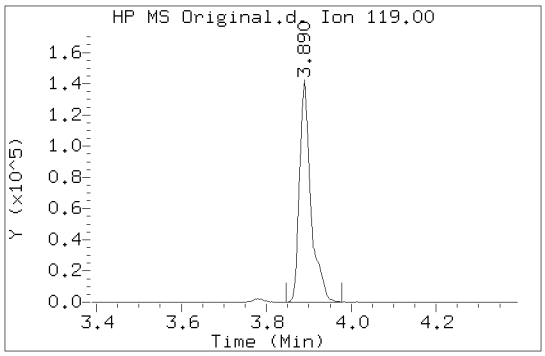
AFTER

MASS
117
AREA
234627
HEIGHT
143424
25-Jul-2024
17:14



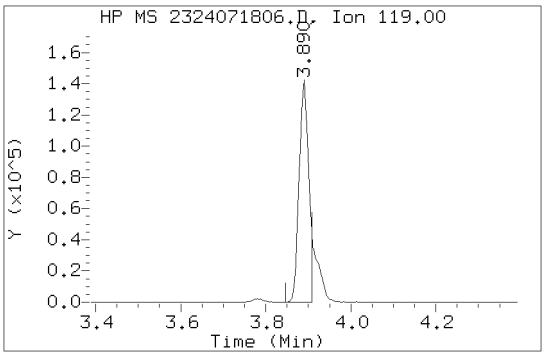
BEFORE

MASS
119
AREA
260616
HEIGHT
142464
18-Jul-2024
20:18



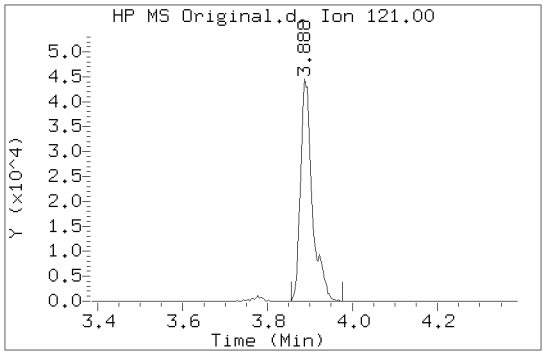
AFTER

MASS
119
AREA
215288
HEIGHT
142464
25-Jul-2024
17:14



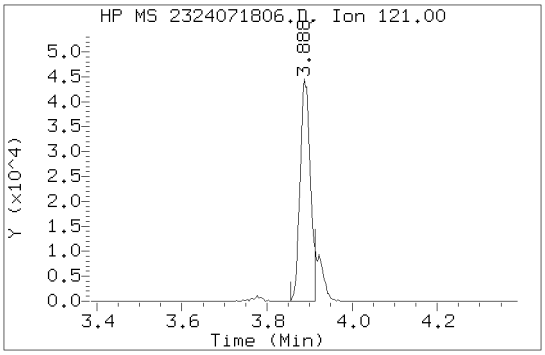
BEFORE

MASS
121
AREA
84925
HEIGHT
44576
18-Jul-2024
20:18



AFTER

MASS
121
AREA
73821
HEIGHT
44576
25-Jul-2024
17:14

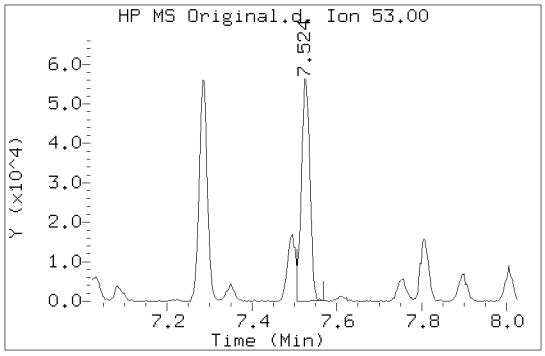


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

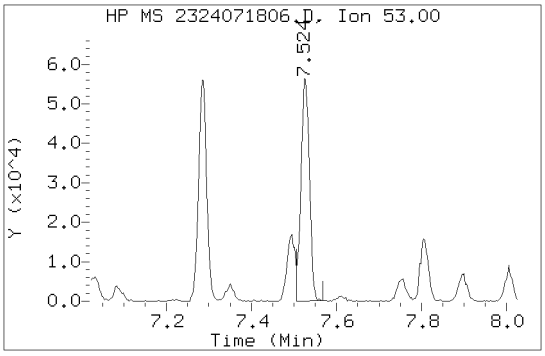
BEFORE

MASS
53
AREA
76032
HEIGHT
56229
18-Jul-2024
20:18



AFTER

MASS
53
AREA
76032
HEIGHT
56229
25-Jul-2024
17:14

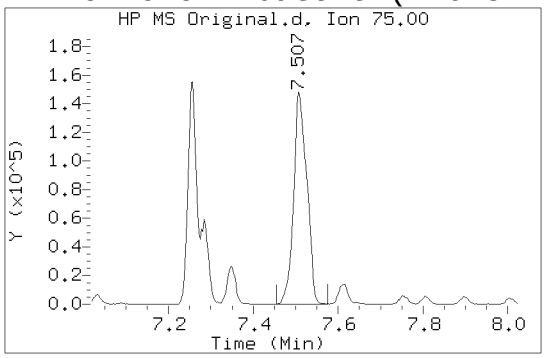


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Inj Date : 18-JUL-2024 13:43
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LabSampID : 1236

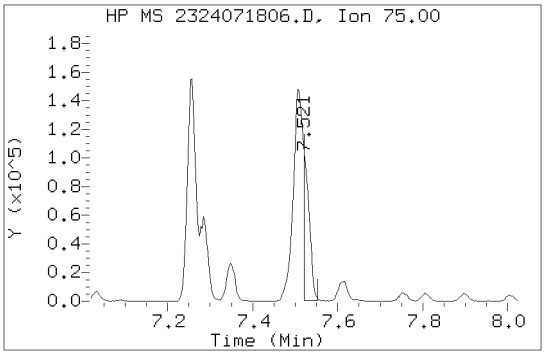
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

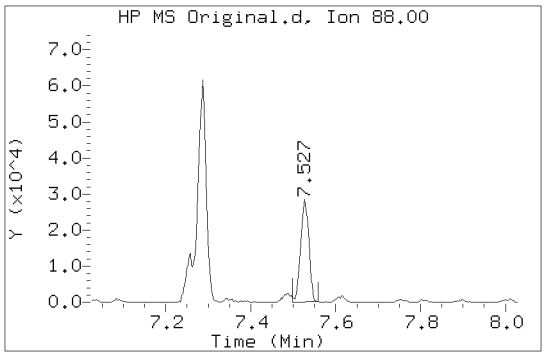
BEFORE
MASS
75
AREA
320588
HEIGHT
148288
18-Jul-2024
20:18



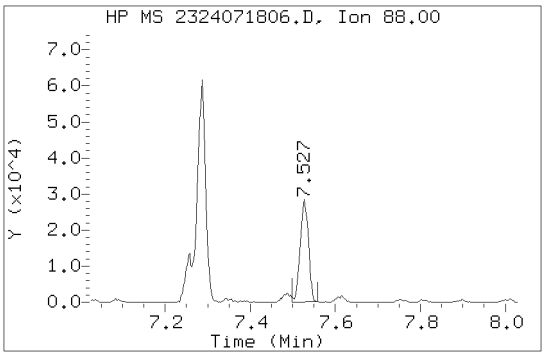
AFTER
MASS
75
AREA
91634
HEIGHT
102749
25-Jul-2024
17:14



BEFORE
MASS
88
AREA
37209
HEIGHT
28339
18-Jul-2024
20:18



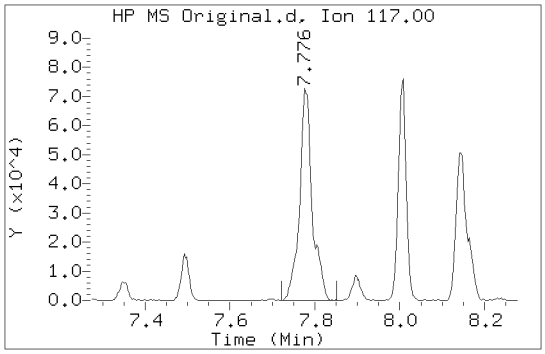
AFTER
MASS
88
AREA
37209
HEIGHT
28339
25-Jul-2024
17:14



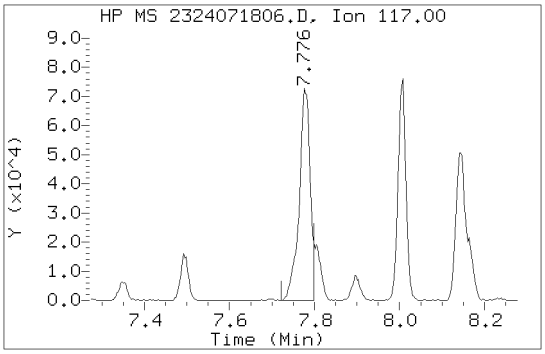
Pentachloroethane (76-01-7)

Reason Code: MP

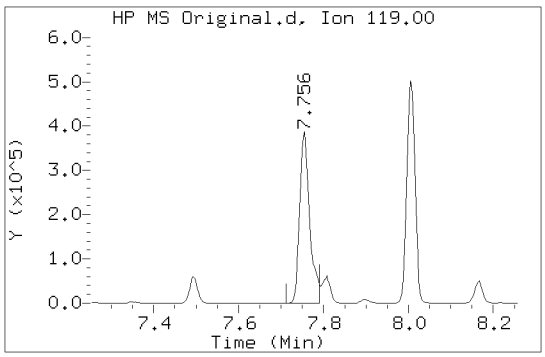
BEFORE
MASS
117
AREA
148382
HEIGHT
72840
18-Jul-2024
20:18



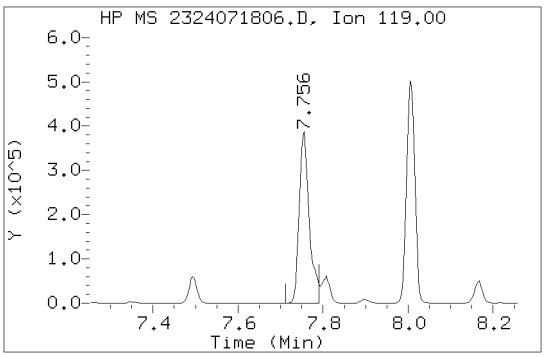
AFTER
MASS
117
AREA
129683
HEIGHT
72840
25-Jul-2024
17:14



BEFORE
MASS
119
AREA
628606
HEIGHT
387776
18-Jul-2024
20:18



AFTER
MASS
119
AREA
628606
HEIGHT
387776
25-Jul-2024
17:14



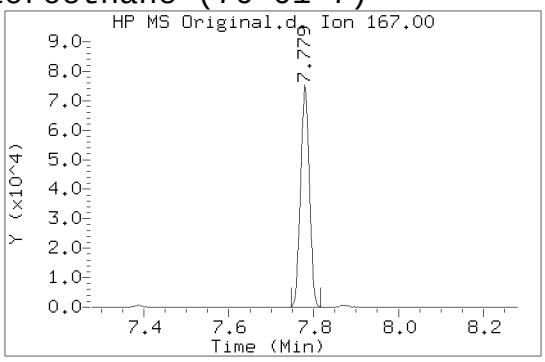
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Inj Date : 18-JUL-2024 13:43
InstruID : ms23.i
LabSampID : 1236

Pentachloroethane (76-01-7)

Reason Code: MP

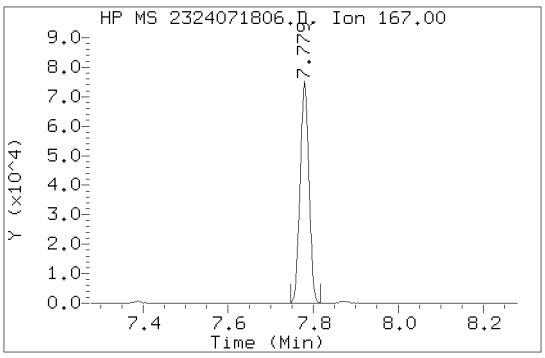
BEFORE

MASS
167
AREA
106317
HEIGHT
75352
18-Jul-2024
20:18



AFTER

MASS
167
AREA
106317
HEIGHT
75352
25-Jul-2024
17:14

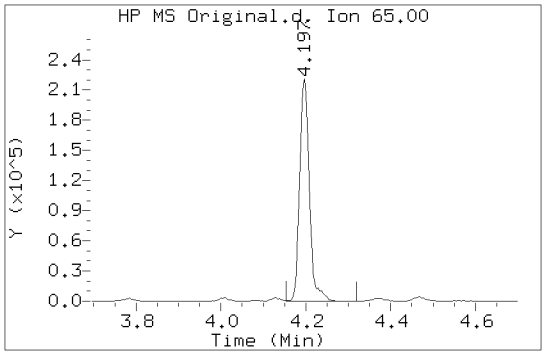


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

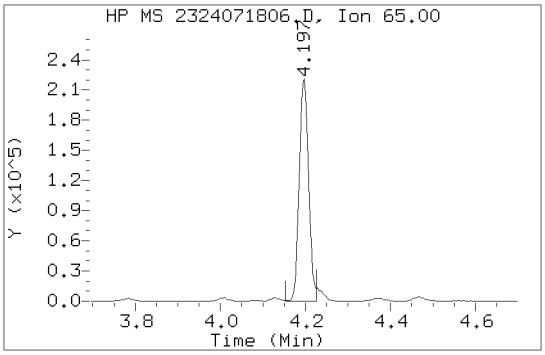
BEFORE

MASS
65
AREA
346572
HEIGHT
221056
18-Jul-2024
20:18



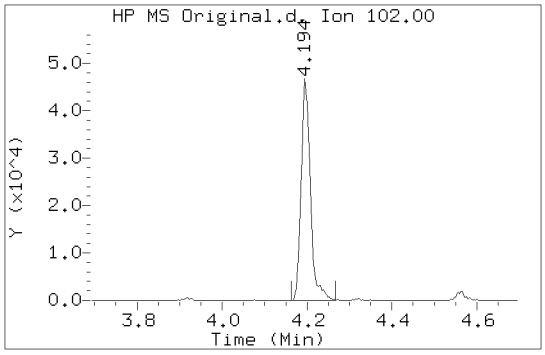
AFTER

MASS
65
AREA
333159
HEIGHT
221056
25-Jul-2024
17:14



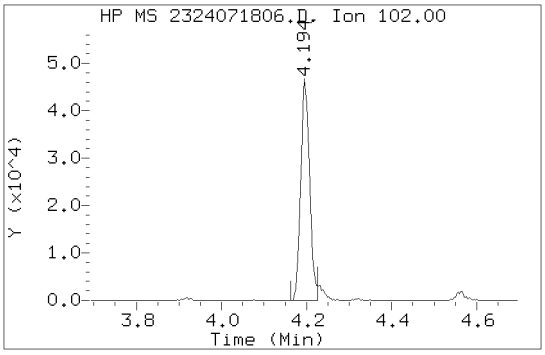
BEFORE

MASS
102
AREA
69512
HEIGHT
46768
18-Jul-2024
20:18



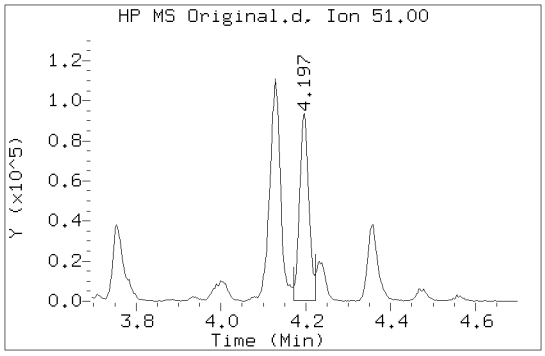
AFTER

MASS
102
AREA
66460
HEIGHT
46768
25-Jul-2024
17:14



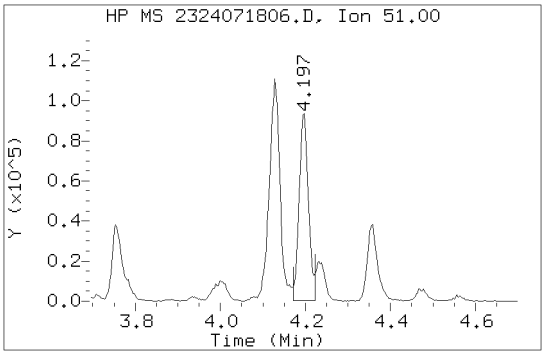
BEFORE

MASS
51
AREA
140715
HEIGHT
93405
18-Jul-2024
20:18



AFTER

MASS
51
AREA
140715
HEIGHT
93405
25-Jul-2024
17:14



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:14
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240718.b/232407180
Inj Date: 18-JUL-2024 13:43
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071807.D
Lab Smp Id: 1237
Inj Date : 18-JUL-2024 14:03
Operator : ILY Inst ID: ms23.i
Smp Info : 1237;;1;1;4;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\23-8260b09.m
Meth Date : 22-Jul-2024 06:29 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 14:03 Cal File: 2324071807.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.632	1.632	(0.375)	642793	50.0000	51.5222	
2	Chloromethane	50	1.785	1.785	(0.410)	621391	50.0000	48.8290	
3	Vinyl Chloride	62	1.849	1.849	(0.424)	570276	50.0000	50.6862	
4	Bromomethane	94	2.072	2.072	(0.476)	266557	50.0000	50.7699	
5	Chloroethane	64	2.150	2.150	(0.494)	299715	50.0000	49.4430(M)	MP
6	Pentane	41	2.245	2.245	(0.516)	381399	50.0000	46.3847	
7	Trichlorofluoromethane	101	2.251	2.251	(0.517)	714813	50.0000	51.9126	
8	Dichlorofluoromethane	67	2.277	2.277	(0.523)	840784	50.0000	47.4033	
9	Ethyl Ether	74	2.442	2.442	(0.561)	277992	50.0000	49.3387	
10	1,1-Dichloroethene	61	2.578	2.578	(0.592)	595112	50.0000	48.3250	
11	Freon 113	101	2.593	2.593	(0.595)	361783	50.0000	49.9824	
12	Carbon Disulfide	76	2.619	2.619	(0.601)	1209365	50.0000	48.3451	
13	Iodomethane	127	2.677	2.677	(0.615)	186201	50.0000	51.5100(M)	MP
14	Acrolein	56	2.761	2.761	(0.634)	410222	250.000	248.604(A)	
15	Isopropyl Alcohol	45	2.822	2.822	(0.648)	184455	250.000	233.817(A)	
16	3-Chloro-1-propene	41	2.850	2.850	(0.654)	660226	50.0000	50.7775	
17	Methylene Chloride	84	2.908	2.908	(0.668)	432970	50.0000	48.1132	
18	Acetone	58	2.920	2.920	(0.670)	248015	250.000	236.494(A)	
19	Methyl acetate	74	2.984	2.984	(0.685)	93007	50.0000	48.5165	
20	trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	590256	50.0000	47.9352	
21	Hexane	57	3.044	3.044	(0.699)	898705	50.0000	49.0523	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.050	3.050	(0.700)	1328514	50.0000	50.2993	
	23 tert.- Butyl Alcohol	59	3.068	3.068	(0.704)	295976	250.000	259.235(A)	
	24 Acetonitrile	41	3.186	3.186	(0.732)	392856	250.000	237.740(A)	
	25 Diisopropyl ether	45	3.247	3.247	(0.745)	1498101	50.0000	49.6288	
	26 Chloroprene	53	3.334	3.334	(0.765)	510367	50.0000	46.8956(M)	MP
	27 1,1-Dichloroethane	63	3.346	3.346	(0.768)	788235	50.0000	48.8194	
	28 Acrylonitrile	53	3.357	3.357	(0.771)	1302307	250.000	253.763(AM)	MP
	29 Ethyl tert-butyl ether	59	3.450	3.450	(0.792)	1431134	50.0000	50.4956	
	30 n-Propanol	41	3.447	3.447	(0.791)	304239	500.000	465.470(A)	
	31 Vinyl Acetate	86	3.450	3.450	(0.792)	110669	50.0000	52.4813	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	613986	50.0000	49.4660	
	33 2,2-Dichloropropane	77	3.710	3.710	(0.852)	618385	50.0000	49.8420	
	34 Bromochloromethane	128	3.757	3.757	(0.862)	225216	50.0000	50.2902	
	35 Cyclohexane	84	3.780	3.780	(0.868)	617085	50.0000	48.2092	
	36 Chloroform	83	3.780	3.780	(0.868)	821434	50.0000	48.8741	
	37 Ethyl Acetate	43	3.815	3.815	(0.876)	611439	50.0000	49.7979	
	38 Methyl acrylate	55	3.832	3.832	(0.880)	521286	50.0000	50.9493	
	39 Carbon Tetrachloride	117	3.890	3.890	(0.893)	554344	50.0000	50.7903(M)	MP
$	41 Dibromofluoromethane	113	3.884	3.884	(0.892)	252679	30.0000	29.6567	
	40 Tetrahydrofuran	42	3.881	3.881	(0.891)	891405	250.000	251.511(A)	
	42 1,1,1-Trichloroethane	97	3.925	3.925	(0.901)	663641	50.0000	49.8396	
	43 2-Butanone	72	3.936	3.936	(0.904)	337563	250.000	246.926(A)	
	44 1,1-Dichloropropene	75	3.985	3.985	(0.915)	598594	50.0000	48.6855	
	45 1-Chlorobutane	41	4.006	4.006	(0.920)	490645	50.0000	47.0371	
	46 Heptane	71	4.078	4.078	(0.936)	298505	50.0000	47.1681	
	47 Benzene	78	4.127	4.127	(0.947)	1666931	50.0000	48.2951	
	48 Propionitrile	54	4.110	4.110	(0.944)	448133	250.000	253.453(A)	
	49 Methacrylonitrile	67	4.127	4.127	(0.947)	228080	50.0000	50.2432	
	50 tert-Amyl methyl ether	73	4.165	4.165	(0.956)	1295498	50.0000	50.0673	
	54 Isobutyl alcohol	42	4.168	4.168	(0.957)	181932	500.000	472.315(A)	
$	51 1,2-Dichloroethane-d4	65	4.197	4.197	(0.963)	313100	30.0000	28.6984(M)	MP
	52 1,2-Dichloroethane	62	4.234	4.234	(0.972)	669086	50.0000	48.0412	
	53 tert-Amyl Alcohol	59	4.237	4.237	(0.973)	250435	250.000	232.127(A)	
*	55 Fluorobenzene	96	4.356	4.356	(1.000)	916708	30.0000		
	56 Diisobutylene	57	4.371	4.371	(1.003)	1042979	50.0000	48.5866	
	57 Trichloroethene	95	4.457	4.457	(1.023)	457634	50.0000	48.3209	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	666774	50.0000	48.4453	
	59 tert-Amyl Ethylether	59	4.562	4.562	(1.047)	1069746	50.0000	50.0038	
	60 Dibromomethane	93	4.712	4.712	(1.082)	312221	50.0000	50.3072	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.095)	466893	50.0000	49.1544	
	62 Bromodichloromethane	83	4.793	4.793	(1.100)	609129	50.0000	50.7565	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	515779	50.0000	49.9893	
	64 1,4-Dioxane	88	4.903	4.903	(1.126)	169794	1250.00	1288.63(A)	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.174)	361598	50.0000	52.6699	
	66 cis-1,3-Dichloropropene	75	5.181	5.181	(0.814)	758450	50.0000	52.2730	
	67 Octane	85	5.196	5.196	(0.816)	265449	50.0000	50.1575	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	968115	30.0000	29.4787	
	69 Toluene	92	5.343	5.343	(0.839)	1024992	50.0000	48.0767	
	70 Chloroacetonitrile	75	5.378	5.378	(0.845)	158628	250.000	232.153(A)	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	926098	250.000	240.008(A)	
	72 1,1-Dichloro-2-Propanone	63	5.497	5.497	(0.864)	67514	250.000	233.256(A)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.555	5.555	(0.873)	2943646	250.000	261.124(A)	
	75 trans-1,3-Dichloropropene	75	5.592	5.592	(0.879)	710516	50.0000	52.4522	
	74 Tetrachloroethene	164	5.607	5.607	(0.881)	379730	50.0000	48.5875	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.665	5.665	(0.890)	701518	50.0000	52.5727	
77	1,1,2-Trichloroethane	83	5.705	5.705	(0.896)	366595	50.0000	49.6204	
78	Chlorodibromomethane	129	5.838	5.838	(0.917)	485425	50.0000	53.1288	
79	1,3-Dichloropropane	76	5.899	5.899	(0.927)	745410	50.0000	49.3741	
80	1,2-Dibromoethane	107	6.018	6.018	(0.945)	386573	50.0000	49.0042	
81	2-Hexanone	43	6.116	6.116	(0.961)	2112572	250.000	261.010(A)	
82	1-Chlorohexane	91	6.336	6.336	(0.995)	511462	50.0000	45.3131	
* 83	Chlorobenzene-d5	82	6.365	6.365	(1.000)	407950	30.0000	(M)	SP
84	Chlorobenzene	112	6.377	6.377	(1.002)	1100820	50.0000	48.2130	
85	Ethylbenzene	106	6.383	6.383	(1.003)	579550	50.0000	47.9264	
86	1,1,1,2-Tetrachloroethane	131	6.412	6.412	(1.007)	407383	50.0000	50.4848	
87	mp-Xylene	106	6.481	6.481	(1.018)	1423711	100.000	96.0588	
88	o-Xylene	106	6.800	6.800	(1.068)	705056	50.0000	48.8935	
89	Styrene	104	6.837	6.837	(0.840)	1193913	50.0000	50.4243	
90	Bromoform	173	6.872	6.872	(0.844)	322600	50.0000	53.5222	
91	Isopropylbenzene	105	7.031	7.031	(0.863)	1607677	50.0000	48.7606	
M 100	1,2-Dichloroethene, Total	61				1204242	100.000	97.4012	
$ 92	4-Bromofluorobenzene	174	7.257	7.257	(0.891)	312767	30.0000	29.9492	
93	Bromobenzene	156	7.350	7.350	(0.903)	466748	50.0000	48.7755	
94	n-Propylbenzene	120	7.350	7.350	(0.903)	483295	50.0000	47.8714	
95	1,1,2,2-Tetrachloroethane	83	7.385	7.385	(0.907)	605807	50.0000	50.9305	
96	o-Chlorotoluene	91	7.486	7.486	(0.919)	1490270	50.0000	48.4146	
97	1,3,5-Trimethylbenzene	105	7.492	7.492	(0.920)	1544392	50.0000	50.4919	
98	1,2,3-Trichloropropane	110	7.506	7.506	(0.922)	182431	50.0000	49.6043	
99	trans-1,4-Dichloro-2-butene	53	7.526	7.526	(0.924)	184666	50.0000	50.1878(M)	MP
101	p-Chlorotoluene	91	7.610	7.610	(0.935)	1370427	50.0000	48.0341	
102	tert-Butylbenzene	134	7.752	7.752	(0.952)	337898	50.0000	47.0266	
103	Pentachloroethane	117	7.778	7.778	(0.955)	297194	50.0000	50.0304(M)	MP
104	1,2,4-Trimethylbenzene	105	7.807	7.807	(0.959)	1552374	50.0000	49.3807	
105	sec-Butylbenzene	105	7.897	7.897	(0.970)	1847136	50.0000	48.2894	
106	p-Isopropyltoluene	134	8.007	8.007	(0.983)	410316	50.0000	48.5076	
107	1,3-Dichlorobenzene	146	8.085	8.085	(0.993)	860016	50.0000	47.6296	
* 108	1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	368859	30.0000		
109	1,4-Dichlorobenzene	146	8.155	8.155	(1.001)	879966	50.0000	47.2705	
110	Benzyl Chloride	126	8.349	8.349	(1.025)	206229	50.0000	48.5069	
111	n-Butylbenzene	134	8.352	8.352	(1.026)	377170	50.0000	47.1679	
112	Hexachloroethane	117	8.494	8.494	(1.043)	301442	50.0000	51.1819	
113	1,2-Dichlorobenzene	146	8.505	8.505	(1.044)	849189	50.0000	48.6939	
114	1,2-Dibromo-3-chloropropane	75	9.171	9.171	(1.126)	112705	50.0000	50.0381	
115	Nitrobenzene	77	9.640	9.640	(1.184)	458899	500.000	452.296(A)	
116	Hexachlorobutadiene	225	9.715	9.715	(1.193)	227622	50.0000	47.9699	
M 120	1,3-Dichloropropene, Total	75				1468966	100.000	104.725	
117	1,2,4-Trichlorobenzene	180	9.744	9.744	(1.197)	562295	50.0000	49.1687	
M 121	Total Xylenes	106				2128767	150.000	144.952	
118	Naphthalene	128	10.011	10.011	(1.229)	1674259	50.0000	52.9952	
119	1,2,3-Trichlorobenzene	180	10.164	10.164	(1.248)	552040	50.0000	49.9606(M)	H

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071807.D

Date : 18-JUL-2024 14:03

Client ID:

Instrument: ms23.i

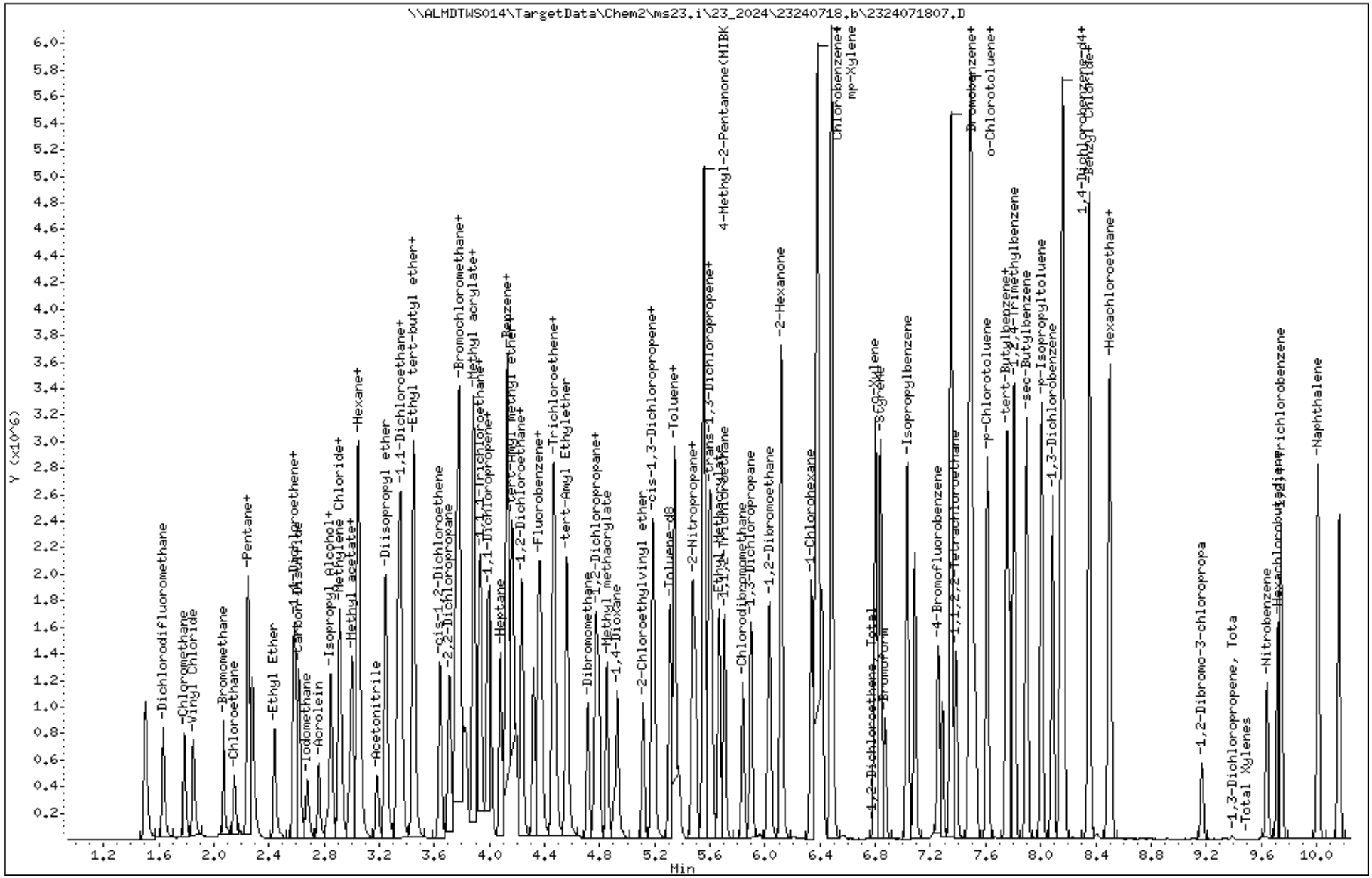
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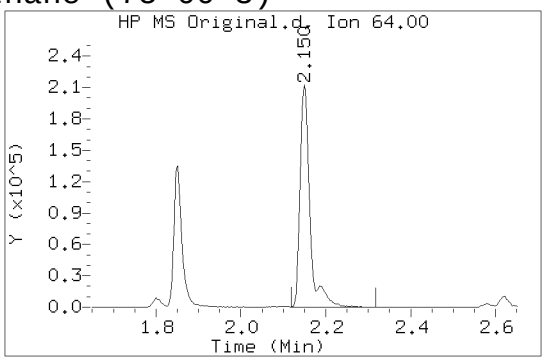


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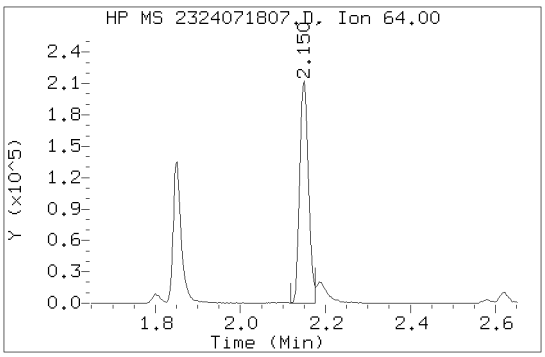
Chloroethane (75-00-3)

Reason Code: MP

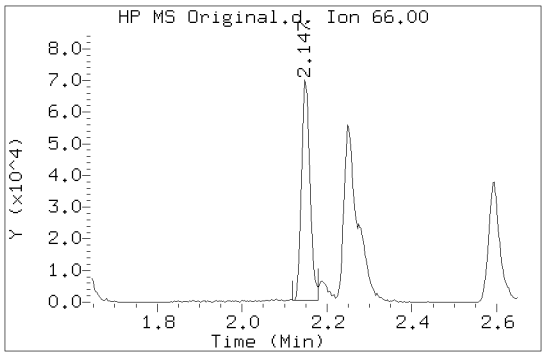
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18-Jul-2024
20:00



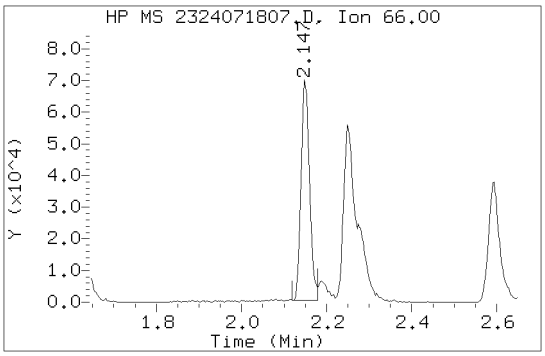
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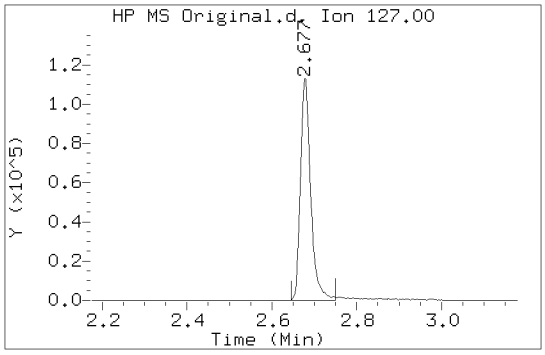
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17:14



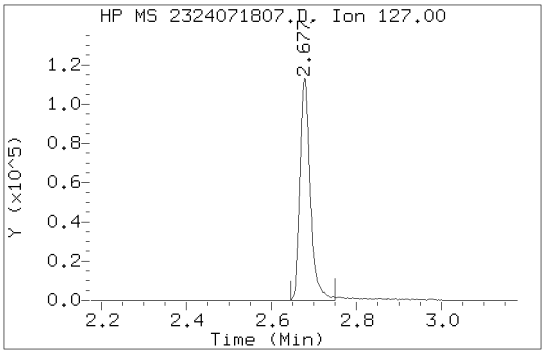
Iodomethane (74-88-4)

Reason Code: MP

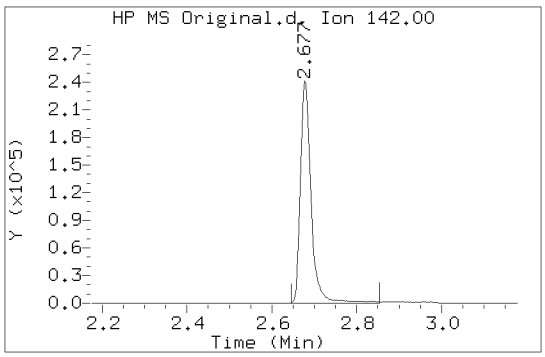
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18-Jul-2024
20:00



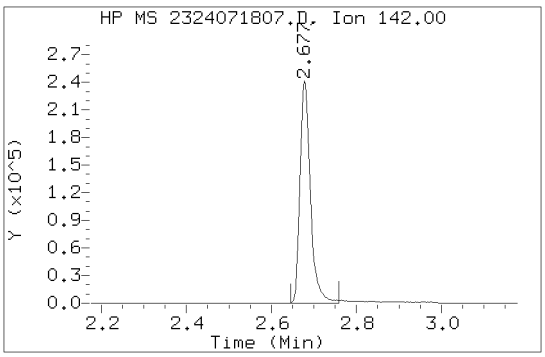
AFTER
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25-Jul-2024
17:14



BEFORE
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20:00



AFTER
MASS
142
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HEIGHT
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25-Jul-2024
17:14



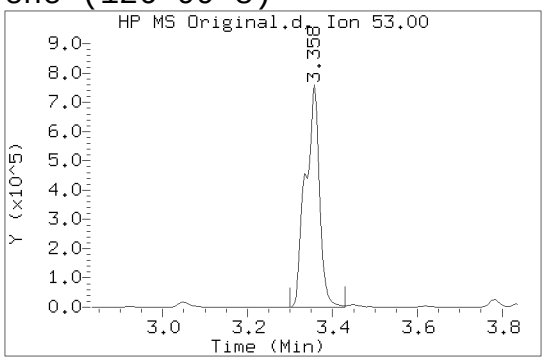
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Inj Date : 18-JUL-2024 14:03
InstruID : ms23.i
LabSampID : 1237

Chloroprene (126-99-8)

Reason Code: MP

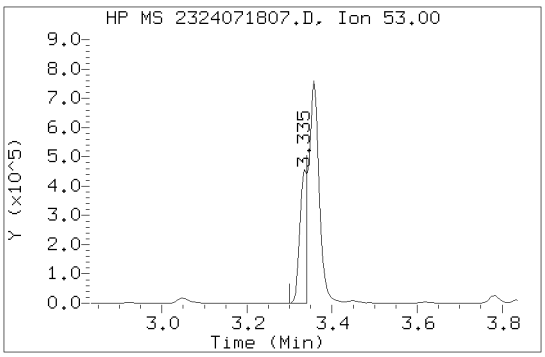
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MASS
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18-Jul-2024
20:00



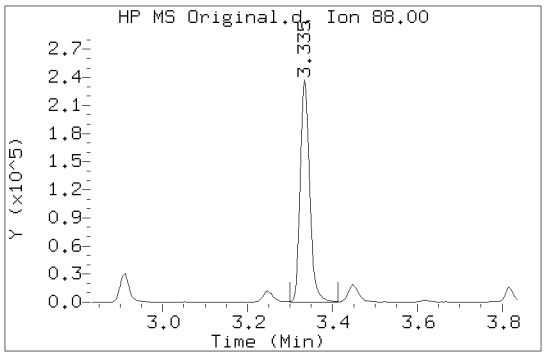
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25-Jul-2024
17:14



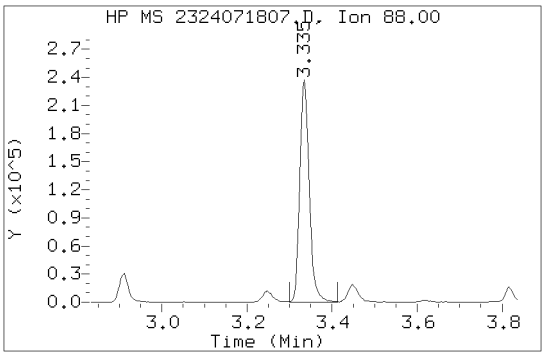
BEFORE

MASS
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HEIGHT
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18-Jul-2024
20:00



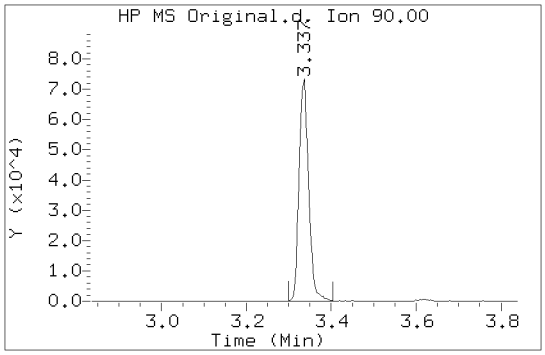
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17:14



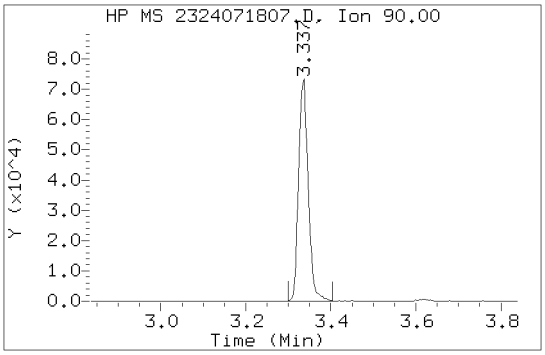
BEFORE

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18-Jul-2024
20:00



AFTER

MASS
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HEIGHT
73392
25-Jul-2024
17:14

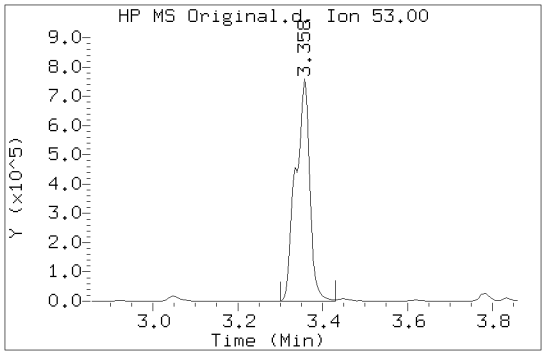


Acrylonitrile (107-13-1)

Reason Code: MP

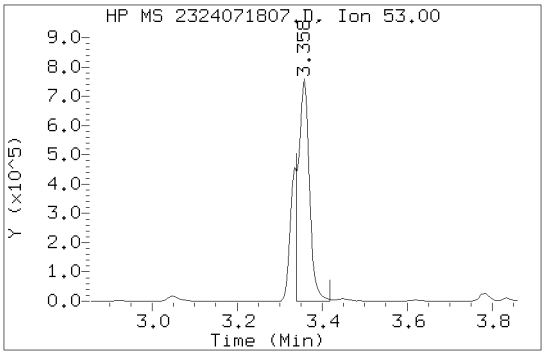
BEFORE

MASS
53
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HEIGHT
759041
18-Jul-2024
20:00



AFTER

MASS
53
AREA
1302307
HEIGHT
758756
25-Jul-2024
17:14



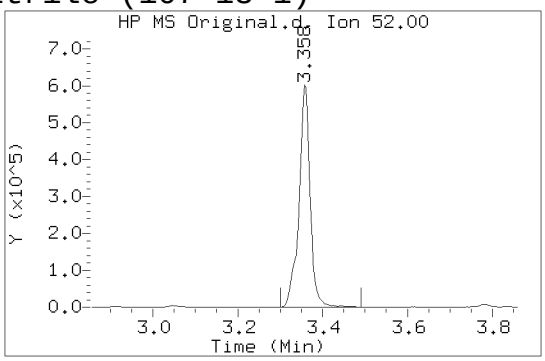
Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071807.D
Inj Date : 18-JUL-2024 14:03
InstruID : ms23.i
LabSampID : 1237

Acrylonitrile (107-13-1)

Reason Code: MP

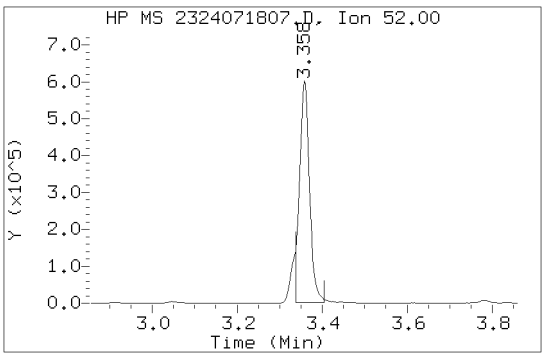
BEFORE

MASS
52
AREA
1084404
HEIGHT
602368
18-Jul-2024
20:00



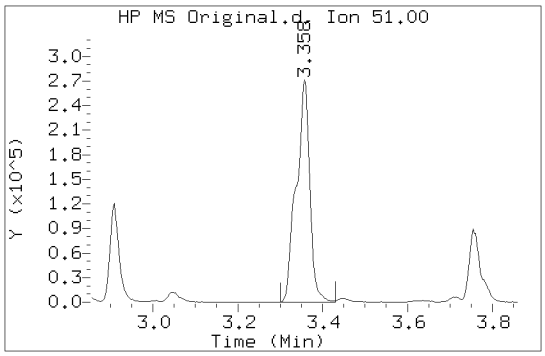
AFTER

MASS
52
AREA
964914
HEIGHT
600227
25-Jul-2024
17:14



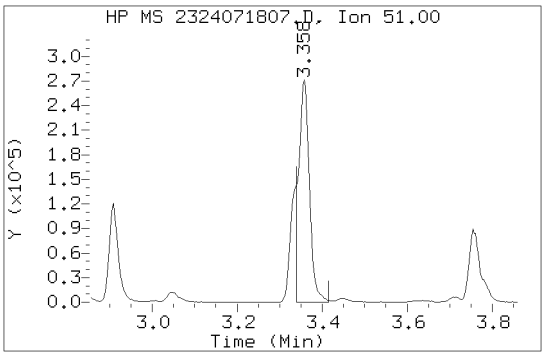
BEFORE

MASS
51
AREA
594334
HEIGHT
271424
18-Jul-2024
20:00



AFTER

MASS
51
AREA
456770
HEIGHT
271110
25-Jul-2024
17:14

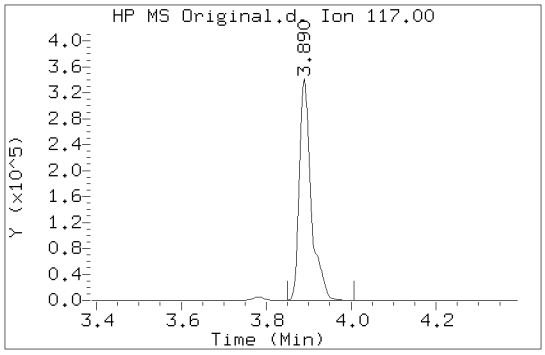


Carbon Tetrachloride (56-23-5)

Reason Code: MP

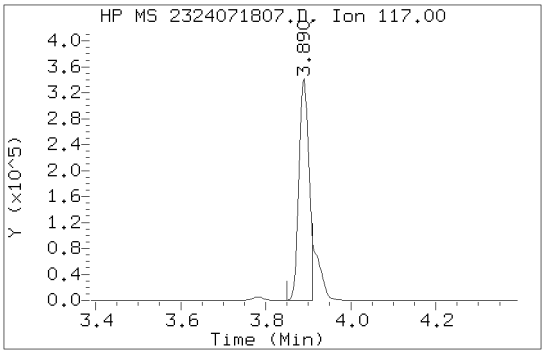
BEFORE

MASS
117
AREA
653370
HEIGHT
341760
18-Jul-2024
20:00



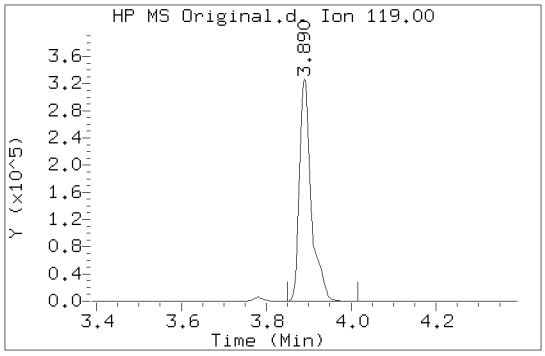
AFTER

MASS
117
AREA
554344
HEIGHT
341760
25-Jul-2024
17:14



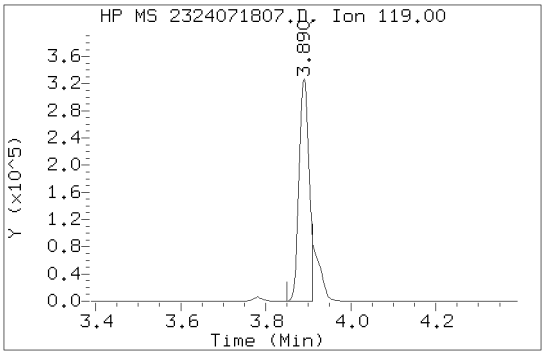
BEFORE

MASS
119
AREA
624479
HEIGHT
326848
18-Jul-2024
20:00



AFTER

MASS
119
AREA
529447
HEIGHT
326848
25-Jul-2024
17:14



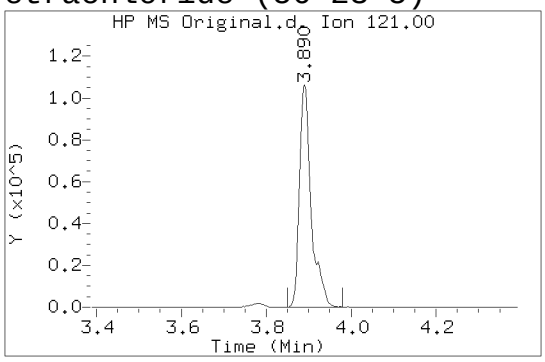
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Inj Date : 18-JUL-2024 14:03
InstruID : ms23.i
LabSampID : 1237

Carbon Tetrachloride (56-23-5)

Reason Code: MP

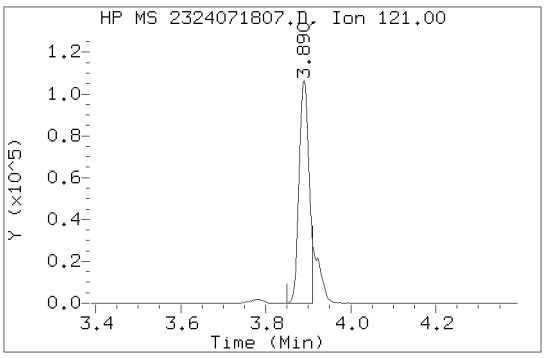
BEFORE

MASS
121
AREA
201713
HEIGHT
106272
18-Jul-2024
20:00



AFTER

MASS
121
AREA
171126
HEIGHT
106272
25-Jul-2024
17:14

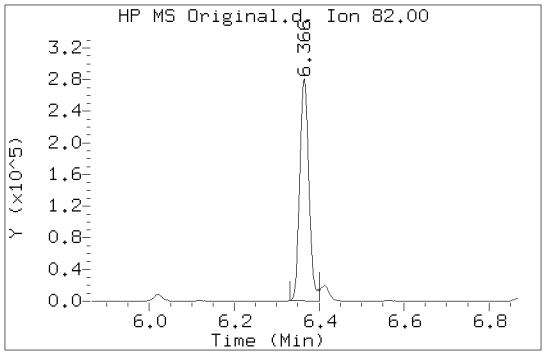


Chlorobenzene-d5 (3114-55-4)

Reason Code: SP

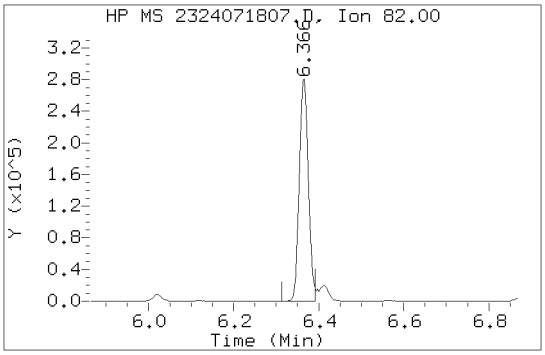
BEFORE

MASS
82
AREA
412970
HEIGHT
280434
18-Jul-2024
20:00



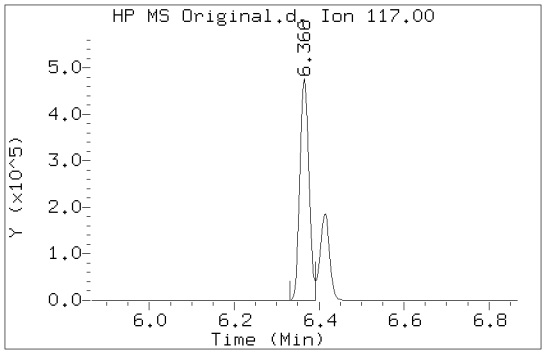
AFTER

MASS
82
AREA
407950
HEIGHT
280832
25-Jul-2024
17:14



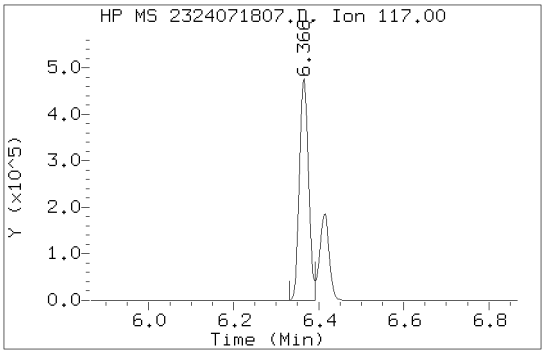
BEFORE

MASS
117
AREA
700611
HEIGHT
476250
18-Jul-2024
20:00



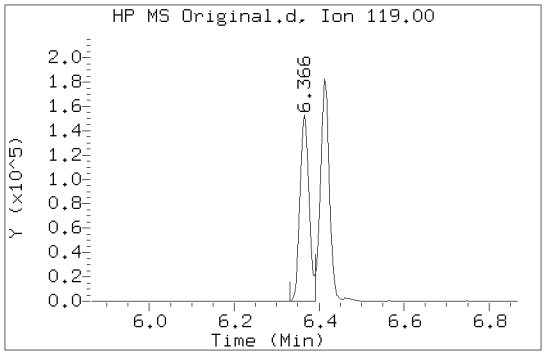
AFTER

MASS
117
AREA
700611
HEIGHT
476250
25-Jul-2024
17:14



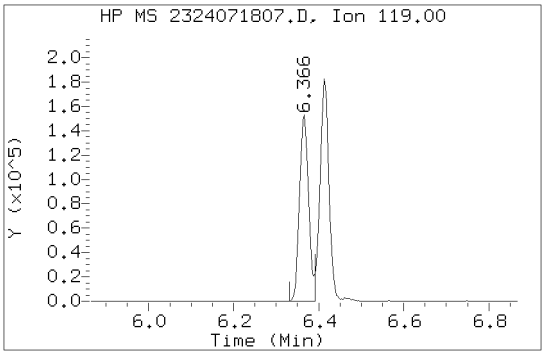
BEFORE

MASS
119
AREA
225774
HEIGHT
153152
18-Jul-2024
20:00



AFTER

MASS
119
AREA
225774
HEIGHT
153152
25-Jul-2024
17:14

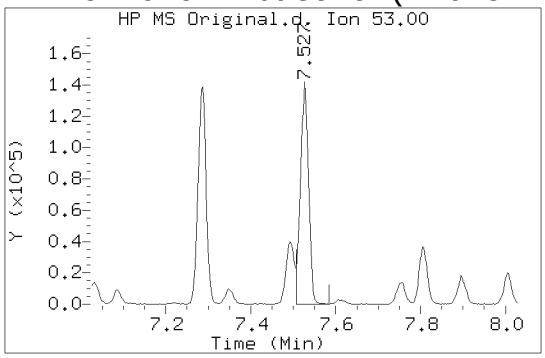


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Inj Date : 18-JUL-2024 14:03
InstruID : ms23.i
LabSampID : 1237

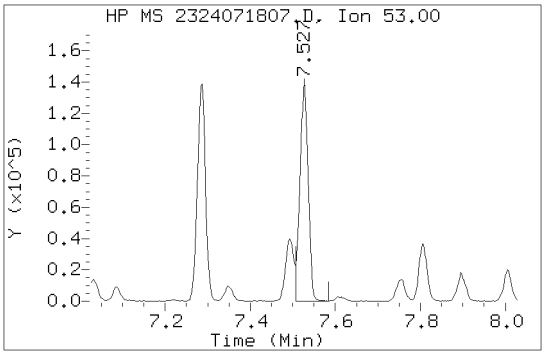
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

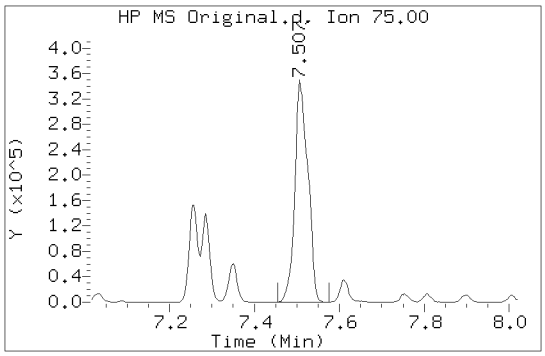
BEFORE
MASS
53
AREA
184666
HEIGHT
142016
18-Jul-2024
20:00



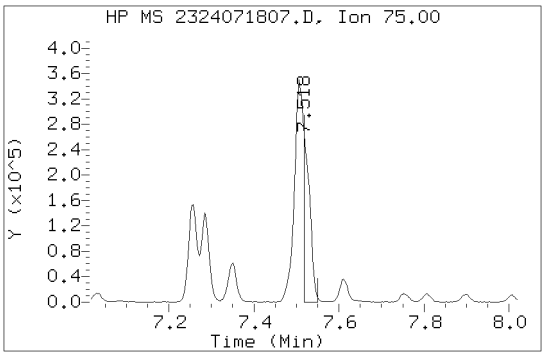
AFTER
MASS
53
AREA
184666
HEIGHT
142016
25-Jul-2024
17:14



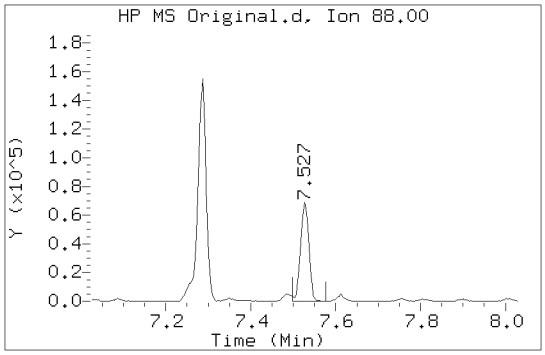
BEFORE
MASS
75
AREA
744858
HEIGHT
349642
18-Jul-2024
20:00



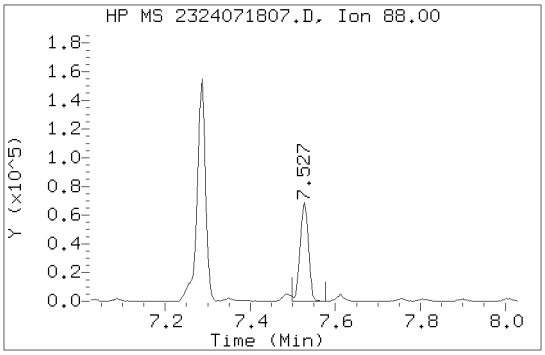
AFTER
MASS
75
AREA
262004
HEIGHT
263913
25-Jul-2024
17:14



BEFORE
MASS
88
AREA
92177
HEIGHT
68960
18-Jul-2024
20:00



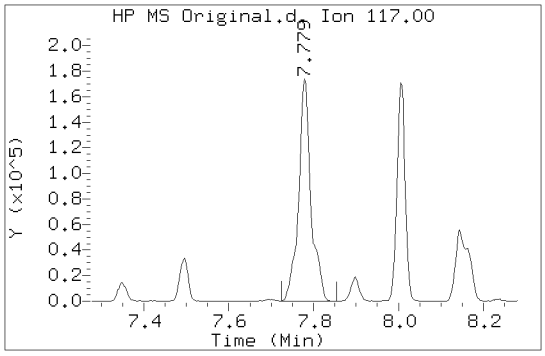
AFTER
MASS
88
AREA
92177
HEIGHT
68960
25-Jul-2024
17:14



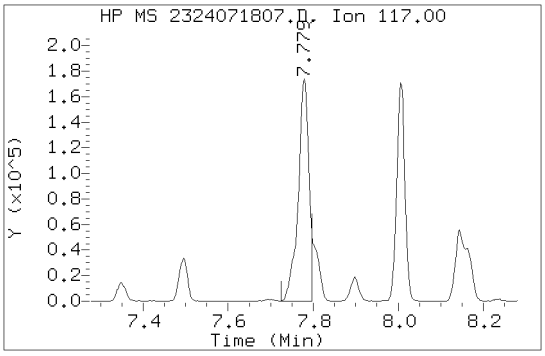
Pentachloroethane (76-01-7)

Reason Code: MP

BEFORE
MASS
117
AREA
347831
HEIGHT
173952
18-Jul-2024
20:00



AFTER
MASS
117
AREA
297194
HEIGHT
173952
25-Jul-2024
17:14



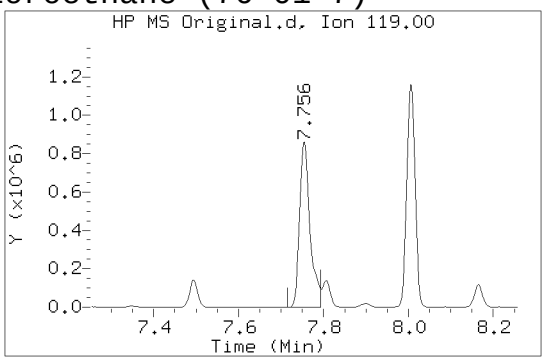
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Inj Date : 18-JUL-2024 14:03
InstruID : ms23.i
LabSampID : 1237

Pentachloroethane (76-01-7)

Reason Code: MP

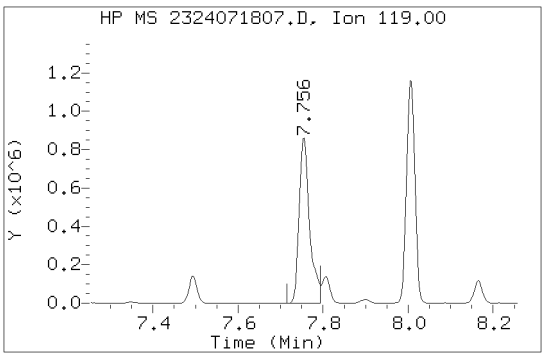
BEFORE

MASS
119
AREA
1462577
HEIGHT
860544
18-Jul-2024
20:00



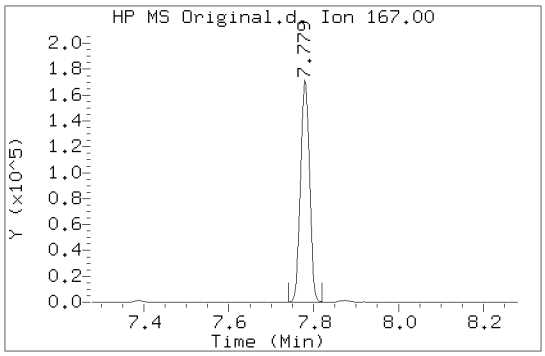
AFTER

MASS
119
AREA
1462577
HEIGHT
860544
25-Jul-2024
17:14



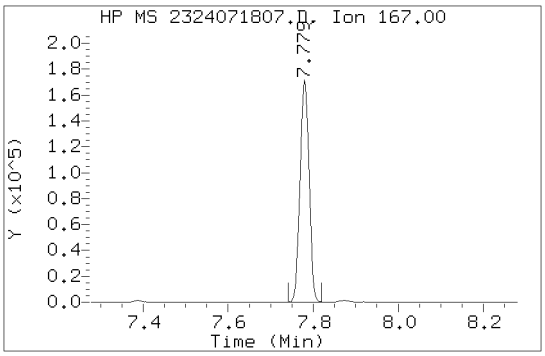
BEFORE

MASS
167
AREA
249194
HEIGHT
171712
18-Jul-2024
20:00



AFTER

MASS
167
AREA
249194
HEIGHT
171712
25-Jul-2024
17:14

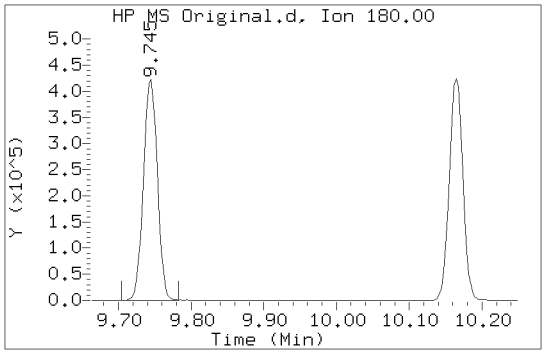


1,2,3-Trichlorobenzene (87-61-6)

Reason Code: H

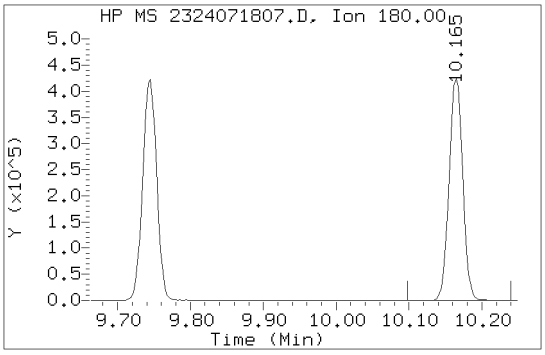
BEFORE

MASS
180
AREA
563506
HEIGHT
422720
18-Jul-2024
20:00



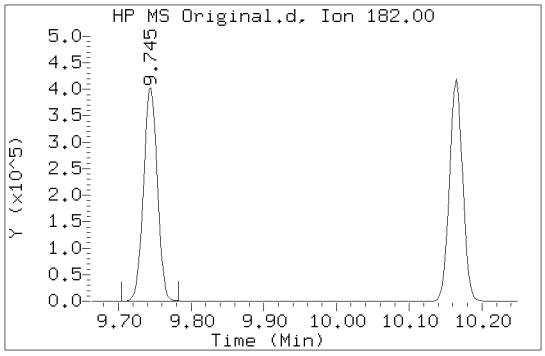
AFTER

MASS
180
AREA
552040
HEIGHT
424031
25-Jul-2024
17:14



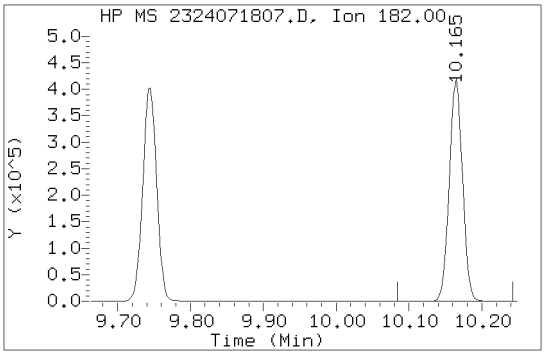
BEFORE

MASS
182
AREA
532478
HEIGHT
402176
18-Jul-2024
20:00



AFTER

MASS
182
AREA
527993
HEIGHT
419520
25-Jul-2024
17:14



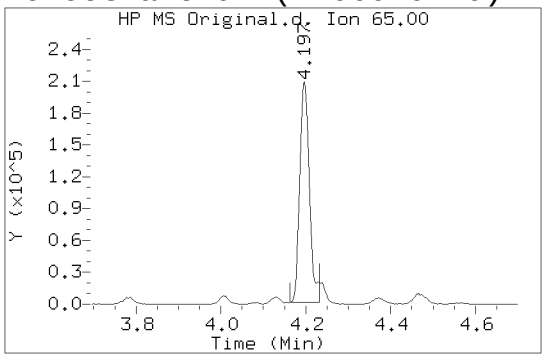
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Inj Date : 18-JUL-2024 14:03
InstruID : ms23.i
LabSampID : 1237

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

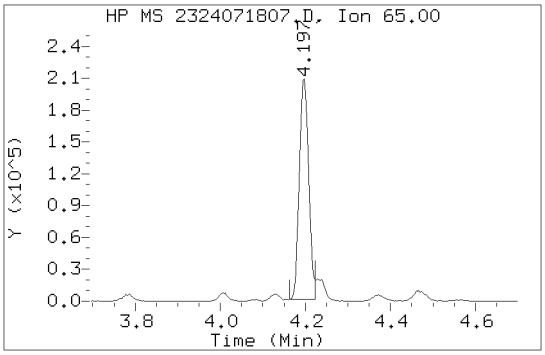
BEFORE

MASS
65
AREA
322671
HEIGHT
207533
18-Jul-2024
20:00



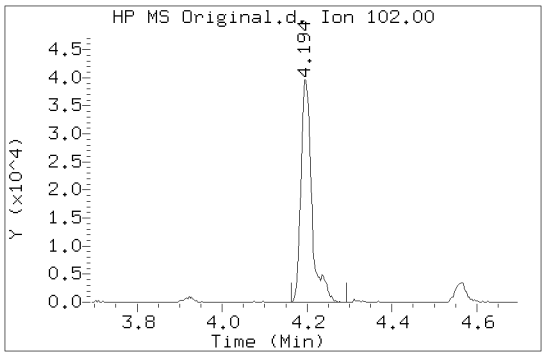
AFTER

MASS
65
AREA
313100
HEIGHT
207533
25-Jul-2024
17:14



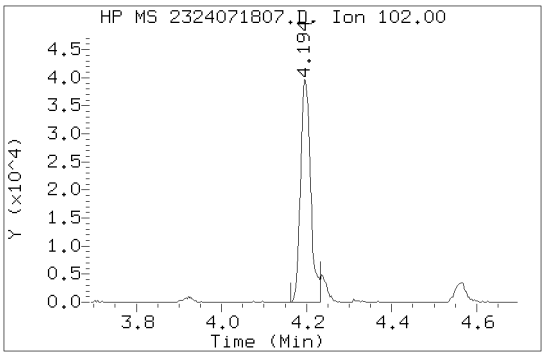
BEFORE

MASS
102
AREA
69467
HEIGHT
39616
18-Jul-2024
20:00



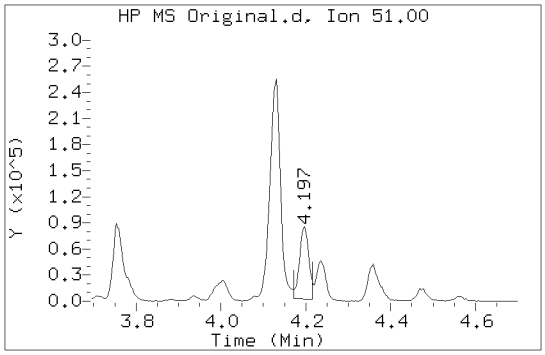
AFTER

MASS
102
AREA
64601
HEIGHT
39616
25-Jul-2024
17:14



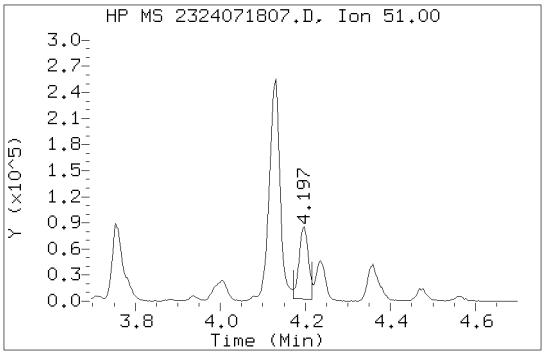
BEFORE

MASS
51
AREA
124196
HEIGHT
82925
18-Jul-2024
20:00



AFTER

MASS
51
AREA
124196
HEIGHT
82925
25-Jul-2024
17:14



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:14
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240718.b/232407180
Inj Date: 18-JUL-2024 14:03
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071808.D
Lab Smp Id: 1238
Inj Date : 18-JUL-2024 14:23
Operator : ILY Inst ID: ms23.i
Smp Info : 1238;;1;1;5;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\23-8260b09.m
Meth Date : 22-Jul-2024 06:29 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 14:23 Cal File: 2324071808.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.632	1.632	(0.375)	1382927	100.000	108.624	
2	Chloromethane	50	1.785	1.785	(0.410)	1319987	100.000	101.645	
3	Vinyl Chloride	62	1.849	1.849	(0.424)	1208009	100.000	105.215	
4	Bromomethane	94	2.072	2.072	(0.476)	552439	100.000	103.689	
5	Chloroethane	64	2.144	2.144	(0.492)	676196	100.000	109.314	
6	Pentane	41	2.240	2.240	(0.514)	827822	100.000	98.6591	
7	Trichlorofluoromethane	101	2.245	2.245	(0.516)	1554541	100.000	110.634	
8	Dichlorofluoromethane	67	2.277	2.277	(0.523)	1835577	100.000	101.415	
9	Ethyl Ether	74	2.439	2.439	(0.560)	593671	100.000	103.254	
10	1,1-Dichloroethene	61	2.575	2.575	(0.591)	1313183	100.000	104.497	
11	Freon 113	101	2.590	2.590	(0.595)	781758	100.000	105.839	
12	Carbon Disulfide	76	2.616	2.616	(0.601)	2618650	100.000	102.583	
13	Iodomethane	127	2.674	2.674	(0.614)	418080	100.000	113.338	
14	Acrolein	56	2.761	2.761	(0.634)	874111	500.000	519.111(A)	
15	Isopropyl Alcohol	45	2.824	2.824	(0.648)	407723	500.000	507.353(A)	
16	3-Chloro-1-propene	41	2.848	2.848	(0.654)	1426763	100.000	107.531	
17	Methylene Chloride	84	2.908	2.908	(0.668)	935634	100.000	101.887	
18	Acetone	58	2.920	2.920	(0.670)	537509	500.000	502.264(A)	
19	Methyl acetate	74	2.984	2.984	(0.685)	200164	100.000	102.545	
20	trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	1285362	100.000	102.293	
21	Hexane	57	3.042	3.042	(0.698)	1913833	100.000	102.365	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.047	3.047	(0.700)	2853594	100.000	105.875	
	23 tert.- Butyl Alcohol	59	3.068	3.068	(0.704)	648005	500.000	556.187(A)	
	24 Acetonitrile	41	3.183	3.183	(0.731)	833912	500.000	494.531(A)	
	25 Diisopropyl ether	45	3.244	3.244	(0.745)	3212830	100.000	104.300	
	26 Chloroprene	53	3.334	3.334	(0.765)	1191436	100.000	107.282(M)	MP
	27 1,1-Dichloroethane	63	3.346	3.346	(0.768)	1698937	100.000	103.114	
	28 Acrylonitrile	53	3.357	3.357	(0.771)	2733657	500.000	521.993(AM)	MP
	29 Ethyl tert-butyl ether	59	3.447	3.447	(0.791)	3131930	100.000	108.291	
	30 n-Propanol	41	3.447	3.447	(0.791)	656590	1000.00	984.410(A)	
	31 Vinyl Acetate	86	3.450	3.450	(0.792)	242289	100.000	112.595	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	1328662	100.000	104.898	
	33 2,2-Dichloropropane	77	3.710	3.710	(0.852)	1334305	100.000	105.389	
	34 Bromochloromethane	128	3.754	3.754	(0.862)	480044	100.000	105.044	
	35 Cyclohexane	84	3.780	3.780	(0.868)	1312597	100.000	100.490	
	36 Chloroform	83	3.780	3.780	(0.868)	1775022	100.000	103.494	
	37 Ethyl Acetate	43	3.815	3.815	(0.876)	1320594	100.000	105.398	
	38 Methyl acrylate	55	3.832	3.832	(0.880)	1111369	100.000	106.445	
	39 Carbon Tetrachloride	117	3.890	3.890	(0.893)	1225313	100.000	110.015(M)	MP
$	41 Dibromofluoromethane	113	3.884	3.884	(0.892)	262579	30.0000	30.2008	
	40 Tetrahydrofuran	42	3.881	3.881	(0.891)	1896879	500.000	524.477(A)	
	42 1,1,1-Trichloroethane	97	3.922	3.922	(0.900)	1439211	100.000	105.918	
	43 2-Butanone	72	3.936	3.936	(0.904)	723545	500.000	518.053(A)	
	44 1,1-Dichloropropene	75	3.985	3.985	(0.915)	1283340	100.000	102.285	
	45 1-Chlorobutane	41	4.003	4.003	(0.919)	1062783	100.000	99.8441	
	46 Heptane	71	4.078	4.078	(0.936)	625368	100.000	96.8360	
	47 Benzene	78	4.127	4.127	(0.947)	3553586	100.000	100.892	
	48 Propionitrile	54	4.110	4.110	(0.944)	942593	500.000	522.419(A)	
	49 Methacrylonitrile	67	4.127	4.127	(0.947)	491942	100.000	106.196	
	50 tert-Amyl methyl ether	73	4.162	4.162	(0.955)	2854349	100.000	108.101	
	54 Isobutyl alcohol	42	4.168	4.168	(0.957)	404183	1000.00	1015.75(A)	
$	51 1,2-Dichloroethane-d4	65	4.194	4.194	(0.963)	330185	30.0000	29.6576(M)	MP
	52 1,2-Dichloroethane	62	4.234	4.234	(0.972)	1455732	100.000	102.428	
	53 tert-Amyl Alcohol	59	4.237	4.237	(0.973)	560222	500.000	506.996(A)	
*	55 Fluorobenzene	96	4.356	4.356	(1.000)	935462	30.0000		
	56 Diisobutylene	57	4.371	4.371	(1.003)	2201598	100.000	102.398	
	57 Trichloroethene	95	4.457	4.457	(1.023)	989418	100.000	102.377	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	1434907	100.000	101.032	
	59 tert-Amyl Ethylether	59	4.562	4.562	(1.047)	2354152	100.000	107.836	
	60 Dibromomethane	93	4.712	4.712	(1.082)	672338	100.000	106.160	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.095)	994309	100.000	102.582	
	62 Bromodichloromethane	83	4.793	4.793	(1.100)	1346405	100.000	109.942	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	1131295	100.000	107.447	
	64 1,4-Dioxane	88	4.903	4.903	(1.126)	370639	2500.00	2756.53(A)	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.174)	772250	100.000	110.230	
	66 cis-1,3-Dichloropropene	75	5.181	5.181	(0.814)	1659690	100.000	110.852	
	67 Octane	85	5.196	5.196	(0.817)	544068	100.000	99.6259	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	1017534	30.0000	30.0258	
	69 Toluene	92	5.343	5.343	(0.840)	2211084	100.000	100.504	
	70 Chloroacetonitrile	75	5.378	5.378	(0.845)	365193	500.000	514.614(A)	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	2075433	500.000	519.437(A)	
	72 1,1-Dichloro-2-Propanone	63	5.494	5.494	(0.863)	153322	500.000	511.025(AQ)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.555	5.555	(0.873)	6173564	500.000	530.715(A)	
	75 trans-1,3-Dichloropropene	75	5.592	5.592	(0.879)	1586129	100.000	113.473	
	74 Tetrachloroethene	164	5.607	5.607	(0.881)	824358	100.000	102.218	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	76 Ethyl Methacrylate	69	5.665	5.665	(0.890)	1533647	100.000	111.381	
	77 1,1,2-Trichloroethane	83	5.705	5.705	(0.897)	789882	100.000	103.610	
	78 Chlorodibromomethane	129	5.839	5.839	(0.918)	1070052	100.000	113.495	
	79 1,3-Dichloropropane	76	5.896	5.896	(0.927)	1611516	100.000	103.443	
	80 1,2-Dibromoethane	107	6.021	6.021	(0.946)	889248	100.000	109.242	
	81 2-Hexanone	43	6.116	6.116	(0.961)	4484299	500.000	536.913(A)	
	82 1-Chlorohexane	91	6.337	6.337	(0.996)	1103892	100.000	94.7766	
*	83 Chlorobenzene-d5	82	6.363	6.363	(1.000)	420962	30.0000	(M)	MP
	84 Chlorobenzene	112	6.377	6.377	(1.002)	2418451	100.000	102.648	
	85 Ethylbenzene	106	6.383	6.383	(1.003)	1252380	100.000	100.365	
	86 1,1,1,2-Tetrachloroethane	131	6.415	6.415	(1.008)	897747	100.000	107.814	
	87 mp-Xylene	106	6.481	6.481	(1.019)	3079653	200.000	201.364(A)	
	88 o-Xylene	106	6.803	6.803	(1.069)	1527897	100.000	102.680	
	89 Styrene	104	6.835	6.835	(0.839)	2600613	100.000	104.704	
	90 Bromoform	173	6.872	6.872	(0.844)	727881	100.000	115.120	
	91 Isopropylbenzene	105	7.031	7.031	(0.863)	3412888	100.000	98.6763	
M	100 1,2-Dichloroethene, Total	61				2614024	200.000	207.191	
$	92 4-Bromofluorobenzene	174	7.257	7.257	(0.891)	328641	30.0000	29.9989	
	93 Bromobenzene	156	7.350	7.350	(0.903)	1026185	100.000	102.227	
	94 n-Propylbenzene	120	7.350	7.350	(0.903)	1050521	100.000	99.1948	
	95 1,1,2,2-Tetrachloroethane	83	7.388	7.388	(0.907)	1303061	100.000	104.431	
	96 o-Chlorotoluene	91	7.486	7.486	(0.919)	3262888	100.000	101.049	
	97 1,3,5-Trimethylbenzene	105	7.495	7.495	(0.920)	3323480	100.000	103.580	
	98 1,2,3-Trichloropropane	110	7.509	7.509	(0.922)	395743	100.000	102.578	
	99 trans-1,4-Dichloro-2-butene	53	7.527	7.527	(0.924)	427167	100.000	110.670(QM)	MP
	101 p-Chlorotoluene	91	7.610	7.610	(0.935)	2962779	100.000	98.9950	
	102 tert-Butylbenzene	134	7.755	7.755	(0.952)	720888	100.000	95.6415	
	103 Pentachloroethane	117	7.778	7.778	(0.955)	660719	100.000	106.030(M)	MP
	104 1,2,4-Trimethylbenzene	105	7.807	7.807	(0.959)	3334087	100.000	101.102	
	105 sec-Butylbenzene	105	7.897	7.897	(0.970)	3873446	100.000	96.5318	
	106 p-Isopropyltoluene	134	8.007	8.007	(0.983)	888438	100.000	100.124	
	107 1,3-Dichlorobenzene	146	8.088	8.088	(0.993)	1872864	100.000	98.8773	
*	108 1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	386937	30.0000	(Q)	
	109 1,4-Dichlorobenzene	146	8.158	8.158	(1.002)	1926794	100.000	98.6688	
	110 Benzyl Chloride	126	8.346	8.346	(1.025)	460230	100.000	102.845(Q)	
	111 n-Butylbenzene	134	8.355	8.355	(1.026)	811018	100.000	96.6852	
	112 Hexachloroethane	117	8.494	8.494	(1.043)	668669	100.000	108.229	
	113 1,2-Dichlorobenzene	146	8.505	8.505	(1.044)	1874286	100.000	102.453	
	114 1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	246653	100.000	104.391	
	115 Nitrobenzene	77	9.640	9.640	(1.184)	1212604	1000.00	1041.89(A)	
	116 Hexachlorobutadiene	225	9.718	9.718	(1.193)	469837	100.000	94.3891	
M	120 1,3-Dichloropropene, Total	75				3245819	200.000	224.325	
	117 1,2,4-Trichlorobenzene	180	9.744	9.744	(1.197)	1193614	100.000	99.4966	
M	121 Total Xylenes	106				4607550	300.000	304.044	
	118 Naphthalene	128	10.011	10.011	(1.229)	3603942	100.000	108.746	
	119 1,2,3-Trichlorobenzene	180	10.164	10.164	(1.248)	1216781	100.000	104.976	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071808.D

Date : 18-JUL-2024 14:23

Client ID:

Instrument: ms23.i

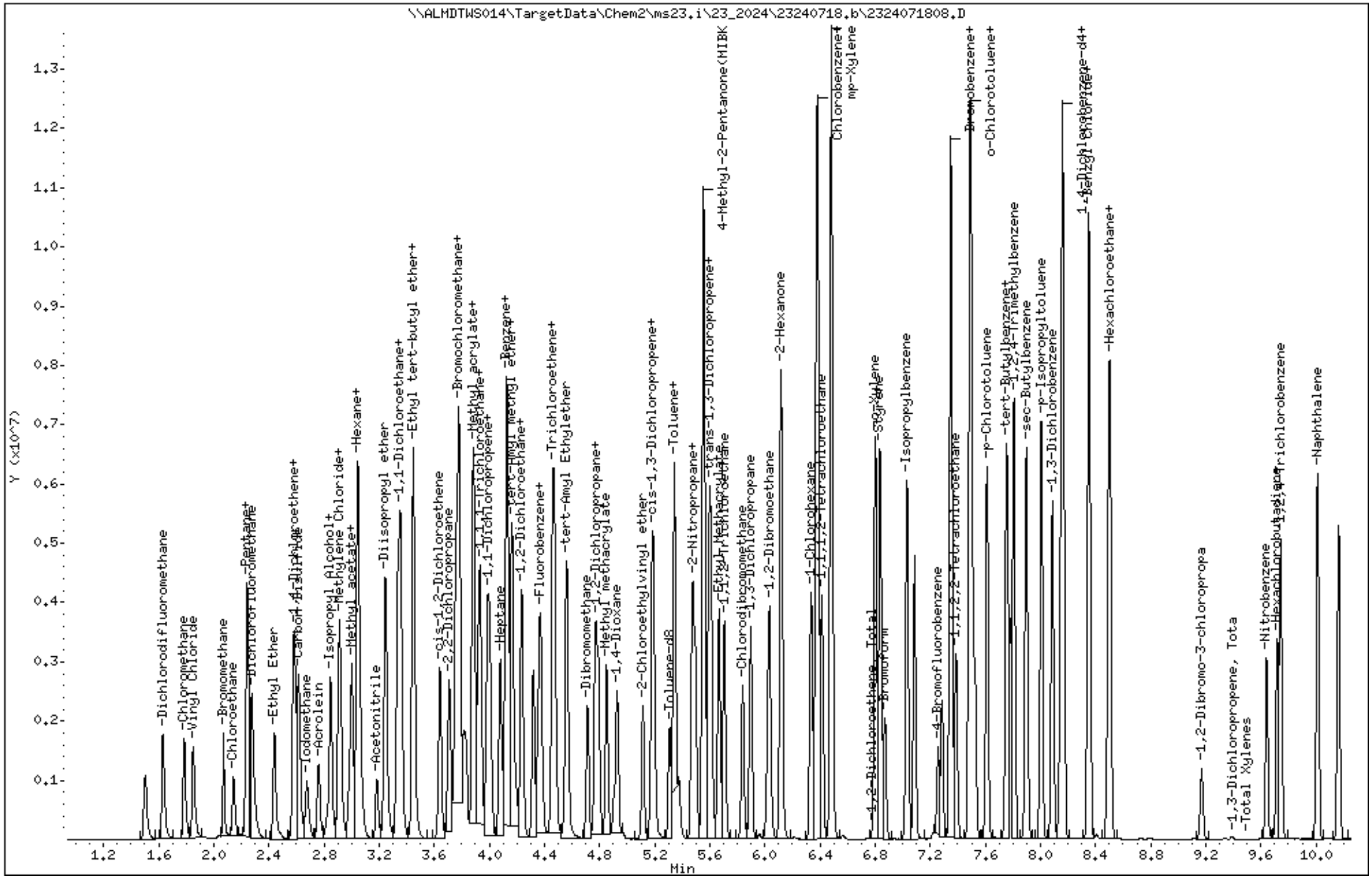
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Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25



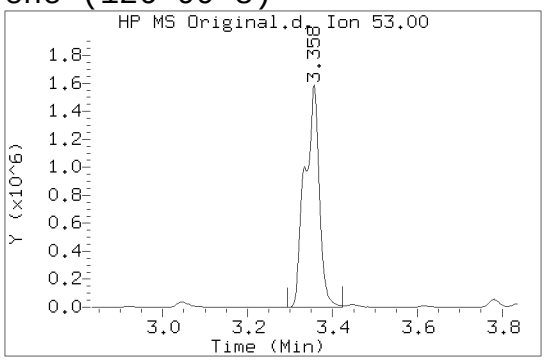
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Inj Date : 18-JUL-2024 14:23
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LabSampID : 1238

Chloroprene (126-99-8)

Reason Code: MP

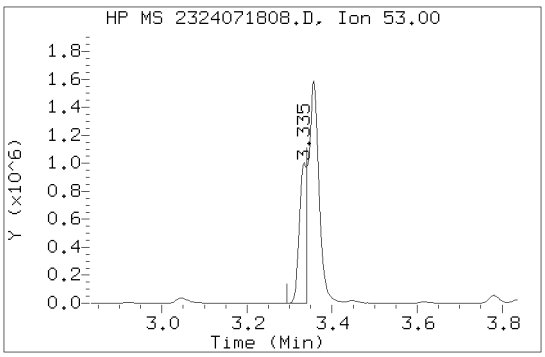
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18-Jul-2024
20:09



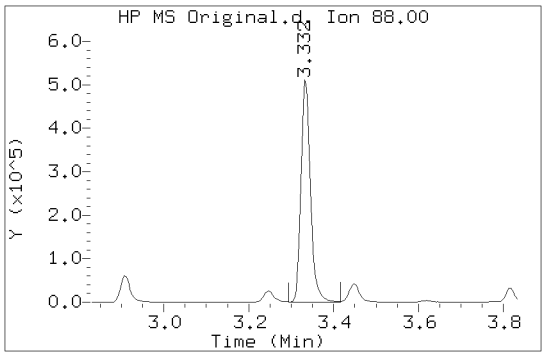
AFTER

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25-Jul-2024
17:14



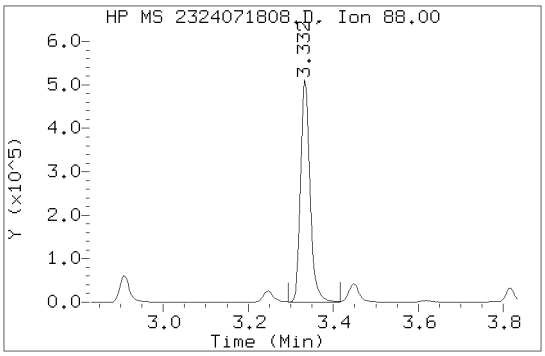
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18-Jul-2024
20:09



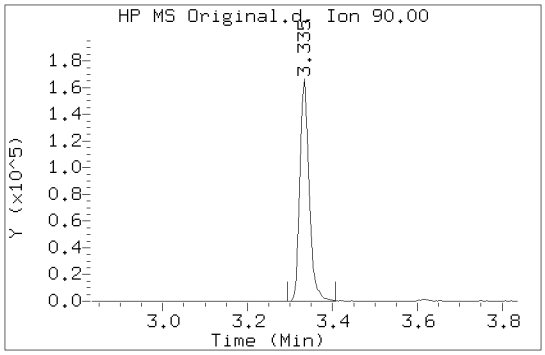
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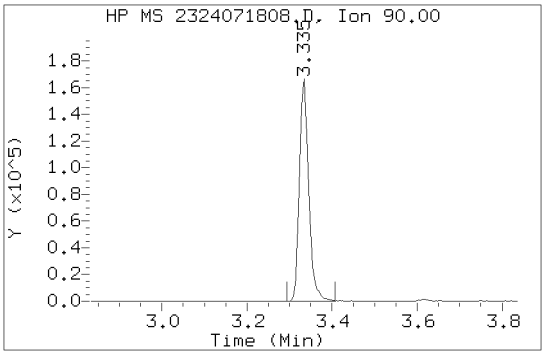
BEFORE

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18-Jul-2024
20:09



AFTER

MASS
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25-Jul-2024
17:14

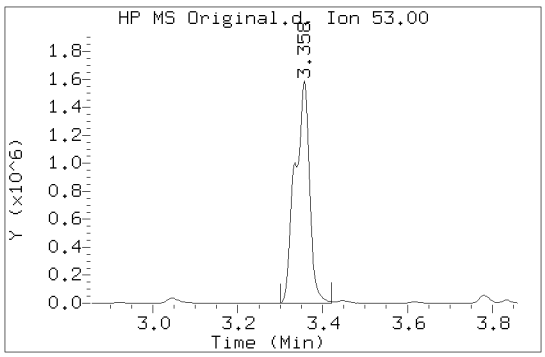


Acrylonitrile (107-13-1)

Reason Code: MP

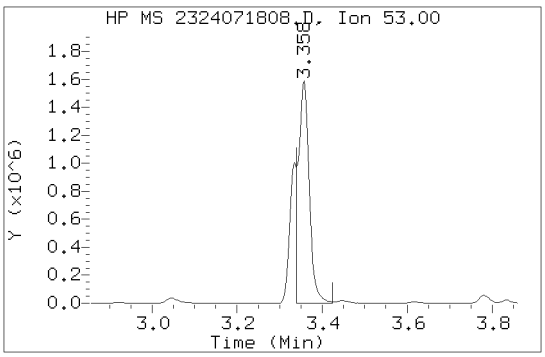
BEFORE

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20:09



AFTER

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25-Jul-2024
17:14



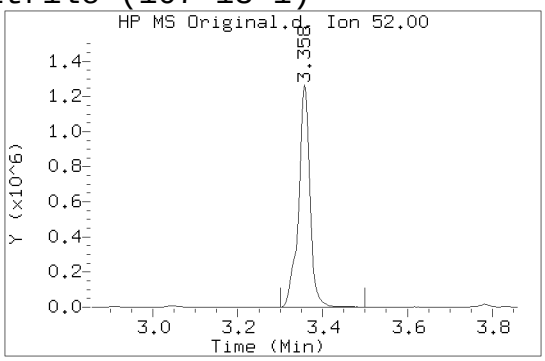
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Acrylonitrile (107-13-1)

Reason Code: MP

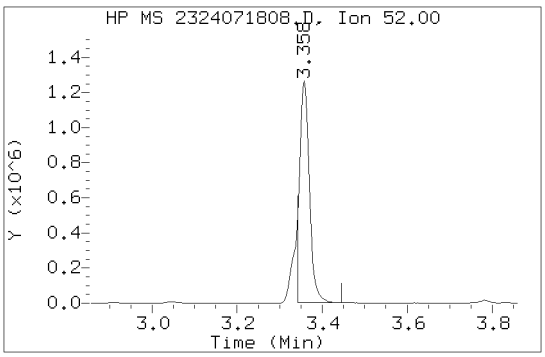
BEFORE

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18-Jul-2024
20:09



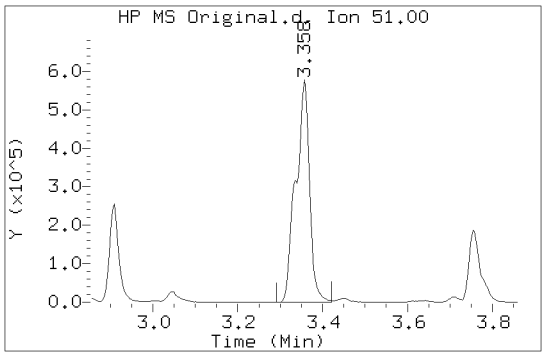
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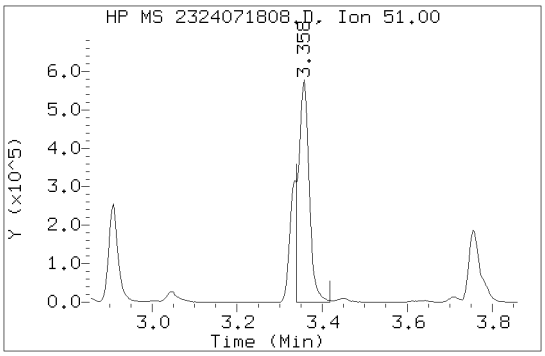
BEFORE

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20:09



AFTER

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25-Jul-2024
17:14

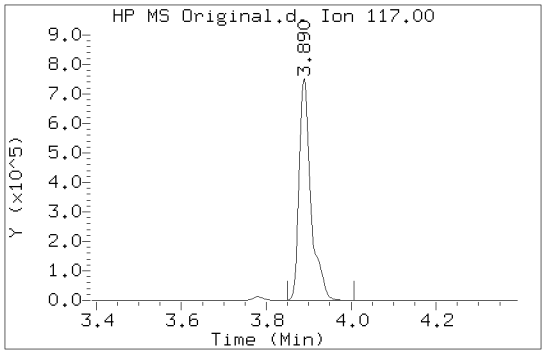


Carbon Tetrachloride (56-23-5)

Reason Code: MP

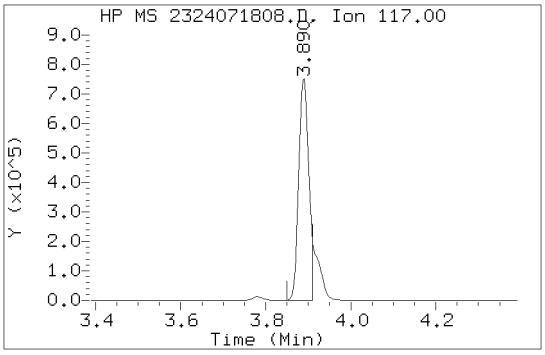
BEFORE

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HEIGHT
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18-Jul-2024
20:09



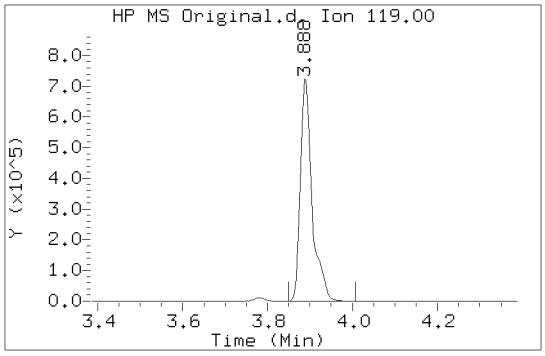
AFTER

MASS
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25-Jul-2024
17:14



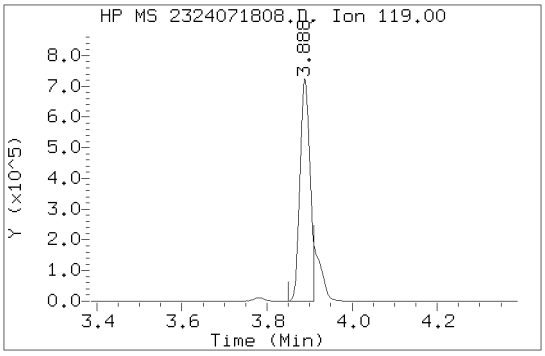
BEFORE

MASS
119
AREA
1370824
HEIGHT
724032
18-Jul-2024
20:09



AFTER

MASS
119
AREA
1170002
HEIGHT
724032
25-Jul-2024
17:14



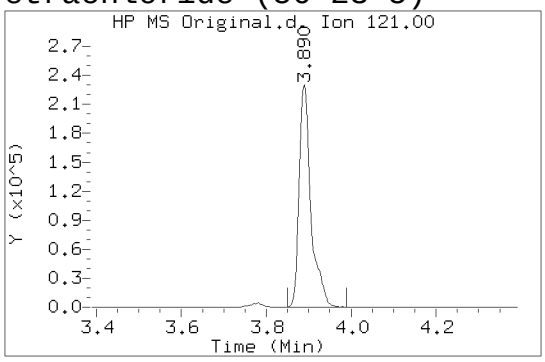
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Inj Date : 18-JUL-2024 14:23
InstruID : ms23.i
LabSampID : 1238

Carbon Tetrachloride (56-23-5)

Reason Code: MP

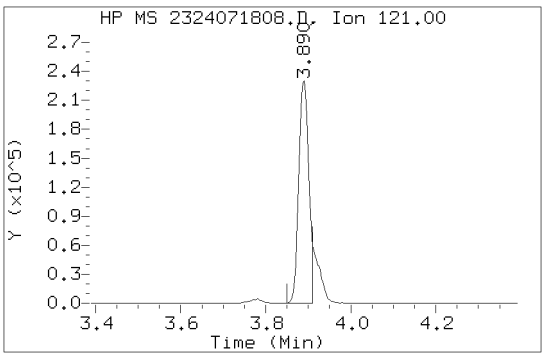
BEFORE

MASS
121
AREA
439043
HEIGHT
230080
18-Jul-2024
20:09



AFTER

MASS
121
AREA
374885
HEIGHT
230080
25-Jul-2024
17:14

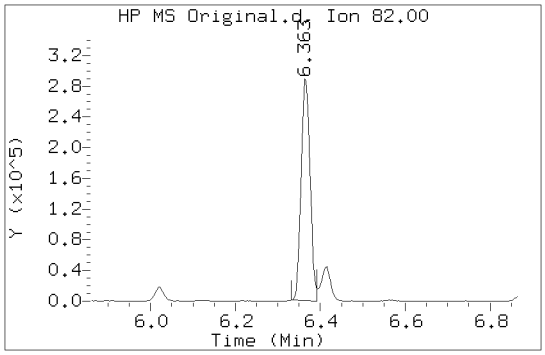


Chlorobenzene-d5 (3114-55-4)

Reason Code: MP

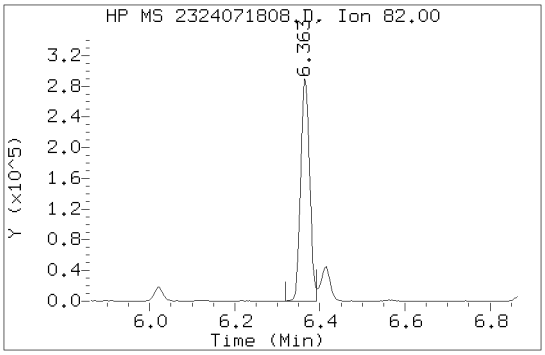
BEFORE

MASS
82
AREA
418253
HEIGHT
288937
18-Jul-2024
20:09



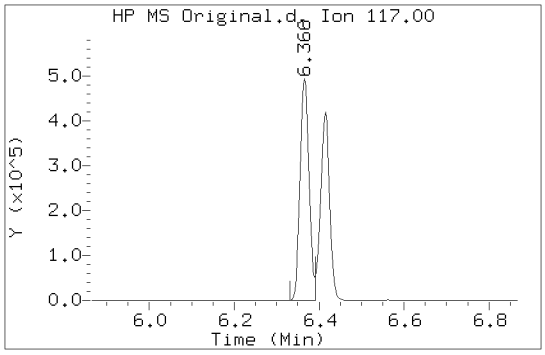
AFTER

MASS
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AREA
420962
HEIGHT
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25-Jul-2024
17:14



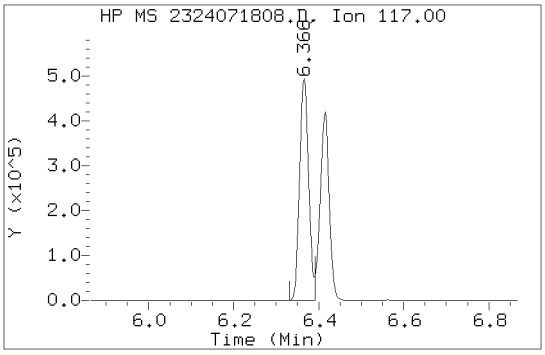
BEFORE

MASS
117
AREA
722184
HEIGHT
493343
18-Jul-2024
20:09



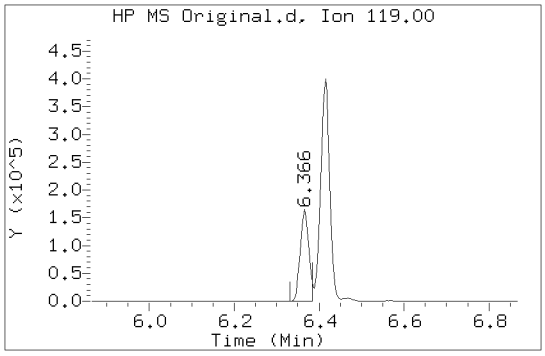
AFTER

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493343
25-Jul-2024
17:14



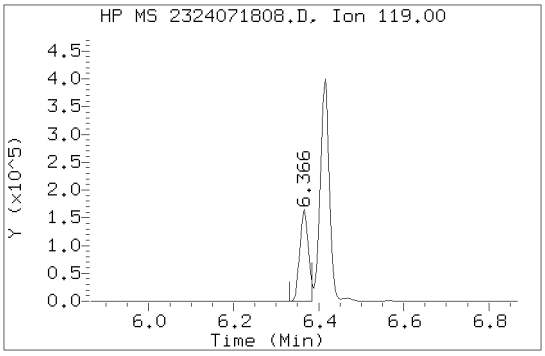
BEFORE

MASS
119
AREA
222585
HEIGHT
164995
18-Jul-2024
20:09



AFTER

MASS
119
AREA
222585
HEIGHT
164995
25-Jul-2024
17:14

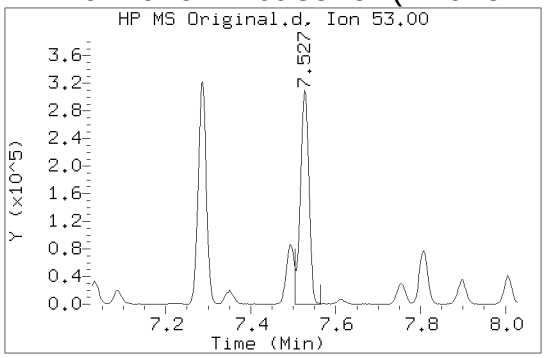


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Inj Date : 18-JUL-2024 14:23
InstruID : ms23.i
LabSampID : 1238

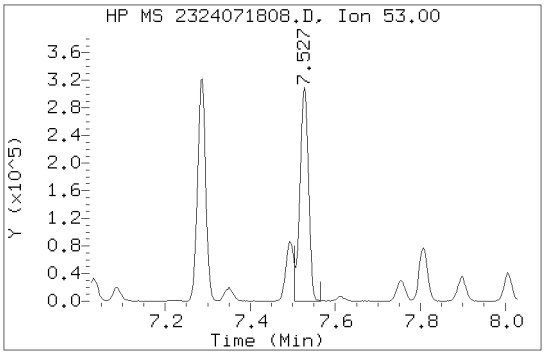
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

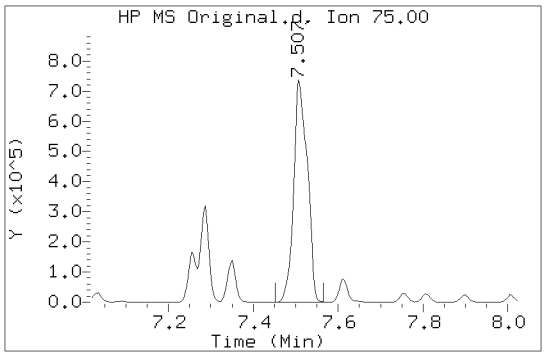
BEFORE
MASS
53
AREA
427167
HEIGHT
309989
18-Jul-2024
20:09



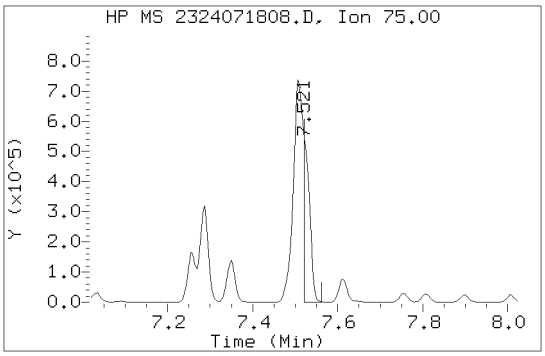
AFTER
MASS
53
AREA
427167
HEIGHT
309989
25-Jul-2024
17:14



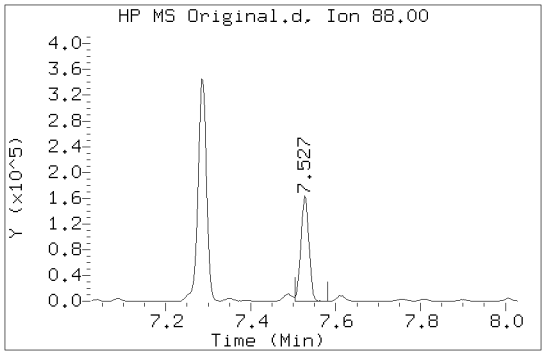
BEFORE
MASS
75
AREA
1647179
HEIGHT
736967
18-Jul-2024
20:09



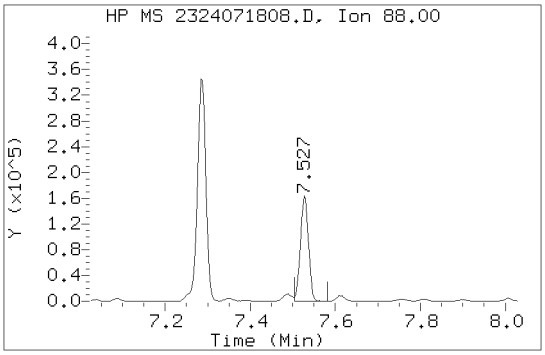
AFTER
MASS
75
AREA
516604
HEIGHT
543801
25-Jul-2024
17:14



BEFORE
MASS
88
AREA
209816
HEIGHT
163456
18-Jul-2024
20:09



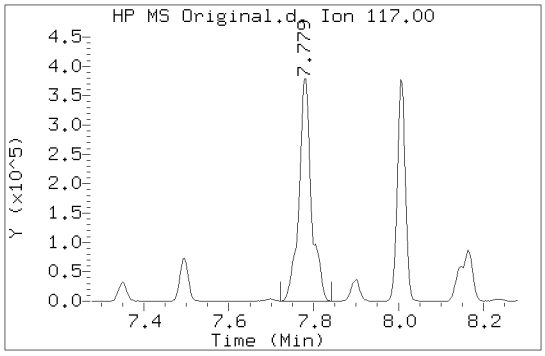
AFTER
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HEIGHT
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25-Jul-2024
17:14



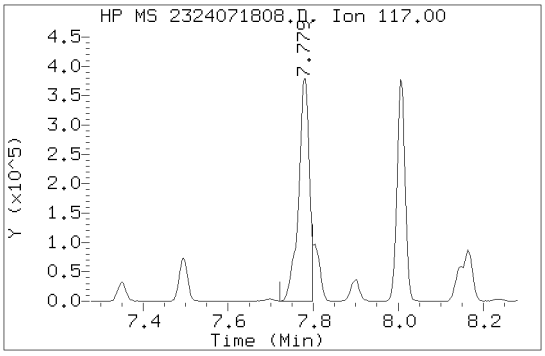
Pentachloroethane (76-01-7)

Reason Code: MP

BEFORE
MASS
117
AREA
758449
HEIGHT
378265
18-Jul-2024
20:09



AFTER
MASS
117
AREA
660719
HEIGHT
378265
25-Jul-2024
17:14



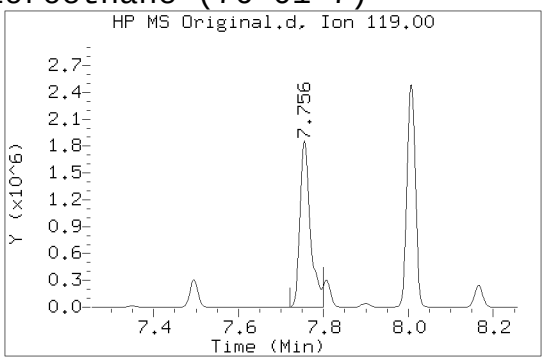
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Inj Date : 18-JUL-2024 14:23
InstruID : ms23.i
LabSampID : 1238

Pentachloroethane (76-01-7)

Reason Code: MP

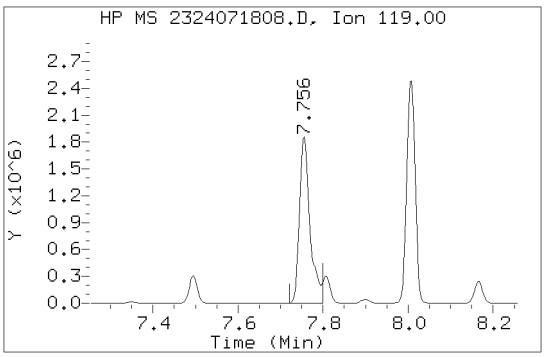
BEFORE

MASS
119
AREA
3172243
HEIGHT
1856507
18-Jul-2024
20:09



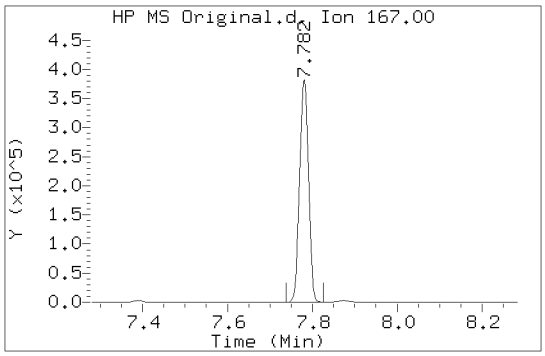
AFTER

MASS
119
AREA
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HEIGHT
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25-Jul-2024
17:14



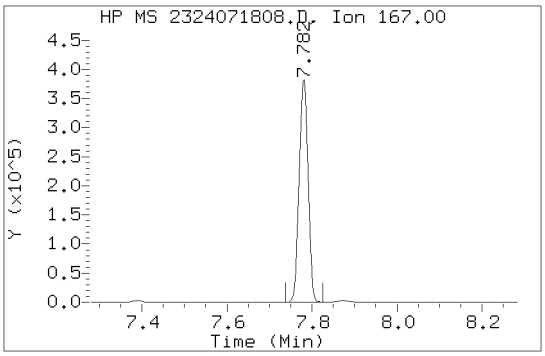
BEFORE

MASS
167
AREA
549837
HEIGHT
381952
18-Jul-2024
20:09



AFTER

MASS
167
AREA
549837
HEIGHT
381952
25-Jul-2024
17:14

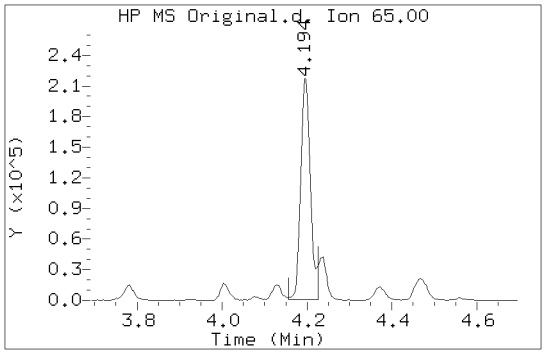


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

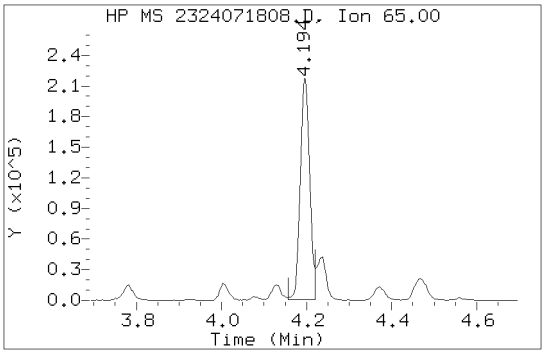
BEFORE

MASS
65
AREA
341557
HEIGHT
216675
18-Jul-2024
20:09



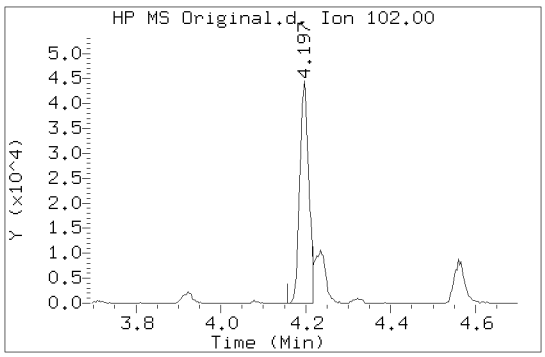
AFTER

MASS
65
AREA
330185
HEIGHT
216675
25-Jul-2024
17:14



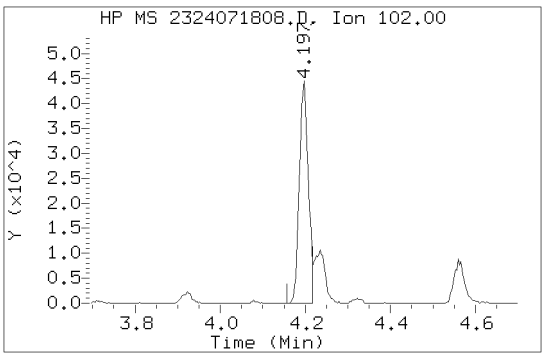
BEFORE

MASS
102
AREA
64013
HEIGHT
44512
18-Jul-2024
20:09



AFTER

MASS
102
AREA
64013
HEIGHT
44512
25-Jul-2024
17:14



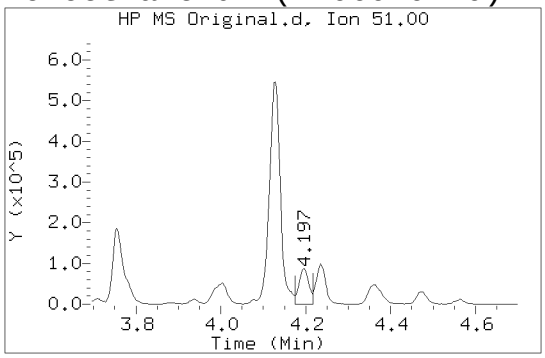
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Inj Date : 18-JUL-2024 14:23
InstruID : ms23.i
LabSampID : 1238

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

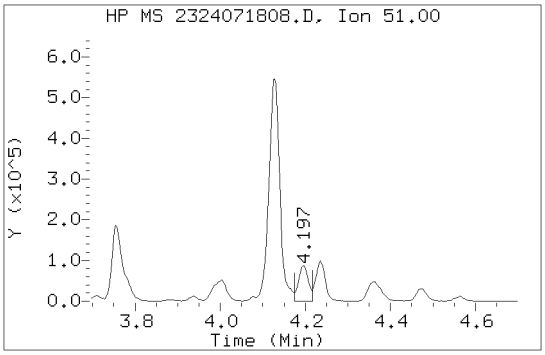
BEFORE

MASS
51
AREA
142238
HEIGHT
86856
18-Jul-2024
20:09



AFTER

MASS
51
AREA
142238
HEIGHT
86856
25-Jul-2024
17:14



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:14
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240718.b/232407180
Inj Date: 18-JUL-2024 14:23
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071809.D
Lab Smp Id: 1239
Inj Date : 18-JUL-2024 14:43
Operator : ILY Inst ID: ms23.i
Smp Info : 1239;;1;1;6;;;
Misc Info :
Comment :
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Meth Date : 22-Jul-2024 06:29 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

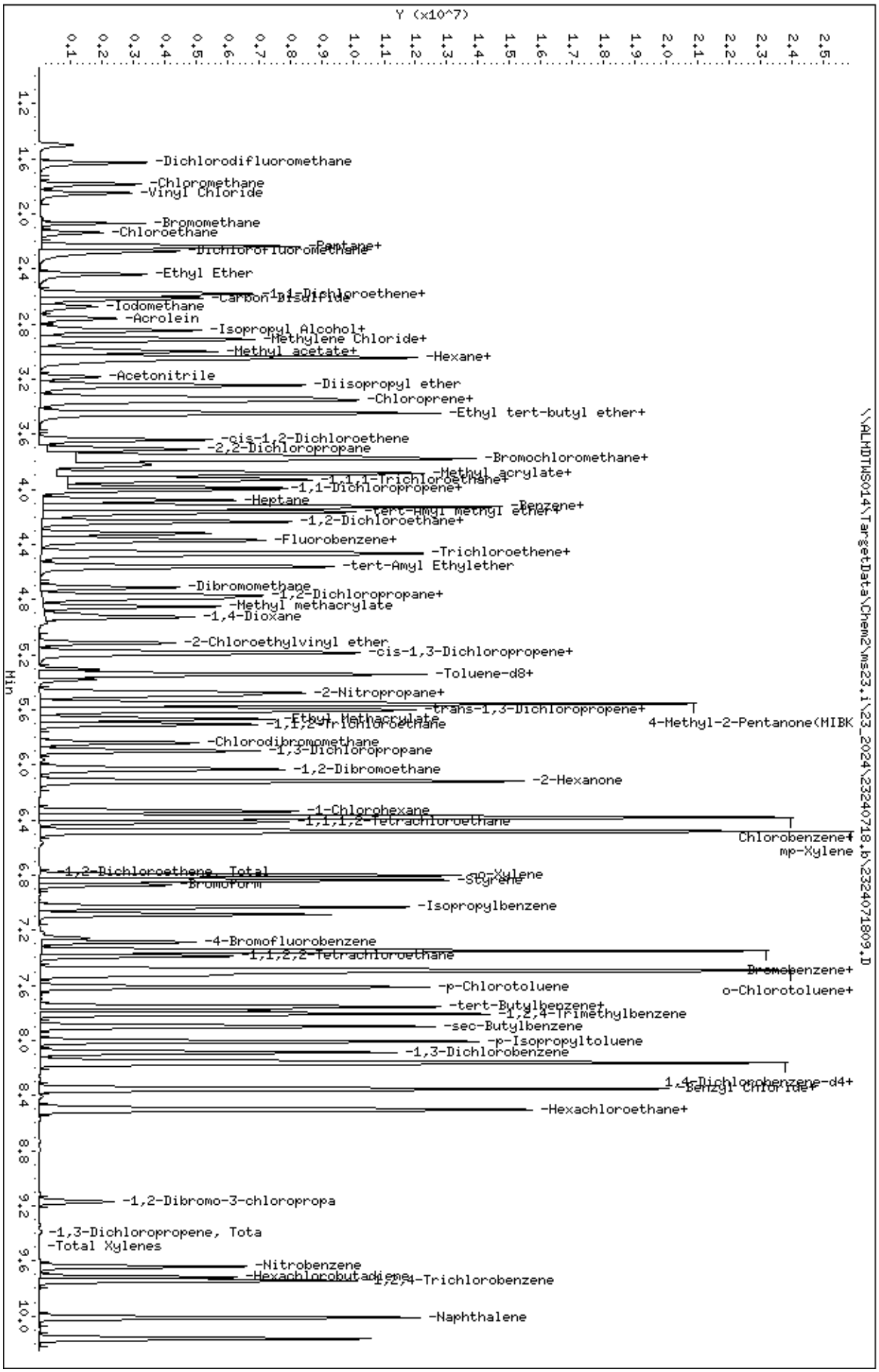
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.629	1.629	(0.374)	2710746	200.000	210.152(A)	
2	Chloromethane	50	1.782	1.782	(0.409)	2550421	200.000	193.841	
3	Vinyl Chloride	62	1.849	1.849	(0.424)	2326897	200.000	200.033(A)	
4	Bromomethane	94	2.069	2.069	(0.475)	1051738	200.000	195.329	
5	Chloroethane	64	2.135	2.135	(0.490)	1326536	200.000	211.659(A)	
6	Pentane	41	2.234	2.234	(0.513)	1582574	200.000	186.157	
7	Trichlorofluoromethane	101	2.240	2.240	(0.514)	3111355	200.000	218.550(A)	
8	Dichlorofluoromethane	67	2.272	2.272	(0.522)	3487735	200.000	190.190	
9	Ethyl Ether	74	2.439	2.439	(0.560)	1149813	200.000	197.380	
10	1,1-Dichloroethene	61	2.576	2.576	(0.591)	2530040	200.000	198.711	
11	Freon 113	101	2.587	2.587	(0.594)	1503934	200.000	200.964(A)	
12	Carbon Disulfide	76	2.616	2.616	(0.601)	4925257	200.000	190.434	
13	Iodomethane	127	2.674	2.674	(0.614)	783285	200.000	209.580(AM)	MP
14	Acrolein	56	2.761	2.761	(0.634)	1698787	1000.00	995.745(A)	
15	Isopropyl Alcohol	45	2.830	2.830	(0.650)	820600	1000.00	1008.59(A)	
16	3-Chloro-1-propene	41	2.845	2.845	(0.653)	2642660	200.000	196.581	
17	Methylene Chloride	84	2.906	2.906	(0.667)	1766518	200.000	189.865	
18	Acetone	58	2.920	2.920	(0.670)	1047428	1000.00	966.021(A)	
19	Methyl acetate	74	2.984	2.984	(0.685)	390536	200.000	197.659(Q)	
20	trans-1,2-Dichloroethene	61	3.001	3.001	(0.689)	2432523	200.000	191.070	
21	Hexane	57	3.042	3.042	(0.698)	3656381	200.000	193.025	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.048	3.048	(0.700)	5479535	200.000	200.660(A)	
	23 tert.- Butyl Alcohol	59	3.074	3.074	(0.706)	1305604	1000.00	1106.04(A)	
	24 Acetonitrile	41	3.184	3.184	(0.731)	1638098	1000.00	958.801(A)	
	25 Diisopropyl ether	45	3.244	3.244	(0.745)	6040971	200.000	193.562	
	26 Chloroprene	53	3.331	3.331	(0.765)	2057472	200.000	182.854	
	27 1,1-Dichloroethane	63	3.343	3.343	(0.767)	3235851	200.000	193.841	
	28 Acrylonitrile	53	3.357	3.357	(0.771)	5131131	1000.00	967.051(AM)	MP
	29 Ethyl tert-butyl ether	59	3.447	3.447	(0.791)	5968521	200.000	203.686(A)	
	30 n-Propanol	41	3.447	3.447	(0.791)	1278915	2000.00	1892.52(A)	
	31 Vinyl Acetate	86	3.447	3.447	(0.791)	470102	200.000	215.621(AQ)	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	2539149	200.000	197.860	
	33 2,2-Dichloropropane	77	3.708	3.708	(0.851)	2563228	200.000	199.823	
	34 Bromochloromethane	128	3.754	3.754	(0.862)	904154	200.000	195.275	
	35 Cyclohexane	84	3.780	3.780	(0.868)	2501275	200.000	189.002	
	36 Chloroform	83	3.780	3.780	(0.868)	3385644	200.000	194.835	
	37 Ethyl Acetate	43	3.815	3.815	(0.876)	2538244	200.000	199.946	
	38 Methyl acrylate	55	3.832	3.832	(0.880)	2147622	200.000	203.021(A)	
	39 Carbon Tetrachloride	117	3.887	3.887	(0.892)	2457140	200.000	217.747(AM)	MP
$	41 Dibromofluoromethane	113	3.884	3.884	(0.892)	263223	30.0000	29.8812	
	40 Tetrahydrofuran	42	3.878	3.878	(0.890)	3643821	1000.00	994.397(A)	
	42 1,1,1-Trichloroethane	97	3.922	3.922	(0.900)	2776134	200.000	201.652(A)	
	43 2-Butanone	72	3.936	3.936	(0.904)	1385120	1000.00	978.348(A)	
	44 1,1-Dichloropropene	75	3.986	3.986	(0.915)	2452494	200.000	192.928	
	45 1-Chlorobutane	41	4.003	4.003	(0.919)	2029757	200.000	188.208	
	46 Heptane	71	4.078	4.078	(0.936)	1267298	200.000	193.685	
	47 Benzene	78	4.127	4.127	(0.947)	6640240	200.000	186.076	
	48 Propionitrile	54	4.113	4.113	(0.944)	1808153	1000.00	989.112(A)	
	49 Methacrylonitrile	67	4.127	4.127	(0.947)	959432	200.000	204.421(A)	
	50 tert-Amyl methyl ether	73	4.162	4.162	(0.955)	5455183	200.000	203.914(A)	
	54 Isobutyl alcohol	42	4.171	4.171	(0.957)	823109	2000.00	1997.70(A)	
$	51 1,2-Dichloroethane-d4	65	4.194	4.194	(0.963)	344785	30.0000	30.5663(Q)	
	52 1,2-Dichloroethane	62	4.235	4.235	(0.972)	2795775	200.000	194.158	
	53 tert-Amyl Alcohol	59	4.240	4.240	(0.973)	1137771	1000.00	1014.72(A)	
*	55 Fluorobenzene	96	4.356	4.356	(1.000)	947786	30.0000		
	56 Diisobutylene	57	4.371	4.371	(1.003)	4274181	200.000	197.835	
	57 Trichloroethene	95	4.458	4.458	(1.023)	1903075	200.000	194.354	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	2770217	200.000	188.419	
	59 tert-Amyl Ethylether	59	4.562	4.562	(1.047)	4577096	200.000	206.935(A)	
	60 Dibromomethane	93	4.712	4.712	(1.082)	1315657	200.000	205.037(A)	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.095)	1892248	200.000	192.683	
	62 Bromodichloromethane	83	4.793	4.793	(1.100)	2564040	200.000	206.647(A)	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	2192946	200.000	205.571(A)	
	64 1,4-Dioxane	88	4.906	4.906	(1.126)	729381	5000.00	5354.04(A)	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.174)	1484663	200.000	209.163(A)	
	66 cis-1,3-Dichloropropene	75	5.181	5.181	(0.814)	3175492	200.000	204.880(A)	
	67 Octane	85	5.196	5.196	(0.816)	1065878	200.000	188.539	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	1016342	30.0000	28.9708	
	69 Toluene	92	5.341	5.341	(0.839)	4251435	200.000	186.676	
	70 Chloroacetonitrile	75	5.381	5.381	(0.845)	747951	1000.00	1015.49(A)	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	4123391	1000.00	995.486(A)	
	72 1,1-Dichloro-2-Propanone	63	5.500	5.500	(0.864)	314412	1000.00	1010.41(AQ)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.555	5.555	(0.873)	11127637	1000.00	924.066(A)	
	75 trans-1,3-Dichloropropene	75	5.593	5.593	(0.879)	3098272	200.000	214.115(A)	
	74 Tetrachloroethene	164	5.607	5.607	(0.881)	1625384	200.000	194.690	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.668	5.668	(0.890)	2963668	200.000	207.917(A)	
77	1,1,2-Trichloroethane	83	5.705	5.705	(0.896)	1518918	200.000	192.463	
78	Chlorodibromomethane	129	5.839	5.839	(0.917)	2114103	200.000	216.607(A)	
79	1,3-Dichloropropane	76	5.899	5.899	(0.927)	3080188	200.000	190.994	
80	1,2-Dibromoethane	107	6.021	6.021	(0.946)	1790145	200.000	212.436(A)	
81	2-Hexanone	43	6.119	6.119	(0.961)	8400458	1000.00	971.600(A)	
82	1-Chlorohexane	91	6.337	6.337	(0.995)	2274390	200.000	188.631	
* 83	Chlorobenzene-d5	82	6.366	6.366	(1.000)	435781	30.0000	(M)	MP
84	Chlorobenzene	112	6.380	6.380	(1.002)	4671408	200.000	191.529	
85	Ethylbenzene	106	6.383	6.383	(1.003)	2489148	200.000	192.696	
86	1,1,1,2-Tetrachloroethane	131	6.415	6.415	(1.008)	1763315	200.000	204.563(A)	
87	mp-Xylene	106	6.481	6.481	(1.018)	5943760	400.000	375.418(A)	
88	o-Xylene	106	6.800	6.800	(1.068)	3004875	200.000	195.071	
89	Styrene	104	6.838	6.838	(0.840)	5108387	200.000	195.312	
90	Bromoform	173	6.872	6.872	(0.844)	1500596	200.000	225.378(A)	
91	Isopropylbenzene	105	7.032	7.032	(0.863)	6524483	200.000	179.141	
M 100	1,2-Dichloroethene, Total	61				4971672	400.000	388.930	
$ 92	4-Bromofluorobenzene	174	7.254	7.254	(0.891)	341923	30.0000	29.6394	
93	Bromobenzene	156	7.350	7.350	(0.903)	2023461	200.000	191.422	
94	n-Propylbenzene	120	7.350	7.350	(0.903)	2072502	200.000	185.839(Q)	
95	1,1,2,2-Tetrachloroethane	83	7.388	7.388	(0.907)	2553823	200.000	194.362	
96	o-Chlorotoluene	91	7.486	7.486	(0.919)	6316234	200.000	185.758	
97	1,3,5-Trimethylbenzene	105	7.495	7.495	(0.920)	6409486	200.000	189.699	
98	1,2,3-Trichloropropane	110	7.509	7.509	(0.922)	784735	200.000	193.162	
99	trans-1,4-Dichloro-2-butene	53	7.530	7.530	(0.925)	876201	200.000	215.572(AM)	MP
101	p-Chlorotoluene	91	7.613	7.613	(0.935)	5709116	200.000	181.151	
102	tert-Butylbenzene	134	7.755	7.755	(0.952)	1422919	200.000	179.273	
103	Pentachloroethane	117	7.779	7.779	(0.955)	1337283	200.000	203.795(AQM)	MP
104	1,2,4-Trimethylbenzene	105	7.807	7.807	(0.959)	6385040	200.000	183.866	
105	sec-Butylbenzene	105	7.900	7.900	(0.970)	7330998	200.000	173.498	
106	p-Isopropyltoluene	134	8.007	8.007	(0.983)	1746064	200.000	186.866	
107	1,3-Dichlorobenzene	146	8.088	8.088	(0.993)	3667686	200.000	183.882	
* 108	1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	407458	30.0000	(Q)	
109	1,4-Dichlorobenzene	146	8.158	8.158	(1.002)	3810168	200.000	185.288	
110	Benzyl Chloride	126	8.349	8.349	(1.025)	941153	200.000	199.431(Q)	
111	n-Butylbenzene	134	8.355	8.355	(1.026)	1593378	200.000	180.387(Q)	
112	Hexachloroethane	117	8.494	8.494	(1.043)	1344760	200.000	206.698(A)	
113	1,2-Dichlorobenzene	146	8.505	8.505	(1.044)	3615855	200.000	187.698	
114	1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	503127	200.000	202.215(A)	
115	Nitrobenzene	77	9.643	9.643	(1.184)	2685707	2000.00	1993.55(A)	
116	Hexachlorobutadiene	225	9.718	9.718	(1.193)	889419	200.000	169.683	
M 120	1,3-Dichloropropene, Total	75				6273764	400.000	418.996	
117	1,2,4-Trichlorobenzene	180	9.744	9.744	(1.197)	2320599	200.000	183.697	
M 121	Total Xylenes	106				8948635	600.000	570.489	
118	Naphthalene	128	10.011	10.011	(1.229)	6930336	200.000	198.585	
119	1,2,3-Trichlorobenzene	180	10.164	10.164	(1.248)	2405030	200.000	197.040	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.


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Client ID:
Sample Info: 1239;;1;1;6;;;
Purge Volume: 5.0
Column phase: DB-VRX
Instrument: ms23.i
Operator: ILY
Column diameter: 0.25
Page 1
Y (x10^7)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Pentane+
-Dichlorofluoromethane
-Ethyl Ether
-Carbon Disulfide
-1,1-Dichloroethene+
-Iodomethane
-Acrolein
-Isopropyl Alcohol+
-Methylene Chloride+
-Methyl acetate+
-Hexane+
-Acetonitrile
-Diisopropyl ether
-Chloroprene+
-Ethyl tert-butyl ether+
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Bromochloromethane+
-Methyl acrylate+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene+
-Heptane
-Benzene+
-tert-Amyl methyl ether+
-1,2-Dichloroethane+
-Fluorobenzene+
-Trichloroethene+
-tert-Amyl Ethylether
-Dibromomethane
-1,2-Dichloropropane+
-Methyl methacrylate
-1,4-Dioxane
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropene+
-Toluene-d8+
-2-Nitropropane+
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane
4-Methyl-2-Pentanone(MIBK
-Chlorodibromomethane
-1,3-Dichloropropane
-1,2-Dibromoethane
-2-Hexanone
-1-Chlorohexane
-1,1,1,2-Tetrachloroethane
Chlorobenzene+
mp-Xylene
-1,2-Dichloroethene, Total
-Bromoform
-o-Xylene
-Styrene
-Isopropylbenzene
-4-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
Bromobenzene+
-p-Chlorotoluene
o-Chlorotoluene+
-tert-Butylbenzene+
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-p-Isopropyltoluene
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
-Benzyl Chloride+
-Hexachloroethane+
-1,2-Dibromo-3-chloropropa
-1,3-Dichloropropene, Tota
-Total Xylenes
-Nitrobenzene
-Hexachlorobutadiene
1,2,4-Trichlorobenzene
-Naphthalene
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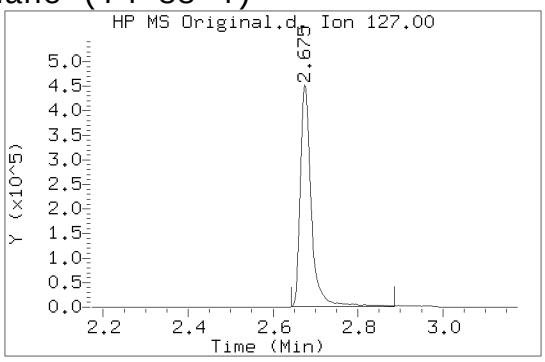
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InstruID : ms23.i
LabSampID : 1239

Iodomethane (74-88-4)

Reason Code: MP

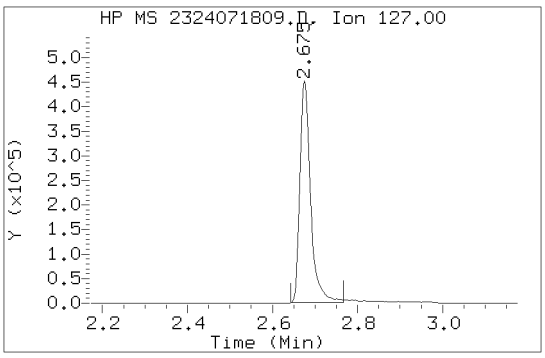
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18-Jul-2024
20:13



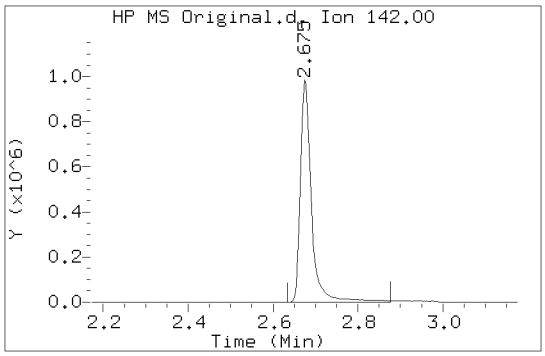
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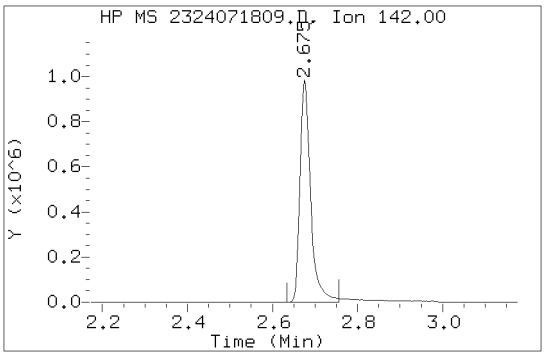
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AFTER

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25-Jul-2024
17:14

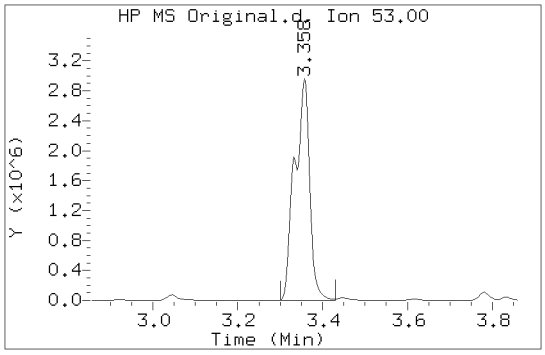


Acrylonitrile (107-13-1)

Reason Code: MP

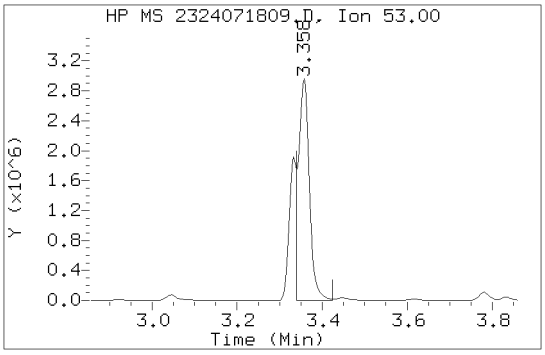
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18-Jul-2024
20:13



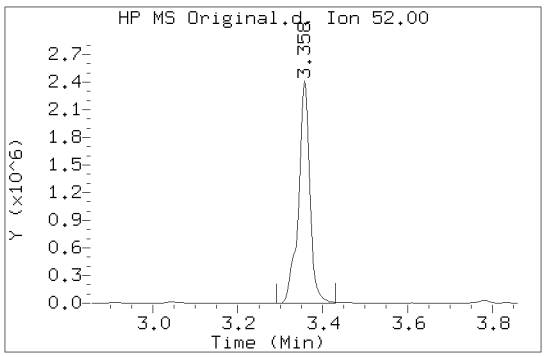
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AREA
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25-Jul-2024
17:14



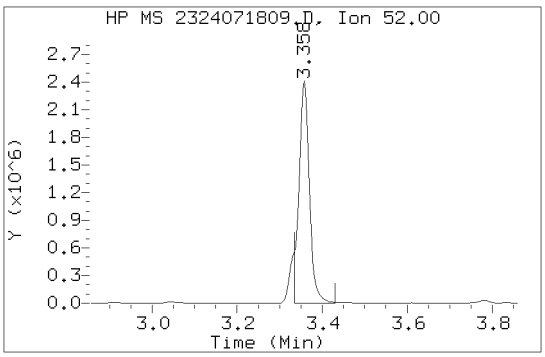
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20:13



AFTER

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HEIGHT
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25-Jul-2024
17:14



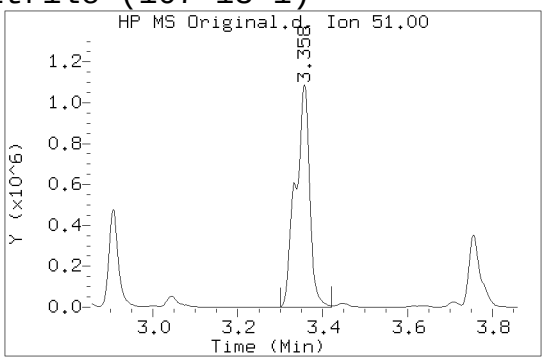
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InstruID : ms23.i
LabSampID : 1239

Acrylonitrile (107-13-1)

Reason Code: MP

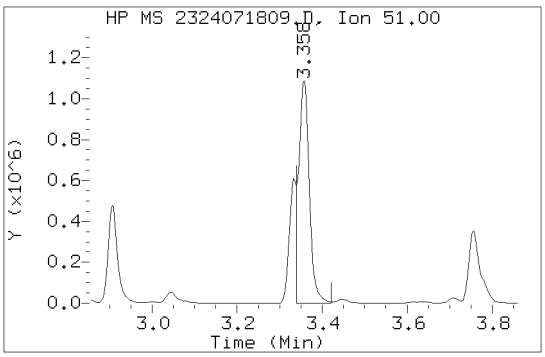
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AFTER

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HEIGHT
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25-Jul-2024
17:14

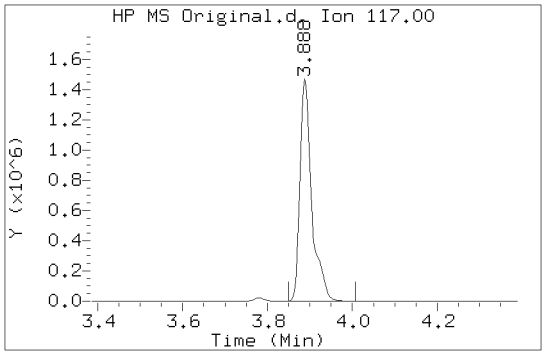


Carbon Tetrachloride (56-23-5)

Reason Code: MP

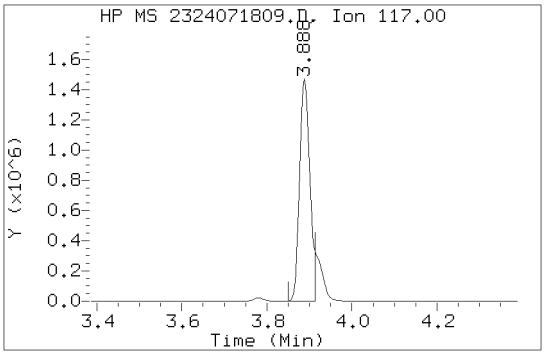
BEFORE

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HEIGHT
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18-Jul-2024
20:13



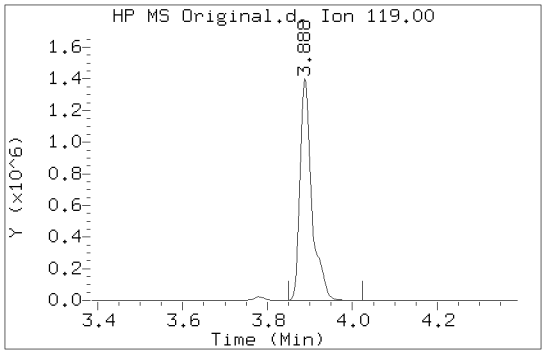
AFTER

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HEIGHT
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25-Jul-2024
17:14



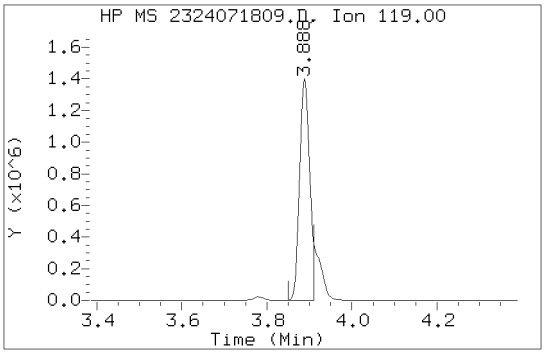
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18-Jul-2024
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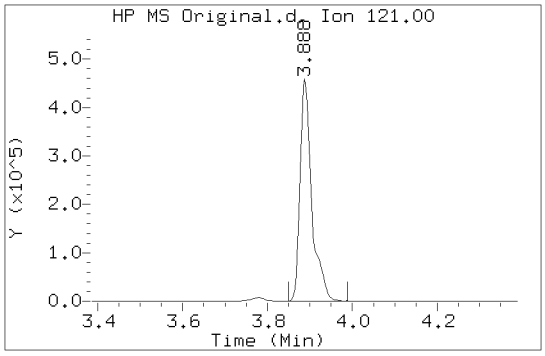
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25-Jul-2024
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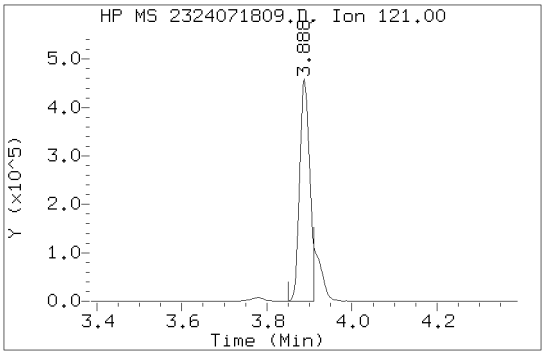
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121
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18-Jul-2024
20:13



AFTER

MASS
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HEIGHT
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25-Jul-2024
17:14



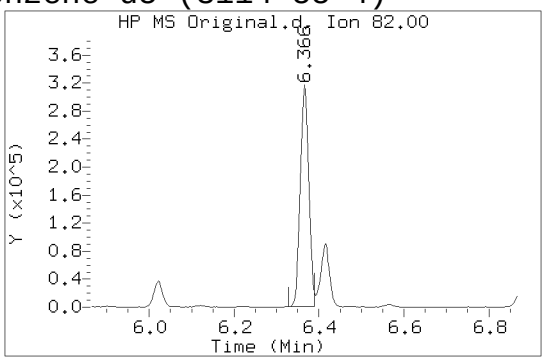
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InstruID : ms23.i
LabSampID : 1239

Chlorobenzene-d5 (3114-55-4)

Reason Code: MP

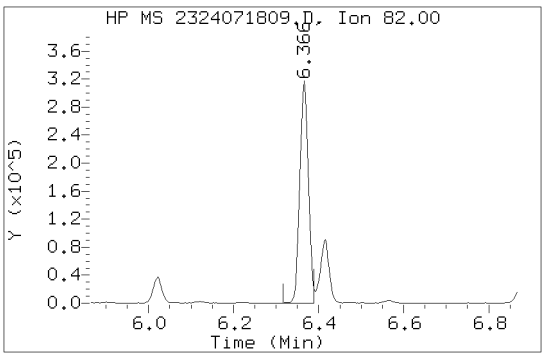
BEFORE

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HEIGHT
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18-Jul-2024
20:13



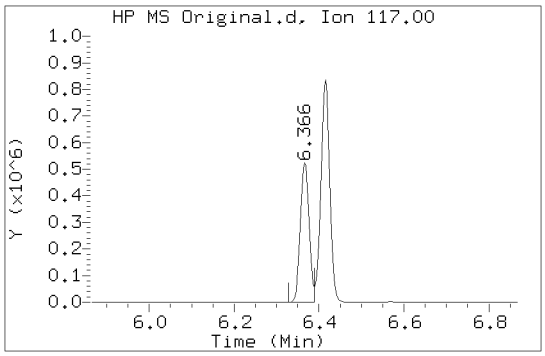
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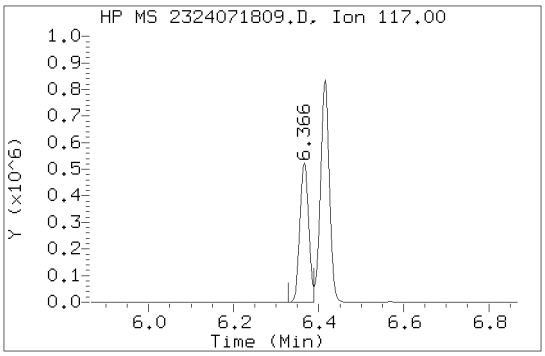
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18-Jul-2024
20:13



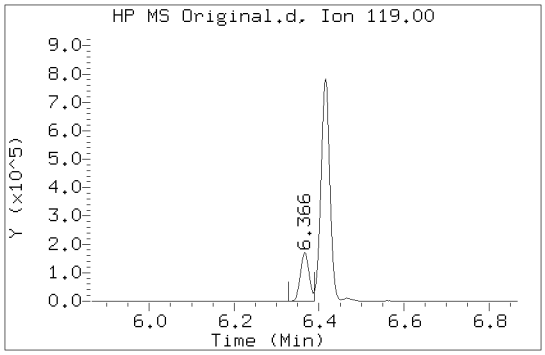
AFTER

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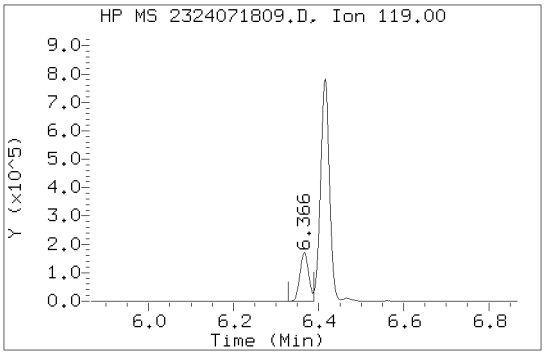
BEFORE

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18-Jul-2024
20:13



AFTER

MASS
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25-Jul-2024
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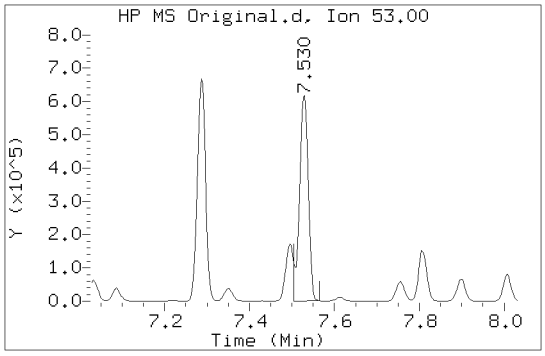


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

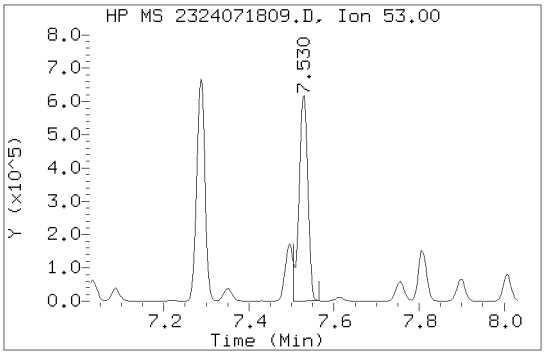
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AFTER

MASS
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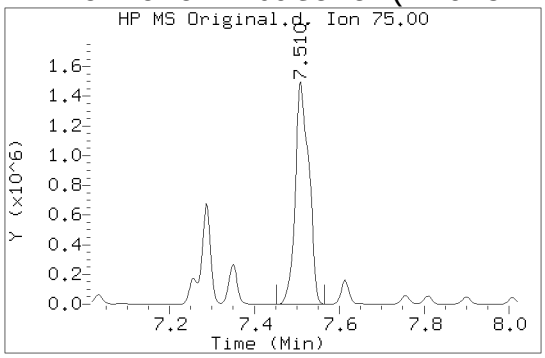


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LabSampID : 1239

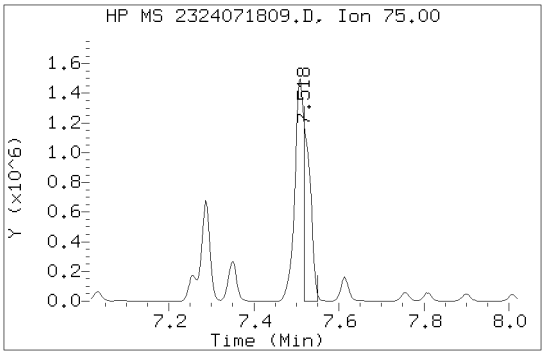
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

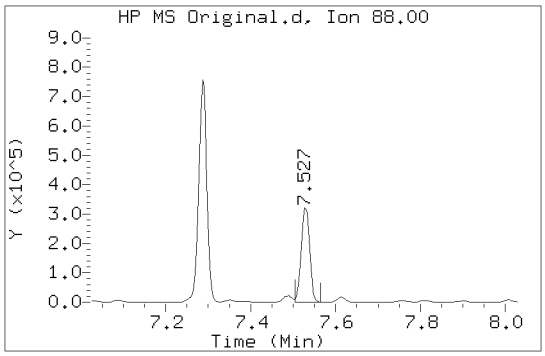
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18-Jul-2024
20:13



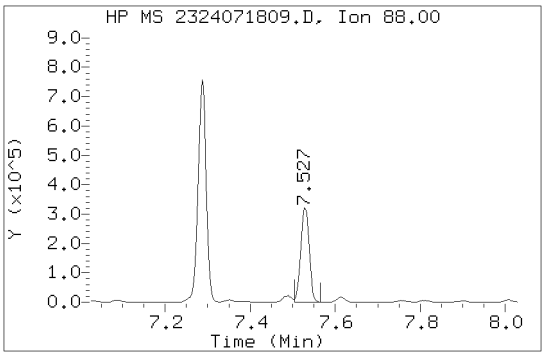
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17:14



BEFORE
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435128
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18-Jul-2024
20:13



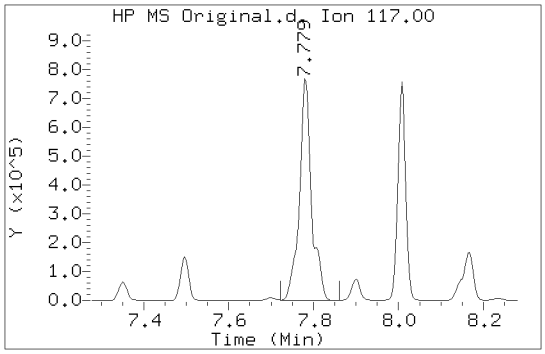
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25-Jul-2024
17:14



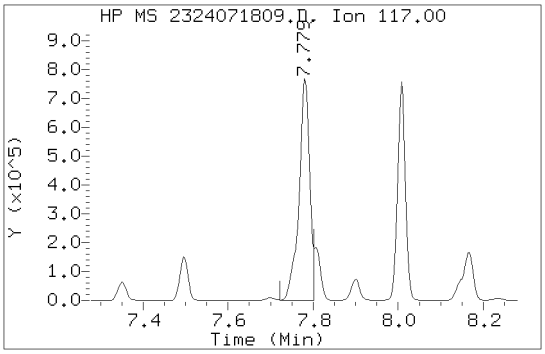
Pentachloroethane (76-01-7)

Reason Code: MP

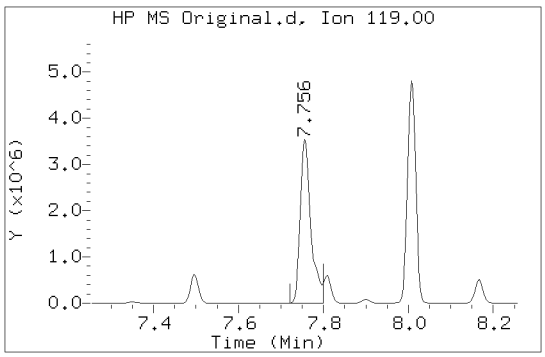
BEFORE
MASS
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AREA
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HEIGHT
768105
18-Jul-2024
20:13



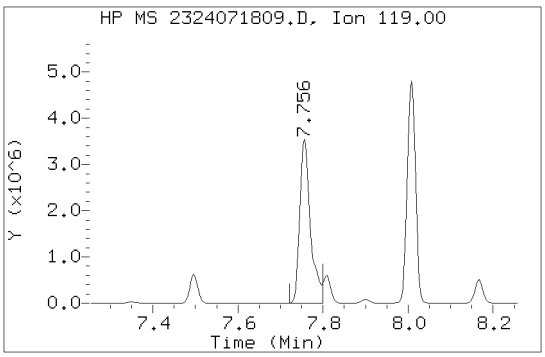
AFTER
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HEIGHT
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25-Jul-2024
17:14



BEFORE
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AFTER
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25-Jul-2024
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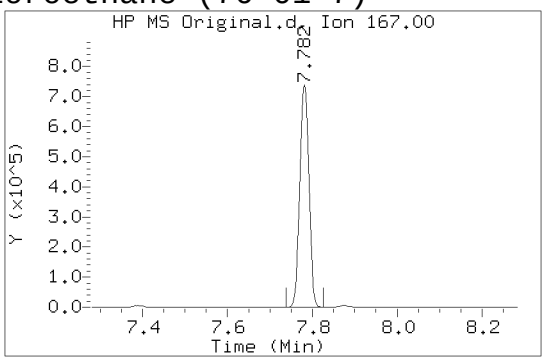
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Inj Date : 18-JUL-2024 14:43
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LabSampID : 1239

Pentachloroethane (76-01-7)

Reason Code: MP

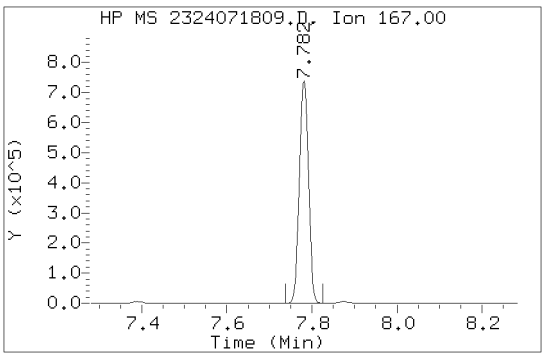
BEFORE

MASS
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18-Jul-2024
20:13



AFTER

MASS
167
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HEIGHT
738624
25-Jul-2024
17:14



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:15
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240718.b/232407180
Inj Date: 18-JUL-2024 14:43
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

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Misc Info :
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Meth Date : 22-Jul-2024 06:29 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 13:03 Cal File: 2324071804.D
Als bottle: 16 QC Sample: ICV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
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Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

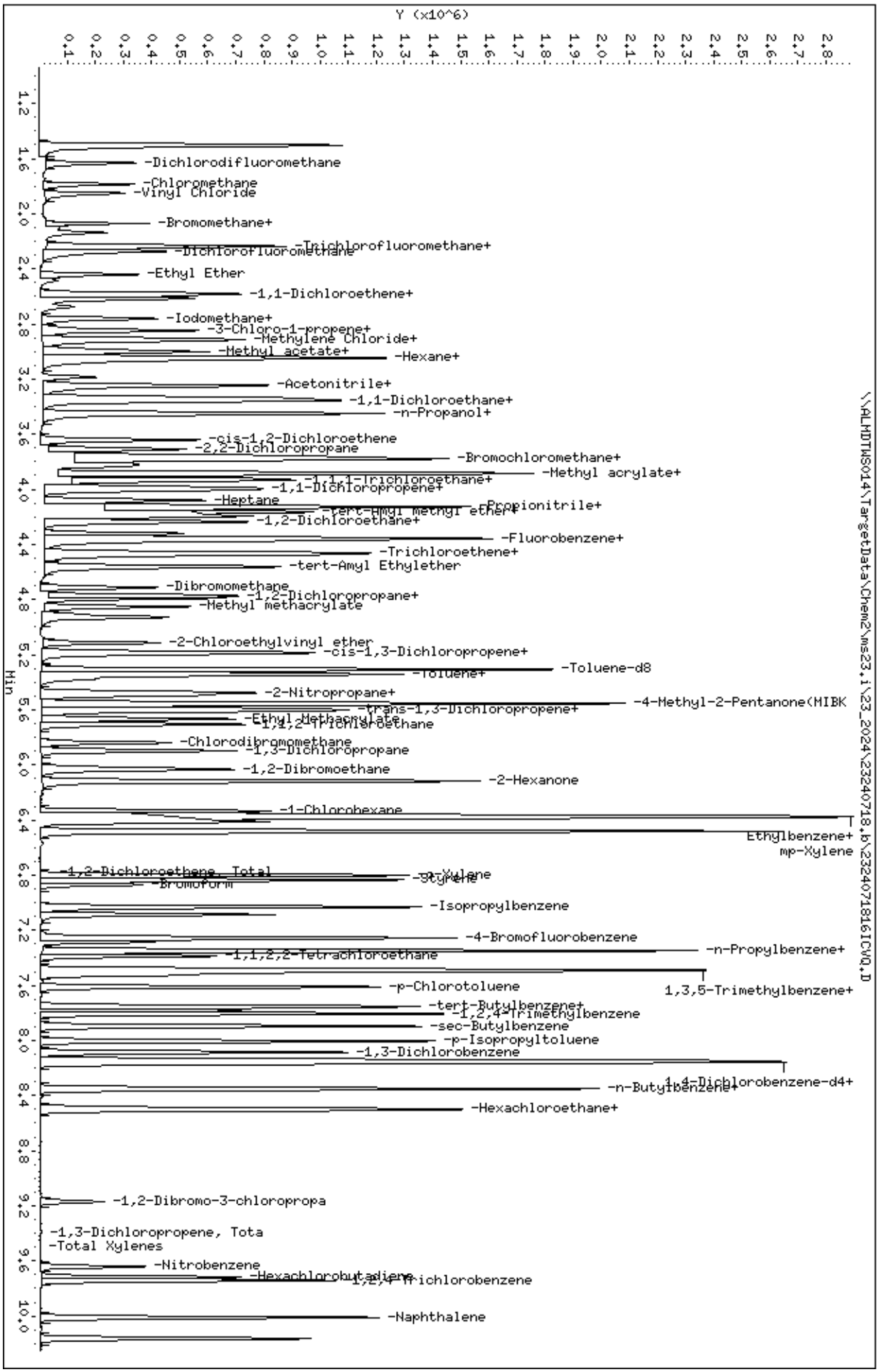
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.632	1.629	(0.375)	256412	20.4656	20.4656	
2	Chloromethane	50	1.785	1.782	(0.410)	247104	19.3356	19.3356	
3	Vinyl Chloride	62	1.849	1.849	(0.424)	230282	20.3811	20.3811	
4	Bromomethane	94	2.072	2.069	(0.476)	114322	21.3615	21.3615	
5	Chloroethane	64	2.135	2.135	(0.490)	126607	20.7978	20.7978	
6	Pentane	41	2.231	2.234	(0.512)	162139	19.6357	19.6357(M)	MP
7	Trichlorofluoromethane	101	2.240	2.240	(0.514)	295678	21.3827	21.3827	
8	Dichlorofluoromethane	67	2.274	2.272	(0.522)	365130	20.4991	20.4991	
9	Ethyl Ether	74	2.442	2.439	(0.561)	117373	20.7437	20.7437	
10	1,1-Dichloroethene	61	2.575	2.576	(0.591)	264543	21.3911	21.3911	
12	Carbon Disulfide	76	2.616	2.616	(0.601)	510020	20.3023	20.3023	
11	Freon 113	101	2.590	2.587	(0.595)	158657	21.8269	21.8269	
13	Iodomethane	127	2.674	2.674	(0.614)	52153	14.3666	14.3666(R)	
14	Acrolein	56	2.761	2.761	(0.634)	292951	176.786	176.786	
16	3-Chloro-1-propene	41	2.848	2.845	(0.654)	295331	22.6179	22.6179	
15	Isopropyl Alcohol	45	2.830	2.830	(0.650)	78048	98.0796	98.0796	
17	Methylene Chloride	84	2.905	2.906	(0.667)	185254	20.4992	20.4992	
18	Acetone	58	2.920	2.920	(0.670)	124848	118.546	118.546	
19	Methyl acetate	74	2.984	2.984	(0.685)	38597	19.9304	19.9304(Q)	
20	trans-1,2-Dichloroethene	61	3.001	3.001	(0.689)	250960	20.2947	20.2947	
21	Hexane	57	3.044	3.042	(0.699)	391344	21.2699	21.2699	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.050	3.048	(0.700)	570496	21.5086	21.5086	
	23 tert.- Butyl Alcohol	59	3.073	3.074	(0.706)	123817	107.990	107.990	
	24 Acetonitrile	41	3.186	3.184	(0.732)	168908	101.785	101.785	
	25 Diisopropyl ether	45	3.244	3.244	(0.745)	631479	20.8313	20.8313	
	26 Chloroprene	53	3.331	3.331	(0.765)	259893	23.7798	23.7798(M)	MP
	27 1,1-Dichloroethane	63	3.346	3.343	(0.768)	331804	20.4636	20.4636	
	28 Acrylonitrile	53	3.357	3.357	(0.771)	516041	100.130	100.130(M)	MP
	30 n-Propanol	41	3.447	3.447	(0.791)	128643	195.987	195.987(a)	
	29 Ethyl tert-butyl ether	59	3.450	3.447	(0.792)	614600	21.5938	21.5938	
	31 Vinyl acetate	86	3.450	3.447	(0.792)	44123	20.8357	20.8357	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	262158	21.0317	21.0317	
	33 2,2-Dichloropropane	77	3.710	3.708	(0.852)	258637	20.7583	20.7583	
M	100 1,2-Dichloroethene, Total	61				513118	41.3265	41.3265	
	34 Bromochloromethane	128	3.754	3.754	(0.862)	96226	21.3964	21.3964	
	35 Cyclohexane	84	3.783	3.780	(0.868)	269260	20.9469	20.9469	
	36 Chloroform	83	3.780	3.780	(0.868)	345014	20.4412	20.4412	
	37 Ethyl acetate	43	3.815	3.815	(0.876)	250545	20.3192	20.3192	
	38 Methyl acrylate	55	3.832	3.832	(0.880)	218094	21.2261	21.2261	
	39 Carbon Tetrachloride	117	3.887	3.887	(0.892)	223442	20.3859	20.3859(QM)	MP
	40 Tetrahydrofuran	42	3.881	3.878	(0.891)	372174	104.566	104.566	
$	41 Dibromofluoromethane	113	3.884	3.884	(0.892)	264701	30.9366	30.9366	
	42 1,1,1-Trichloroethane	97	3.922	3.922	(0.900)	286536	21.4281	21.4281	
	43 2-Butanone	72	3.939	3.936	(0.904)	129205	94.4563	94.4563(Q)	
	44 1,1-Dichloropropene	75	3.985	3.986	(0.915)	251049	20.3324	20.3324	
	45 1-Chlorobutane	41	4.006	4.003	(0.920)	209304	19.9809	19.9809	
	46 Heptane	71	4.078	4.078	(0.936)	124520	19.5929	19.5929	
	48 Propionitrile	54	4.110	4.113	(0.944)	187554	105.628	105.628	
	47 Benzene	78	4.127	4.127	(0.947)	705046	20.3407	20.3407	
	49 Methacrylonitrile	67	4.127	4.127	(0.947)	96898	21.2554	21.2554	
	50 tert-amyl methyl Ether	73	4.162	4.162	(0.955)	564037	21.7065	21.7065	
$	51 1,2-Dichloroethane-d4	65	4.197	4.194	(0.963)	333519	30.4410	30.4410(M)	MP
	54 Isobutyl alcohol	42	4.174	4.171	(0.958)	61771	160.824	160.824(Q)	
	52 1,2-Dichloroethane	62	4.234	4.235	(0.972)	281400	20.1196	20.1196	
	53 tert-Amyl Alcohol	59	4.243	4.240	(0.974)	100582	93.7715	93.7715	
*	55 Fluorobenzene	96	4.356	4.356	(1.000)	920592	30.0000		
	56 Diisobutylene	57	4.371	4.371	(1.003)	461332	20.4084	20.4084	
	57 Trichloroethene	95	4.457	4.458	(1.023)	191685	20.1543	20.1543	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	284500	20.5127	20.5127	
	59 tert-Amyl Ethylether	59	4.562	4.562	(1.047)	435694	20.2800	20.2800	
	60 Dibromomethane	93	4.712	4.712	(1.082)	130018	20.8610	20.8610	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.095)	196002	20.5480	20.5480	
	62 Bromodichloromethane	83	4.793	4.793	(1.100)	255356	21.1881	21.1881	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	214195	20.6722	20.6722	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.174)	151079	21.9131	21.9131	
	66 cis-1,3-Dichloropropene	75	5.181	5.181	(0.814)	299368	20.4750	20.4750	
	67 Octane	85	5.196	5.196	(0.816)	108074	20.2648	20.2648	
$	68 Toluene-d8	98	5.306	5.309	(0.834)	1019330	30.8009	30.8009	
	69 Toluene	92	5.340	5.341	(0.839)	433903	20.1964	20.1964	
	70 Chloroacetonitrile	75	5.378	5.381	(0.845)	61377	90.8043	90.8043	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	359744	93.4668	93.4668	
	72 1,1-Dichloro-2-propanone	63	5.494	5.500	(0.863)	26274	91.2652	91.2652(Q)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.555	5.555	(0.873)	1239417	109.105	109.105	
	75 trans-1,3-Dichloropropene	75	5.592	5.593	(0.879)	294077	21.5436	21.5436	
	74 Tetrachloroethene	164	5.607	5.607	(0.881)	157640	20.0163	20.0163	

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/L)	REVIEW CODE
	76 Ethyl methacrylate	69	5.668	5.668	(0.890)	289583	21.5358	21.5358	
	77 1,1,2-Trichloroethane	83	5.705	5.705	(0.896)	157731	21.1864	21.1864	
	78 Chlorodibromomethane	129	5.838	5.839	(0.917)	195567	21.2408	21.2408	
	79 1,3-Dichloropropane	76	5.899	5.899	(0.927)	313307	20.5940	20.5940	
	80 1,2-Dibromoethane	107	6.018	6.021	(0.945)	159031	20.0055	20.0055	
	81 2-Hexanone	43	6.116	6.119	(0.961)	902477	110.649	110.649	
	82 1-Chlorohexane	91	6.334	6.337	(0.995)	212739	18.7036	18.7036	
*	83 Chlorobenzene-d5	82	6.365	6.366	(1.000)	411093	30.0000	(M)	MP
	85 Ethylbenzene	106	6.380	6.383	(1.002)	248268	20.3738	20.3738	
	84 Chlorobenzene	112	6.377	6.380	(1.002)	466371	20.2696	20.2696	
	86 1,1,1,2-Tetrachloroethane	131	6.415	6.415	(1.008)	171475	21.0875	21.0875	
	87 mp-Xylene	106	6.481	6.481	(1.018)	602470	40.3383	40.3383	
M	120 1,3-Dichloropropene, Total	75				593445	42.0185	42.0185	
	88 o-Xylene	106	6.800	6.800	(1.068)	299973	20.6432	20.6432	
	89 Styrene	104	6.834	6.838	(0.839)	507206	20.8977	20.8977	
	90 Bromoform	173	6.872	6.872	(0.844)	128107	20.7343	20.7343	
	91 Isopropylbenzene	105	7.031	7.032	(0.863)	761458	22.5301	22.5301	
$	92 4-Bromofluorobenzene	174	7.257	7.254	(0.891)	325236	30.3815	30.3815	
M	121 TOTAL XYLENES	106				902443	60.9815	60.9815	
	94 n-Propylbenzene	120	7.347	7.350	(0.902)	205244	19.8327	19.8327	
	93 Bromobenzene	156	7.350	7.350	(0.903)	198895	20.2763	20.2763	
	95 1,1,2,2-Tetrachloroethane	83	7.387	7.388	(0.907)	259295	21.2660	21.2660	
	97 1,3,5-Trimethylbenzene	105	7.492	7.495	(0.920)	649960	20.7299	20.7299	
	96 o-Chlorotoluene	91	7.483	7.486	(0.919)	645199	20.4480	20.4480	
	98 1,2,3-Trichloropropane	110	7.506	7.509	(0.922)	78451	20.8097	20.8097	
	99 trans-1,4-Dichloro-2-butene	53	7.526	7.530	(0.924)	73621	19.5191	19.5191(Q)	
	101 p-Chlorotoluene	91	7.610	7.613	(0.935)	578918	19.7951	19.7951	
	102 tert-Butylbenzene	134	7.755	7.755	(0.952)	148132	20.1119	20.1119	
	103 Pentachloroethane	117	7.778	7.779	(0.955)	125906	20.6770	20.6770(M)	MP
	104 1,2,4-Trimethylbenzene	105	7.807	7.807	(0.959)	656978	20.3873	20.3873	
	105 sec-Butylbenzene	105	7.897	7.900	(0.970)	800257	20.4094	20.4094	
	106 p-Isopropyltoluene	134	8.004	8.007	(0.983)	172340	19.8758	19.8758	
	107 1,3-Dichlorobenzene	146	8.085	8.088	(0.993)	360213	19.4615	19.4615	
*	108 1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	378106	30.0000		
	109 1,4-Dichlorobenzene	146	8.155	8.158	(1.001)	375990	19.7037	19.7037	
	111 n-Butylbenzene	134	8.355	8.355	(1.026)	160939	19.6344	19.6344	
	110 Benzyl Chloride	126	8.346	8.349	(1.025)	81581	18.9088	18.9088(Q)	
	112 Hexachloroethane	117	8.494	8.494	(1.043)	124689	20.6532	20.6532	
	113 1,2-Dichlorobenzene	146	8.502	8.505	(1.044)	356436	19.9388	19.9388	
	114 1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	45914	19.8861	19.8861	
	115 Nitrobenzene	77	9.640	9.643	(1.184)	145875	162.423	162.423	
	116 Hexachlorobutadiene	225	9.718	9.718	(1.193)	98974	20.3480	20.3480	
	117 1,2,4-Trichlorobenzene	180	9.744	9.744	(1.197)	248079	21.1622	21.1622	
	118 Naphthalene	128	10.011	10.011	(1.229)	693021	21.3997	21.3997	
	119 1,2,3-Trichlorobenzene	180	10.161	10.164	(1.248)	225509	19.9099	19.9099	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.



Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\232407l8.b\232407l816ICVQ.D
Date : 18-JUL-2024 17:02
Client ID:
Sample Info: ICVQ;1;3;;ICVQ;1;
Purge Volume: 5.0
Column phase: DB-VRX

Instrument: ms23.i
Operator: ILY
Column diameter: 0.25

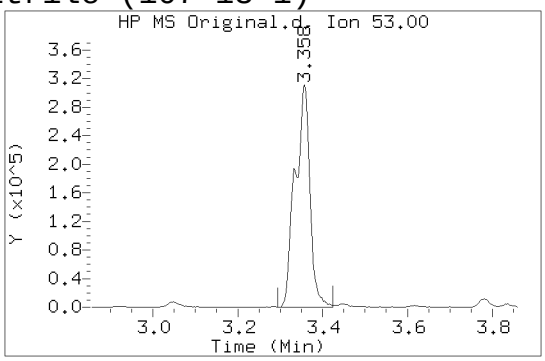
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Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240718.b\2324071816ICV
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InstruID : ms23.i
LabSampID : ICVQ

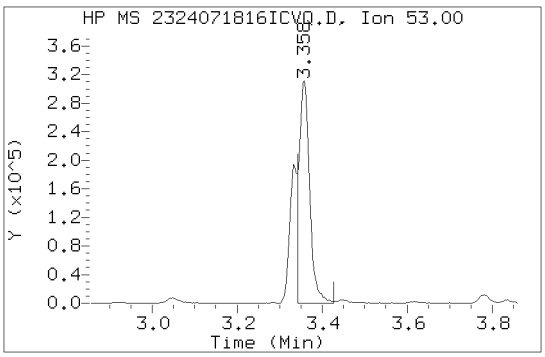
Acrylonitrile (107-13-1)

Reason Code: MP

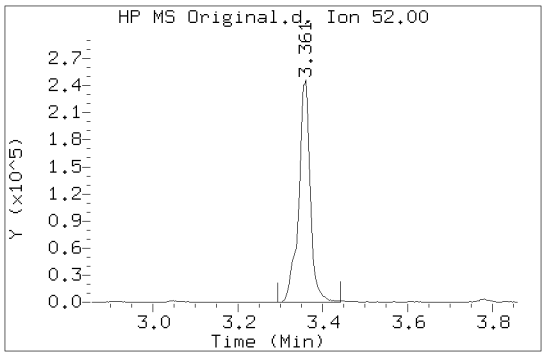
BEFORE
MASS
53
AREA
745060
HEIGHT
310916
18-Jul-2024
20:48



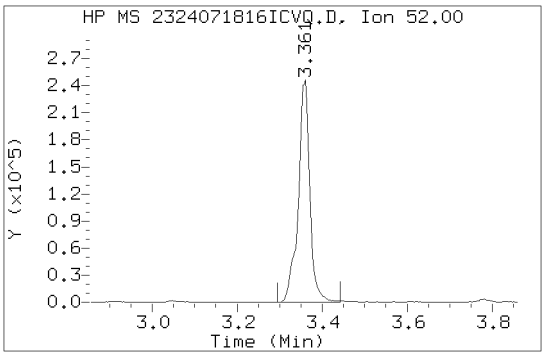
AFTER
MASS
53
AREA
516041
HEIGHT
310846
25-Jul-2024
17:19



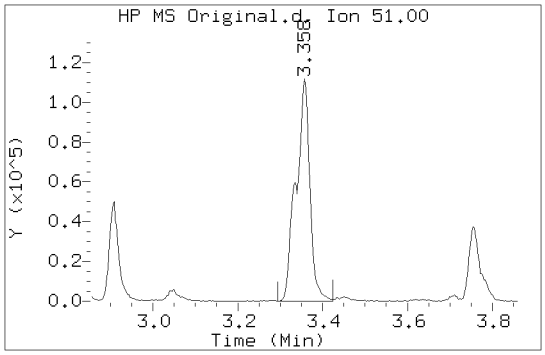
BEFORE
MASS
52
AREA
459334
HEIGHT
246464
18-Jul-2024
20:48



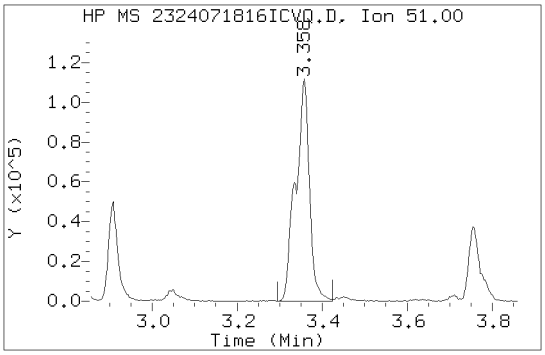
AFTER
MASS
52
AREA
459334
HEIGHT
246464
25-Jul-2024
17:19



BEFORE
MASS
51
AREA
250232
HEIGHT
111656
18-Jul-2024
20:48



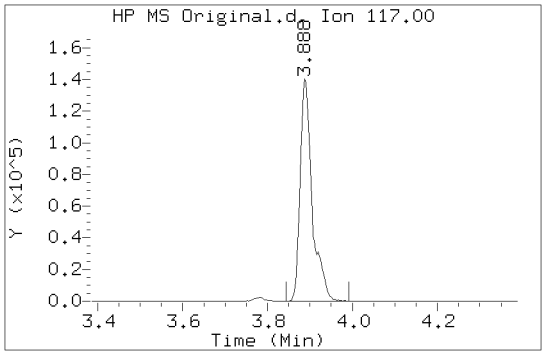
AFTER
MASS
51
AREA
250232
HEIGHT
111656
25-Jul-2024
17:19



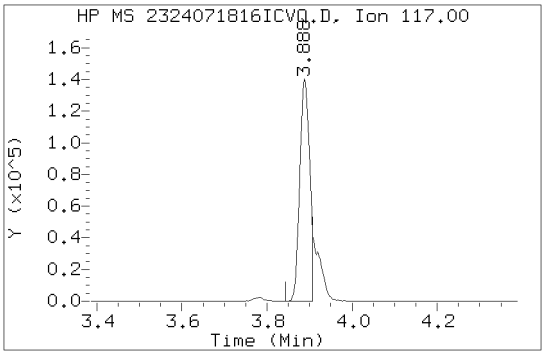
Carbon Tetrachloride (56-23-5)

Reason Code: MP

BEFORE
MASS
117
AREA
272083
HEIGHT
140352
18-Jul-2024
20:48



AFTER
MASS
117
AREA
223442
HEIGHT
140352
25-Jul-2024
17:19

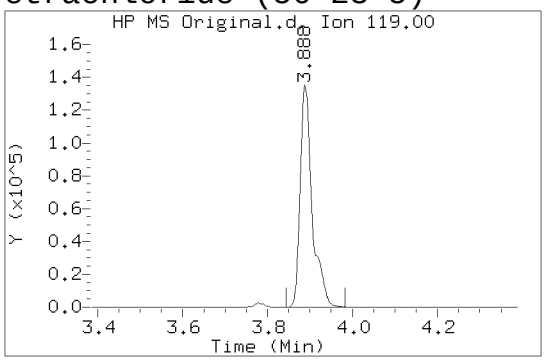


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Inj Date : 18-JUL-2024 17:02
InstruID : ms23.i
LabSampID : ICVQ

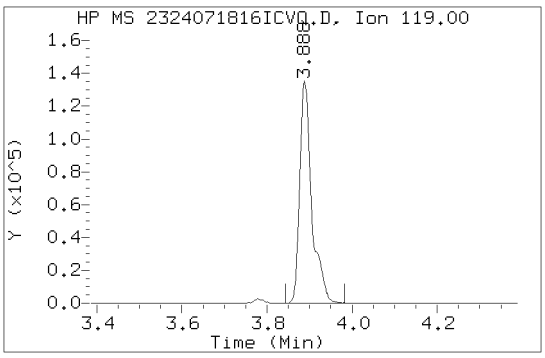
Carbon Tetrachloride (56-23-5)

Reason Code: MP

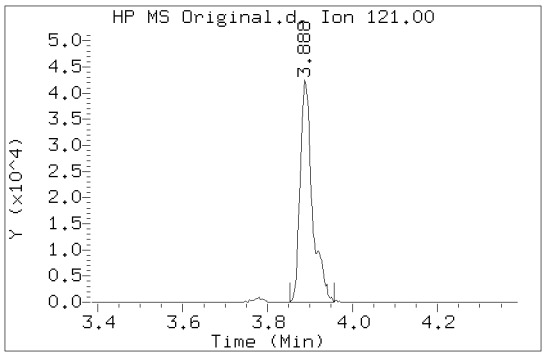
BEFORE
MASS
119
AREA
262599
HEIGHT
135360
18-Jul-2024
20:48



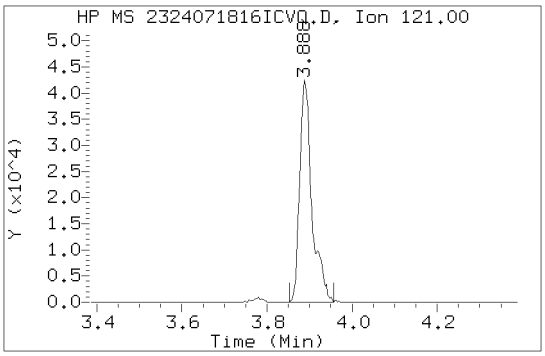
AFTER
MASS
119
AREA
262599
HEIGHT
135360
25-Jul-2024
17:19



BEFORE
MASS
121
AREA
83661
HEIGHT
42520
18-Jul-2024
20:48



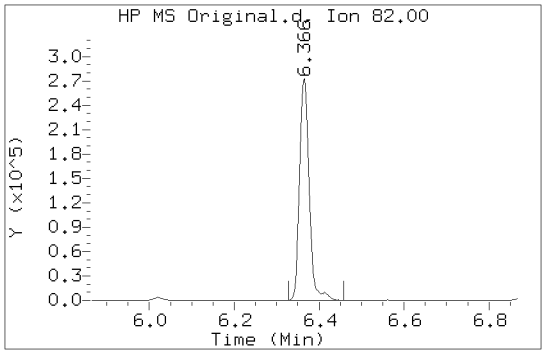
AFTER
MASS
121
AREA
83661
HEIGHT
42520
25-Jul-2024
17:19



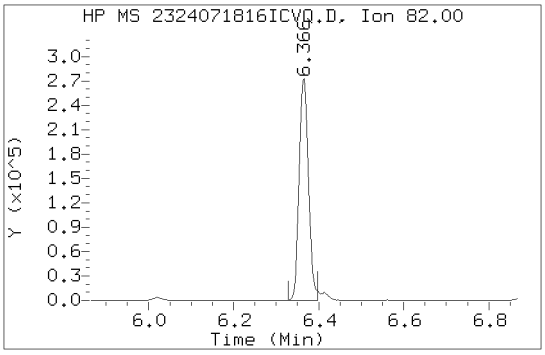
Chlorobenzene-d5 (3114-55-4)

Reason Code: MP

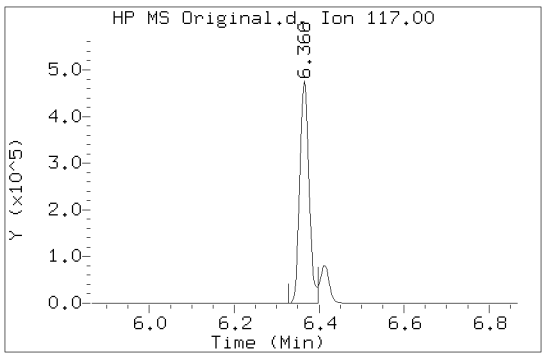
BEFORE
MASS
82
AREA
425591
HEIGHT
272768
18-Jul-2024
20:48



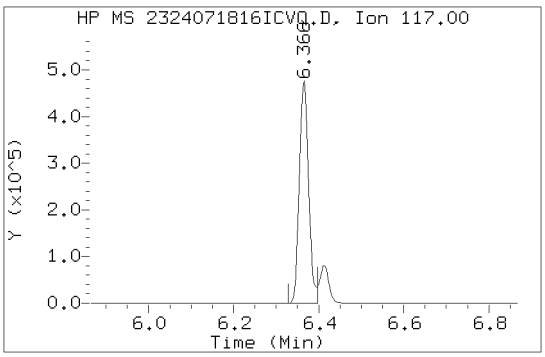
AFTER
MASS
82
AREA
411093
HEIGHT
272768
25-Jul-2024
17:19



BEFORE
MASS
117
AREA
713462
HEIGHT
476273
18-Jul-2024
20:48



AFTER
MASS
117
AREA
713462
HEIGHT
476273
25-Jul-2024
17:19



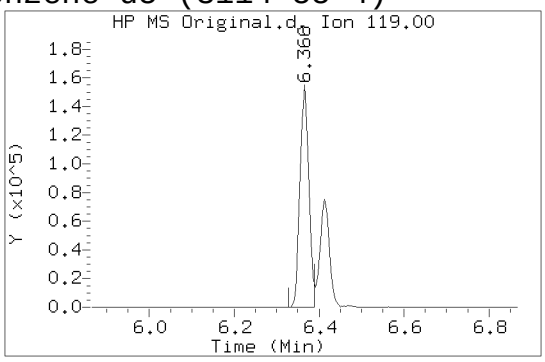
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Inj Date : 18-JUL-2024 17:02
InstruID : ms23.i
LabSampID : ICVQ

Chlorobenzene-d5 (3114-55-4)

Reason Code: MP

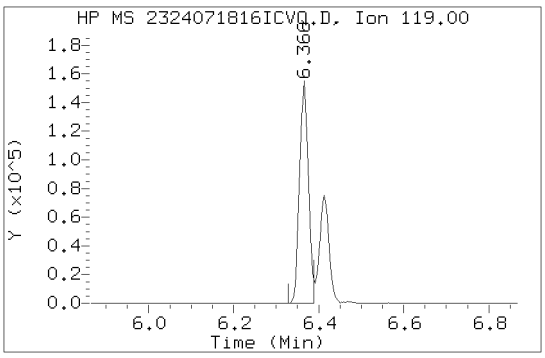
BEFORE

MASS
119
AREA
221179
HEIGHT
155136
18-Jul-2024
20:48



AFTER

MASS
119
AREA
221179
HEIGHT
155136
25-Jul-2024
17:19

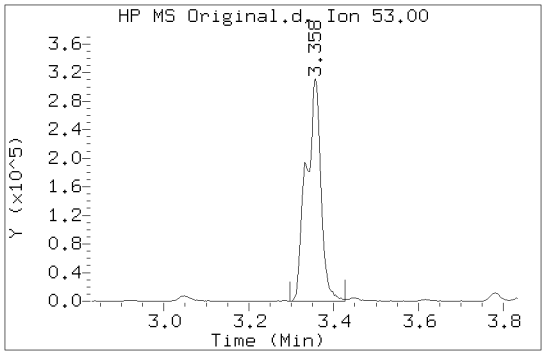


Chloroprene (126-99-8)

Reason Code: MP

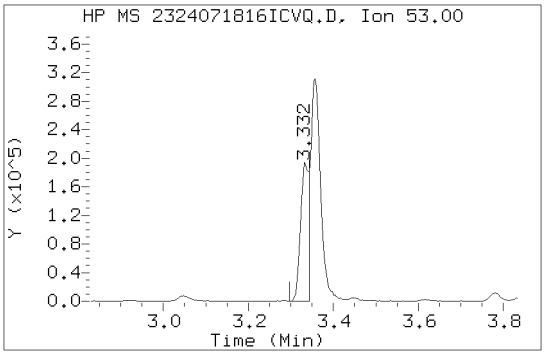
BEFORE

MASS
53
AREA
743753
HEIGHT
310706
18-Jul-2024
20:48



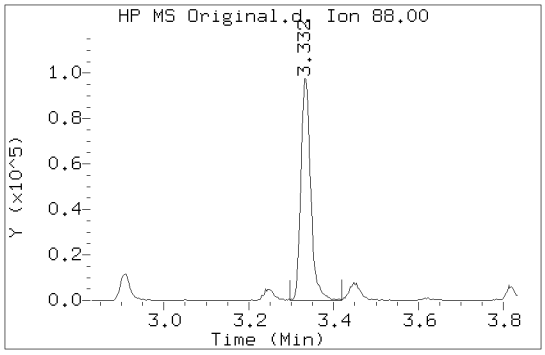
AFTER

MASS
53
AREA
259893
HEIGHT
194162
25-Jul-2024
17:19



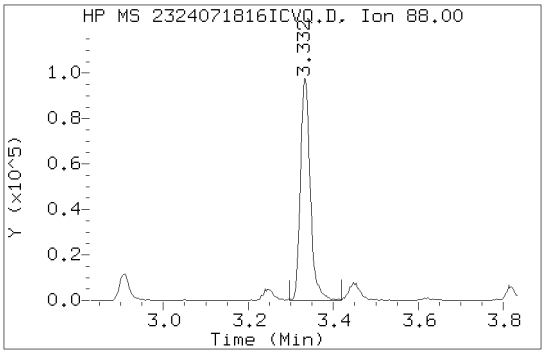
BEFORE

MASS
88
AREA
154528
HEIGHT
97520
18-Jul-2024
20:48



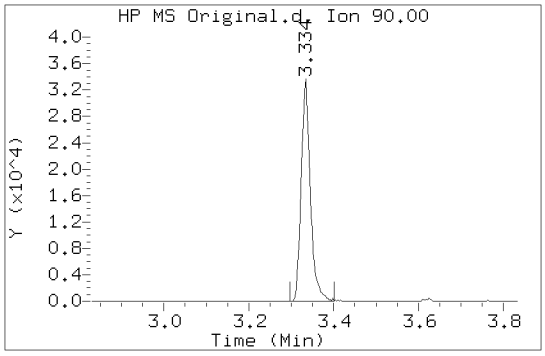
AFTER

MASS
88
AREA
154528
HEIGHT
97520
25-Jul-2024
17:19



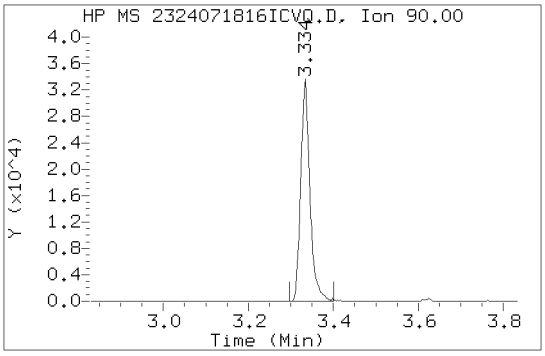
BEFORE

MASS
90
AREA
49465
HEIGHT
33672
18-Jul-2024
20:48



AFTER

MASS
90
AREA
49465
HEIGHT
33672
25-Jul-2024
17:19



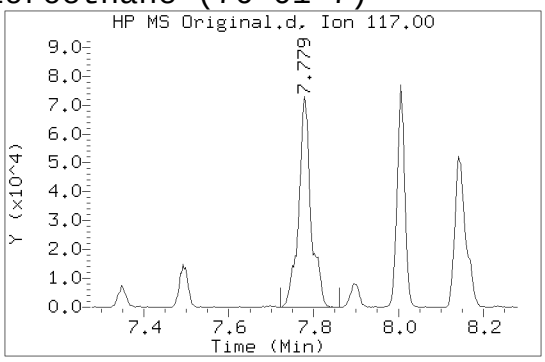
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Inj Date : 18-JUL-2024 17:02
InstruID : ms23.i
LabSampID : ICVQ

Pentachloroethane (76-01-7)

Reason Code: MP

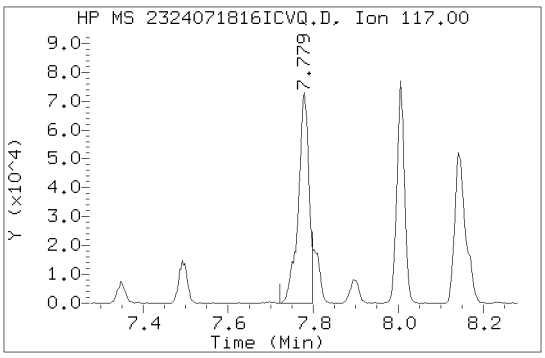
BEFORE

MASS
117
AREA
144551
HEIGHT
73080
18-Jul-2024
20:48



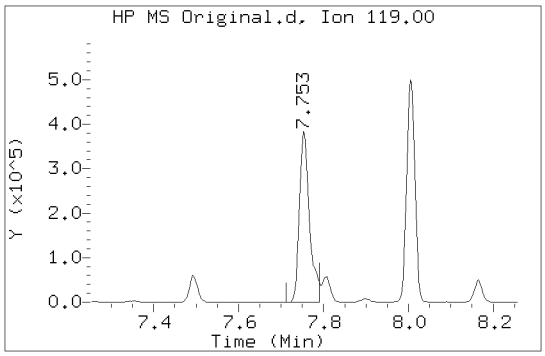
AFTER

MASS
117
AREA
125906
HEIGHT
73080
25-Jul-2024
17:19



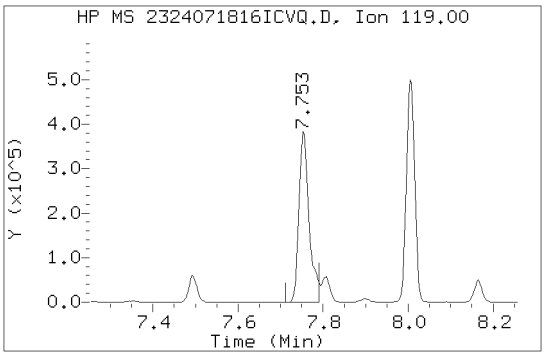
BEFORE

MASS
119
AREA
627049
HEIGHT
384704
18-Jul-2024
20:48



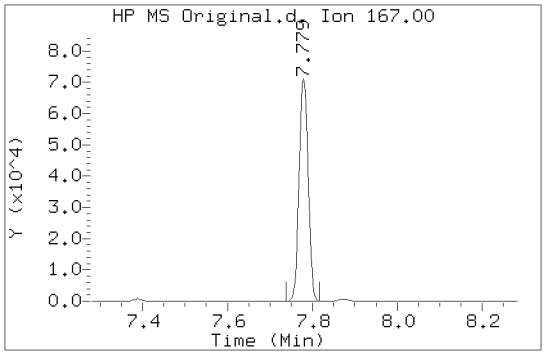
AFTER

MASS
119
AREA
627049
HEIGHT
384704
25-Jul-2024
17:19



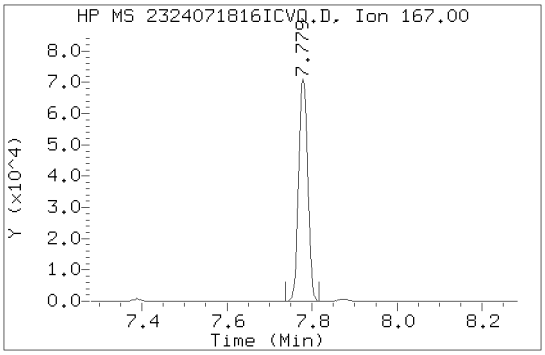
BEFORE

MASS
167
AREA
103972
HEIGHT
71096
18-Jul-2024
20:48



AFTER

MASS
167
AREA
103972
HEIGHT
71096
25-Jul-2024
17:19

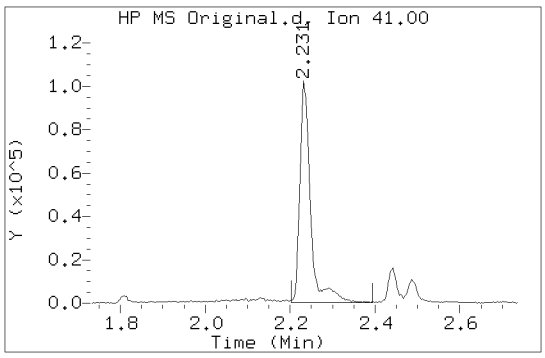


Pentane (109-66-0)

Reason Code: MP

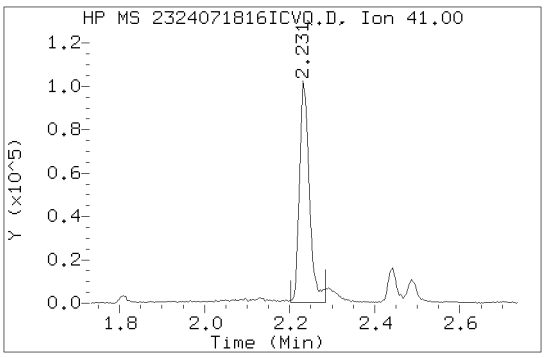
BEFORE

MASS
41
AREA
175362
HEIGHT
102175
18-Jul-2024
20:48



AFTER

MASS
41
AREA
162139
HEIGHT
102175
25-Jul-2024
17:19



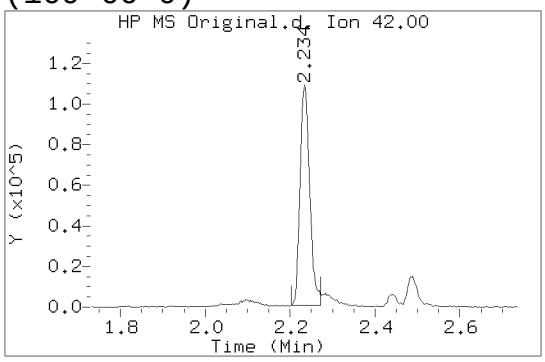
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Inj Date : 18-JUL-2024 17:02
InstruID : ms23.i
LabSampID : ICVQ

Pentane (109-66-0)

Reason Code: MP

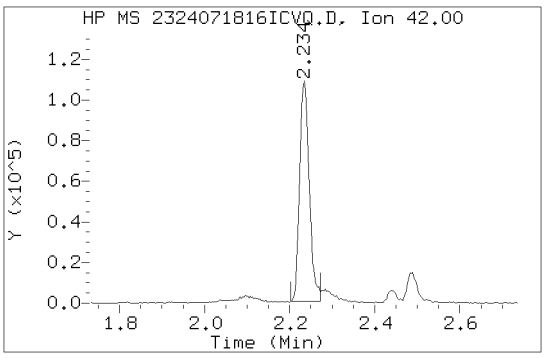
BEFORE

MASS
42
AREA
168643
HEIGHT
108627
18-Jul-2024
20:48



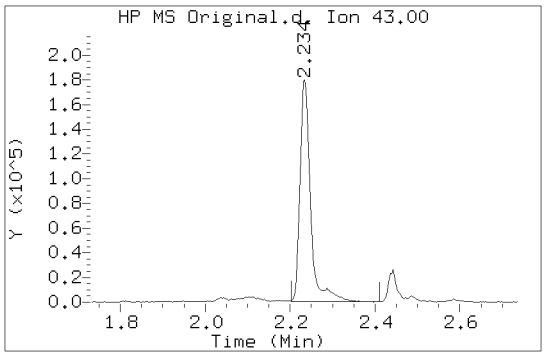
AFTER

MASS
42
AREA
168643
HEIGHT
108627
25-Jul-2024
17:19



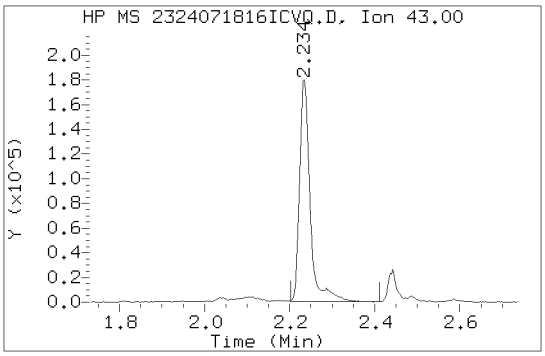
BEFORE

MASS
43
AREA
306546
HEIGHT
179641
18-Jul-2024
20:48



AFTER

MASS
43
AREA
306546
HEIGHT
179641
25-Jul-2024
17:19

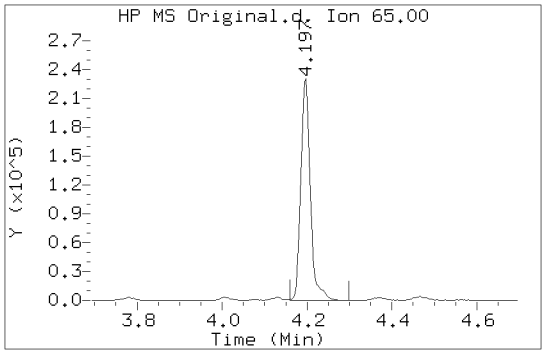


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

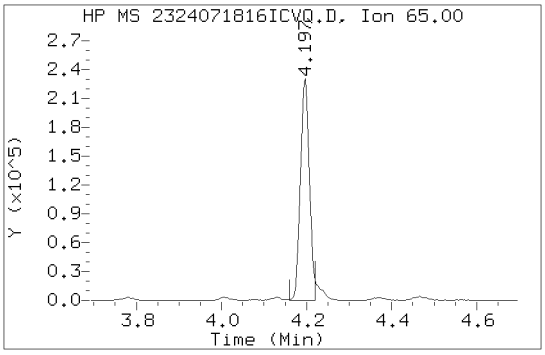
BEFORE

MASS
65
AREA
352858
HEIGHT
230336
18-Jul-2024
20:48



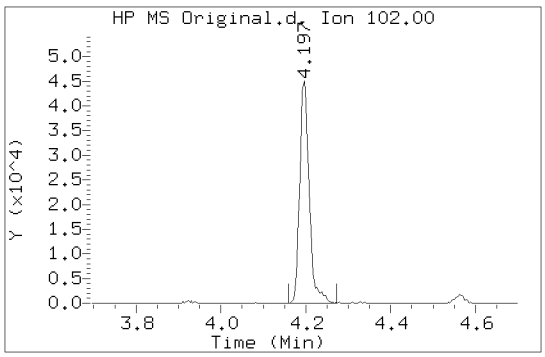
AFTER

MASS
65
AREA
333519
HEIGHT
230336
25-Jul-2024
17:19



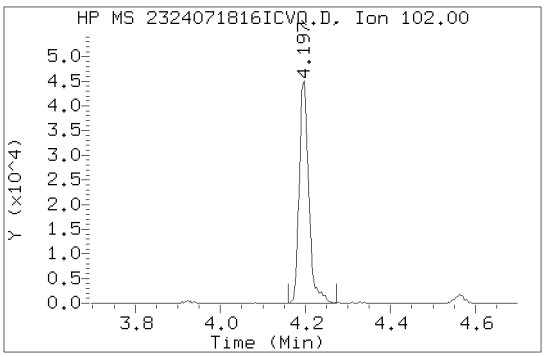
BEFORE

MASS
102
AREA
69183
HEIGHT
45072
18-Jul-2024
20:48



AFTER

MASS
102
AREA
69183
HEIGHT
45072
25-Jul-2024
17:19



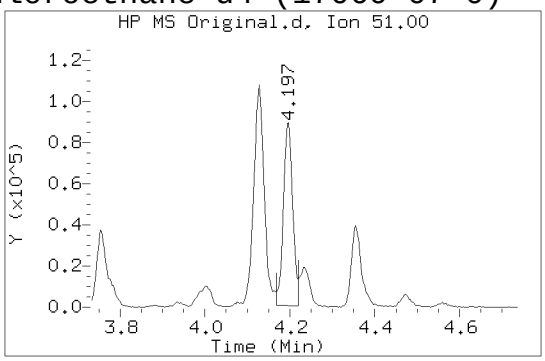
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Inj Date : 18-JUL-2024 17:02
InstruID : ms23.i
LabSampID : ICVQ

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

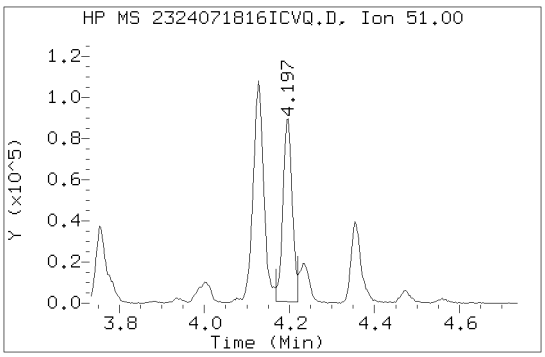
BEFORE

MASS
51
AREA
135087
HEIGHT
88965
18-Jul-2024
20:48



AFTER

MASS
51
AREA
135087
HEIGHT
88965
25-Jul-2024
17:19



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:19
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240718.b/232407181
Inj Date: 18-JUL-2024 17:02
Operator: ILY

There were no Unassigned peaks in this sample!

right solutions.
right partner.

k| T| | 9A9B7E8H

o | fi UhQF9D7S

h vx

SSVcSVM

Mfk

Q |

a xu

QSkCHAf VQkl A77ADDBD

7869A6979C

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ALS Environmental Services

BFB Tune

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071900.D
Lab Smp Id: 1000
Inj Date : 19-JUL-2024 10:20
Operator : JTH Inst ID: ms23.i
Smp Info : 1000
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\bfb288.m
Meth Date : 13-Sep-2023 15:55 bsimms Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAMDTW7053

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
7.249	7.159	(0.000)	95	55240			0.00- 100.00	100.00
7.249	8.129	(0.000)	50	12093			15.00- 40.00	21.89
7.249	8.129	(0.000)	75	29208			30.00- 60.00	52.87
7.249	8.129	(0.000)	96	3418			5.00- 9.00	6.19
7.249	8.129	(0.000)	173	463			0.00- 2.00	1.12
7.249	8.129	(0.000)	174	41392			50.00- 0.00	74.93
7.249	8.129	(0.000)	175	3694			5.00- 9.00	8.92
7.249	8.129	(0.000)	176	41176			95.00- 101.00	99.48
7.249	8.129	(0.000)	177	2884			5.00- 9.00	7.00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.89
75	30.00 - 60.00% of mass 95	52.87
96	5.00 - 9.00% of mass 95	6.19
173	Less than 2.00% of mass 174	0.84 (1.12)
174	Greater than 50.00% of mass 95	74.93
175	5.00 - 9.00% of mass 174	6.69 (8.92)
176	95.00 - 101.00% of mass 174	74.54 (99.48)
177	5.00 - 9.00% of mass 176	5.22 (7.00)

Data File: 2324071900.D
Spectrum: Avg. Scans 2179-2181 (7.25), Background Scan 2167
Location of Maximum: 95.00
Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	682	60.00	528	82.00	636	118.00	321
37.00	3491	61.00	2896	83.00	139	119.00	291
38.00	2944	62.00	2608	87.00	1998	128.00	51
39.00	810	63.00	2163	88.00	2527	131.00	121
40.00	103	64.00	298	91.00	393	135.00	91
41.00	172	67.00	214	92.00	1596	141.00	658
43.00	109	68.00	5969	93.00	2422	143.00	587
44.00	230	69.00	6433	94.00	6700	148.00	65
45.00	465	70.00	629	95.00	55240	155.00	52
47.00	875	72.00	422	96.00	3418	157.00	125
48.00	378	73.00	2769	97.00	69	170.00	59
49.00	2817	74.00	10145	104.00	341	172.00	363
50.00	12093	75.00	29208	105.00	145	173.00	463
51.00	3829	76.00	2763	106.00	352	174.00	41392
52.00	164	77.00	378	107.00	79	175.00	3694
55.00	374	78.00	232	113.00	112	176.00	41176
56.00	1157	79.00	2289	115.00	93	177.00	2884
57.00	1861	80.00	673	116.00	241	178.00	150
58.00	52	81.00	2591	117.00	431		

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071900.D

Date : 19-JUL-2024 10:20

Client ID:

Instrument: ms23.i

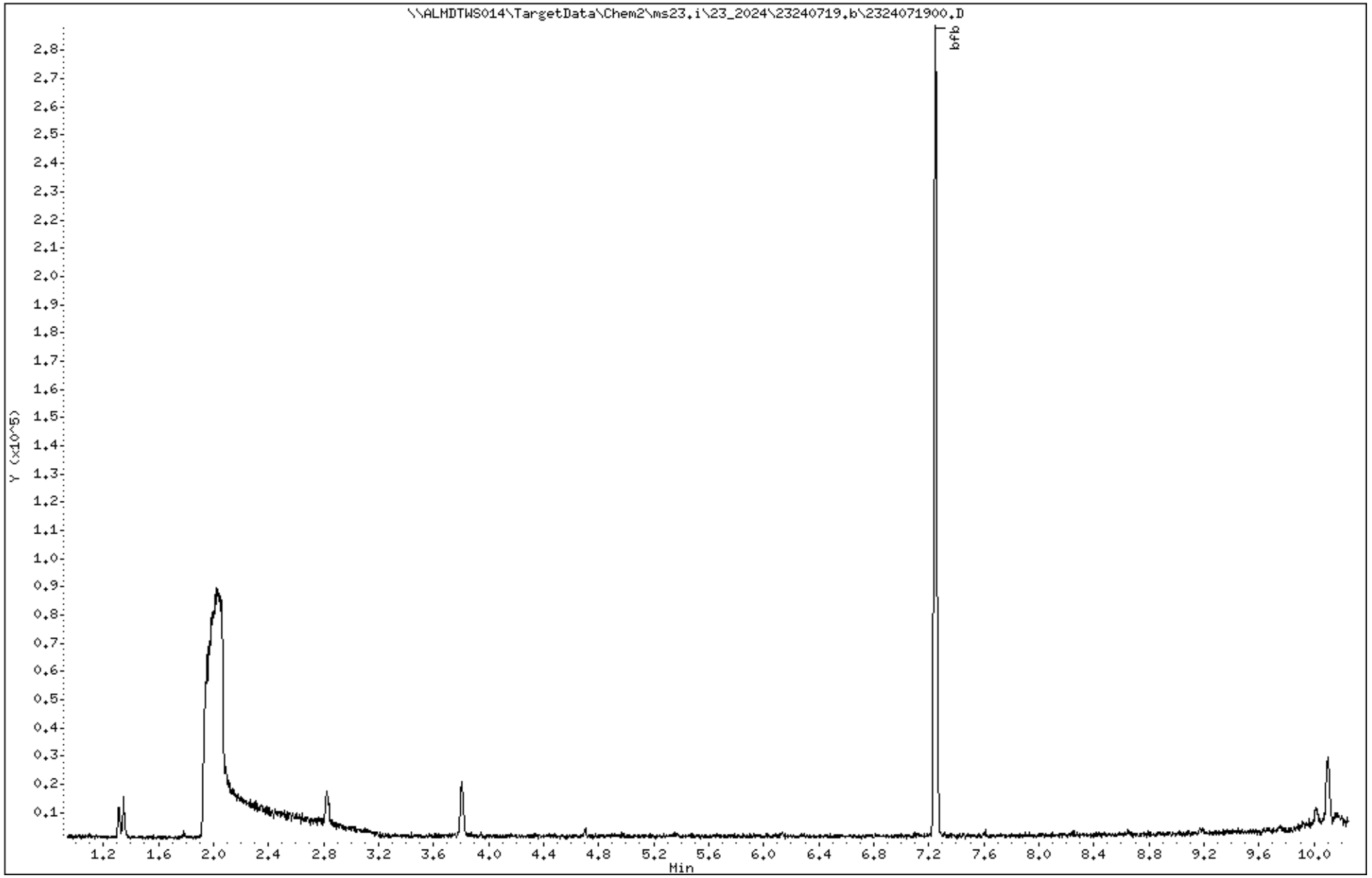
Sample Info: 1000

Volume Injected (uL): 1.0

Operator: JTH

Column phase: DB624

Column diameter: 0.53



Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071900.D
Inj Date : 19-JUL-2024 10:20
InstruID : ms23.i
LabSampID : 1000

NO MANUAL INTEGRATIONS

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071901.D
Lab Smp Id: 1800
Inj Date : 19-JUL-2024 11:01
Operator : JTH Inst ID: ms23.i
Smp Info : 1800;;1;2;4;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\23-8260b09D.m
Meth Date : 25-Jul-2024 06:20 ms23.i Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

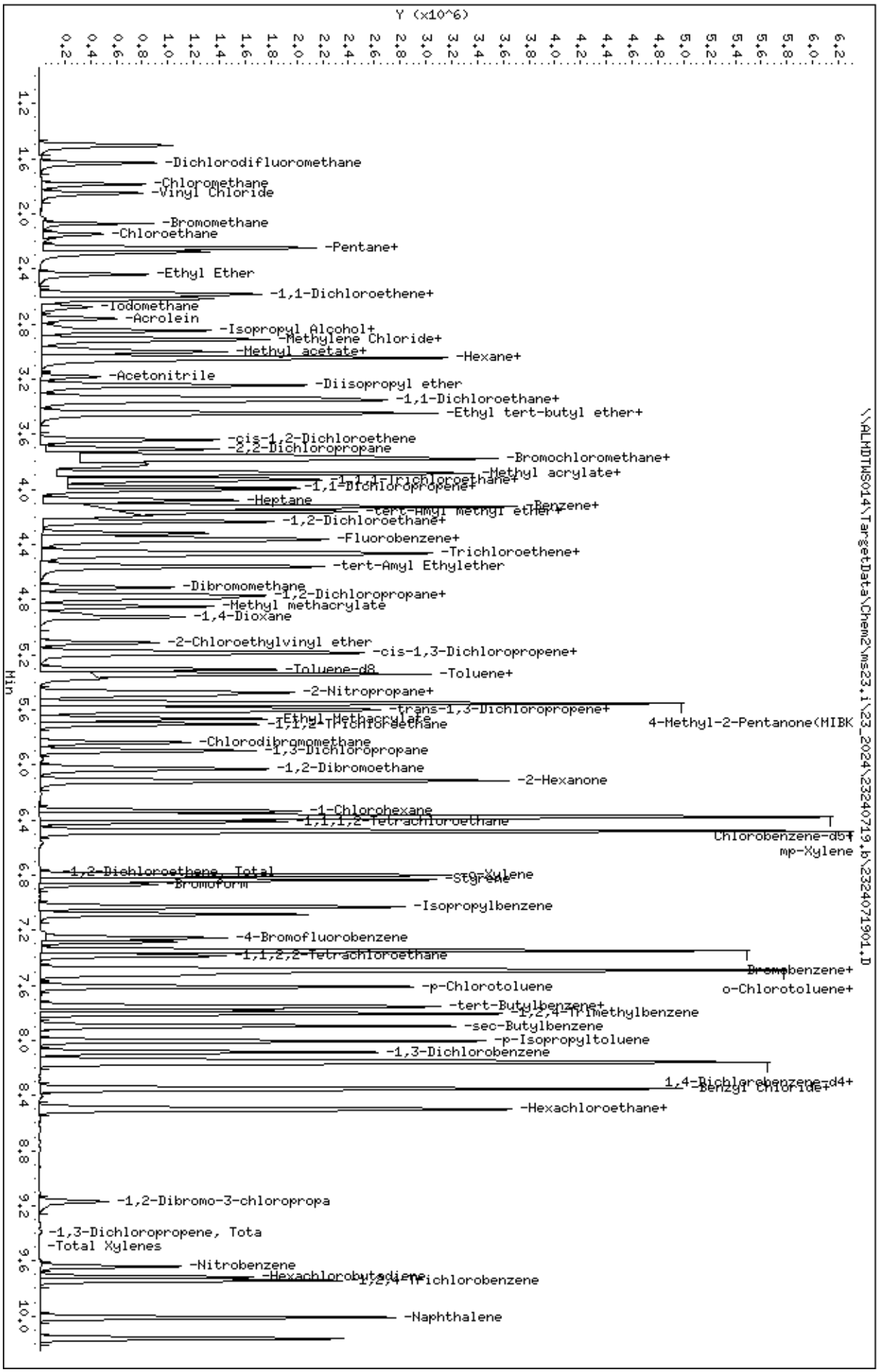
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.632	1.632	(0.375)	700133	50.0000	54.7917	
2	Chloromethane	50	1.785	1.785	(0.410)	634848	50.0000	48.7073	
3	Vinyl Chloride	62	1.849	1.849	(0.425)	605838	50.0000	52.5742	
4	Bromomethane	94	2.072	2.072	(0.476)	269052	50.0000	50.0257	
5	Chloroethane	64	2.147	2.147	(0.493)	324082	50.0000	52.1991	
6	Pentane	41	2.245	2.245	(0.516)	409294	50.0000	48.6007	
7	Trichlorofluoromethane	101	2.251	2.251	(0.517)	778586	50.0000	55.2075	
8	Dichlorofluoromethane	67	2.280	2.280	(0.524)	890899	50.0000	49.0415	
9	Ethyl Ether	74	2.439	2.439	(0.560)	283713	50.0000	49.1638	
10	1,1-Dichloroethene	61	2.578	2.578	(0.592)	632483	50.0000	50.1457	
11	Freon 113	101	2.590	2.590	(0.595)	384935	50.0000	51.9239	
12	Carbon Disulfide	76	2.619	2.619	(0.602)	1270352	50.0000	49.5827	
13	Iodomethane	127	2.677	2.677	(0.615)	174708	50.0000	47.1882	
14	Acrolein	56	2.761	2.761	(0.634)	418647	250.000	247.712	
15	Isopropyl Alcohol	45	2.819	2.819	(0.648)	181427	250.000	224.512	
16	3-Chloro-1-propene	41	2.848	2.848	(0.654)	690768	50.0000	51.8707	
17	Methylene Chloride	84	2.908	2.908	(0.668)	443077	50.0000	48.0725	
18	Acetone	58	2.917	2.917	(0.670)	255954	250.000	238.295	
19	Methyl acetate	74	2.981	2.981	(0.685)	89905	50.0000	45.7785	
20	trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	618124	50.0000	49.0119	
21	Hexane	57	3.042	3.042	(0.699)	957357	50.0000	51.0184	
22	Methyl t-Butyl Ether	73	3.047	3.047	(0.700)	1338924	50.0000	49.4952	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	3.065	3.065	(0.704)	282523	250.000	241.603	
	24 Acetonitrile	41	3.181	3.181	(0.731)	393077	250.000	232.251	
	25 Diisopropyl ether	45	3.244	3.244	(0.745)	1548730	50.0000	50.0933	
	26 Chloroprene	53	3.334	3.334	(0.766)	576504	50.0000	51.7206(M)	MP
	27 1,1-Dichloroethane	63	3.346	3.346	(0.769)	820130	50.0000	49.5942	
	28 Acrylonitrile	53	3.354	3.354	(0.771)	1281833	250.000	243.870(M)	
	29 Ethyl tert-butyl ether	59	3.447	3.447	(0.792)	1461570	50.0000	50.3506	
	30 n-Propanol	41	3.444	3.444	(0.791)	311499	500.000	465.313(a)	
	31 Vinyl Acetate	86	3.450	3.450	(0.793)	113634	50.0000	52.6136	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	634409	50.0000	49.9033	
	33 2,2-Dichloropropane	77	3.707	3.707	(0.852)	683500	50.0000	53.7882	
	34 Bromochloromethane	128	3.757	3.757	(0.863)	231203	50.0000	50.4068	
	35 Cyclohexane	84	3.780	3.780	(0.868)	641964	50.0000	48.9674	
	36 Chloroform	83	3.780	3.780	(0.868)	843172	50.0000	48.9816	
	37 Ethyl Acetate	43	3.812	3.812	(0.876)	618786	50.0000	49.2051	
	38 Methyl acrylate	55	3.832	3.832	(0.880)	514480	50.0000	49.0955	
	39 Carbon Tetrachloride	117	3.890	3.890	(0.894)	590738	50.0000	52.8454(M)	MP
$	41 Dibromofluoromethane	113	3.881	3.881	(0.892)	262506	30.0000	30.0818	
	40 Tetrahydrofuran	42	3.881	3.881	(0.892)	862869	250.000	237.705	
	42 1,1,1-Trichloroethane	97	3.922	3.922	(0.901)	687159	50.0000	50.3859	
	43 2-Butanone	72	3.933	3.933	(0.904)	331994	250.000	237.134	
	44 1,1-Dichloropropene	75	3.985	3.985	(0.916)	621732	50.0000	49.3721	
	45 1-Chlorobutane	41	4.006	4.006	(0.920)	515797	50.0000	48.2795	
	46 Heptane	71	4.078	4.078	(0.937)	320579	50.0000	49.4587	
	47 Benzene	78	4.127	4.127	(0.948)	1719856	50.0000	48.6507	
	48 Propionitrile	54	4.110	4.110	(0.944)	437688	250.000	241.694	
	49 Methacrylonitrile	67	4.127	4.127	(0.948)	224684	50.0000	48.3251	
	50 tert-Amyl methyl ether	73	4.162	4.162	(0.956)	1322302	50.0000	49.8953	
	54 Isobutyl alcohol	42	4.165	4.165	(0.957)	164199	500.000	416.727	
$	51 1,2-Dichloroethane-d4	65	4.194	4.194	(0.963)	362888	30.0000	32.4757	
	52 1,2-Dichloroethane	62	4.234	4.234	(0.973)	679501	50.0000	47.6357	
	53 tert-Amyl Alcohol	59	4.234	4.234	(0.973)	233203	250.000	211.187	
*	55 Fluorobenzene	96	4.353	4.353	(1.000)	938901	30.0000		
	56 Diisobutylene	57	4.371	4.371	(1.004)	1120352	50.0000	51.0438	
	57 Trichloroethene	95	4.457	4.457	(1.024)	475808	50.0000	49.0523	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	705749	50.0000	51.4468	
	59 tert-Amyl Ethylether	59	4.562	4.562	(1.048)	1093816	50.0000	49.9204	
	60 Dibromomethane	93	4.712	4.712	(1.082)	312686	50.0000	49.1913	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.096)	472642	50.0000	48.5835	
	62 Bromodichloromethane	83	4.790	4.790	(1.100)	623742	50.0000	50.7457	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	516740	50.0000	48.8986	
	64 1,4-Dioxane	88	4.903	4.903	(1.126)	164548	1250.00	1219.30	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.175)	324194	50.0000	46.1055	
	66 cis-1,3-Dichloropropene	75	5.178	5.178	(0.814)	777863	50.0000	53.7885	
	67 Octane	85	5.196	5.196	(0.817)	281490	50.0000	53.3646	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	1003860	30.0000	30.6683	
	69 Toluene	92	5.340	5.340	(0.839)	1049984	50.0000	49.4120	
	70 Chloroacetonitrile	75	5.378	5.378	(0.845)	171943	250.000	252.236	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	915445	250.000	238.045	
	72 1,1-Dichloro-2-Propanone	63	5.494	5.494	(0.863)	65509	250.000	227.129	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.552	5.552	(0.873)	2866181	250.000	255.094	
	75 trans-1,3-Dichloropropene	75	5.592	5.592	(0.879)	730433	50.0000	54.1010	
	74 Tetrachloroethene	164	5.607	5.607	(0.881)	385965	50.0000	49.5488	
	76 Ethyl Methacrylate	69	5.665	5.665	(0.890)	698150	50.0000	52.4935	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
77	1,1,2-Trichloroethane	83	5.705	5.705	(0.897)	371533	50.0000	50.4553	
78	Chlorodibromomethane	129	5.838	5.838	(0.918)	485666	50.0000	53.3311	
79	1,3-Dichloropropane	76	5.896	5.896	(0.927)	747467	50.0000	49.6743	
80	1,2-Dibromoethane	107	6.018	6.018	(0.946)	395909	50.0000	50.3538	
81	2-Hexanone	43	6.116	6.116	(0.961)	2047200	250.000	253.771	
82	1-Chlorohexane	91	6.334	6.334	(0.995)	552235	50.0000	49.0874	
* 83	Chlorobenzene-d5	82	6.363	6.363	(1.000)	406604	30.0000		
84	Chlorobenzene	112	6.377	6.377	(1.002)	1132543	50.0000	49.7665	
85	Ethylbenzene	106	6.380	6.380	(1.003)	586193	50.0000	48.6363	
86	1,1,1,2-Tetrachloroethane	131	6.412	6.412	(1.008)	415307	50.0000	51.6372	
87	mp-Xylene	106	6.481	6.481	(1.019)	1444518	100.000	97.7853	
88	o-Xylene	106	6.800	6.800	(1.069)	713873	50.0000	49.6688	
89	Styrene	104	6.834	6.834	(0.840)	1195946	50.0000	52.0869	
90	Bromoform	173	6.869	6.869	(0.844)	316798	50.0000	54.2003	
91	Isopropylbenzene	105	7.028	7.028	(0.863)	1610166	50.0000	50.3606	
M 100	1,2-Dichloroethene, Total	61				1252533	100.000	98.9151	
$ 92	4-Bromofluorobenzene	174	7.254	7.254	(0.891)	315456	30.0000	31.1496	
93	Bromobenzene	156	7.350	7.350	(0.903)	462726	50.0000	49.8647	
94	n-Propylbenzene	120	7.347	7.347	(0.903)	488488	50.0000	49.8962	
95	1,1,2,2-Tetrachloroethane	83	7.385	7.385	(0.907)	595020	50.0000	51.5852	
96	o-Chlorotoluene	91	7.483	7.483	(0.919)	1521594	50.0000	50.9753	
97	1,3,5-Trimethylbenzene	105	7.492	7.492	(0.920)	1562034	50.0000	52.6628	
98	1,2,3-Trichloropropane	110	7.506	7.506	(0.922)	180699	50.0000	50.6671	
99	trans-1,4-Dichloro-2-butene	53	7.526	7.526	(0.925)	186023	50.0000	52.1348	
101	p-Chlorotoluene	91	7.610	7.610	(0.935)	1380692	50.0000	49.9046	
102	tert-Butylbenzene	134	7.755	7.755	(0.953)	343266	50.0000	49.2651	
103	Pentachloroethane	117	7.778	7.778	(0.956)	322020	50.0000	55.9019(M)	MP
104	1,2,4-Trimethylbenzene	105	7.807	7.807	(0.959)	1582183	50.0000	51.9000	
105	sec-Butylbenzene	105	7.897	7.897	(0.970)	1875801	50.0000	50.5696	
106	p-Isopropyltoluene	134	8.004	8.004	(0.983)	418708	50.0000	51.0450	
107	1,3-Dichlorobenzene	146	8.085	8.085	(0.993)	874000	50.0000	49.9150	
* 108	1,4-Dichlorobenzene-d4	152	8.140	8.140	(1.000)	357693	30.0000		
109	1,4-Dichlorobenzene	146	8.155	8.155	(1.002)	884441	50.0000	48.9941	
110	Benzyl Chloride	126	8.346	8.346	(1.025)	212989	50.0000	51.6407	
111	n-Butylbenzene	134	8.352	8.352	(1.026)	389159	50.0000	50.1865	
112	Hexachloroethane	117	8.491	8.491	(1.043)	305388	50.0000	53.4706	
113	1,2-Dichlorobenzene	146	8.502	8.502	(1.044)	851743	50.0000	50.3650	
114	1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	109998	50.0000	50.3607	
115	Nitrobenzene	77	9.640	9.640	(1.184)	429009	500.000	437.571	
116	Hexachlorobutadiene	225	9.718	9.718	(1.194)	233551	50.0000	50.7558	
M 120	1,3-Dichloropropene, Total	75				1508296	100.000	107.889	
117	1,2,4-Trichlorobenzene	180	9.744	9.744	(1.197)	556838	50.0000	50.2115	
M 121	Total Xylenes	106				2158391	150.000	147.454	
118	Naphthalene	128	10.011	10.011	(1.230)	1636530	50.0000	53.4180	
119	1,2,3-Trichlorobenzene	180	10.164	10.164	(1.249)	554294	50.0000	51.7306	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.


Data File: \\ALHDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\23240719.D
Date : 19-JUL-2024 11:01
Client ID:
Sample Info: 1800;;1;2;4;;;
Purge Volume: 5.0
Column phase: DB-VRX
Instrument: ms23.i
Operator: JTH
Column diameter: 0.25
Y (x10^6)
Min
\\ALHDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\23240719.D
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Pentane+
-Ethyl Ether
-1,1-Dichloroethene+
-Iodomethane
-Acrolein
-Isopropyl Alcohol+
-Methylene Chloride+
-Methyl acetate+
-Hexane+
-Acetonitrile
-Diisopropyl ether
-1,1-Dichloroethane+
-Ethyl tert-butyl ether+
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Bromochloromethane+
-Methyl acrylate+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene+
-Heptane
-Benzene+
-tert-Amyl methyl ether+
-1,2-Dichloroethane+
-Fluorobenzene+
-Trichloroethene+
-tert-Amyl Ethylether
-Dibromomethane
-1,2-Dichloropropane+
-Methyl methacrylate
-1,4-Dioxane
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropene+
-Toluene-d8
-Toluene+
-2-Nitropropane+
-trans-1,3-Dichloropropene+
4-Methyl-2-Pentanone(MIBK
-Ethyl Methacrylate
-1,1,2-Trichloroethane
-Chlorodibromomethane
-1,3-Dichloropropane
-1,2-Dibromoethane
-2-Hexanone
-Chlorohexane
-1,1,1,2-Tetrachloroethane
Chlorobenzene-d5+
mp-Xylene
-1,2-Dichloroethene, Total
-Bromoform
-o-Xylene
-Styrene
-Isopropylbenzene
-4-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
Bromobenzene+
-p-Chlorotoluene
o-Chlorotoluene+
-tert-Butylbenzene+
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-p-Isopropyltoluene
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
Benzyl Chloride+
-Hexachloroethane+
-1,2-Dibromo-3-chloropropa
-1,3-Dichloropropene, Tota
-Total Xylenes
-Nitrobenzene
-Hexachlorobutadiene
1,2,4-Trichlorobenzene
-Naphthalene

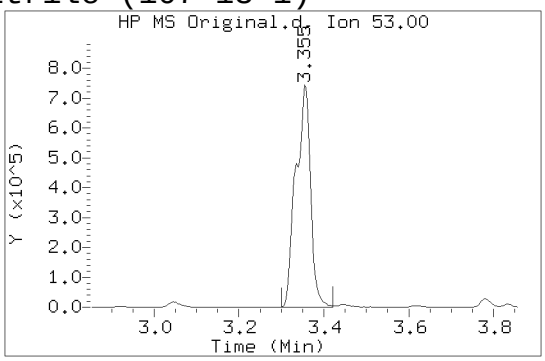
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Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071901.D
Inj Date : 19-JUL-2024 11:01
InstruID : ms23.i
LabSampID : 1800

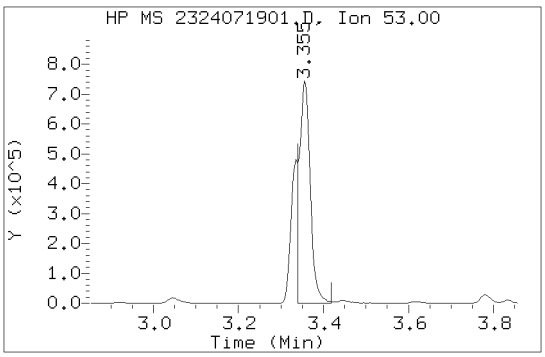
Acrylonitrile (107-13-1)

Reason Code:

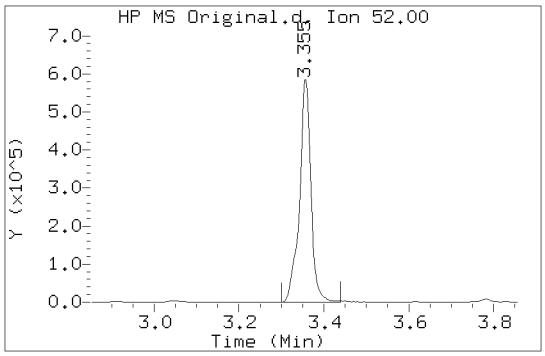
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HEIGHT
743637
19-Jul-2024
11:15



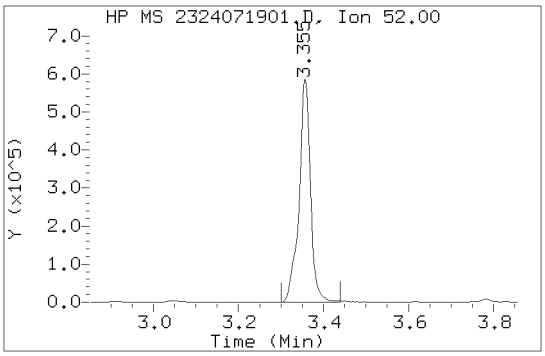
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HEIGHT
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25-Jul-2024
17:45



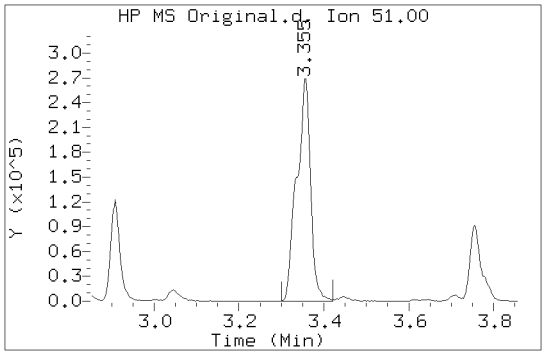
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HEIGHT
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19-Jul-2024
11:15



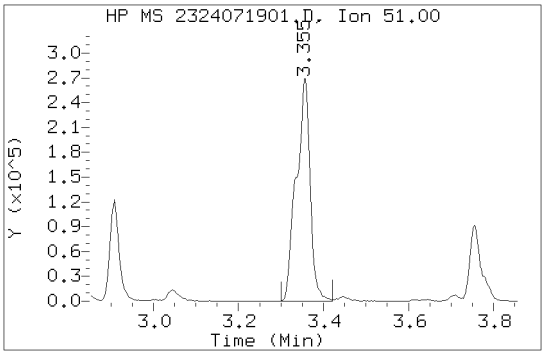
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MASS
52
AREA
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HEIGHT
583793
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17:45



BEFORE
MASS
51
AREA
603407
HEIGHT
268358
19-Jul-2024
11:15



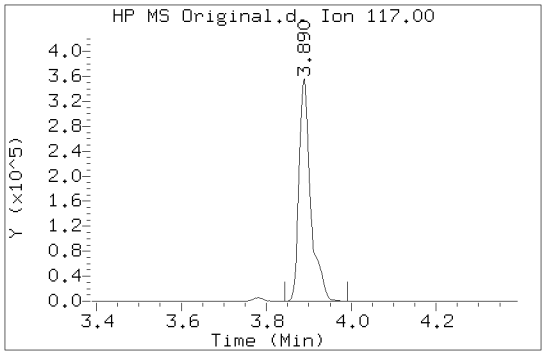
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HEIGHT
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25-Jul-2024
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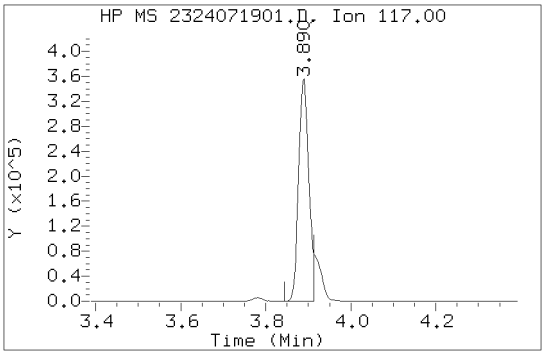
Carbon Tetrachloride (56-23-5)

Reason Code: MP

BEFORE
MASS
117
AREA
672839
HEIGHT
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19-Jul-2024
11:15



AFTER
MASS
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AREA
590738
HEIGHT
355776
25-Jul-2024
17:45

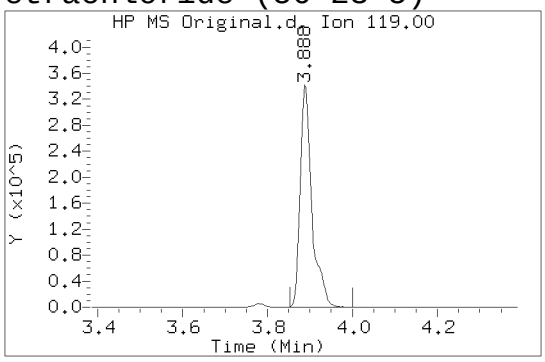


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LabSampID : 1800

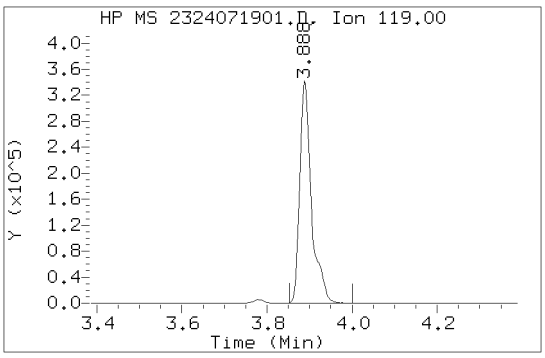
Carbon Tetrachloride (56-23-5)

Reason Code: MP

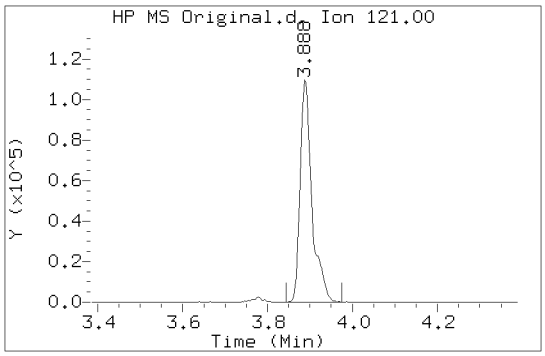
BEFORE
MASS
119
AREA
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HEIGHT
342016
19-Jul-2024
11:15



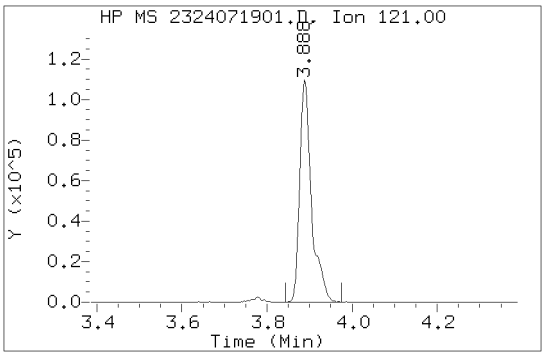
AFTER
MASS
119
AREA
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HEIGHT
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25-Jul-2024
17:45



BEFORE
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AREA
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HEIGHT
109696
19-Jul-2024
11:15



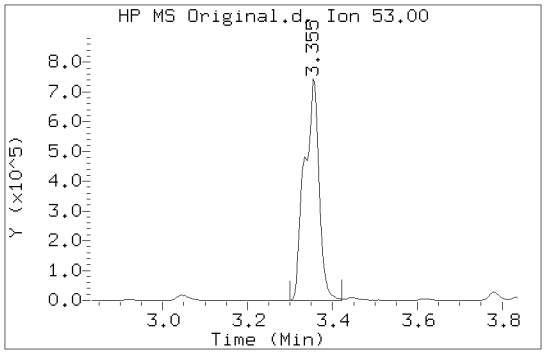
AFTER
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121
AREA
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HEIGHT
109696
25-Jul-2024
17:45



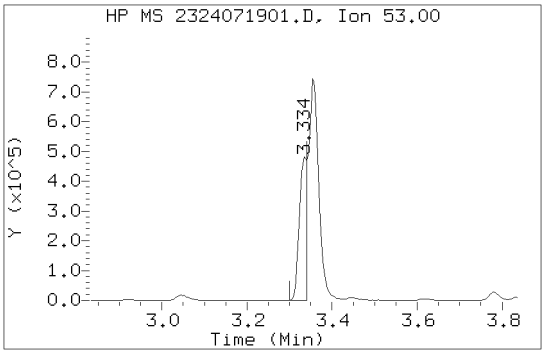
Chloroprene (126-99-8)

Reason Code: MP

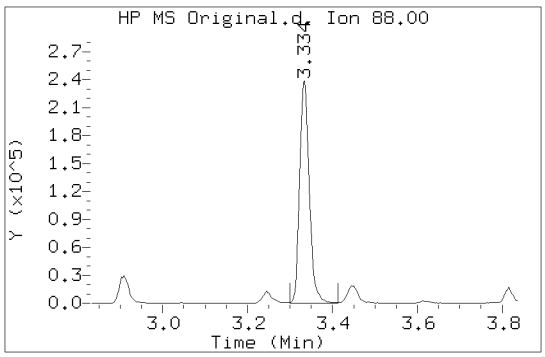
BEFORE
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HEIGHT
743637
19-Jul-2024
11:15



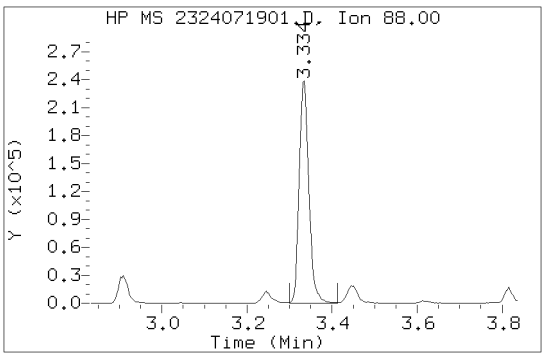
AFTER
MASS
53
AREA
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HEIGHT
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25-Jul-2024
17:45



BEFORE
MASS
88
AREA
370246
HEIGHT
238609
19-Jul-2024
11:15



AFTER
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370246
HEIGHT
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25-Jul-2024
17:45

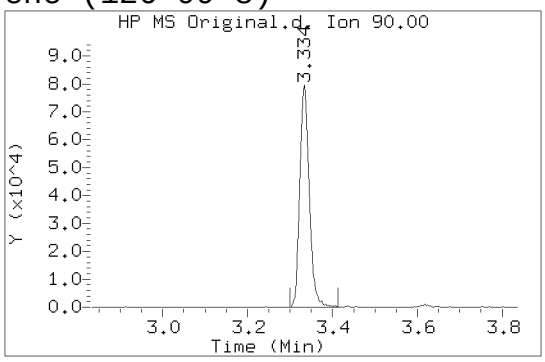


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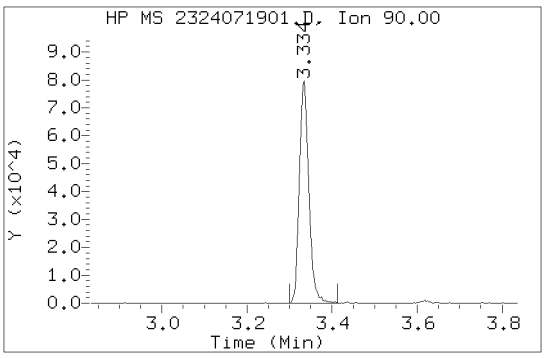
Chloroprene (126-99-8)

Reason Code: MP

BEFORE
MASS
90
AREA
121347
HEIGHT
79632
19-Jul-2024
11:15



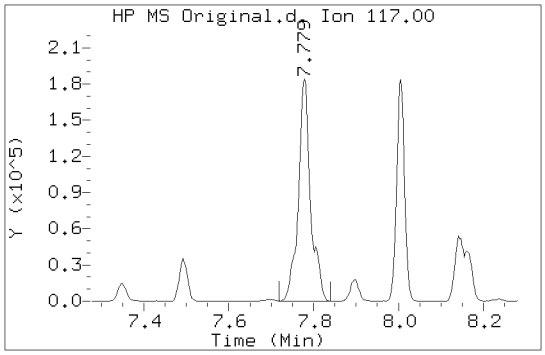
AFTER
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HEIGHT
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25-Jul-2024
17:45



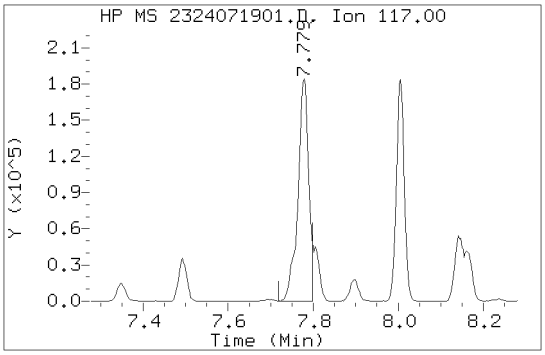
Pentachloroethane (76-01-7)

Reason Code: MP

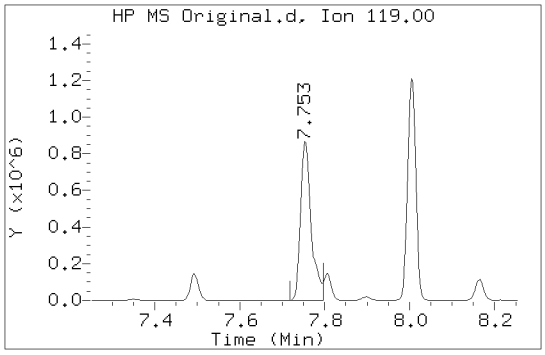
BEFORE
MASS
117
AREA
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HEIGHT
184256
19-Jul-2024
11:15



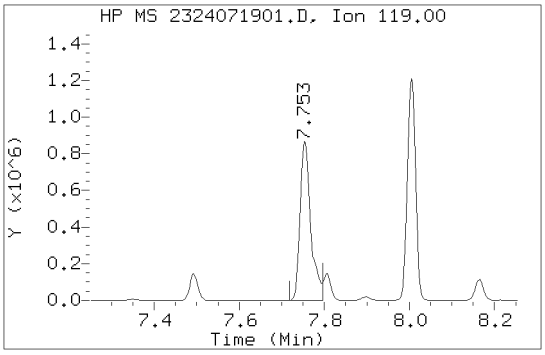
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25-Jul-2024
17:45



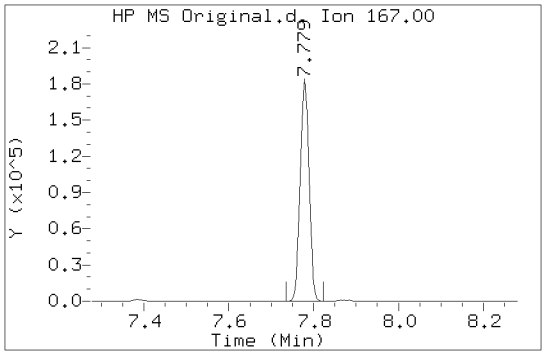
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MASS
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AREA
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HEIGHT
867497
19-Jul-2024
11:15



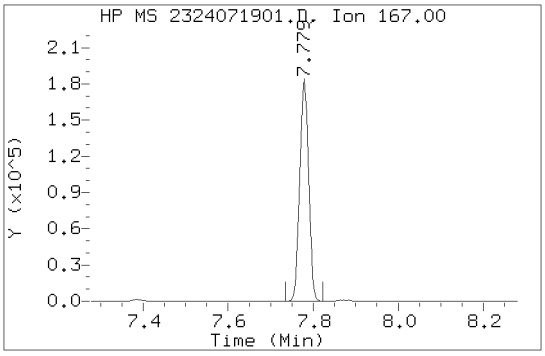
AFTER
MASS
119
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HEIGHT
867497
25-Jul-2024
17:45



BEFORE
MASS
167
AREA
262877
HEIGHT
184128
19-Jul-2024
11:15



AFTER
MASS
167
AREA
262877
HEIGHT
184128
25-Jul-2024
17:45



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:45
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240719.b/232407190
Inj Date: 19-JUL-2024 11:01
Operator: JTH

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071902.D
Lab Smp Id: 3854500 Client Smp ID: LCS for HBN 1258273
Inj Date : 19-JUL-2024 12:03
Operator : JTH Inst ID: ms23.i
Smp Info : 3854500;;1;3;;LCS;1;
Misc Info : ZZ VOMS 73921 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\23-8260b09D.m
Meth Date : 25-Jul-2024 06:20 ms23.i Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

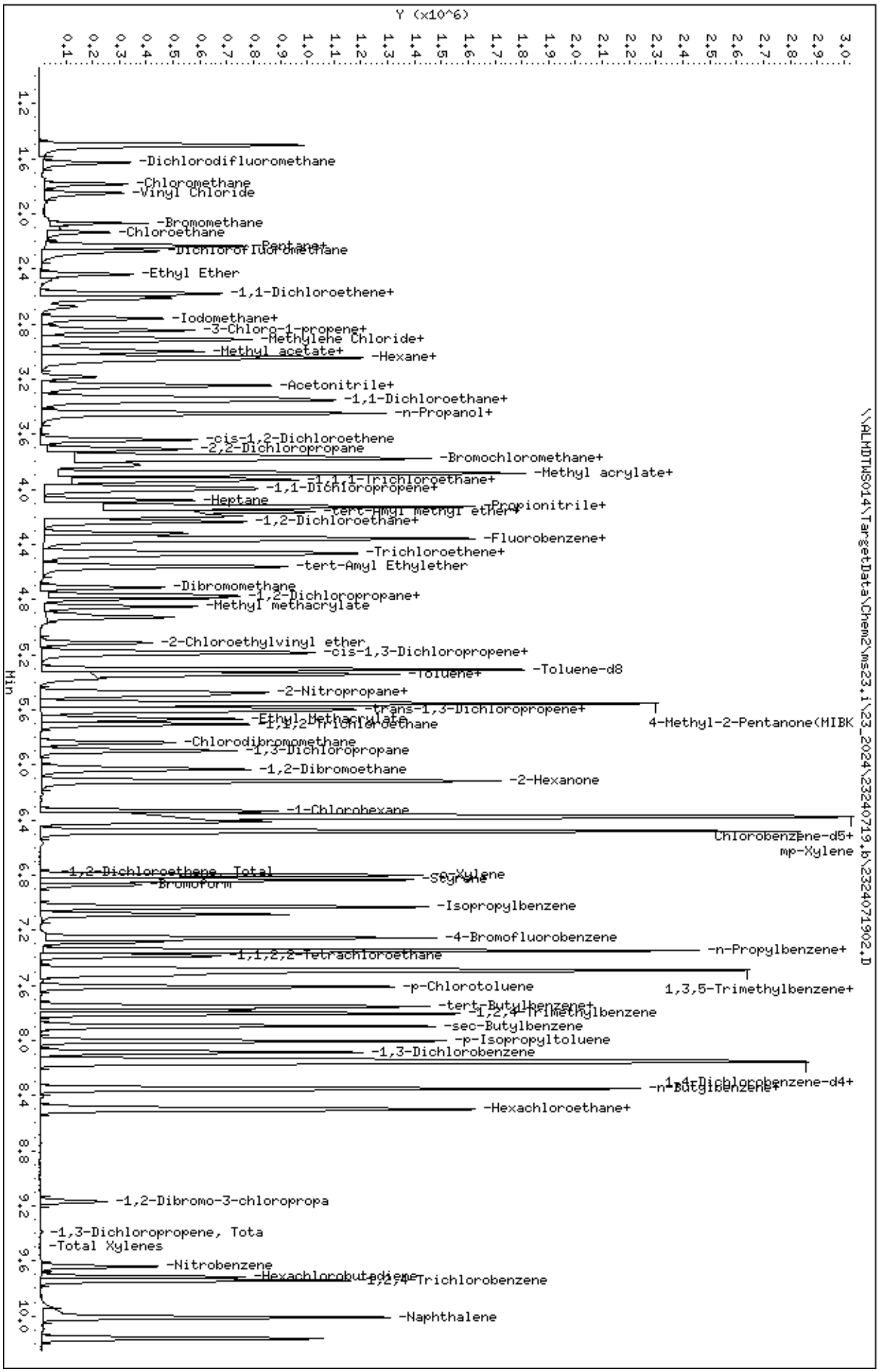
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.629	1.632	(0.374)	258495	20.4814	20.4814	
2 Chloromethane	50	1.782	1.785	(0.409)	248911	19.3349	19.3349	
3 Vinyl Chloride	62	1.849	1.849	(0.425)	237660	20.8807	20.8807	
4 Bromomethane	94	2.069	2.072	(0.475)	108520	20.0972	20.0972	
5 Chloroethane	64	2.135	2.147	(0.491)	130294	21.2474	21.2474	
6 Pentane	41	2.231	2.245	(0.513)	117455	14.1206	14.1206	
7 Trichlorofluoromethane	101	2.237	2.251	(0.514)	303458	21.7853	21.7853	
8 Dichlorofluoromethane	67	2.272	2.280	(0.522)	362397	20.1973	20.1973	
9 Ethyl Ether	74	2.437	2.439	(0.560)	115919	20.3374	20.3374	
10 1,1-Dichloroethene	61	2.573	2.578	(0.591)	256224	20.5673	20.5673	
12 Carbon Disulfide	76	2.613	2.619	(0.600)	454490	17.9599	17.9599	
11 Freon 113	101	2.587	2.590	(0.594)	149250	20.3830	20.3830	
13 Iodomethane	127	2.677	2.677	(0.615)	62593	17.1167	17.1167	
14 Acrolein	56	2.758	2.761	(0.634)	330697	198.109	198.109	
16 3-Chloro-1-propene	41	2.845	2.848	(0.654)	294851	22.4164	22.4164	
15 Isopropyl Alcohol	45	2.827	2.819	(0.650)	84834	105.890	105.890	
17 Methylene Chloride	84	2.908	2.908	(0.668)	191535	21.0397	21.0397	
18 Acetone	58	2.920	2.917	(0.671)	138854	130.884	130.884	
19 Methyl acetate	74	2.987	2.981	(0.686)	41994	21.5426	21.5426	
20 trans-1,2-Dichloroethene	61	3.001	3.004	(0.689)	255260	20.4919	20.4919	
21 Hexane	57	3.042	3.042	(0.699)	372576	20.1021	20.1021	
22 Methyl t-Butyl Ether	73	3.047	3.047	(0.700)	594744	22.2593	22.2593	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	3.074	3.065	(0.706)	134246	116.232	116.232	
	24 Acetonitrile	41	3.184	3.181	(0.731)	175832	105.184	105.184	
	25 Diisopropyl ether	45	3.247	3.244	(0.746)	656611	21.5024	21.5024	
	26 Chloroprene	53	3.331	3.334	(0.765)	241729	21.9565	21.9565(M)	MP
	27 1,1-Dichloroethane	63	3.343	3.346	(0.768)	340465	20.8446	20.8446	
	28 Acrylonitrile	53	3.357	3.354	(0.771)	559891	107.846	107.846(M)	MP
	30 n-Propanol	41	3.447	3.444	(0.792)	138439	209.373	209.373	
	29 Ethyl tert-butyl ether	59	3.450	3.447	(0.793)	644138	22.4666	22.4666	
	31 Vinyl acetate	86	3.447	3.450	(0.792)	46928	21.9986	21.9986	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	274627	21.8714	21.8714	
	33 2,2-Dichloropropane	77	3.710	3.707	(0.852)	282154	22.4806	22.4806	
M	100 1,2-Dichloroethene, Total	61				529887	42.3633	42.3633	
	34 Bromochloromethane	128	3.754	3.757	(0.862)	100788	22.2474	22.2474	
	35 Cyclohexane	84	3.777	3.780	(0.868)	255301	19.7162	19.7162	
	36 Chloroform	83	3.780	3.780	(0.868)	366418	21.5510	21.5510	
	37 Ethyl acetate	43	3.815	3.812	(0.876)	264929	21.3291	21.3291	
	38 Methyl acrylate	55	3.832	3.832	(0.880)	231340	22.3511	22.3511	
	39 Carbon Tetrachloride	117	3.887	3.890	(0.893)	248360	22.4941	22.4941(M)	
	40 Tetrahydrofuran	42	3.881	3.881	(0.892)	390256	108.847	108.847	
$	41 Dibromofluoromethane	113	3.881	3.881	(0.892)	265370	30.7886	30.7886	
	42 1,1,1-Trichloroethane	97	3.919	3.922	(0.900)	292622	21.7237	21.7237	
	43 2-Butanone	72	3.936	3.933	(0.904)	164552	119.274	119.274	
	44 1,1-Dichloropropene	75	3.983	3.985	(0.915)	253136	20.3519	20.3519	
	45 1-Chlorobutane	41	4.006	4.006	(0.920)	216697	20.5358	20.5358	
	46 Heptane	71	4.078	4.078	(0.937)	123016	19.2151	19.2151	
	48 Propionitrile	54	4.110	4.110	(0.944)	200205	111.931	111.931	
	47 Benzene	78	4.127	4.127	(0.948)	733977	21.0210	21.0210	
	49 Methacrylonitrile	67	4.127	4.127	(0.948)	103273	22.4886	22.4886	
	50 tert-amyl methyl Ether	73	4.162	4.162	(0.956)	599455	22.9012	22.9012	
$	51 1,2-Dichloroethane-d4	65	4.197	4.194	(0.964)	356964	32.3432	32.3432	
	54 Isobutyl alcohol	42	4.168	4.165	(0.957)	76066	196.437	196.437(Q)	
	52 1,2-Dichloroethane	62	4.235	4.234	(0.973)	297146	21.0905	21.0905	
	53 tert-Amyl Alcohol	59	4.237	4.234	(0.973)	109877	101.558	101.558	
*	55 Fluorobenzene	96	4.353	4.353	(1.000)	927355	30.0000		
	56 Diisobutylene	57	4.371	4.371	(1.004)	462256	20.2907	20.2907	
	57 Trichloroethene	95	4.457	4.457	(1.024)	197815	20.6472	20.6472	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	276952	19.1032	19.1032	
	59 tert-Amyl Ethylether	59	4.559	4.562	(1.047)	462834	21.3862	21.3862	
	60 Dibromomethane	93	4.712	4.712	(1.082)	137611	21.9183	21.9183	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.096)	206667	21.5081	21.5081	
	62 Bromodichloromethane	83	4.790	4.790	(1.100)	277401	22.8494	22.8494	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	231893	22.2170	22.2170	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.175)	147904	21.2962	21.2962	
	66 cis-1,3-Dichloropropene	75	5.181	5.178	(0.814)	323625	21.1749	21.1749	
	67 Octane	85	5.193	5.196	(0.816)	110780	19.8722	19.8722	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	1004744	29.0446	29.0446	
	69 Toluene	92	5.341	5.340	(0.839)	452953	20.1696	20.1696	
	70 Chloroacetonitrile	75	5.378	5.378	(0.845)	68559	96.8494	96.8494	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	409809	101.722	101.722	
	72 1,1-Dichloro-2-propanone	63	5.497	5.494	(0.864)	30044	99.6575	99.6575(Q)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.555	5.552	(0.873)	1350407	113.725	113.725	
	75 trans-1,3-Dichloropropene	75	5.592	5.592	(0.879)	319906	22.4203	22.4203	
	74 Tetrachloroethene	164	5.607	5.607	(0.881)	163597	19.8726	19.8726	
	76 Ethyl methacrylate	69	5.668	5.665	(0.891)	308185	21.9262	21.9262	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	77 1,1,2-Trichloroethane	83	5.705	5.705	(0.897)	167881	21.5727	21.5727	
	78 Chlorodibromomethane	129	5.839	5.838	(0.918)	209465	21.7645	21.7645	
	79 1,3-Dichloropropane	76	5.896	5.896	(0.927)	332441	20.9049	20.9049	
	80 1,2-Dibromoethane	107	6.021	6.018	(0.946)	171218	20.6054	20.6054	
	81 2-Hexanone	43	6.117	6.116	(0.961)	997724	117.027	117.027	
	82 1-Chlorohexane	91	6.334	6.334	(0.995)	230448	19.3826	19.3826	
*	83 Chlorobenzene-d5	82	6.363	6.363	(1.000)	429712	30.0000		
	85 Ethylbenzene	106	6.380	6.380	(1.003)	260836	20.4777	20.4777	
	84 Chlorobenzene	112	6.377	6.377	(1.002)	495794	20.6148	20.6148	
	86 1,1,1,2-Tetrachloroethane	131	6.412	6.412	(1.008)	185145	21.7821	21.7821	
	87 mp-Xylene	106	6.481	6.481	(1.019)	649941	41.6312	41.6312	
M	120 1,3-Dichloropropene, Total	75				643531	43.5953	43.5953	
	88 o-Xylene	106	6.800	6.800	(1.069)	318919	20.9960	20.9960	
	89 Styrene	104	6.835	6.834	(0.839)	552193	22.6916	22.6916	
	90 Bromoform	173	6.869	6.869	(0.844)	140218	22.6350	22.6350	
	91 Isopropylbenzene	105	7.031	7.028	(0.863)	802395	23.6791	23.6791	
$	92 4-Bromofluorobenzene	174	7.257	7.254	(0.891)	316489	29.4869	29.4869	
M	121 TOTAL XYLENES	106				968860	62.6272	62.6272	
	94 n-Propylbenzene	120	7.350	7.347	(0.903)	219488	21.1535	21.1535	
	93 Bromobenzene	156	7.350	7.350	(0.903)	211644	21.5195	21.5195	
	95 1,1,2,2-Tetrachloroethane	83	7.388	7.385	(0.907)	282099	23.0755	23.0755	
	97 1,3,5-Trimethylbenzene	105	7.492	7.492	(0.920)	696245	22.1479	22.1479	
	96 o-Chlorotoluene	91	7.486	7.483	(0.919)	678178	21.4369	21.4369	
	98 1,2,3-Trichloropropane	110	7.506	7.506	(0.922)	84058	22.2385	22.2385	
	99 trans-1,4-Dichloro-2-butene	53	7.527	7.526	(0.924)	81980	21.6783	21.6783	
	101 p-Chlorotoluene	91	7.611	7.610	(0.935)	634661	21.6442	21.6442	
	102 tert-Butylbenzene	134	7.752	7.755	(0.952)	153745	20.8193	20.8193	
	103 Pentachloroethane	117	7.776	7.778	(0.955)	144334	23.6412	23.6412(M)	MP
	104 1,2,4-Trimethylbenzene	105	7.805	7.807	(0.958)	714883	22.1260	22.1260	
	105 sec-Butylbenzene	105	7.897	7.897	(0.970)	857761	21.8186	21.8186	
	106 p-Isopropyltoluene	134	8.004	8.004	(0.983)	187856	21.6084	21.6084	
	107 1,3-Dichlorobenzene	146	8.085	8.085	(0.993)	392832	21.1682	21.1682	
*	108 1,4-Dichlorobenzene-d4	152	8.143	8.140	(1.000)	379100	30.0000		
	109 1,4-Dichlorobenzene	146	8.155	8.155	(1.001)	410778	21.4703	21.4703	
	111 n-Butylbenzene	134	8.352	8.352	(1.026)	173577	21.1207	21.1207	
	110 Benzyl Chloride	126	8.346	8.346	(1.025)	94360	21.7660	21.7660	
	112 Hexachloroethane	117	8.494	8.491	(1.043)	132234	21.8455	21.8455	
	113 1,2-Dichlorobenzene	146	8.502	8.502	(1.044)	388576	21.6797	21.6797	
	114 1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	50098	21.6413	21.6413	
	115 Nitrobenzene	77	9.643	9.640	(1.184)	170174	184.278	184.278	
	116 Hexachlorobutadiene	225	9.715	9.718	(1.193)	106769	21.8930	21.8930	
	117 1,2,4-Trichlorobenzene	180	9.742	9.744	(1.196)	271063	23.0622	23.0622	
	118 Naphthalene	128	10.011	10.011	(1.229)	753073	23.1930	23.1930	
	119 1,2,3-Trichlorobenzene	180	10.161	10.164	(1.248)	243305	21.4247	21.4247(M)	H

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.


Data File: \\ALHDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\23240719.02.D
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Sample Info: 385450;;1;3;;LCS;1;
Purge Volume: 5.0
Column phase: DB-VRX
Instrument: ms23.i
Operator: JTH
Column diameter: 0.25
Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Pentane+
-Dichlorofluoromethane
-Ethyl Ether
-1,1-Dichloroethene+
-Iodomethane+
-3-Chloro-1-propene+
-Methylene Chloride+
-Methyl acetate+
-Hexane+
-Acetonitrile+
-1,1-Dichloroethane+
-n-Propanol+
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Bromochloromethane+
-Methyl acrylate+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene+
-Heptane
-tert-Amyl methyl ether+
-Propionitrile+
-1,2-Dichloroethane+
-Fluorobenzene+
-Trichloroethene+
-tert-Amyl Ethylether
-Dibromomethane
-1,2-Dichloropropane+
-Methyl methacrylate
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropene+
-Toluene+
-Toluene-d8
-2-Nitropropane+
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane
4-Methyl-2-Pentanone(MIBK
-Chlorodibromomethane
-1,3-Dichloropropane
-1,2-Dibromoethane
-2-Hexanone
-1-Chlorohexane
Chlorobenzene-d5+
mp-Xylene
-1,2-Dichloroethene, Total
-Bromoform
-Styrene
-o-Xylene
-Isopropylbenzene
-4-Bromofluorobenzene
-n-Propylbenzene+
-1,1,2,2-Tetrachloroethane
1,3,5-Trimethylbenzene+
-p-Chlorotoluene
-tert-Butylbenzene+
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-p-Isopropyltoluene
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-Hexachloroethane+
-1,2-Dibromo-3-chloropropa
-1,3-Dichloropropene, Tota
-Total Xylenes
-Nitrobenzene
-Hexachlorobutadiene
1,2,4-Trichlorobenzene
-Naphthalene
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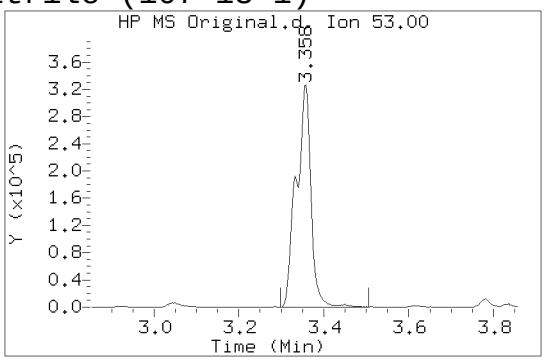
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LabSampID : 3854500

Acrylonitrile (107-13-1)

Reason Code: MP

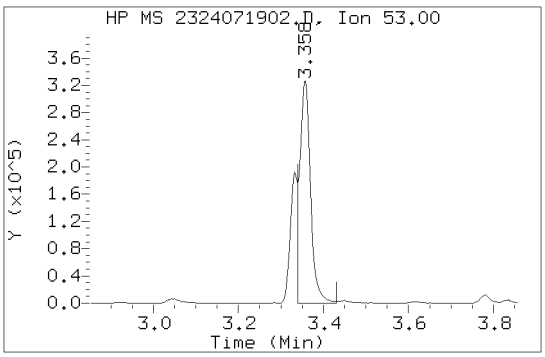
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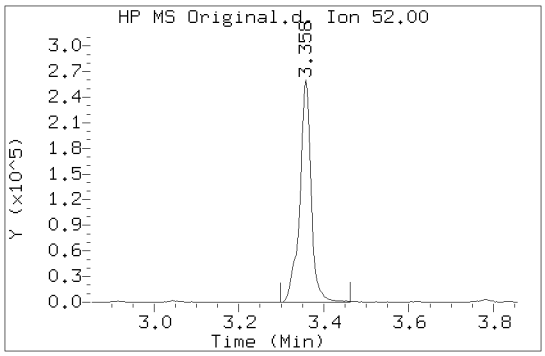
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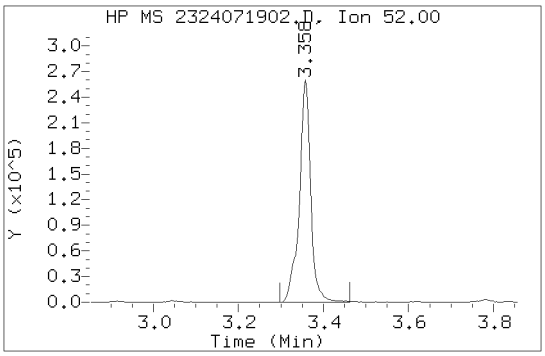
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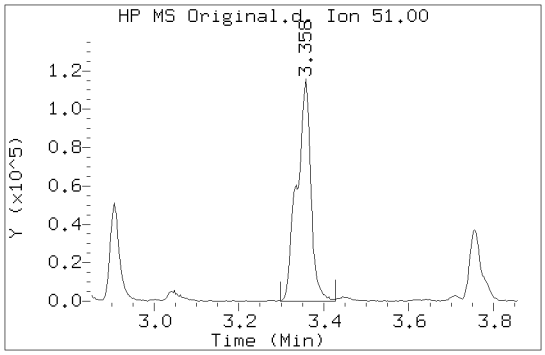
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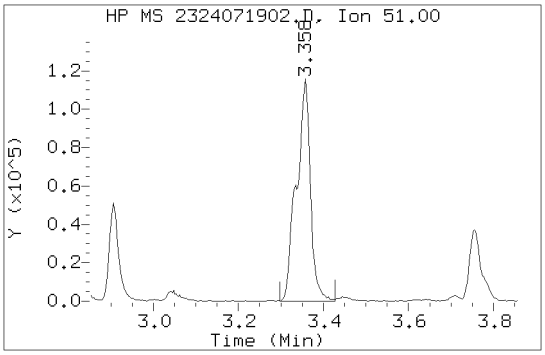
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AFTER

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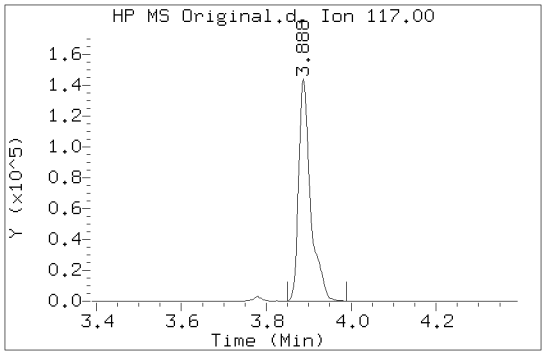


Carbon Tetrachloride (56-23-5)

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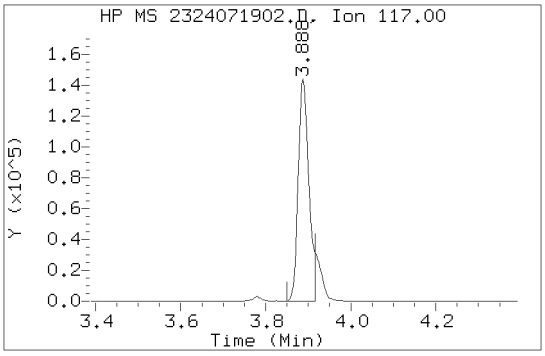
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12:15



AFTER

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25-Jul-2024
17:46

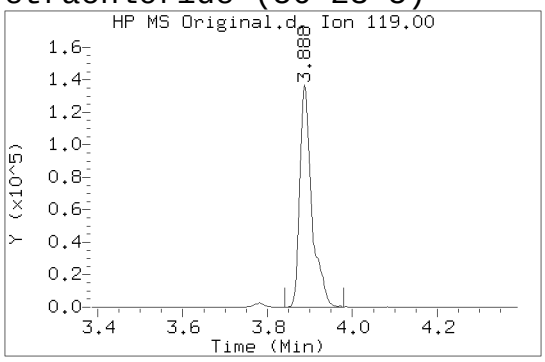


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LabSampID : 3854500

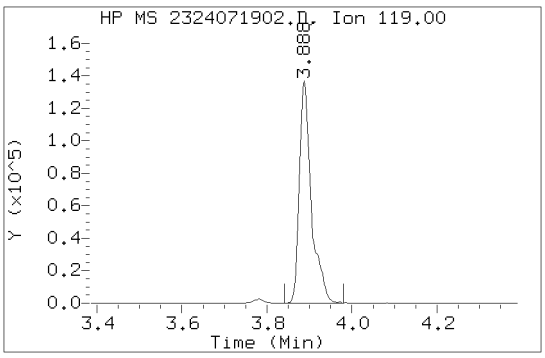
Carbon Tetrachloride (56-23-5)

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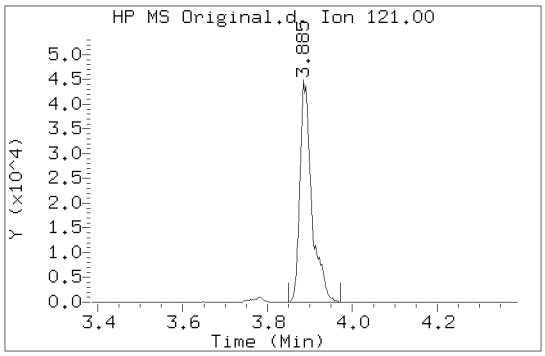
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19-Jul-2024
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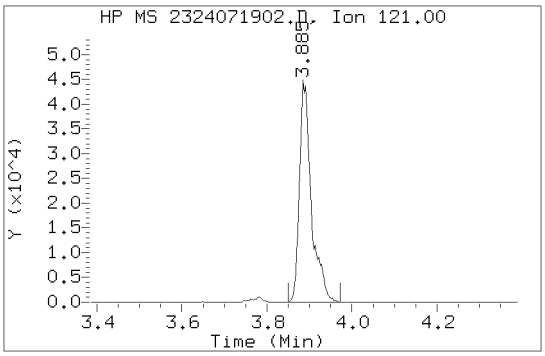
AFTER
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BEFORE
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19-Jul-2024
12:15



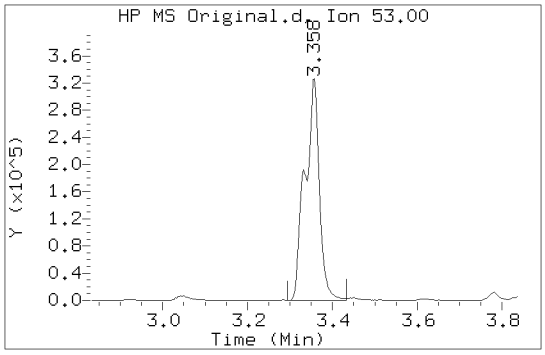
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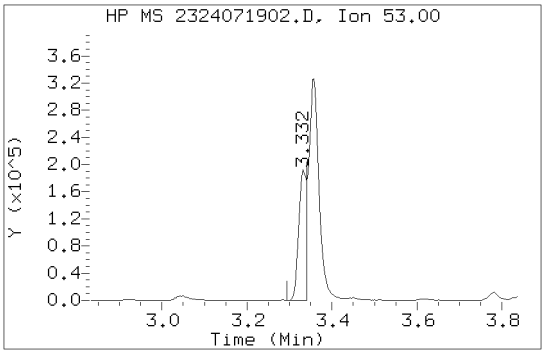
Chloroprene (126-99-8)

Reason Code: MP

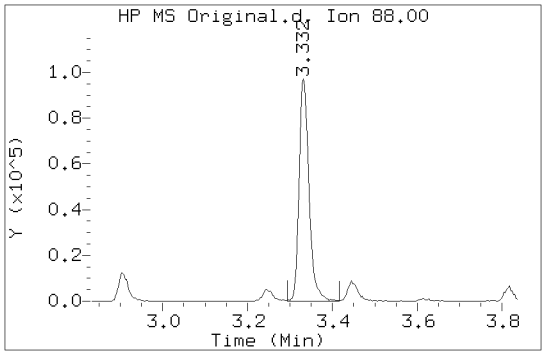
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19-Jul-2024
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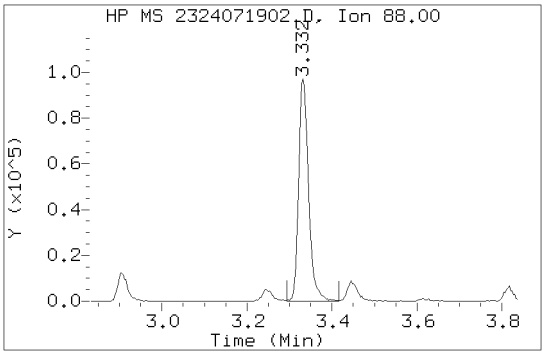
AFTER
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25-Jul-2024
17:46



BEFORE
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19-Jul-2024
12:15



AFTER
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25-Jul-2024
17:46



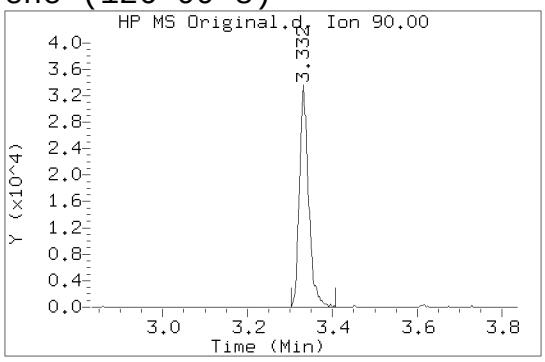
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InstruID : ms23.i
LabSampID : 3854500

Chloroprene (126-99-8)

Reason Code: MP

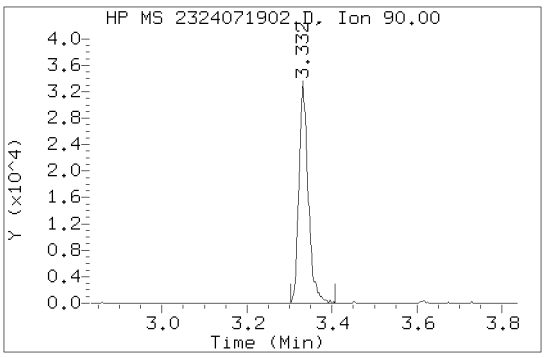
BEFORE

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AFTER

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25-Jul-2024
17:46

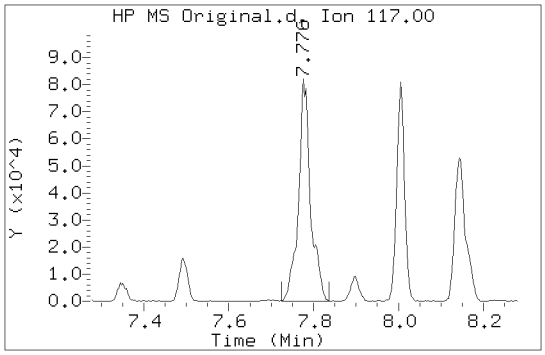


Pentachloroethane (76-01-7)

Reason Code: MP

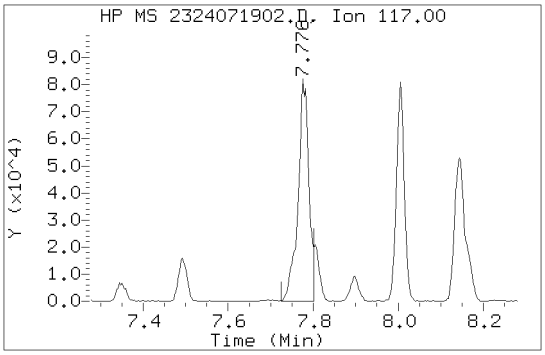
BEFORE

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19-Jul-2024
12:15



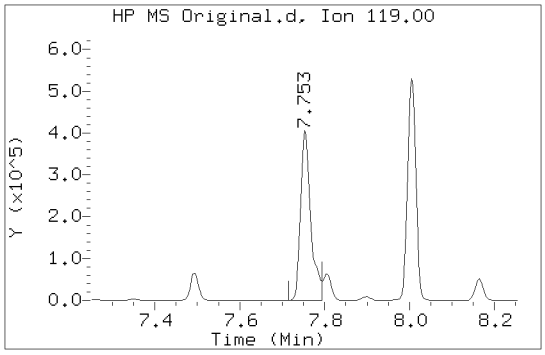
AFTER

MASS
117
AREA
144334
HEIGHT
82160
25-Jul-2024
17:46



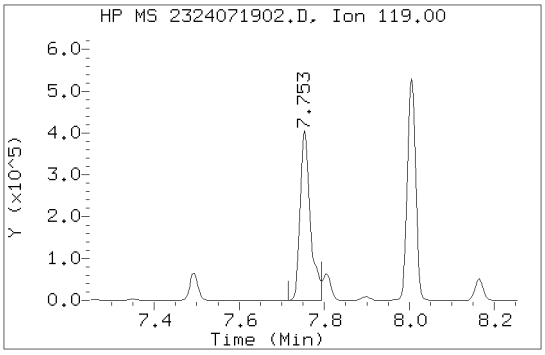
BEFORE

MASS
119
AREA
671327
HEIGHT
405983
19-Jul-2024
12:15



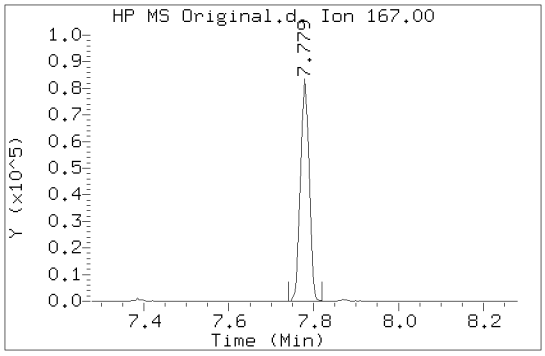
AFTER

MASS
119
AREA
671327
HEIGHT
405983
25-Jul-2024
17:46



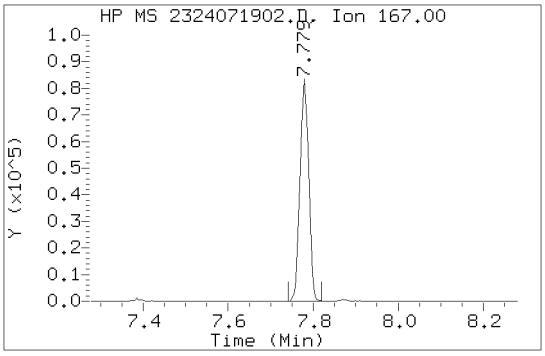
BEFORE

MASS
167
AREA
116807
HEIGHT
83536
19-Jul-2024
12:15



AFTER

MASS
167
AREA
116807
HEIGHT
83536
25-Jul-2024
17:46



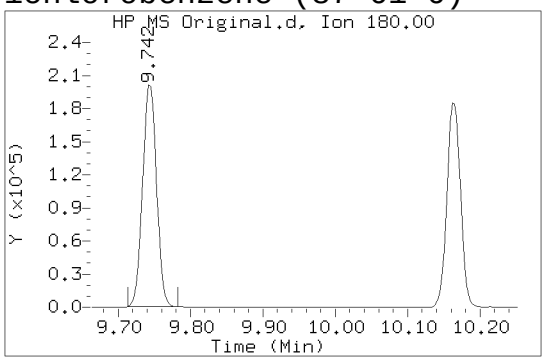
Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071902.D
Inj Date : 19-JUL-2024 12:03
InstruID : ms23.i
LabSampID : 3854500

1,2,3-Trichlorobenzene (87-61-6)

Reason Code: H

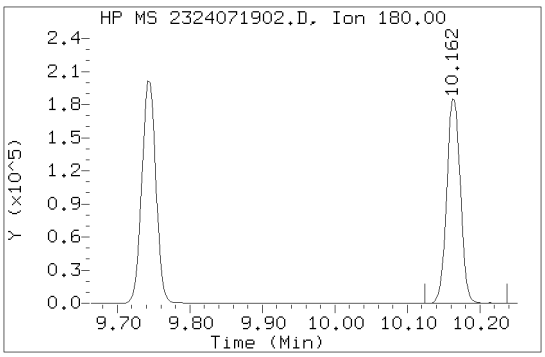
BEFORE

MASS
180
AREA
269465
HEIGHT
201134
19-Jul-2024
12:15



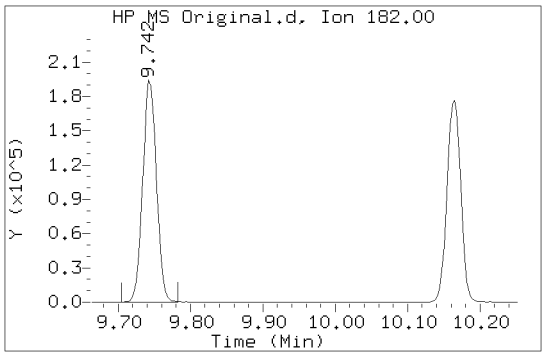
AFTER

MASS
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AREA
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HEIGHT
185152
25-Jul-2024
17:46



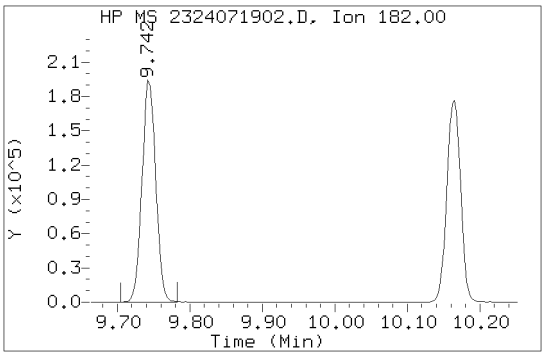
BEFORE

MASS
182
AREA
255818
HEIGHT
194496
19-Jul-2024
12:15



AFTER

MASS
182
AREA
255818
HEIGHT
194496
25-Jul-2024
17:46



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:47
Client ID: LCS for HBN 1258273
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240719.b/232407190
Inj Date: 19-JUL-2024 12:03
Operator: JTH

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071905.D
Lab Smp Id: 3854499 Client Smp ID: MB for HBN 1258273
Inj Date : 19-JUL-2024 13:15
Operator : JTH Inst ID: ms23.i
Smp Info : 3854499;;1;3;;MB;;
Misc Info : ZZ VOMS 73921 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\23-8260b09D.m
Meth Date : 25-Jul-2024 06:20 ms23.i Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	Compound Not Detected.						
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	Compound Not Detected.						
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	Compound Not Detected.						
21 Hexane	57	Compound Not Detected.						
22 Methyl t-Butyl Ether	73	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	Compound Not Detected.						
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61	Compound Not Detected.						
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	Compound Not Detected.						
	37 Ethyl acetate	43	Compound Not Detected.						
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.884	3.881	(0.892)	260753	28.7817	28.7817	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	Compound Not Detected.						
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.197	4.194	(0.963)	346661	29.8823	29.8823	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.356	4.353	(1.000)	974757	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	Compound Not Detected.						
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.309	5.309	(0.834)	1038111	30.1582	30.1582	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						
	76 Ethyl methacrylate	69	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
77	1,1,2-Trichloroethane	83	Compound Not Detected.						
78	Chlorodibromomethane	129	Compound Not Detected.						
79	1,3-Dichloropropane	76	Compound Not Detected.						
80	1,2-Dibromoethane	107	Compound Not Detected.						
81	2-Hexanone	43	Compound Not Detected.						
82	1-Chlorohexane	91	Compound Not Detected.						
* 83	Chlorobenzene-d5	82	6.365	6.363	(1.000)	427589	30.0000		
85	Ethylbenzene	106	Compound Not Detected.						
84	Chlorobenzene	112	Compound Not Detected.						
86	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
87	mp-Xylene	106	Compound Not Detected.						
M 120	1,3-Dichloropropene, Total	75	Compound Not Detected.						
88	o-Xylene	106	Compound Not Detected.						
89	Styrene	104	Compound Not Detected.						
90	Bromoform	173	Compound Not Detected.						
91	Isopropylbenzene	105	Compound Not Detected.						
$ 92	4-Bromofluorobenzene	174	7.257	7.254	(0.891)	333180	30.1873	30.1873	
M 121	TOTAL XYLENES	106	Compound Not Detected.						
94	n-Propylbenzene	120	Compound Not Detected.						
93	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
97	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
96	o-Chlorotoluene	91	Compound Not Detected.						
98	1,2,3-Trichloropropane	110	Compound Not Detected.						
99	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
101	p-Chlorotoluene	91	Compound Not Detected.						
102	tert-Butylbenzene	134	Compound Not Detected.						
103	Pentachloroethane	117	Compound Not Detected.						
104	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
105	sec-Butylbenzene	105	Compound Not Detected.						
106	p-Isopropyltoluene	134	Compound Not Detected.						
107	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 108	1,4-Dichlorobenzene-d4	152	8.143	8.140	(1.000)	389833	30.0000	(Q)	
109	1,4-Dichlorobenzene	146	Compound Not Detected.						
111	n-Butylbenzene	134	Compound Not Detected.						
110	Benzyl Chloride	126	Compound Not Detected.						
112	Hexachloroethane	117	Compound Not Detected.						
113	1,2-Dichlorobenzene	146	Compound Not Detected.						
114	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
115	Nitrobenzene	77	Compound Not Detected.						
116	Hexachlorobutadiene	225	Compound Not Detected.						
117	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
118	Naphthalene	128	Compound Not Detected.						
119	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071905.D

Date : 19-JUL-2024 13:15

Client ID: MB for HBN 1258273

Instrument: ms23.i

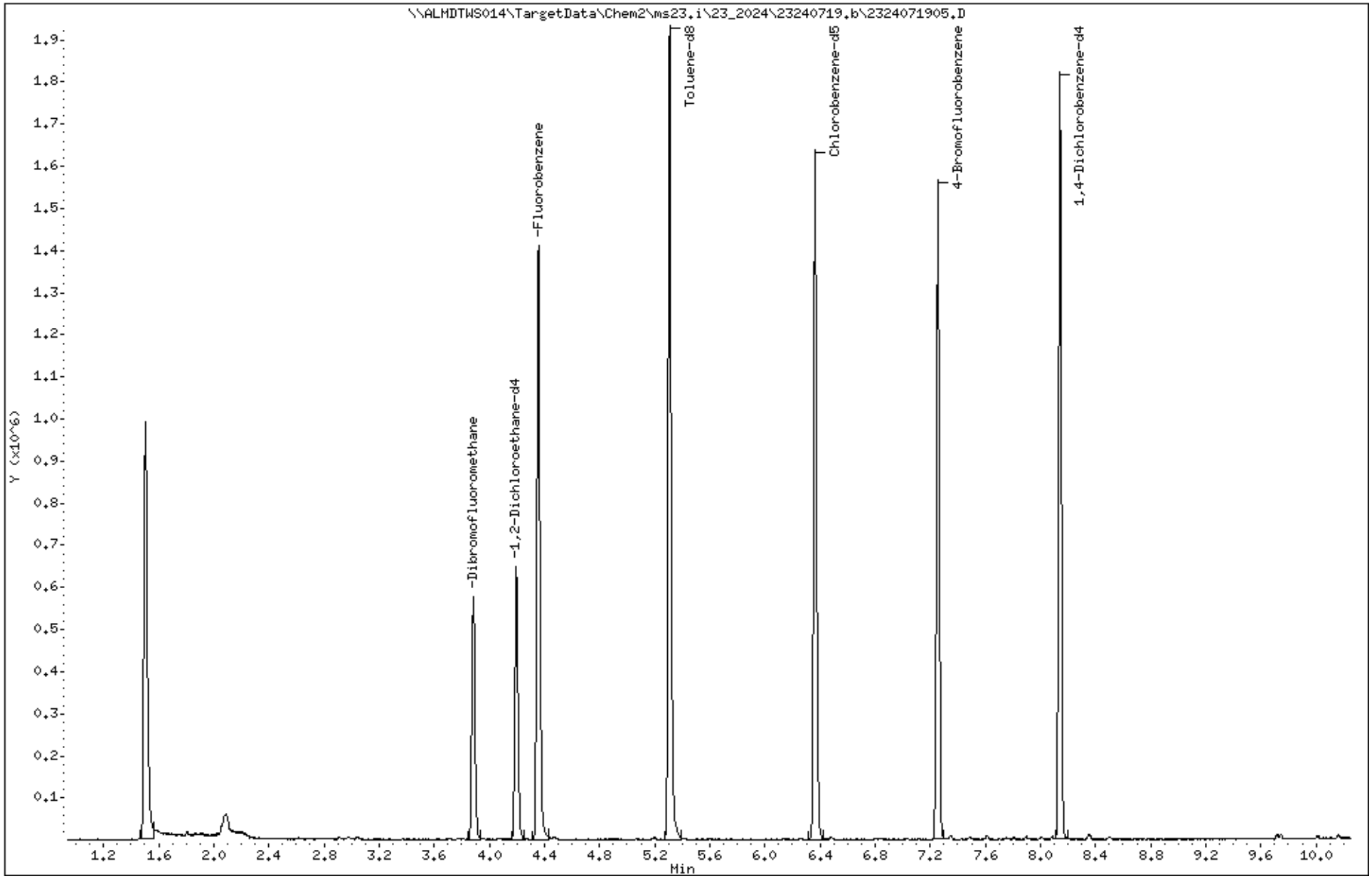
Sample Info: 3854499;;1;3;;MB;;

Purge Volume: 5.0

Operator: JTH

Column phase: DB-VRX

Column diameter: 0.25



Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071905.D
Inj Date : 19-JUL-2024 13:15
InstruID : ms23.i
LabSampID : 3854499

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:47
Client ID: MB for HBN 1258273
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240719.b/232407190
Inj Date: 19-JUL-2024 13:15
Operator: JTH

Analytes listed below were unassigned due to not meeting one or more of the following qualitative criteria (retention time, mass spectral match, extracted ion ratios)
Rationale other than qualitative criteria are noted on the quantitation report.:

Bromoform
1,2-Dichloroethane
Heptane
2-Nitropropane
1-Chlorohexane
1,3-Dichloropropane
Methacrylonitrile
Pentane

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071913.D
Lab Smp Id: 3369360020 Client Smp ID: PW13-4D
Inj Date : 19-JUL-2024 16:05
Operator : JTH Inst ID: ms23.i
Smp Info : 3369360020;;1;;;;;
Misc Info : ZZ VOMS 73921 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\23-8260b09D.m
Meth Date : 25-Jul-2024 06:20 ms23.i Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	Compound Not Detected.						
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	Compound Not Detected.						
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	Compound Not Detected.						
21 Hexane	57	Compound Not Detected.						
22 Methyl t-Butyl Ether	73	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	3.644	3.641	(0.837)	92054	7.38759	7.38759	
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61				92054	7.38759	7.38759	
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	Compound Not Detected.						
	37 Ethyl acetate	43	3.814	3.812	(0.876)	99247	8.05169	8.05169	
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.884	3.881	(0.892)	250636	29.3027	29.3027	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	Compound Not Detected.						
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.197	4.194	(0.963)	324677	29.6440	29.6440	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.356	4.353	(1.000)	920279	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	Compound Not Detected.						
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.308	5.309	(0.834)	983024	29.9631	29.9631	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						
	76 Ethyl methacrylate	69	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
77	1,1,2-Trichloroethane	83	Compound Not Detected.						
78	Chlorodibromomethane	129	Compound Not Detected.						
79	1,3-Dichloropropane	76	Compound Not Detected.						
80	1,2-Dibromoethane	107	Compound Not Detected.						
81	2-Hexanone	43	Compound Not Detected.						
82	1-Chlorohexane	91	Compound Not Detected.						
* 83	Chlorobenzene-d5	82	6.365	6.363	(1.000)	407535	30.0000		
85	Ethylbenzene	106	Compound Not Detected.						
84	Chlorobenzene	112	Compound Not Detected.						
86	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
87	mp-Xylene	106	Compound Not Detected.						
M 120	1,3-Dichloropropene, Total	75	Compound Not Detected.						
88	o-Xylene	106	Compound Not Detected.						
89	Styrene	104	Compound Not Detected.						
90	Bromoform	173	Compound Not Detected.						
91	Isopropylbenzene	105	Compound Not Detected.						
$ 92	4-Bromofluorobenzene	174	7.254	7.254	(0.891)	315219	30.2348	30.2348	
M 121	TOTAL XYLENES	106	Compound Not Detected.						
94	n-Propylbenzene	120	Compound Not Detected.						
93	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
97	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
96	o-Chlorotoluene	91	Compound Not Detected.						
98	1,2,3-Trichloropropane	110	Compound Not Detected.						
99	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
101	p-Chlorotoluene	91	Compound Not Detected.						
102	tert-Butylbenzene	134	Compound Not Detected.						
103	Pentachloroethane	117	Compound Not Detected.						
104	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
105	sec-Butylbenzene	105	Compound Not Detected.						
106	p-Isopropyltoluene	134	Compound Not Detected.						
107	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 108	1,4-Dichlorobenzene-d4	152	8.143	8.140	(1.000)	368239	30.0000	(Q)	
109	1,4-Dichlorobenzene	146	Compound Not Detected.						
111	n-Butylbenzene	134	Compound Not Detected.						
110	Benzyl Chloride	126	Compound Not Detected.						
112	Hexachloroethane	117	Compound Not Detected.						
113	1,2-Dichlorobenzene	146	Compound Not Detected.						
114	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
115	Nitrobenzene	77	Compound Not Detected.						
116	Hexachlorobutadiene	225	Compound Not Detected.						
117	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
118	Naphthalene	128	Compound Not Detected.						
119	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071913.D

Page 1

Date : 19-JUL-2024 16:05

Client ID: PW13-4D

Instrument: ms23.i

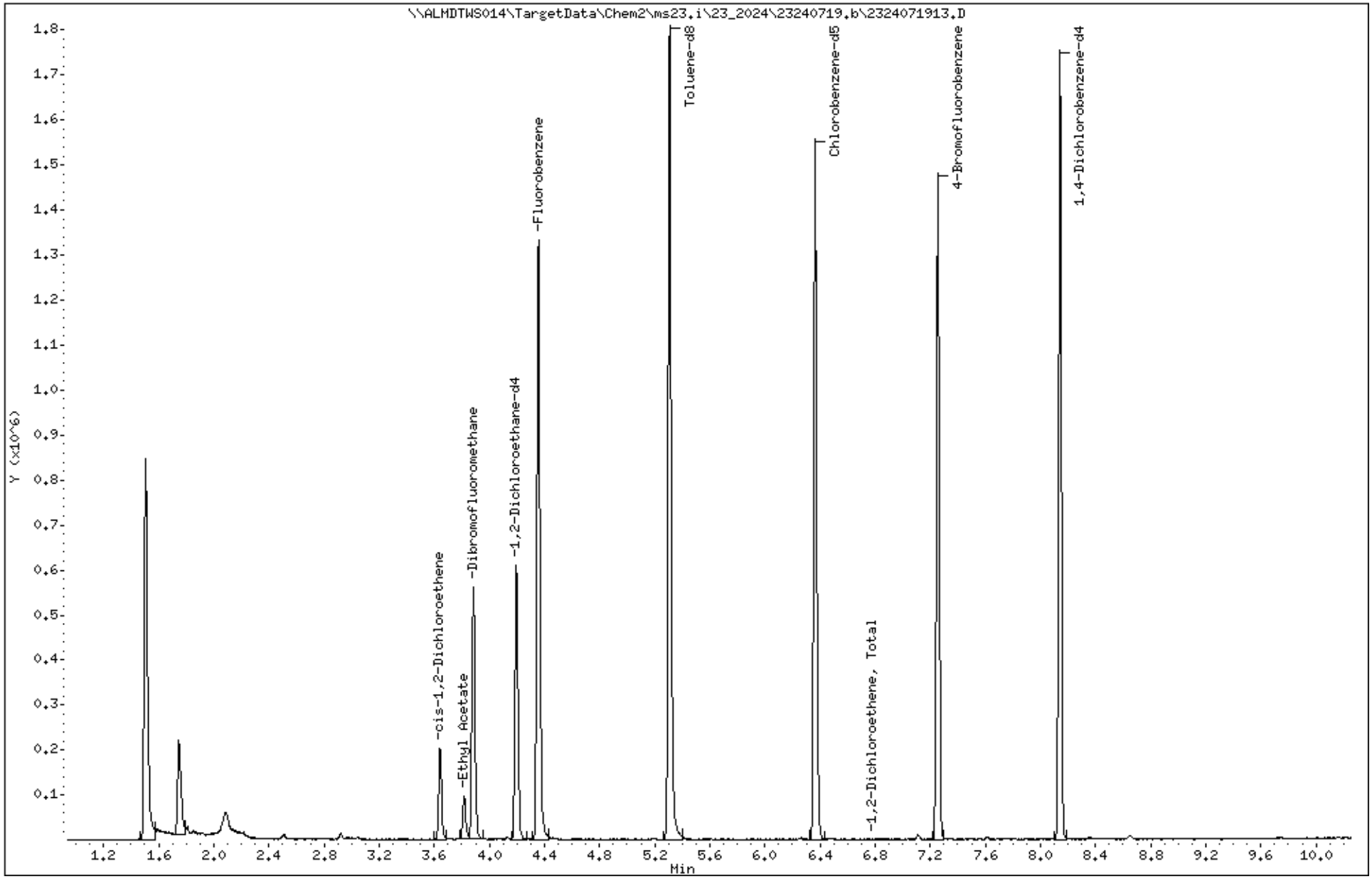
Sample Info: 3369360020;;1;;;;;

Purge Volume: 5.0

Operator: JTH

Column phase: DB-VRX

Column diameter: 0.25



Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071913.D

Date : 19-JUL-2024 16:05

Client ID: PW13-4D

Instrument: ms23.i

Sample Info: 3369360020;;1;;;;;

Purge Volume: 5.0

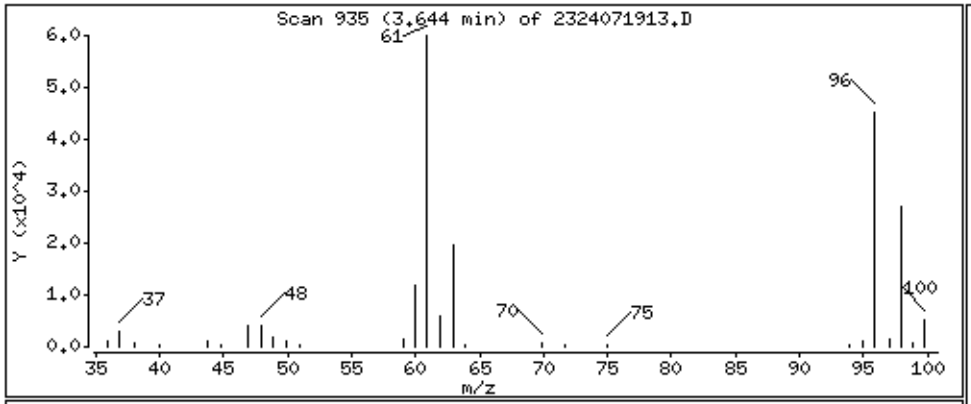
Operator: JTH

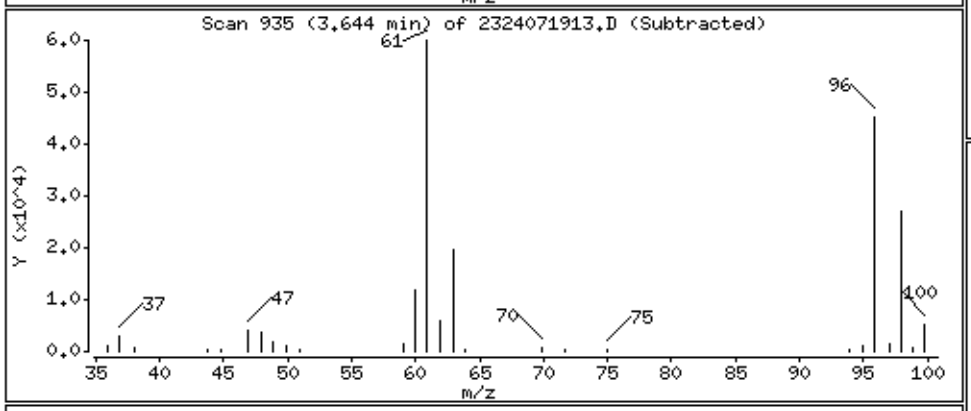
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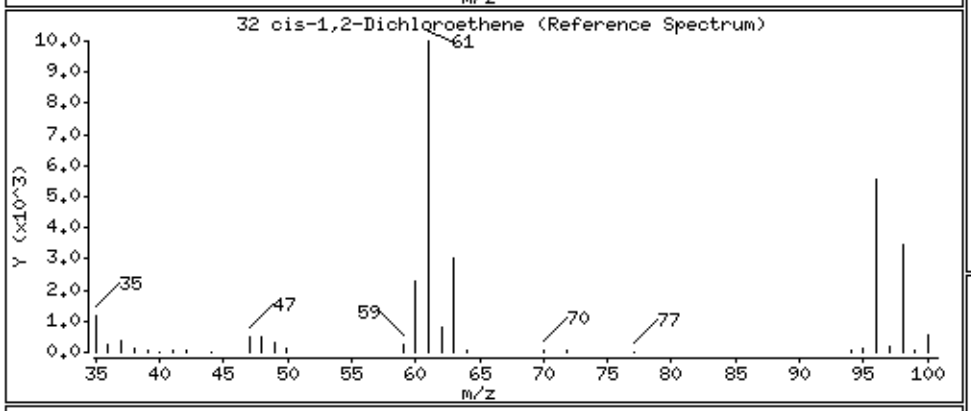
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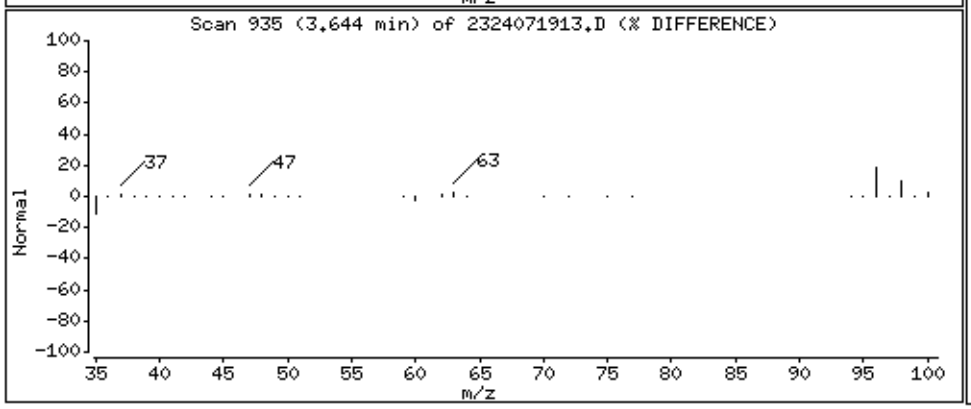
32 cis-1,2-Dichloroethene

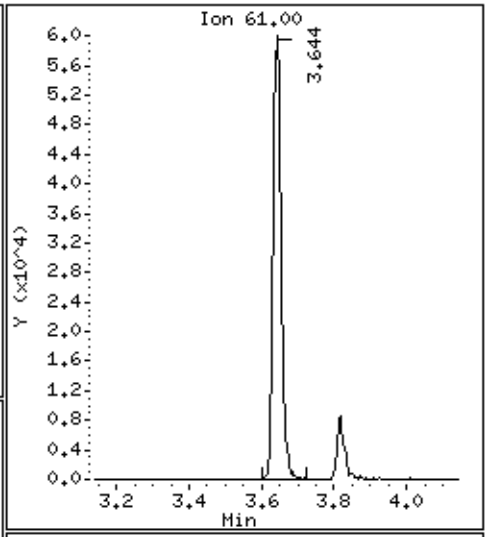
Concentration: 7.38759 ug/L

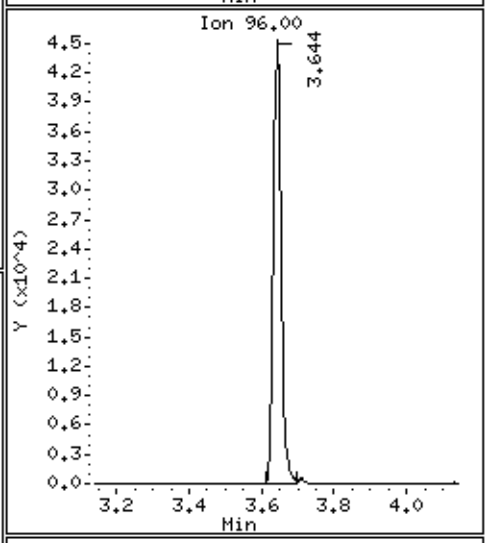


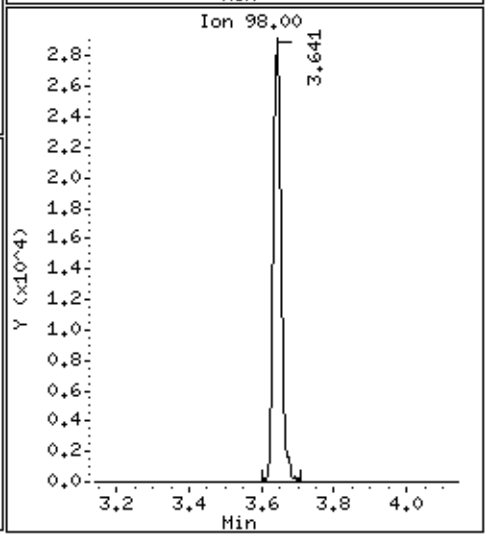












Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071913.D

Date : 19-JUL-2024 16:05

Client ID: PW13-4D

Instrument: ms23.i

Sample Info: 3369360020;;1;;;;;

Purge Volume: 5.0

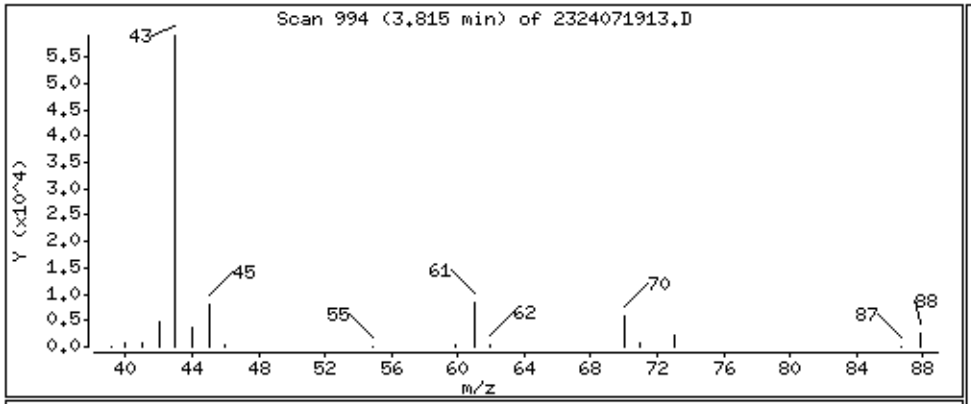
Operator: JTH

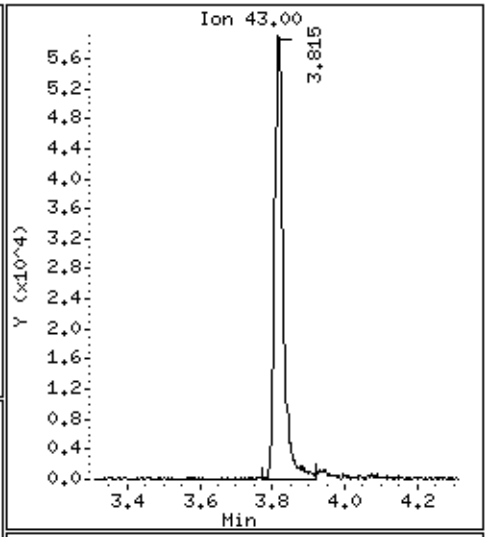
Column phase: DB-VRX

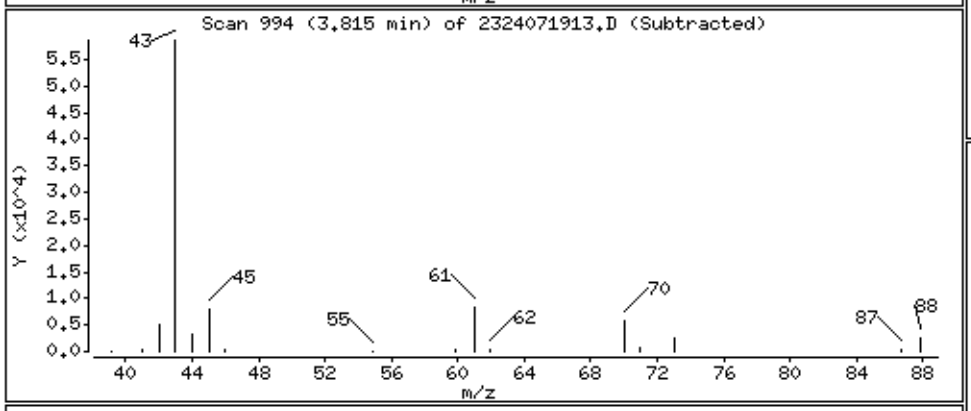
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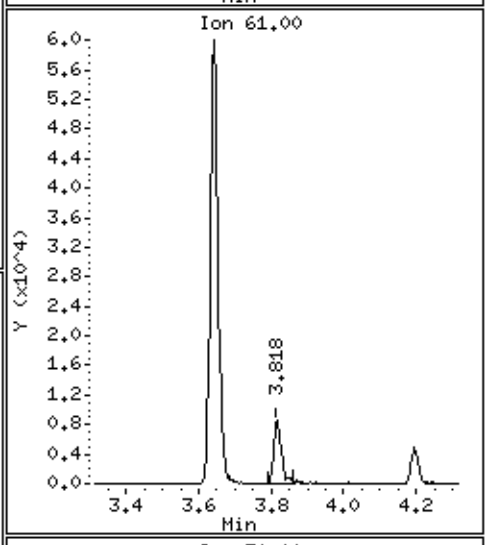
37 Ethyl acetate

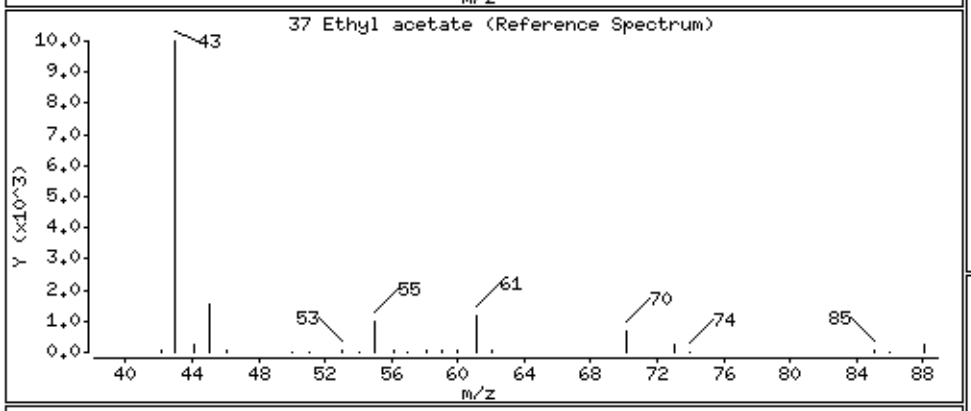
Concentration: 8.05169 ug/L

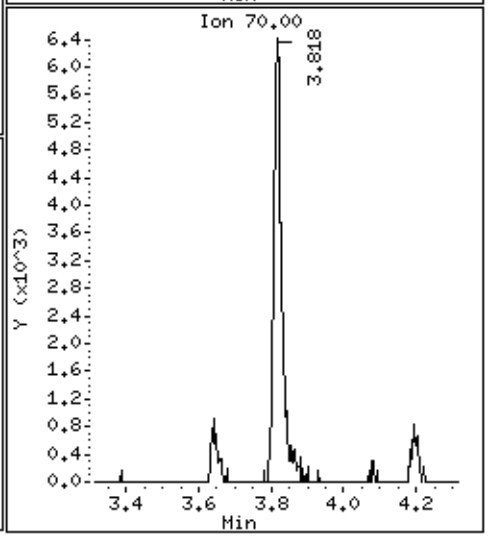


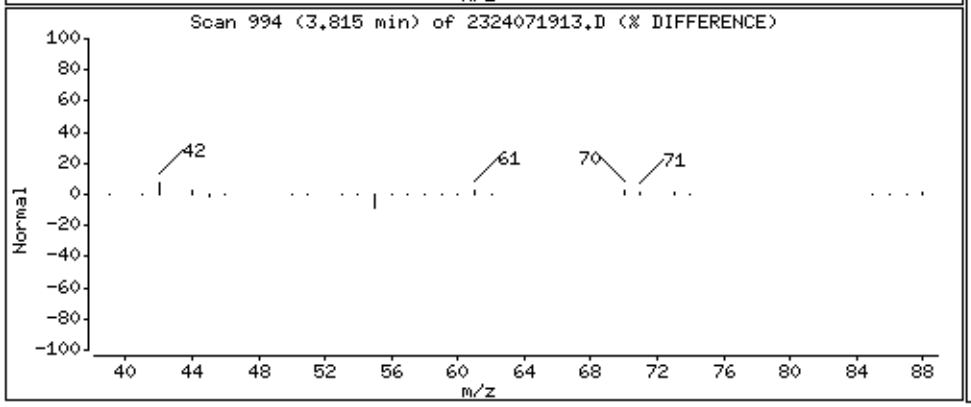












Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071913.D
Inj Date : 19-JUL-2024 16:05
InstruID : ms23.i
LabSampID : 3369360020

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:57
Client ID: PW13-4D
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240719.b/232407191
Inj Date: 19-JUL-2024 16:05
Operator: JTH

Analytes listed below were unassigned due to not meeting one or more of the following qualitative criteria (retention time, mass spectral match, extracted ion ratios)
Rationale other than qualitative criteria are noted on the quantitation report.:

Bromoform
1,2-Dichloroethane
Heptane
2-Nitropropane
Tetrahydrofuran
Chloroethane
1,3-Dichloropropane
Methacrylonitrile
Pentane

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071914.D
Lab Smp Id: 3369360021 Client Smp ID: MW13-4D
Inj Date : 19-JUL-2024 16:24
Operator : JTH Inst ID: ms23.i
Smp Info : 3369360021;;1;;;;;
Misc Info : ZZ VOMS 73921 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\23-8260b09D.m
Meth Date : 25-Jul-2024 06:20 ms23.i Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	Compound Not Detected.						
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	Compound Not Detected.						
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	Compound Not Detected.						
21 Hexane	57	Compound Not Detected.						
22 Methyl t-Butyl Ether	73	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	3.644	3.641	(0.837)	69323	5.48986	5.48986	
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61				69323	5.48986	5.48986	
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	Compound Not Detected.						
	37 Ethyl acetate	43	3.818	3.812	(0.876)	94423	7.55912	7.55912	
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.884	3.881	(0.892)	251028	28.9608	28.9608	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	Compound Not Detected.						
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.194	4.194	(0.963)	327761	29.5302	29.5302	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.356	4.353	(1.000)	932600	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	Compound Not Detected.						
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.309	5.309	(0.834)	985919	30.2000	30.2000	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						
	76 Ethyl methacrylate	69	Compound Not Detected.						

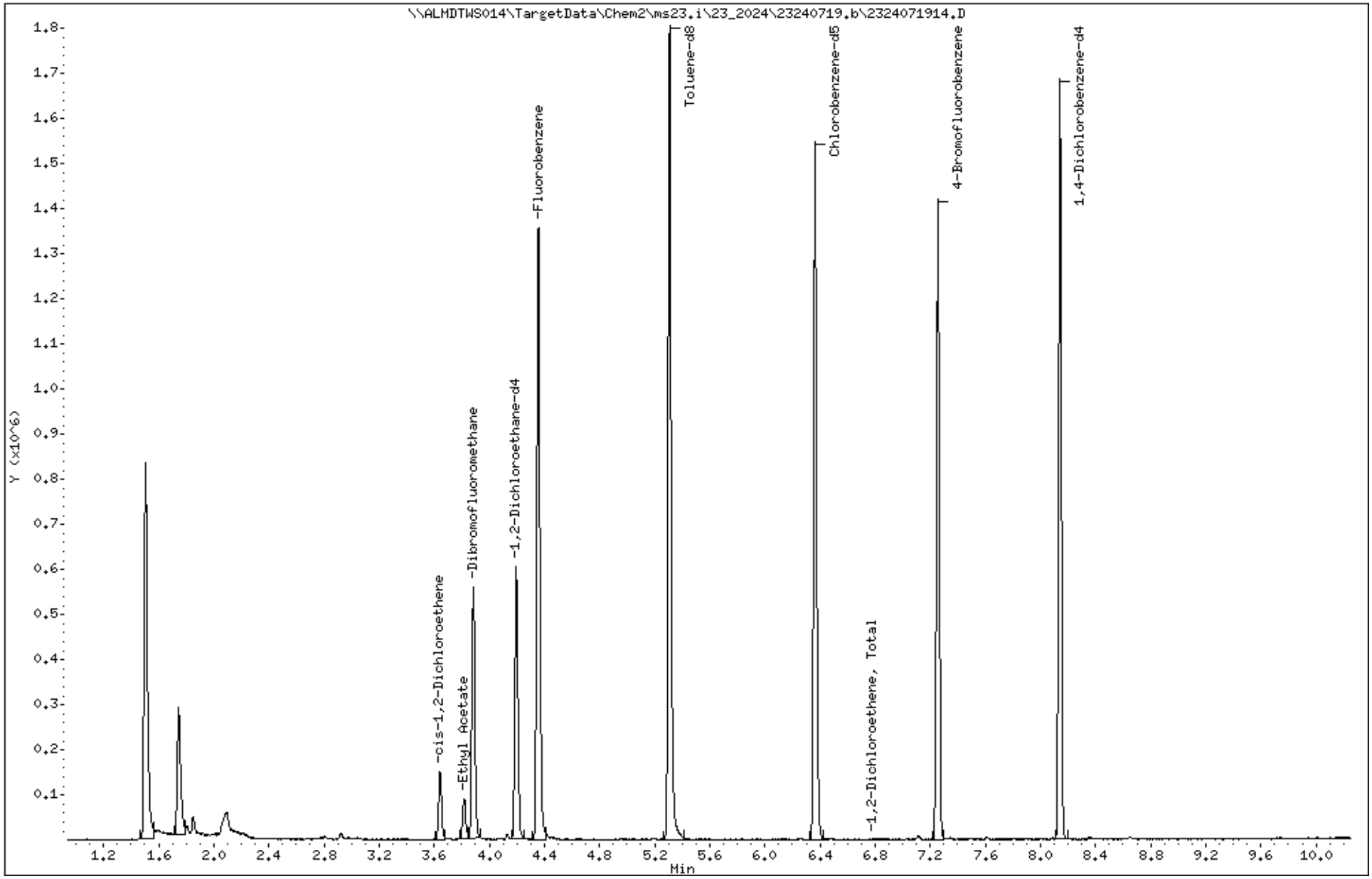
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
77	1,1,2-Trichloroethane	83	Compound Not Detected.						
78	Chlorodibromomethane	129	Compound Not Detected.						
79	1,3-Dichloropropane	76	Compound Not Detected.						
80	1,2-Dibromoethane	107	Compound Not Detected.						
81	2-Hexanone	43	Compound Not Detected.						
82	1-Chlorohexane	91	Compound Not Detected.						
* 83	Chlorobenzene-d5	82	6.363	6.363	(1.000)	405530	30.0000		
85	Ethylbenzene	106	Compound Not Detected.						
84	Chlorobenzene	112	Compound Not Detected.						
86	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
87	mp-Xylene	106	Compound Not Detected.						
M 120	1,3-Dichloropropene, Total	75	Compound Not Detected.						
88	o-Xylene	106	Compound Not Detected.						
89	Styrene	104	Compound Not Detected.						
90	Bromoform	173	Compound Not Detected.						
91	Isopropylbenzene	105	Compound Not Detected.						
$ 92	4-Bromofluorobenzene	174	7.257	7.254	(0.892)	307607	30.5083	30.5083	
M 121	TOTAL XYLENES	106	Compound Not Detected.						
94	n-Propylbenzene	120	Compound Not Detected.						
93	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
97	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
96	o-Chlorotoluene	91	Compound Not Detected.						
98	1,2,3-Trichloropropane	110	Compound Not Detected.						
99	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
101	p-Chlorotoluene	91	Compound Not Detected.						
102	tert-Butylbenzene	134	Compound Not Detected.						
103	Pentachloroethane	117	Compound Not Detected.						
104	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
105	sec-Butylbenzene	105	Compound Not Detected.						
106	p-Isopropyltoluene	134	Compound Not Detected.						
107	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 108	1,4-Dichlorobenzene-d4	152	8.140	8.140	(1.000)	356125	30.0000		(Q)
109	1,4-Dichlorobenzene	146	Compound Not Detected.						
111	n-Butylbenzene	134	Compound Not Detected.						
110	Benzyl Chloride	126	Compound Not Detected.						
112	Hexachloroethane	117	Compound Not Detected.						
113	1,2-Dichlorobenzene	146	Compound Not Detected.						
114	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
115	Nitrobenzene	77	Compound Not Detected.						
116	Hexachlorobutadiene	225	Compound Not Detected.						
117	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
118	Naphthalene	128	Compound Not Detected.						
119	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071914.D
Date : 19-JUL-2024 16:24
Client ID: MW13-4D
Sample Info: 3369360021;;1;;;;;
Purge Volume: 5.0
Column phase: DB-VRX

Instrument: ms23.i
Operator: JTH
Column diameter: 0.25



Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071914.D

Date : 19-JUL-2024 16:24

Client ID: MW13-4D

Instrument: ms23.i

Sample Info: 3369360021;;1;;;;;

Purge Volume: 5.0

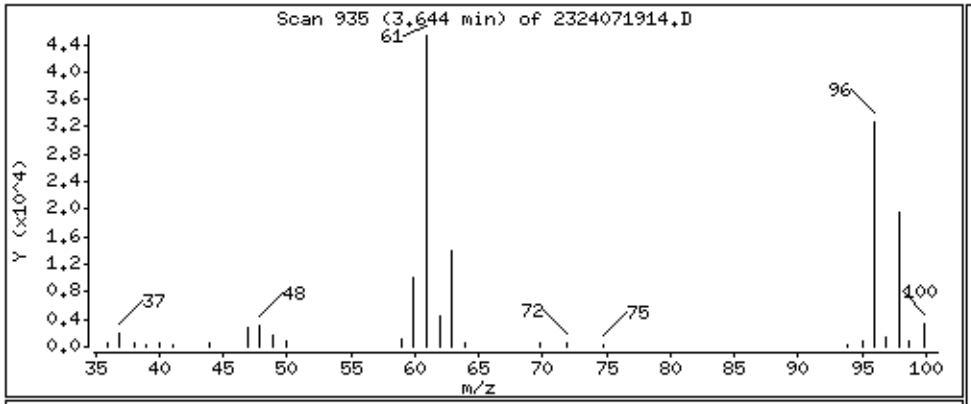
Operator: JTH

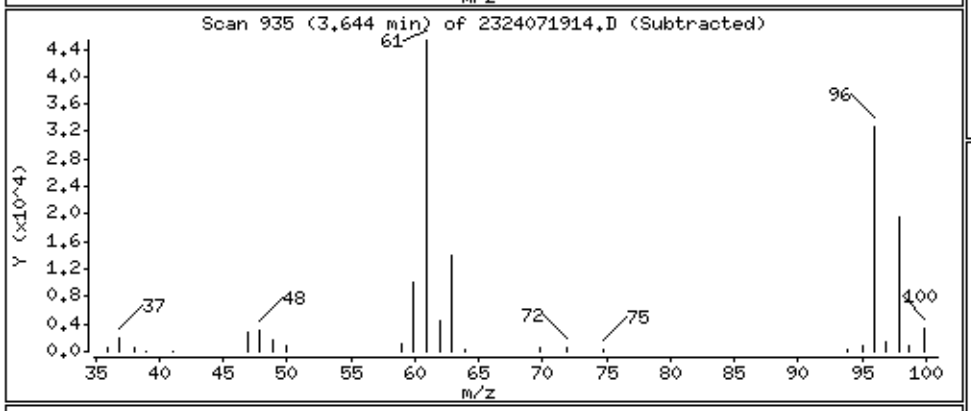
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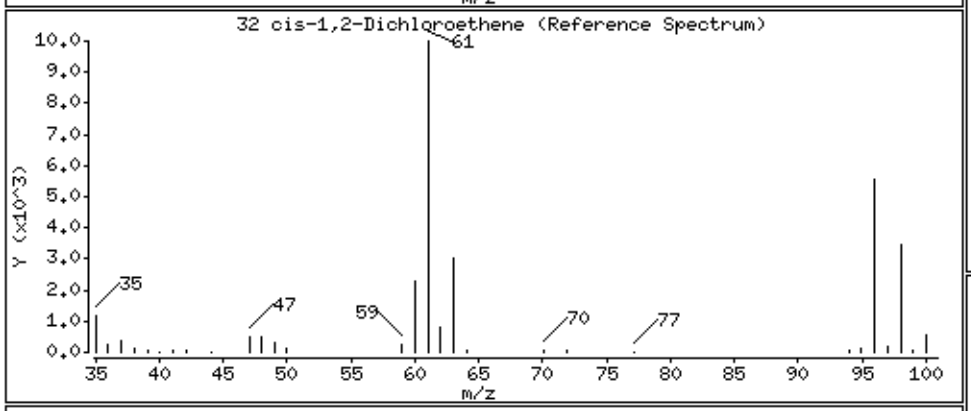
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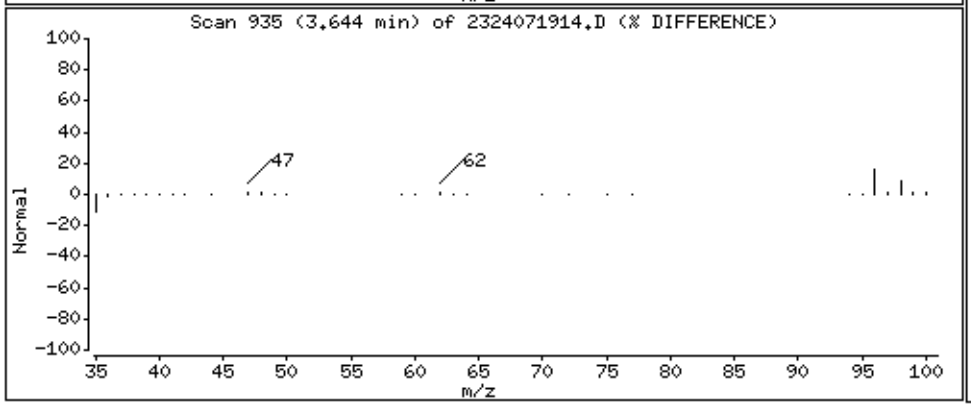
32 cis-1,2-Dichloroethene

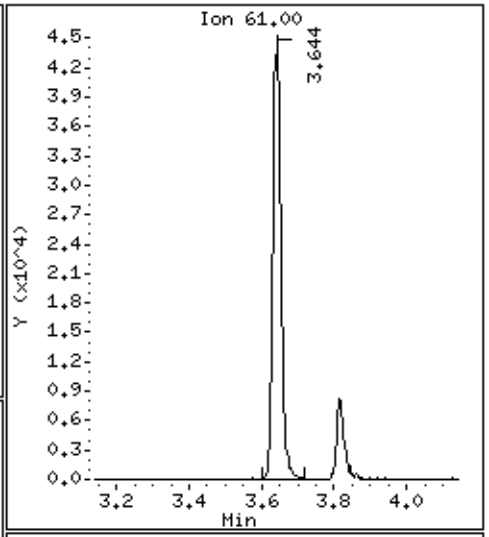
Concentration: 5.48986 ug/L

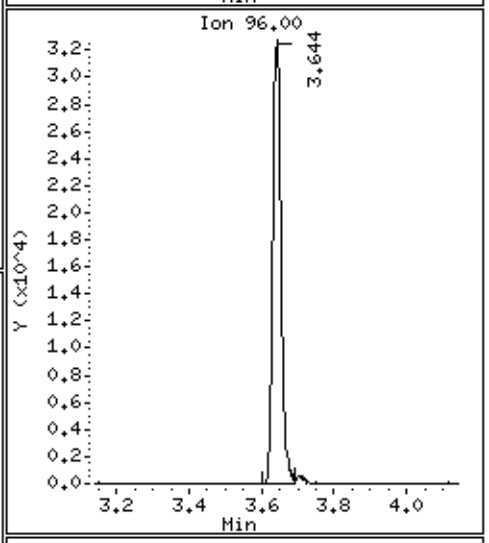


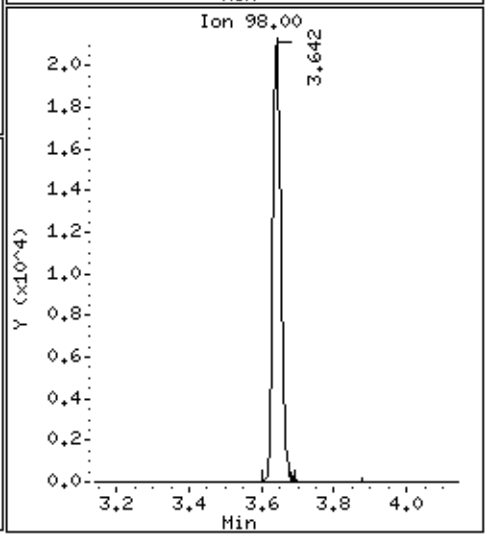












Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071914.D

Date : 19-JUL-2024 16:24

Client ID: MW13-4D

Instrument: ms23.i

Sample Info: 3369360021;;1;;;;;

Purge Volume: 5.0

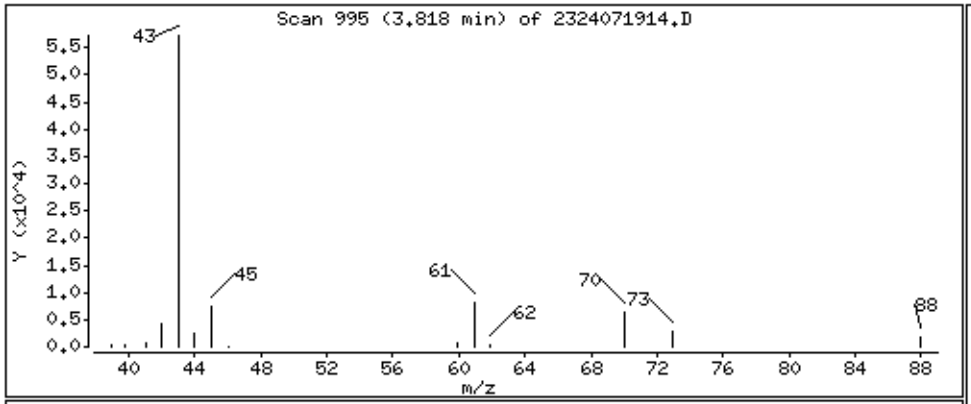
Operator: JTH

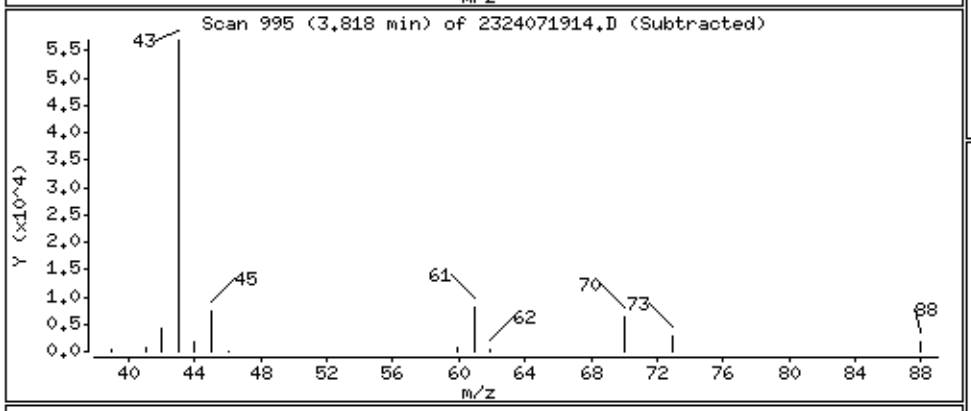
Column phase: DB-VRX

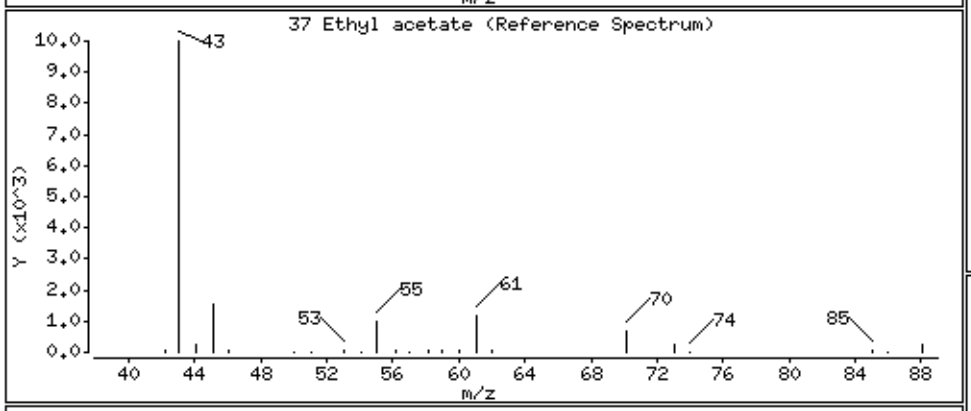
Column diameter: 0.25

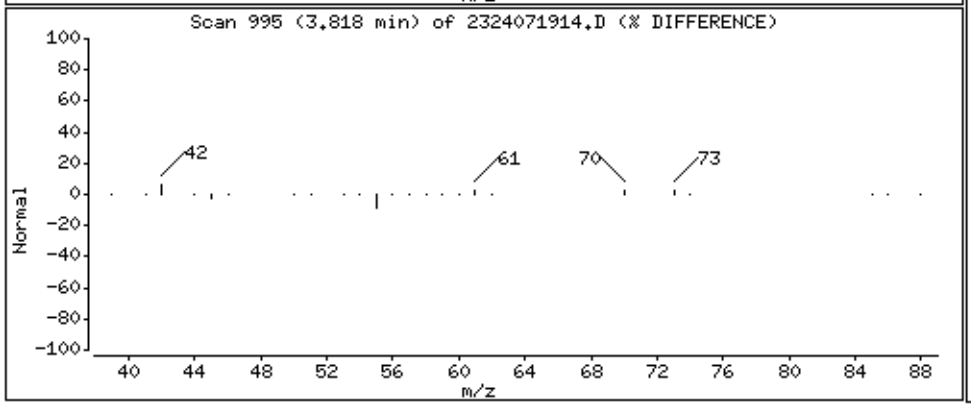
37 Ethyl acetate

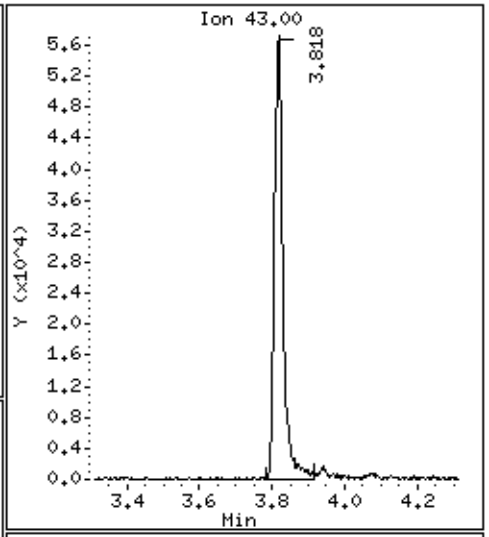
Concentration: 7.55912 ug/L

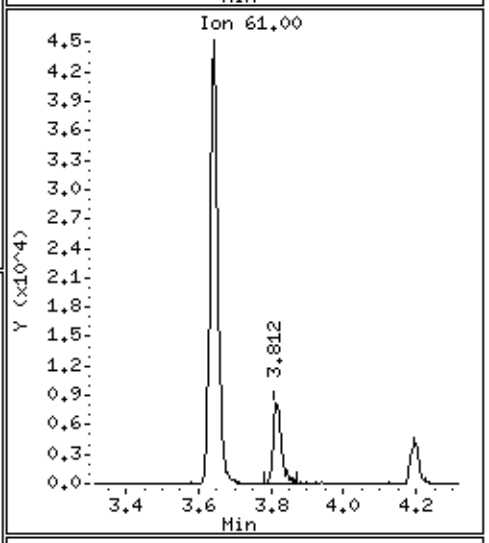


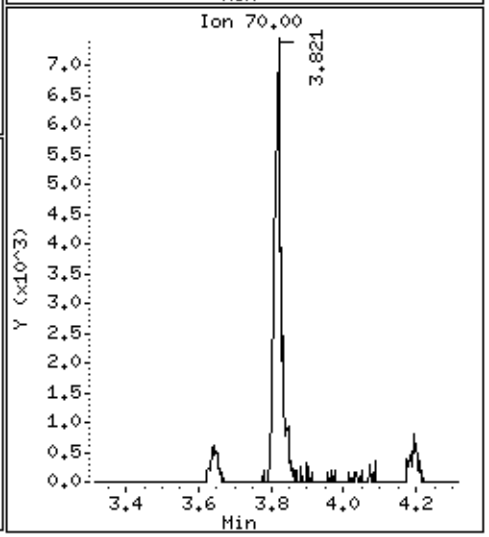












Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071914.D
Inj Date : 19-JUL-2024 16:24
InstruID : ms23.i
LabSampID : 3369360021

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:57
Client ID: MW13-4D
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240719.b/232407191
Inj Date: 19-JUL-2024 16:24
Operator: JTH

Analytes listed below were unassigned due to not meeting one or more of the following qualitative criteria (retention time, mass spectral match, extracted ion ratios)
Rationale other than qualitative criteria are noted on the quantitation report.:

Bromoform
Chloromethane
1,3-Dichloropropane
Methacrylonitrile
Pentane
Chloroethane
1,2-Dichloroethane
Heptane
2-Nitropropane

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071915.D
Lab Smp Id: 3369360022 Client Smp ID: MW13-5D
Inj Date : 19-JUL-2024 16:44
Operator : JTH Inst ID: ms23.i
Smp Info : 3369360022;;1;;;;;
Misc Info : ZZ VOMS 73921 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\23-8260b09D.m
Meth Date : 25-Jul-2024 06:20 ms23.i Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	1.849	1.849	(0.424)	40966	3.65155	3.65155	
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	Compound Not Detected.						
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	Compound Not Detected.						
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	3959	0.32244	0.322440(a)	
21 Hexane	57	Compound Not Detected.						
22 Methyl t-Butyl Ether	73	Compound Not Detected.						

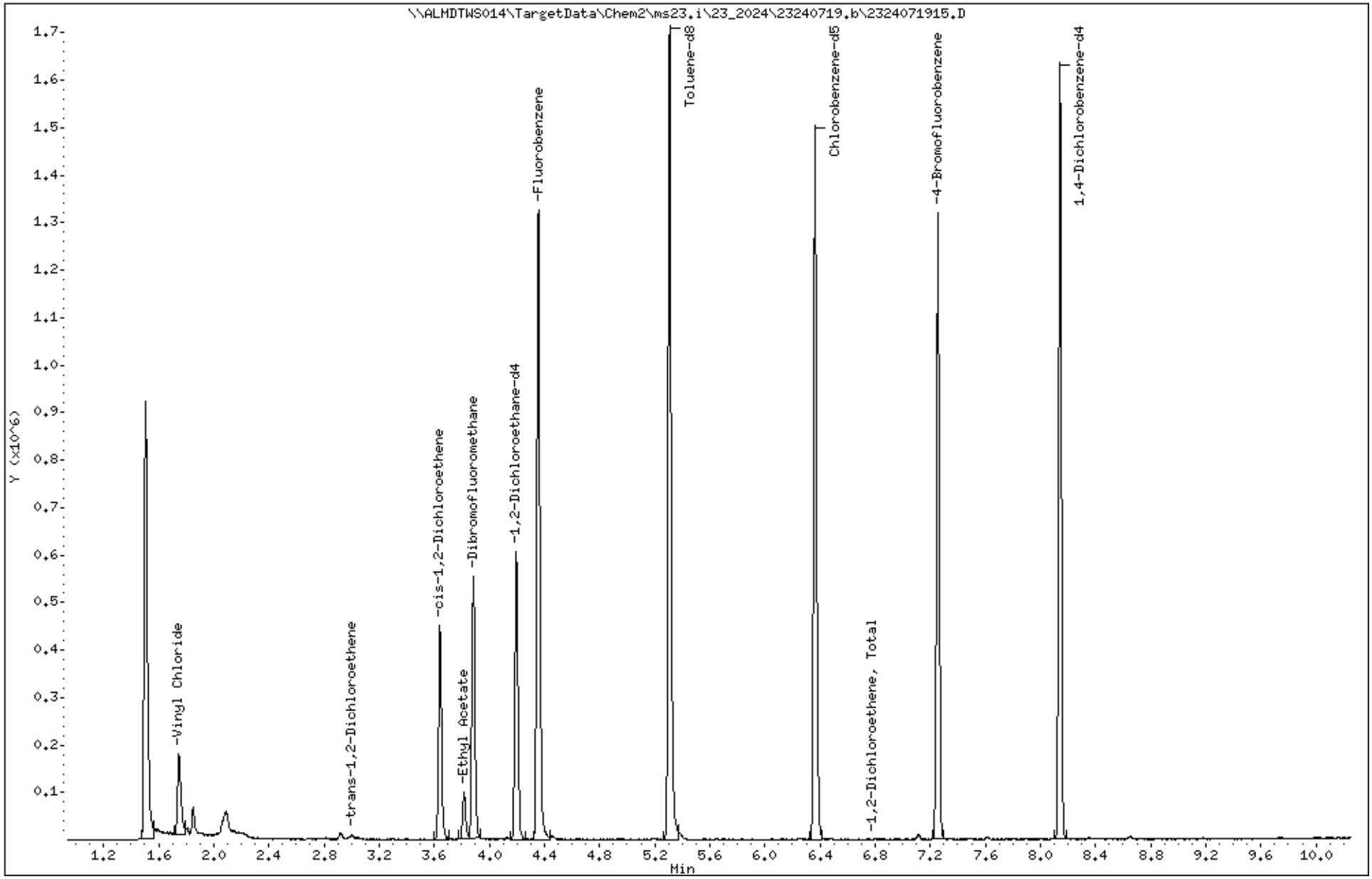
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	205281	16.5862	16.5862	
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61				209240	16.9086	16.9086	
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	Compound Not Detected.						
	37 Ethyl acetate	43	3.815	3.812	(0.876)	96496	7.88164	7.88164	
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.884	3.881	(0.892)	246977	29.0709	29.0709	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	Compound Not Detected.						
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.197	4.194	(0.963)	323271	29.7160	29.7160	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.356	4.353	(1.000)	914075	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	Compound Not Detected.						
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.309	5.309	(0.834)	933133	28.8093	28.8093	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						
	76 Ethyl methacrylate	69	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
77	1,1,2-Trichloroethane	83	Compound Not Detected.						
78	Chlorodibromomethane	129	Compound Not Detected.						
79	1,3-Dichloropropane	76	Compound Not Detected.						
80	1,2-Dibromoethane	107	Compound Not Detected.						
81	2-Hexanone	43	Compound Not Detected.						
82	1-Chlorohexane	91	Compound Not Detected.						
* 83	Chlorobenzene-d5	82	6.363	6.363	(1.000)	402345	30.0000		
85	Ethylbenzene	106	Compound Not Detected.						
84	Chlorobenzene	112	Compound Not Detected.						
86	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
87	mp-Xylene	106	Compound Not Detected.						
M 120	1,3-Dichloropropene, Total	75	Compound Not Detected.						
88	o-Xylene	106	Compound Not Detected.						
89	Styrene	104	Compound Not Detected.						
90	Bromoform	173	Compound Not Detected.						
91	Isopropylbenzene	105	Compound Not Detected.						
$ 92	4-Bromofluorobenzene	174	7.257	7.254	(0.892)	280108	28.7188	28.7188	
M 121	TOTAL XYLENES	106	Compound Not Detected.						
94	n-Propylbenzene	120	Compound Not Detected.						
93	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
97	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
96	o-Chlorotoluene	91	Compound Not Detected.						
98	1,2,3-Trichloropropane	110	Compound Not Detected.						
99	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
101	p-Chlorotoluene	91	Compound Not Detected.						
102	tert-Butylbenzene	134	Compound Not Detected.						
103	Pentachloroethane	117	Compound Not Detected.						
104	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
105	sec-Butylbenzene	105	Compound Not Detected.						
106	p-Isopropyltoluene	134	Compound Not Detected.						
107	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 108	1,4-Dichlorobenzene-d4	152	8.140	8.140	(1.000)	344495	30.0000		(Q)
109	1,4-Dichlorobenzene	146	Compound Not Detected.						
111	n-Butylbenzene	134	Compound Not Detected.						
110	Benzyl Chloride	126	Compound Not Detected.						
112	Hexachloroethane	117	Compound Not Detected.						
113	1,2-Dichlorobenzene	146	Compound Not Detected.						
114	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
115	Nitrobenzene	77	Compound Not Detected.						
116	Hexachlorobutadiene	225	Compound Not Detected.						
117	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
118	Naphthalene	128	Compound Not Detected.						
119	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

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Date : 19-JUL-2024 16:44
Client ID: MW13-5D
Instrument: ms23.i
Sample Info: 3369360022;;1;;;;;
Purge Volume: 5.0
Operator: JTH
Column phase: DB-VRX
Column diameter: 0.25



Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071915.D

Date : 19-JUL-2024 16:44

Client ID: MW13-5D

Instrument: ms23.i

Sample Info: 3369360022;;1;;;;;

Purge Volume: 5.0

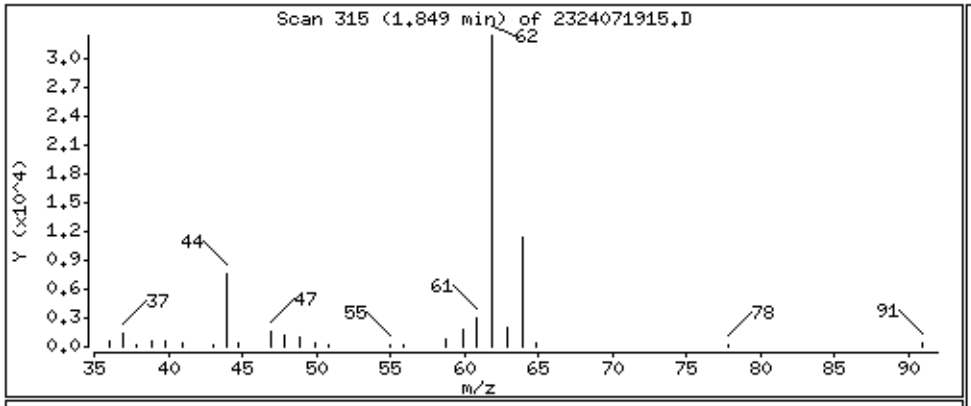
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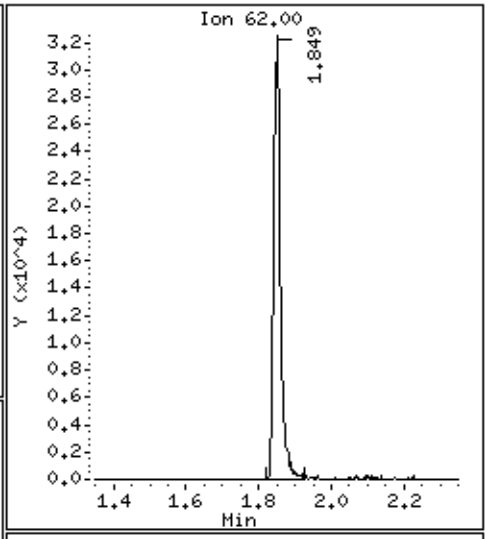
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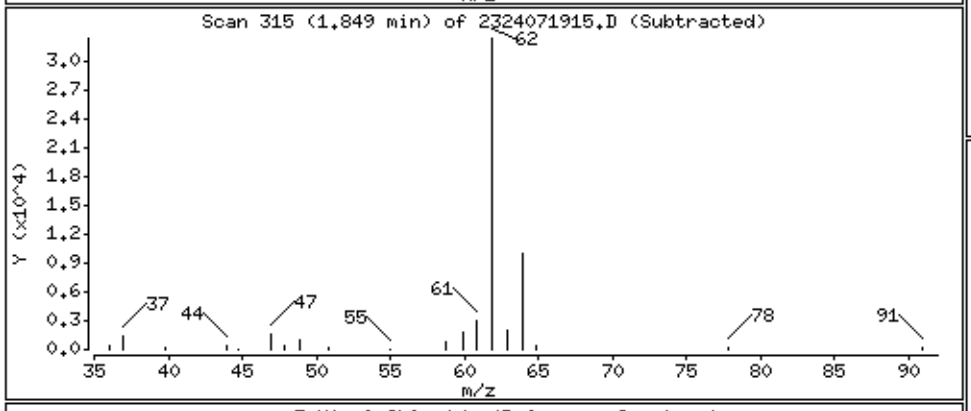
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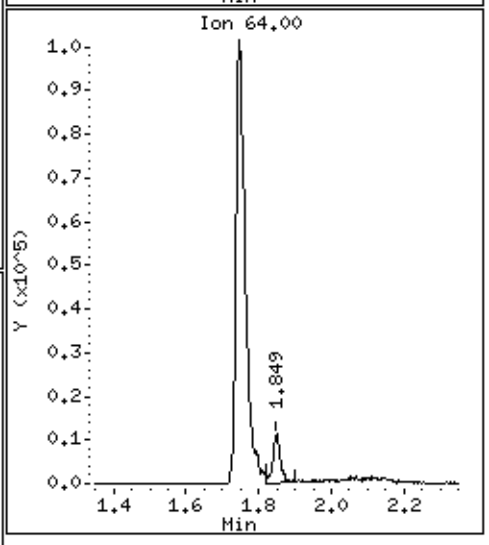
3 Vinyl Chloride

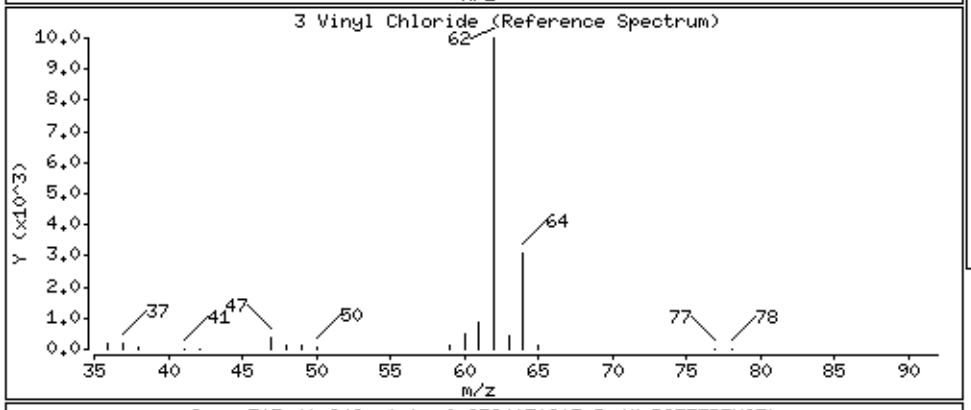
Concentration: 3.65155 ug/L

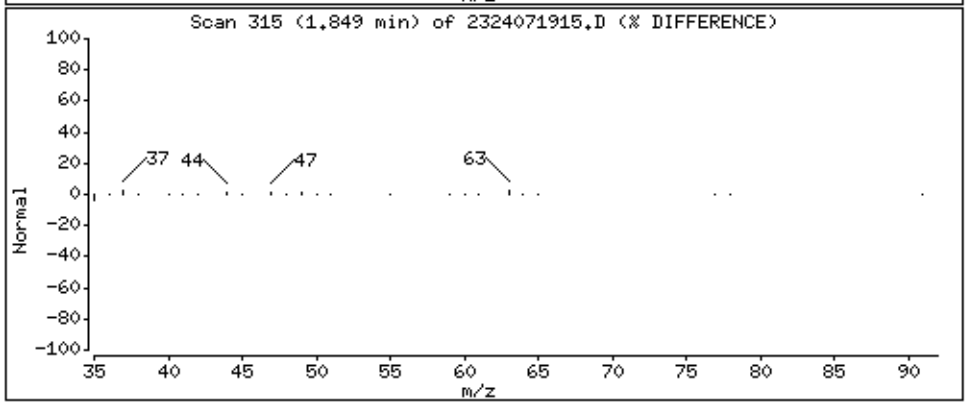












Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071915.D

Date : 19-JUL-2024 16:44

Client ID: MW13-5D

Instrument: ms23.i

Sample Info: 3369360022;;1;;;;;

Purge Volume: 5.0

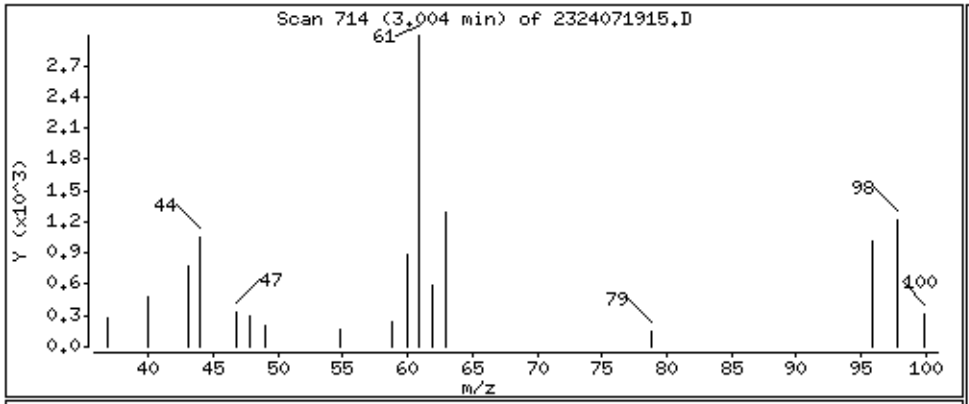
Operator: JTH

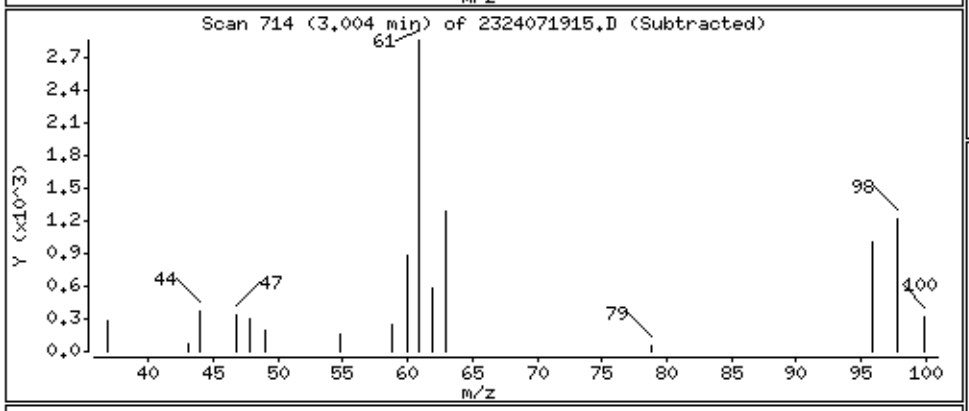
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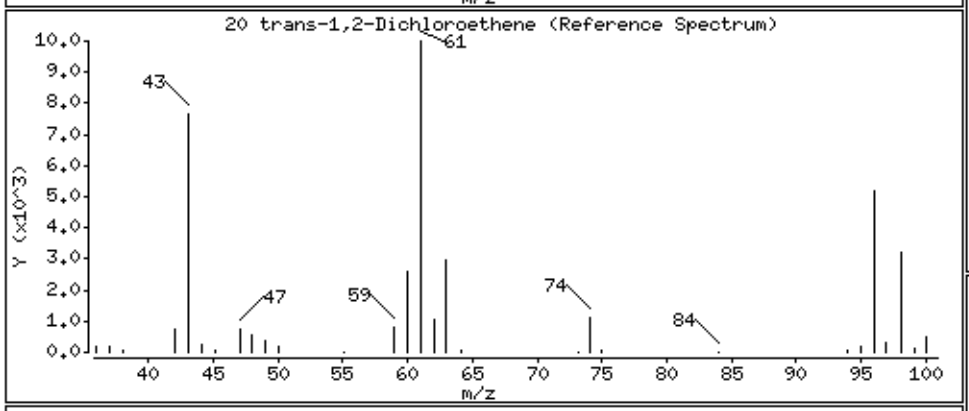
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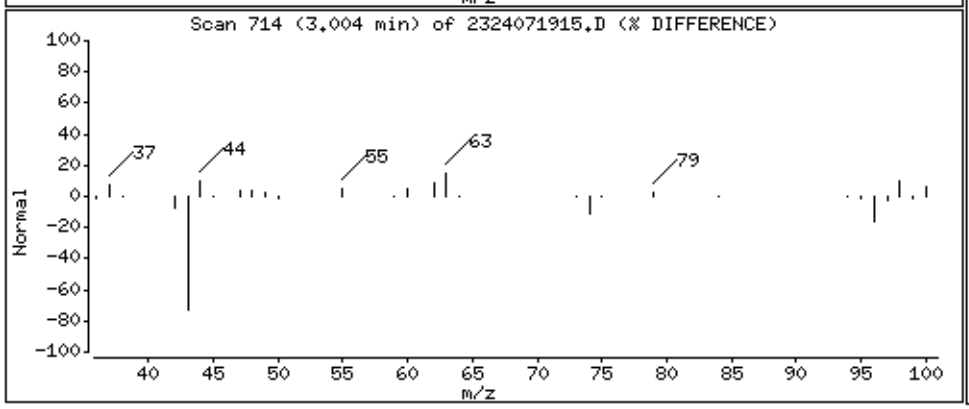
20 trans-1,2-Dichloroethene

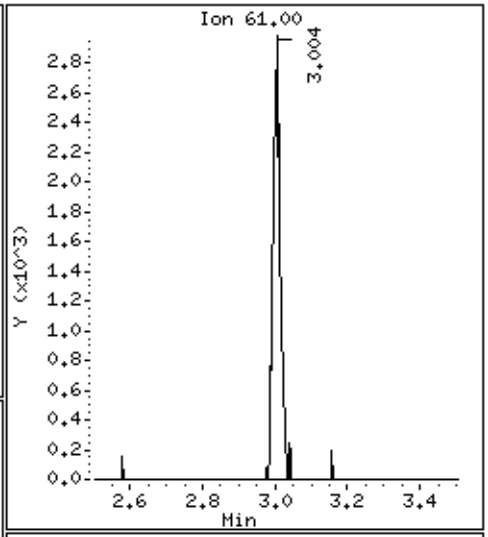
Concentration: 0.322440 ug/L

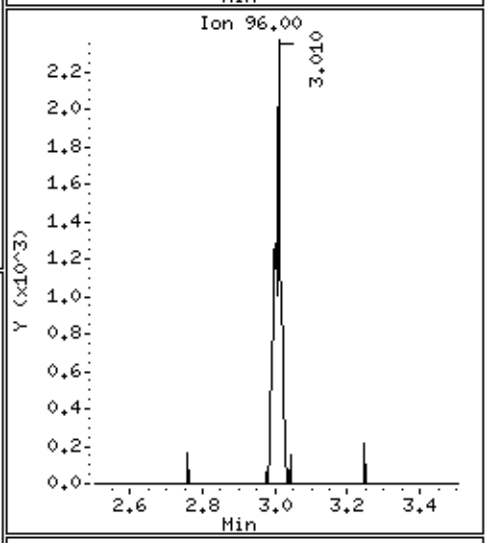


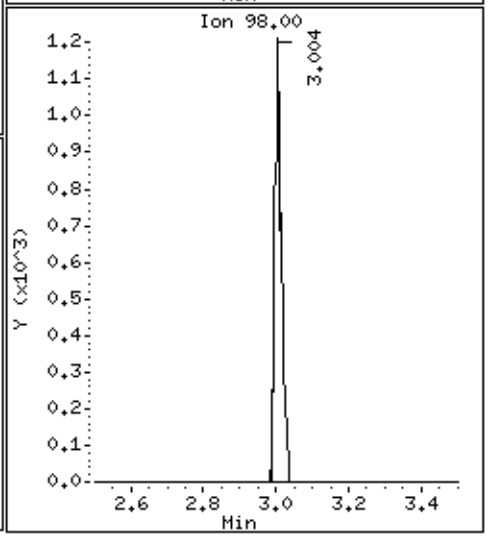












Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071915.D

Date : 19-JUL-2024 16:44

Client ID: MW13-5D

Instrument: ms23.i

Sample Info: 3369360022;;1;;;;;

Purge Volume: 5.0

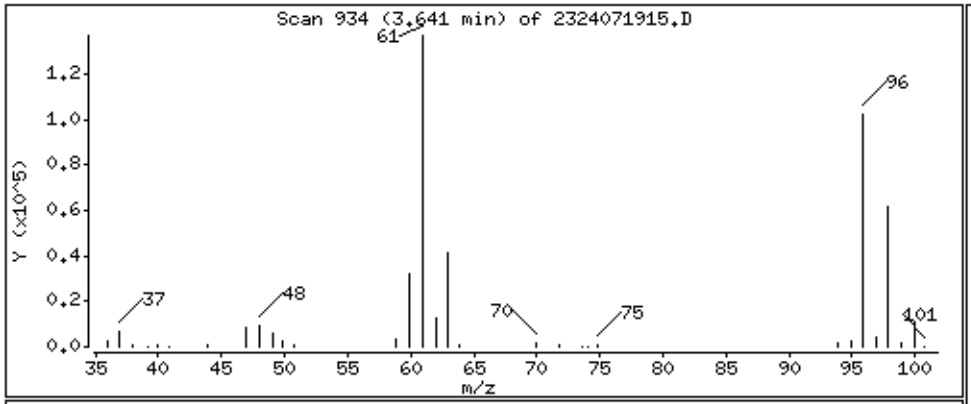
Operator: JTH

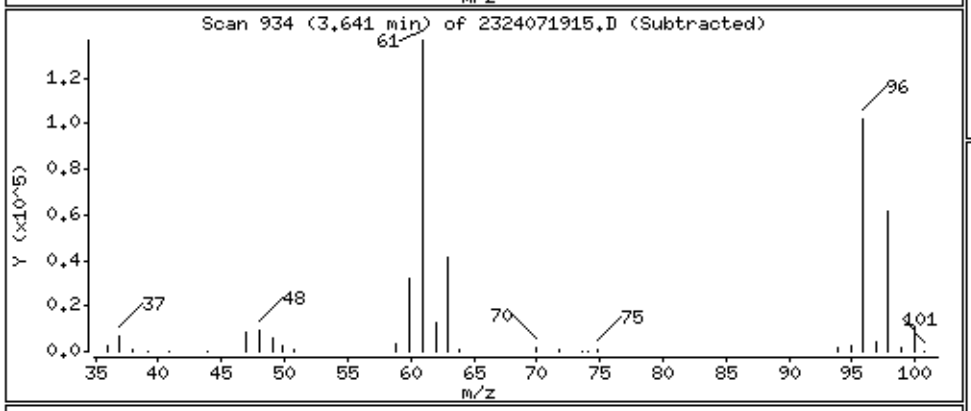
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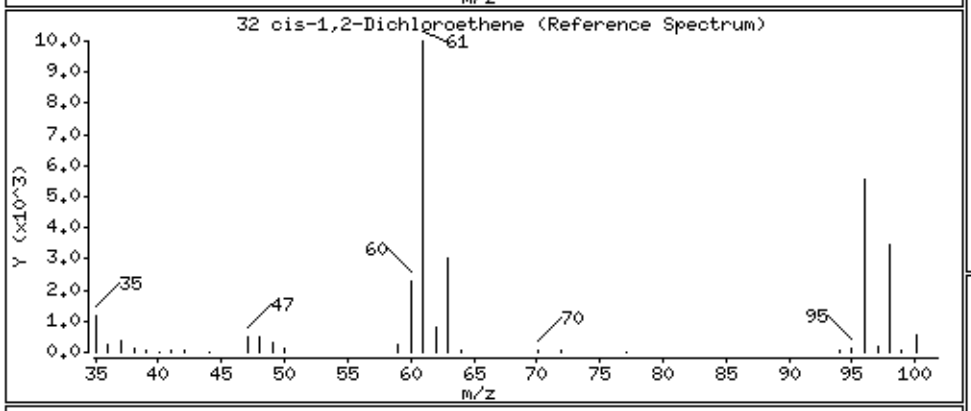
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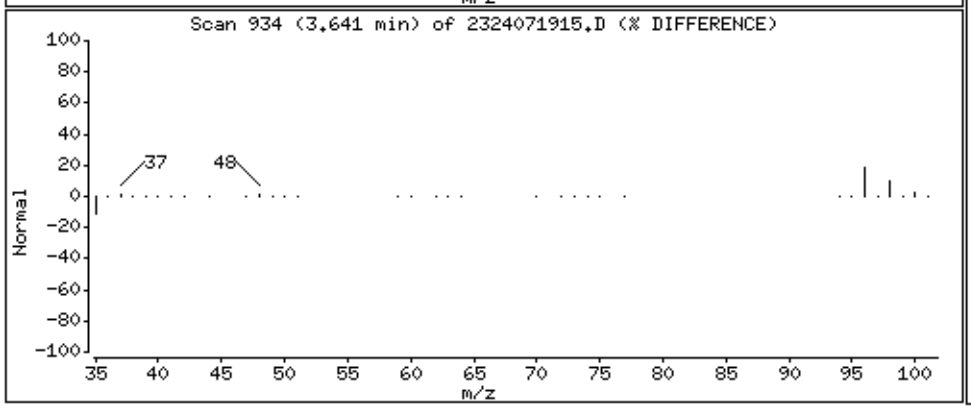
32 cis-1,2-Dichloroethene

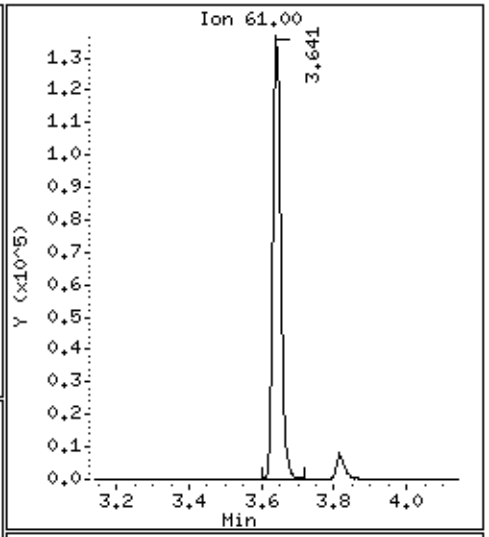
Concentration: 16.5862 ug/L

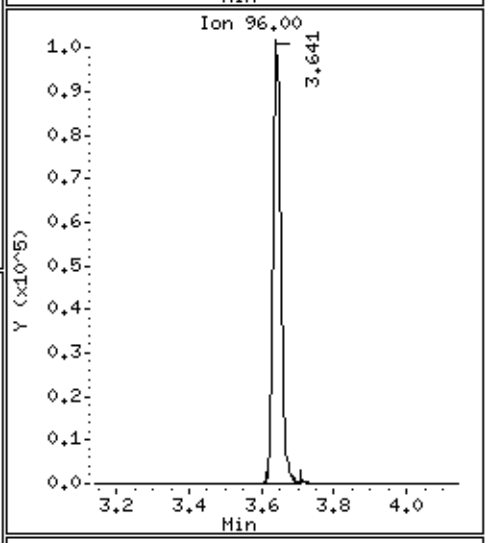


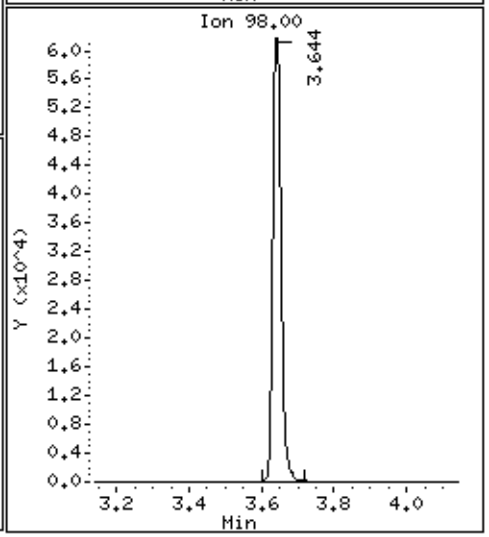












Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071915.D

Date : 19-JUL-2024 16:44

Client ID: MW13-5D

Instrument: ms23.i

Sample Info: 3369360022;;1;;;;;

Purge Volume: 5.0

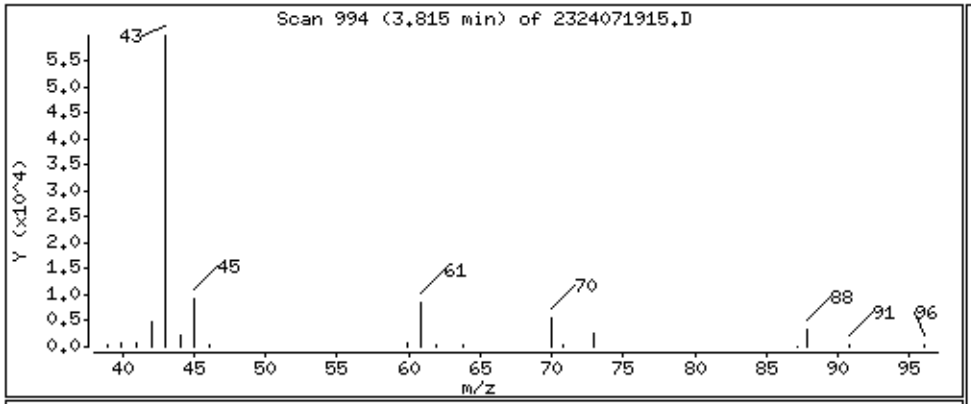
Operator: JTH

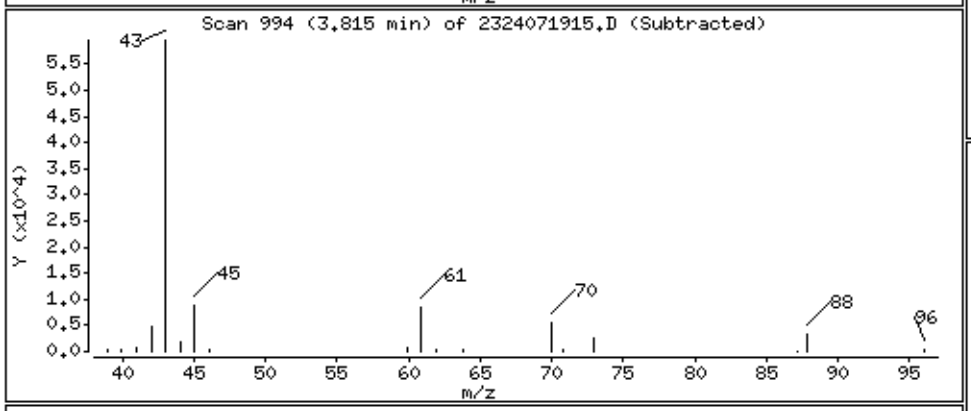
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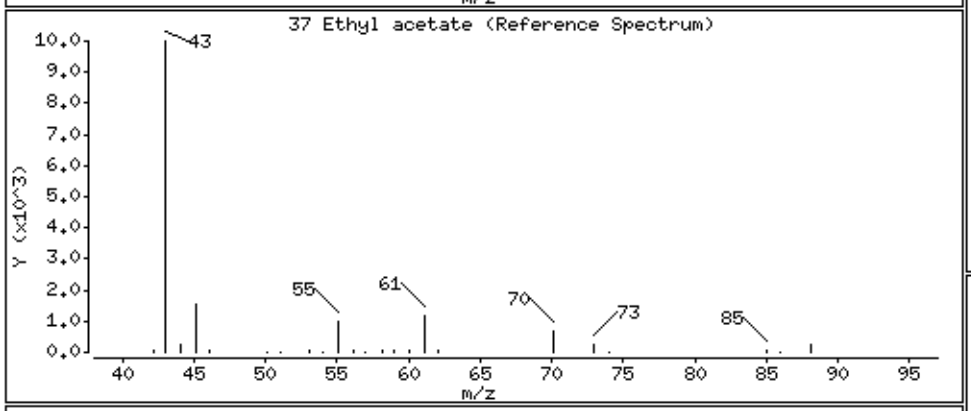
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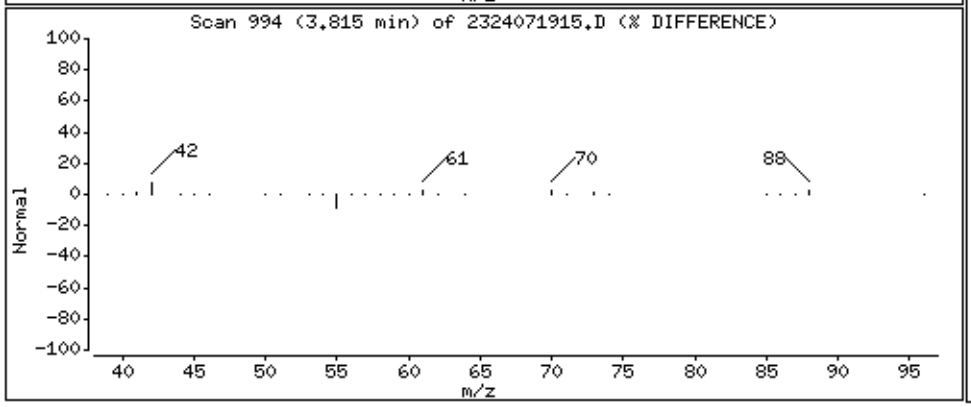
37 Ethyl acetate

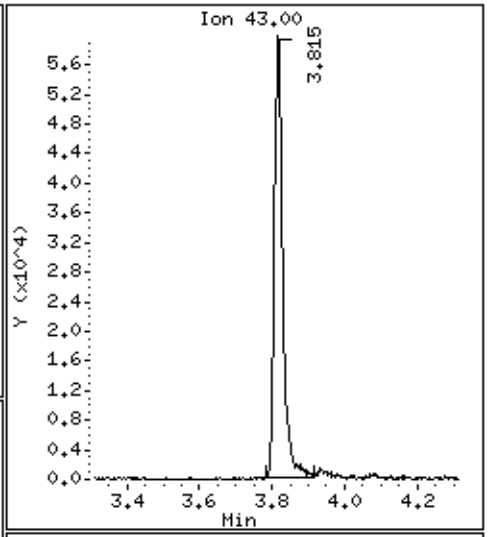
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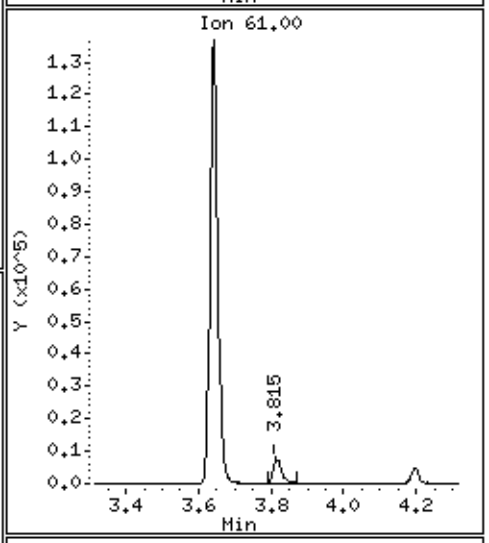


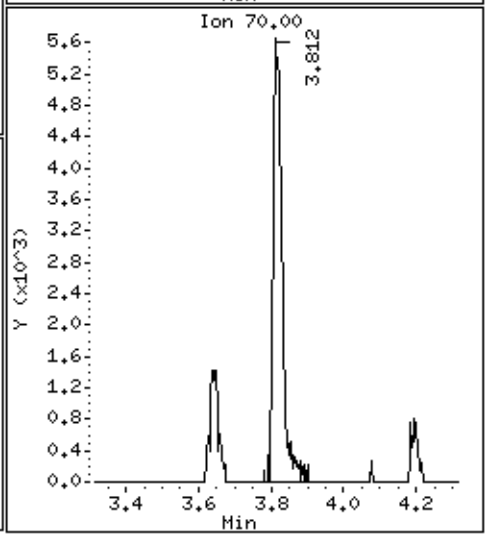












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InstruID : ms23.i
LabSampID : 3369360022

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:58
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Inj Date: 19-JUL-2024 16:44
Operator: JTH

Analytes listed below were unassigned due to not meeting one or more of the following qualitative criteria (retention time, mass spectral match, extracted ion ratios)
Rationale other than qualitative criteria are noted on the quantitation report.:

Bromoform
Chloromethane
1,1-Dichloroethene
Methacrylonitrile
Pentane
Chloroethane
1,2-Dichloroethane
Heptane
2-Nitropropane
1,1,1-Trichloroethane

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

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Operator : JTH Inst ID: ms23.i
Smp Info : 1801;;1;;;;;
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Comment :
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Meth Date : 25-Jul-2024 06:20 ms23.i Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 28 QC Sample: ENDCCV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
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Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

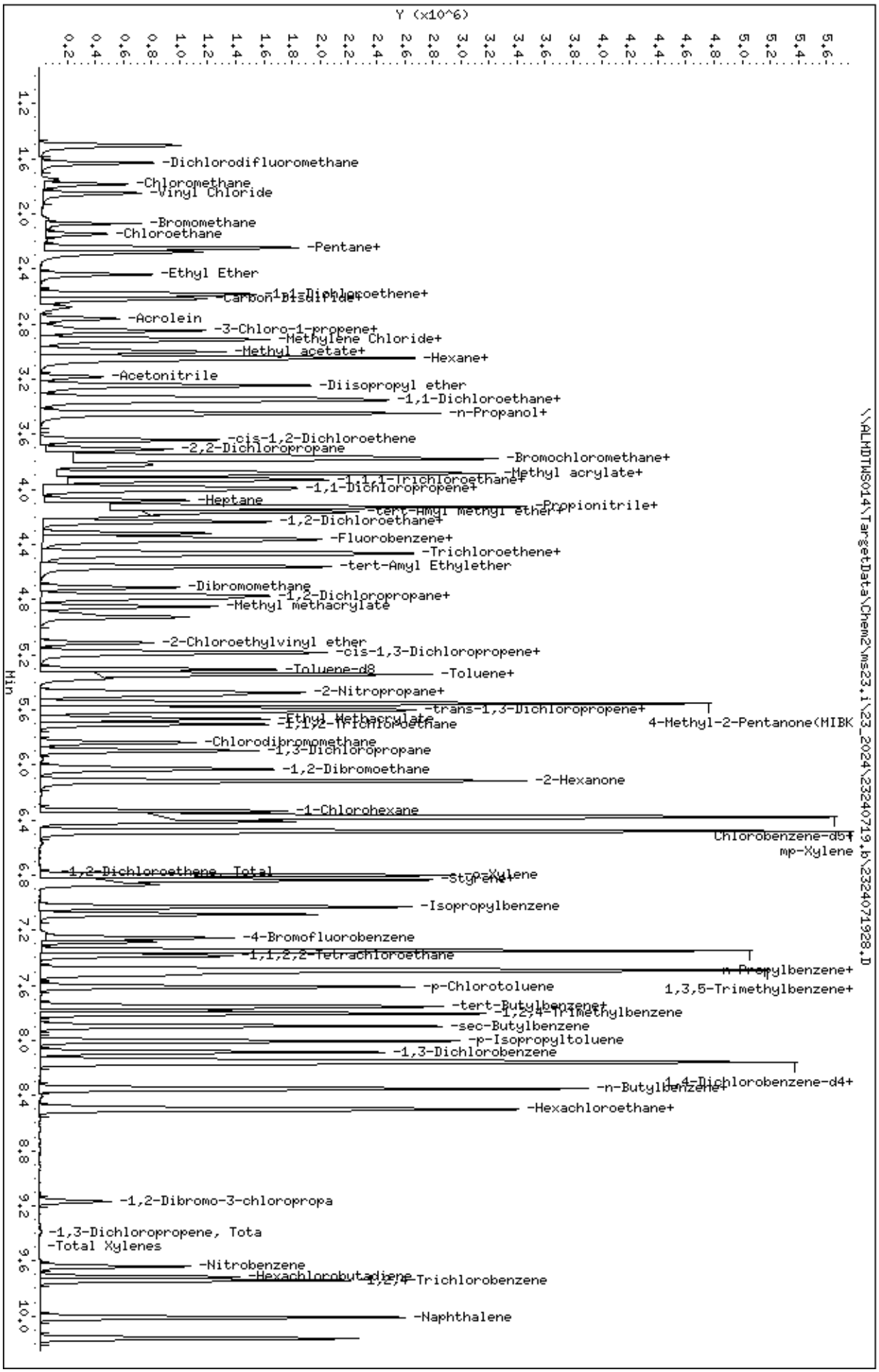
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.631	1.632	(0.375)	614341	50.0749	50.0749	
2 Chloromethane	50	1.785	1.785	(0.410)	480464	38.3938	38.3938	
3 Vinyl Chloride	62	1.849	1.849	(0.425)	537350	48.5679	48.5679	
4 Bromomethane	94	2.072	2.072	(0.476)	214867	41.5163	41.5163	
5 Chloroethane	64	2.147	2.147	(0.493)	303103	50.8481	50.8481	
6 Pentane	41	2.245	2.245	(0.516)	343405	42.4707	42.4707	
7 Trichlorofluoromethane	101	2.248	2.251	(0.517)	705029	52.0684	52.0684	
8 Dichlorofluoromethane	67	2.277	2.280	(0.523)	818106	46.9052	46.9052	
9 Ethyl Ether	74	2.442	2.439	(0.561)	268651	48.4876	48.4876	
10 1,1-Dichloroethene	61	2.578	2.578	(0.592)	579457	47.8500	47.8500	
12 Carbon Disulfide	76	2.619	2.619	(0.602)	1131802	46.0101	46.0101	
11 Freon 113	101	2.593	2.590	(0.596)	333008	46.7854	46.7854	
13 Iodomethane	127	2.677	2.677	(0.615)	128408	36.1235	36.1235	
14 Acrolein	56	2.761	2.761	(0.634)	395821	243.935	243.935	
16 3-Chloro-1-propene	41	2.848	2.848	(0.654)	606191	47.4106	47.4106	
15 Isopropyl Alcohol	45	2.821	2.819	(0.648)	170764	220.081	220.081	
17 Methylene Chloride	84	2.908	2.908	(0.668)	408122	46.1194	46.1194	
18 Acetone	58	2.920	2.917	(0.671)	237263	230.070	230.070	
19 Methyl acetate	74	2.984	2.981	(0.685)	86686	45.9738	45.9738	
20 trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	563536	46.5397	46.5397	
21 Hexane	57	3.044	3.042	(0.699)	778473	43.2089	43.2089	
22 Methyl t-Butyl Ether	73	3.047	3.047	(0.700)	1265333	48.7179	48.7179	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	3.068	3.065	(0.705)	274862	244.816	244.816	
	24 Acetonitrile	41	3.183	3.181	(0.731)	368812	226.966	226.966	
	25 Diisopropyl ether	45	3.247	3.244	(0.746)	1434483	48.3254	48.3254	
	26 Chloroprene	53	3.337	3.334	(0.767)	517883	48.3915	48.3915(M)	
	27 1,1-Dichloroethane	63	3.346	3.346	(0.769)	755972	47.6135	47.6135	
	28 Acrylonitrile	53	3.357	3.354	(0.771)	1215390	240.835	240.835(M)	
	30 n-Propanol	41	3.447	3.444	(0.792)	287125	446.720	446.720	
	29 Ethyl tert-butyl ether	59	3.447	3.447	(0.792)	1370544	49.1761	49.1761	
	31 Vinyl acetate	86	3.450	3.450	(0.793)	103896	50.1031	50.1031	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	586936	48.0869	48.0869	
	33 2,2-Dichloropropane	77	3.710	3.707	(0.852)	462981	37.9479	37.9479	
M	100 1,2-Dichloroethene, Total	61				1150472	94.6266	94.6266	
	34 Bromochloromethane	128	3.757	3.757	(0.863)	216192	49.0921	49.0921	
	35 Cyclohexane	84	3.780	3.780	(0.868)	577503	45.8803	45.8803	
	36 Chloroform	83	3.780	3.780	(0.868)	794868	48.0937	48.0937	
	37 Ethyl acetate	43	3.815	3.812	(0.876)	589895	48.8563	48.8563	
	38 Methyl acrylate	55	3.832	3.832	(0.880)	487367	48.4402	48.4402(Q)	
	39 Carbon Tetrachloride	117	3.890	3.890	(0.894)	559805	52.1585	52.1585(M)	
	40 Tetrahydrofuran	42	3.881	3.881	(0.892)	835702	239.784	239.784	
$	41 Dibromofluoromethane	113	3.884	3.881	(0.892)	249914	29.8285	29.8285	
	42 1,1,1-Trichloroethane	97	3.922	3.922	(0.901)	642415	49.0619	49.0619	
	43 2-Butanone	72	3.936	3.933	(0.904)	315708	234.874	234.874	
	44 1,1-Dichloropropene	75	3.985	3.985	(0.916)	565234	46.7501	46.7501	
	45 1-Chlorobutane	41	4.003	4.006	(0.920)	469399	45.7617	45.7617	
	46 Heptane	71	4.078	4.078	(0.937)	225601	36.2514	36.2514	
	48 Propionitrile	54	4.110	4.110	(0.944)	412764	237.399	237.399	
	47 Benzene	78	4.130	4.127	(0.949)	1603038	47.2299	47.2299	
	49 Methacrylonitrile	67	4.127	4.127	(0.948)	215518	48.2793	48.2793	
	50 tert-amyl methyl Ether	73	4.162	4.162	(0.956)	1235200	48.5448	48.5448	
$	51 1,2-Dichloroethane-d4	65	4.194	4.194	(0.963)	347886	32.4264	32.4264	
	54 Isobutyl alcohol	42	4.165	4.165	(0.957)	158415	418.730	418.730	
	52 1,2-Dichloroethane	62	4.234	4.234	(0.973)	638748	46.6389	46.6389	
	53 tert-Amyl Alcohol	59	4.237	4.234	(0.973)	223121	210.456	210.456	
*	55 Fluorobenzene	96	4.353	4.353	(1.000)	901454	30.0000		
	56 Diisobutylene	57	4.373	4.371	(1.005)	956582	45.1966	45.1966	
	57 Trichloroethene	95	4.457	4.457	(1.024)	428906	46.0539	46.0539	
	58 Methyl cyclohexane	83	4.475	4.472	(0.703)	610507	44.9355	44.9355	
	59 tert-Amyl Ethylether	59	4.559	4.562	(1.047)	1022307	48.5950	48.5950	
	60 Dibromomethane	93	4.712	4.712	(1.082)	296462	48.5763	48.5763	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.096)	441774	47.2969	47.2969	
	62 Bromodichloromethane	83	4.793	4.790	(1.101)	586853	49.7278	49.7278	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	489458	48.2410	48.2410	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.175)	286809	42.4832	42.4832	
	66 cis-1,3-Dichloropropene	75	5.181	5.178	(0.814)	689073	48.1108	48.1108	
	67 Octane	85	5.196	5.196	(0.817)	195166	37.3582	37.3582	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	937215	28.9099	28.9099	
	69 Toluene	92	5.343	5.340	(0.840)	975911	46.3715	46.3715	
	70 Chloroacetonitrile	75	5.378	5.378	(0.845)	157574	233.601	233.601	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	876843	230.269	230.269	
	72 1,1-Dichloro-2-propanone	63	5.494	5.494	(0.863)	62780	219.840	219.840	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.555	5.552	(0.873)	2756864	247.744	247.744	
	75 trans-1,3-Dichloropropene	75	5.592	5.592	(0.879)	655240	49.0023	49.0023	
	74 Tetrachloroethene	164	5.607	5.607	(0.881)	403312	52.2778	52.2778	
	76 Ethyl methacrylate	69	5.668	5.665	(0.891)	661462	50.2173	50.2173	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	77 1,1,2-Trichloroethane	83	5.705	5.705	(0.897)	350868	48.1110	48.1110	
	78 Chlorodibromomethane	129	5.838	5.838	(0.918)	454986	50.4466	50.4466	
	79 1,3-Dichloropropane	76	5.899	5.896	(0.927)	704027	47.2411	47.2411	
	80 1,2-Dibromoethane	107	6.018	6.018	(0.946)	375717	48.2491	48.2491	
	81 2-Hexanone	43	6.116	6.116	(0.961)	1967070	246.202	246.202	
	82 1-Chlorohexane	91	6.334	6.334	(0.995)	456738	40.9925	40.9925	
*	83 Chlorobenzene-d5	82	6.362	6.363	(1.000)	402699	30.0000		
	85 Ethylbenzene	106	6.383	6.380	(1.003)	545172	45.6714	45.6714	
	84 Chlorobenzene	112	6.377	6.377	(1.002)	1056184	46.8612	46.8612	
	86 1,1,1,2-Tetrachloroethane	131	6.412	6.412	(1.008)	389116	48.8499	48.8499	
	87 mp-Xylene	106	6.481	6.481	(1.019)	1323086	90.4336	90.4336	
M	120 1,3-Dichloropropene, Total	75				1344313	97.1131	97.1131	
	88 o-Xylene	106	6.800	6.800	(1.069)	657098	46.1619	46.1619	
	89 Styrene	104	6.834	6.834	(0.839)	1112147	48.2988	48.2988	
	90 Bromoform	173	6.869	6.869	(0.844)	301305	51.4023	51.4023	
	91 Isopropylbenzene	105	7.031	7.028	(0.863)	1479000	46.1260	46.1260	
$	92 4-Bromofluorobenzene	174	7.257	7.254	(0.891)	291310	28.6831	28.6831	
M	121 TOTAL XYLENES	106				1980184	136.596	136.596	
	94 n-Propylbenzene	120	7.350	7.347	(0.903)	439558	44.7700	44.7700	
	93 Bromobenzene	156	7.347	7.350	(0.902)	437998	47.0650	47.0650	
	95 1,1,2,2-Tetrachloroethane	83	7.387	7.385	(0.907)	564392	48.7901	48.7901	
	97 1,3,5-Trimethylbenzene	105	7.495	7.492	(0.920)	1418438	47.6850	47.6850	
	96 o-Chlorotoluene	91	7.483	7.483	(0.919)	1380699	46.1230	46.1230	
	98 1,2,3-Trichloropropane	110	7.506	7.506	(0.922)	172742	48.2976	48.2976	
	99 trans-1,4-Dichloro-2-butene	53	7.526	7.526	(0.924)	145292	40.6032	40.6032(Q)	
	101 p-Chlorotoluene	91	7.610	7.610	(0.935)	1257612	45.3261	45.3261	
	102 tert-Butylbenzene	134	7.755	7.755	(0.952)	307671	44.0304	44.0304	
	103 Pentachloroethane	117	7.778	7.778	(0.955)	245842	42.5556	42.5556(QM)	
	104 1,2,4-Trimethylbenzene	105	7.804	7.807	(0.958)	1442221	47.1737	47.1737	
	105 sec-Butylbenzene	105	7.897	7.897	(0.970)	1670140	44.8966	44.8966	
	106 p-Isopropyltoluene	134	8.004	8.004	(0.983)	364556	44.3163	44.3163	
	107 1,3-Dichlorobenzene	146	8.085	8.085	(0.993)	794311	45.2343	45.2343	
*	108 1,4-Dichlorobenzene-d4	152	8.143	8.140	(1.000)	358718	30.0000		
	109 1,4-Dichlorobenzene	146	8.155	8.155	(1.001)	807383	44.5976	44.5976	
	111 n-Butylbenzene	134	8.352	8.352	(1.026)	338326	43.5063	43.5063(Q)	
	110 Benzyl Chloride	126	8.346	8.346	(1.025)	126028	30.5956	30.5956(Q)	
	112 Hexachloroethane	117	8.493	8.491	(1.043)	275066	48.0239	48.0239	
	113 1,2-Dichlorobenzene	146	8.502	8.502	(1.044)	794329	46.8358	46.8358	
	114 1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	101075	46.1433	46.1433	
	115 Nitrobenzene	77	9.640	9.640	(1.184)	412383	421.136	421.136	
	116 Hexachlorobutadiene	225	9.715	9.718	(1.193)	199600	43.2536	43.2536	
	117 1,2,4-Trichlorobenzene	180	9.741	9.744	(1.196)	511285	45.9721	45.9721	
	118 Naphthalene	128	10.011	10.011	(1.229)	1564917	50.9346	50.9346	
	119 1,2,3-Trichlorobenzene	180	10.164	10.164	(1.248)	516989	48.1112	48.1112	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.


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Instrument: ms23.i
Operator: JTH
Column diameter: 0.25
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Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Pentane+
-Ethyl Ether
-Carbon Disulfide+
-1,1-Dichloroethene+
-Acrolein
-3-Chloro-1-propene+
-Methylene Chloride+
-Methyl acetate+
-Hexane+
-Acetonitrile
-Diisopropyl ether
-1,1-Dichloroethane+
-n-Propanol+
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Bromochloromethane+
-Methyl acrylate+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene+
-Heptane
-Propionitrile+
-tert-Amyl methyl ether+
-1,2-Dichloroethane+
-Fluorobenzene+
-Trichloroethene+
-tert-Amyl Ethylether
-Dibromomethane
-1,2-Dichloropropane+
-Methyl methacrylate
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropene+
-Toluene-d8
-Toluene+
-2-Nitropropane+
-trans-1,3-Dichloropropene+
4-Methyl-2-Pentanone(MIBK
-Ethyl Methacrylate
-1,1,2-Trichloroethane
-Chlorodibromomethane
-1,3-Dichloropropane
-1,2-Dibromoethane
-2-Hexanone
-1-Chlorohexane
Chlorobenzene-d5+
mp-Xylene
-1,2-Dichloroethene, Total
-Styrene+
-o-Xylene
-Isopropylbenzene
-4-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
n-Propylbenzene+
-p-Chlorotoluene
1,3,5-Trimethylbenzene+
-tert-Butylbenzene+
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-p-Isopropyltoluene
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-Hexachloroethane+
-1,2-Dibromo-3-chloropropa
-1,3-Dichloropropene, Tota
-Total Xylenes
-Nitrobenzene
-Hexachlorobutadiene
-1,2,4-Trichlorobenzene
-Naphthalene

Page 1

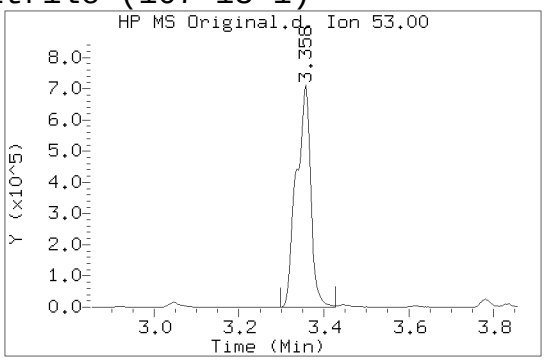
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LabSampID : 1801

Acrylonitrile (107-13-1)

Reason Code:

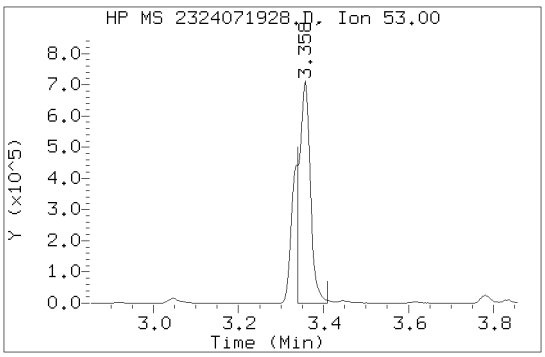
BEFORE

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712320
25-Jul-2024
07:27



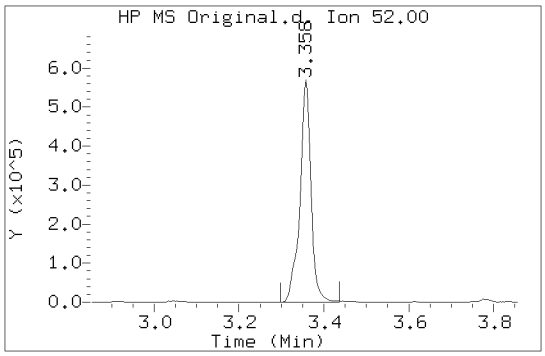
AFTER

MASS
53
AREA
1215390
HEIGHT
711480
25-Jul-2024
17:50



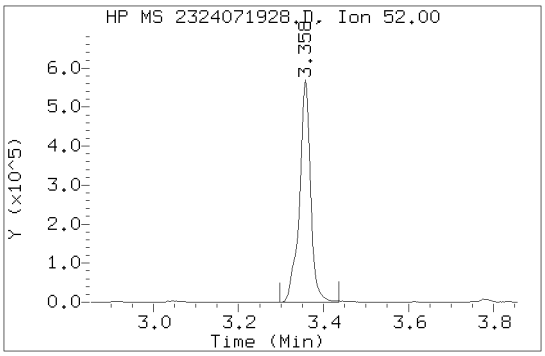
BEFORE

MASS
52
AREA
1021934
HEIGHT
569664
25-Jul-2024
07:27



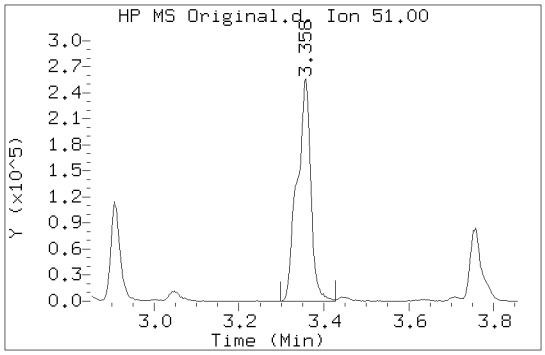
AFTER

MASS
52
AREA
1021934
HEIGHT
569664
25-Jul-2024
17:50



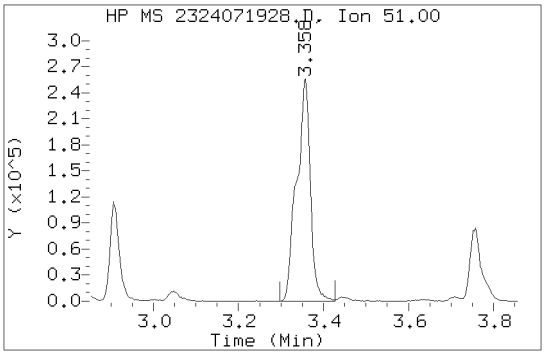
BEFORE

MASS
51
AREA
568793
HEIGHT
255872
25-Jul-2024
07:27



AFTER

MASS
51
AREA
568793
HEIGHT
255872
25-Jul-2024
17:50

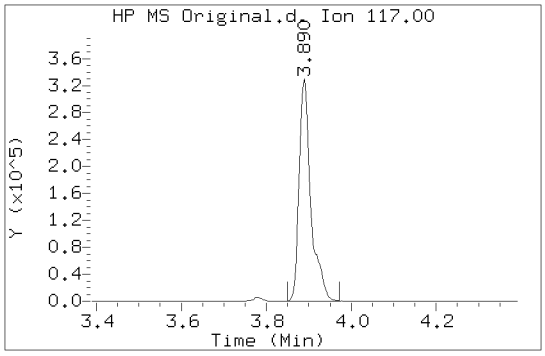


Carbon Tetrachloride (56-23-5)

Reason Code:

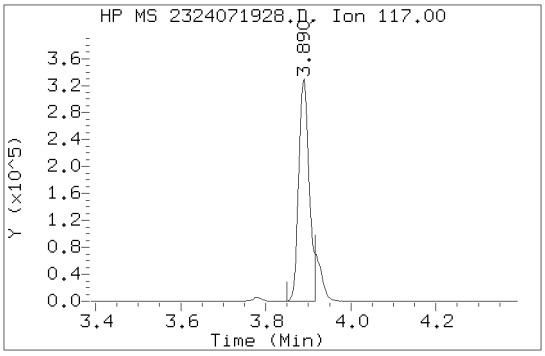
BEFORE

MASS
117
AREA
627345
HEIGHT
329856
25-Jul-2024
07:27



AFTER

MASS
117
AREA
559805
HEIGHT
329856
25-Jul-2024
17:50



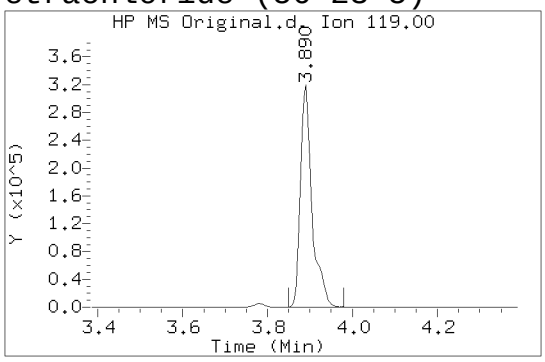
Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071928.D
Inj Date : 19-JUL-2024 21:03
InstruID : ms23.i
LabSampID : 1801

Carbon Tetrachloride (56-23-5)

Reason Code:

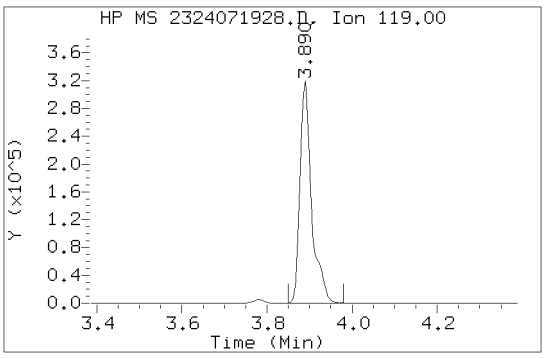
BEFORE

MASS
119
AREA
597428
HEIGHT
319335
25-Jul-2024
07:27



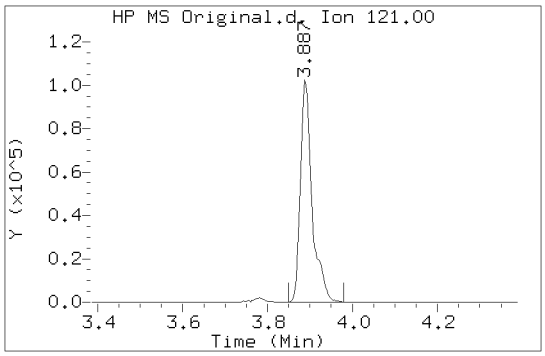
AFTER

MASS
119
AREA
597428
HEIGHT
319335
25-Jul-2024
17:50



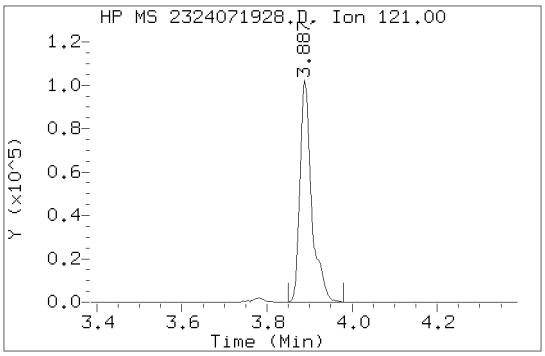
BEFORE

MASS
121
AREA
193296
HEIGHT
102536
25-Jul-2024
07:27



AFTER

MASS
121
AREA
193296
HEIGHT
102536
25-Jul-2024
17:50

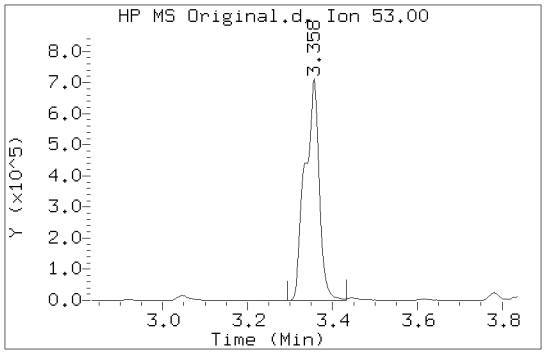


Chloroprene (126-99-8)

Reason Code:

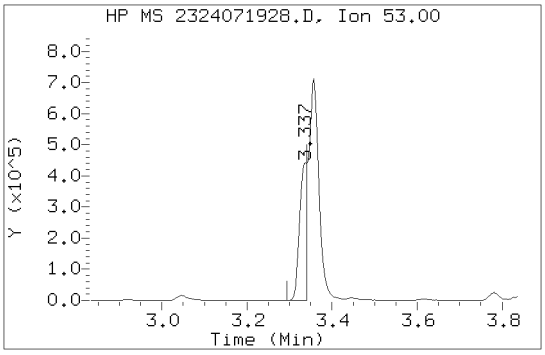
BEFORE

MASS
53
AREA
1667911
HEIGHT
712320
25-Jul-2024
07:27



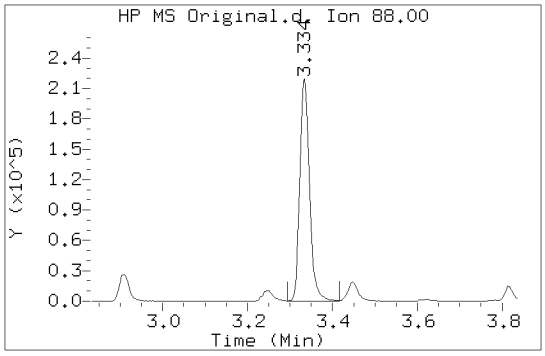
AFTER

MASS
53
AREA
517883
HEIGHT
443584
25-Jul-2024
17:50



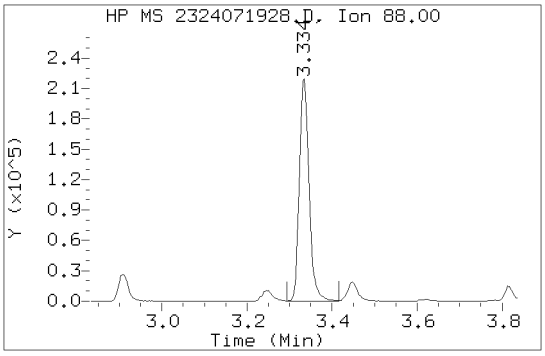
BEFORE

MASS
88
AREA
342039
HEIGHT
219361
25-Jul-2024
07:27



AFTER

MASS
88
AREA
342039
HEIGHT
219361
25-Jul-2024
17:50



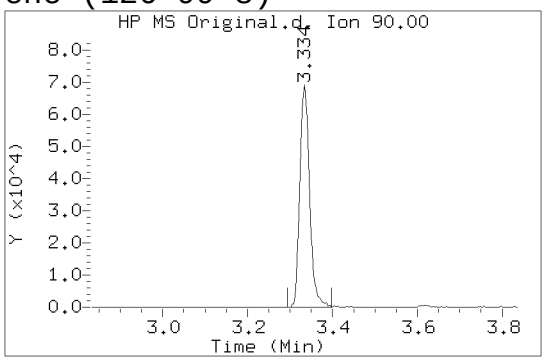
Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240719.b\2324071928.D
Inj Date : 19-JUL-2024 21:03
InstruID : ms23.i
LabSampID : 1801

Chloroprene (126-99-8)

Reason Code:

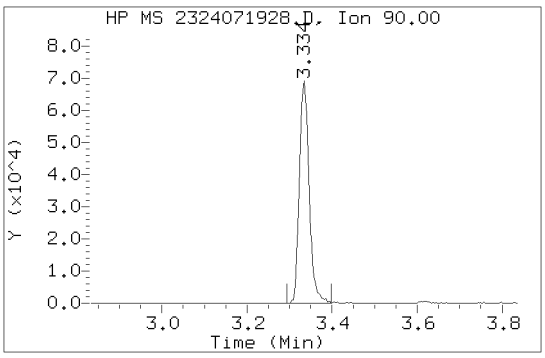
BEFORE

MASS
90
AREA
108704
HEIGHT
69088
25-Jul-2024
07:27



AFTER

MASS
90
AREA
108704
HEIGHT
69088
25-Jul-2024
17:50

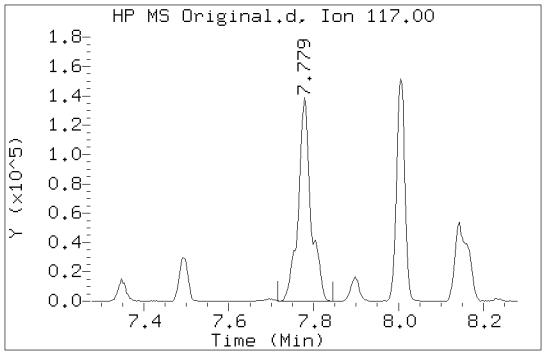


Pentachloroethane (76-01-7)

Reason Code:

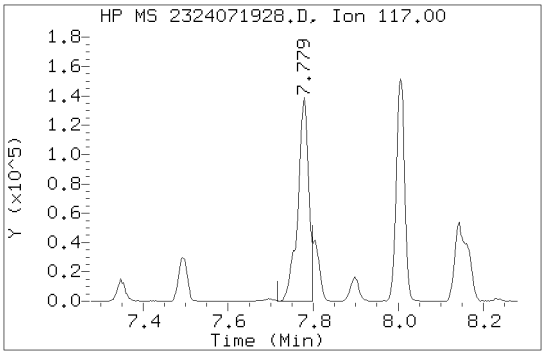
BEFORE

MASS
117
AREA
284703
HEIGHT
138816
25-Jul-2024
07:27



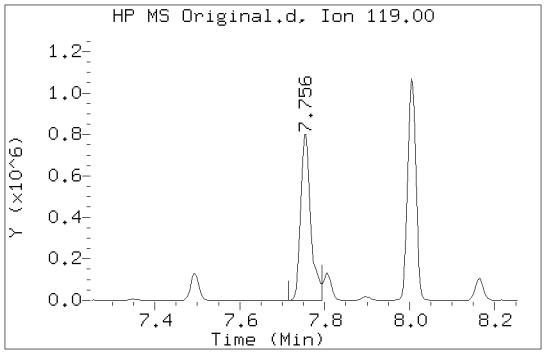
AFTER

MASS
117
AREA
245842
HEIGHT
138816
25-Jul-2024
17:50



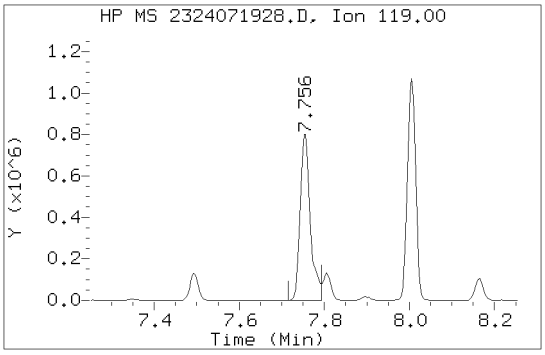
BEFORE

MASS
119
AREA
1311757
HEIGHT
801848
25-Jul-2024
07:27



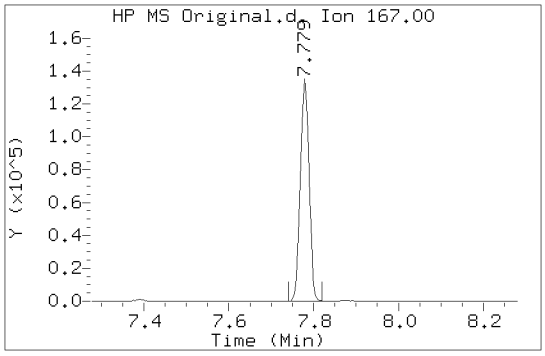
AFTER

MASS
119
AREA
1311757
HEIGHT
801848
25-Jul-2024
17:50



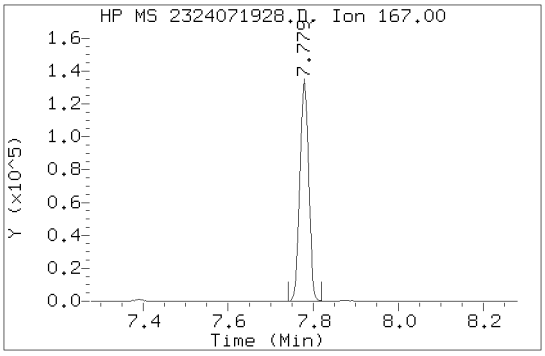
BEFORE

MASS
167
AREA
190285
HEIGHT
135232
25-Jul-2024
07:27



AFTER

MASS
167
AREA
190285
HEIGHT
135232
25-Jul-2024
17:50



UNASSIGNED PEAK REPORT

Report Date: 07/25/2024 17:50
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240719.b/232407192
Inj Date: 19-JUL-2024 21:03
Operator: JTH

There were no Unassigned peaks in this sample!

right solutions.
right partner.

k| T| | 9A9B7E9C

o | fi UhQF9D7S

h vx

SSVcSVM

Mfk

Q |

a xu

QSkCHAf VQkl A77ADDBD

7869A6979C

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ALS Environmental Services

BFB Tune

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072500.D
Lab Smp Id: 1000
Inj Date : 25-JUL-2024 09:35
Operator : ILY Inst ID: ms23.i
Smp Info : 1000
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\bfb288.m
Meth Date : 13-Sep-2023 15:55 bsimms Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAMDTW7026

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
7.246	7.159	(0.000)	95	65016			0.00- 100.00	100.00
7.246	8.129	(0.000)	50	14549			15.00- 40.00	22.38
7.246	8.129	(0.000)	75	34592			30.00- 60.00	53.21
7.246	8.129	(0.000)	96	4466			5.00- 9.00	6.87
7.246	8.129	(0.000)	173	255			0.00- 2.00	0.53
7.246	8.129	(0.000)	174	48024			50.00- 0.00	73.86
7.246	8.129	(0.000)	175	3688			5.00- 9.00	7.68
7.246	8.129	(0.000)	176	47208			95.00- 101.00	98.30
7.246	8.129	(0.000)	177	3361			5.00- 9.00	7.12

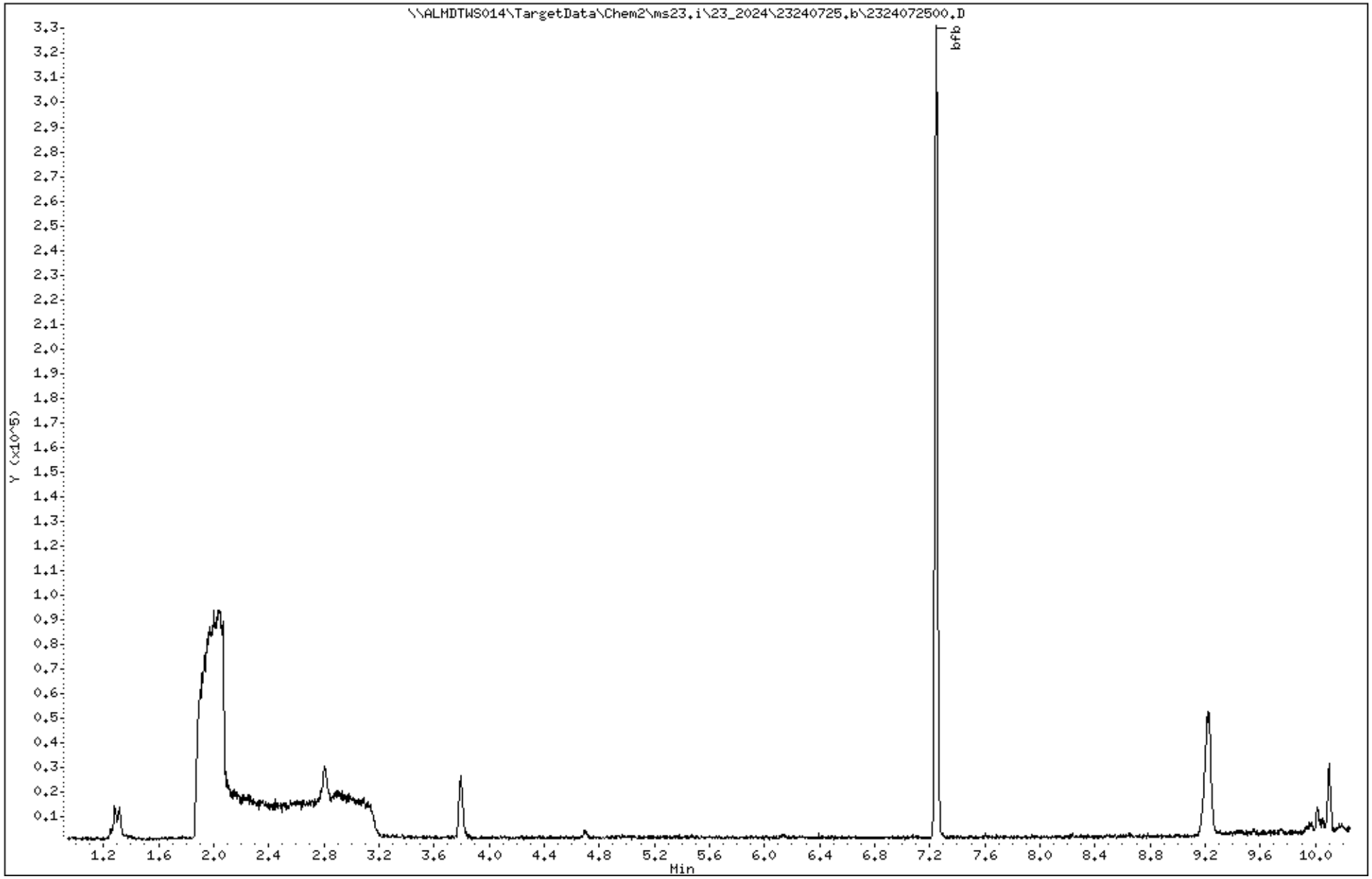
m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.38
75	30.00 - 60.00% of mass 95	53.21
96	5.00 - 9.00% of mass 95	6.87
173	Less than 2.00% of mass 174	0.39 (0.53)
174	Greater than 50.00% of mass 95	73.86
175	5.00 - 9.00% of mass 174	5.67 (7.68)
176	95.00 - 101.00% of mass 174	72.61 (98.30)
177	5.00 - 9.00% of mass 176	5.17 (7.12)

Data File: 2324072500.D
Spectrum: Avg. Scans 2178-2180 (7.25), Background Scan 2165
Location of Maximum: 95.00
Number of points: 77

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	798	61.00	3867	88.00	2856	129.00	56
37.00	4231	62.00	3311	90.00	126	130.00	242
38.00	3619	63.00	2714	91.00	306	135.00	55
39.00	1340	64.00	121	92.00	2131	137.00	120
40.00	151	67.00	188	93.00	3071	141.00	842
41.00	147	68.00	6849	94.00	8000	142.00	56
44.00	639	69.00	7037	95.00	65016	143.00	810
45.00	789	70.00	709	96.00	4466	146.00	80
47.00	910	72.00	491	97.00	78	148.00	131
48.00	511	73.00	3031	104.00	356	155.00	63
49.00	3555	74.00	11497	105.00	58	172.00	343
50.00	14549	75.00	34592	106.00	368	173.00	255
51.00	4300	76.00	2881	113.00	70	174.00	48024
52.00	126	77.00	471	115.00	94	175.00	3688
55.00	311	78.00	430	116.00	362	176.00	47208
56.00	1371	79.00	2869	117.00	498	177.00	3361
57.00	2540	80.00	756	118.00	171	207.00	51
58.00	57	81.00	3094	119.00	269		
59.00	79	82.00	588	124.00	60		
60.00	534	87.00	2976	128.00	180		

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072500.D
Date : 25-JUL-2024 09:35
Client ID:
Sample Info: 1000
Volume Injected (uL): 1.0
Column phase: DB624

Instrument: ms23.i
Operator: ILY
Column diameter: 0.53



Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072500.D
Inj Date : 25-JUL-2024 09:35
InstruID : ms23.i
LabSampID : 1000

NO MANUAL INTEGRATIONS

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072501.D
Lab Smp Id: 1800
Inj Date : 25-JUL-2024 10:23
Operator : ILY Inst ID: ms23.i
Smp Info : 1800;;1;2;4;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\23-8260b09D.m
Meth Date : 26-Jul-2024 07:23 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14
Processing Host: NAMDTW7026

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

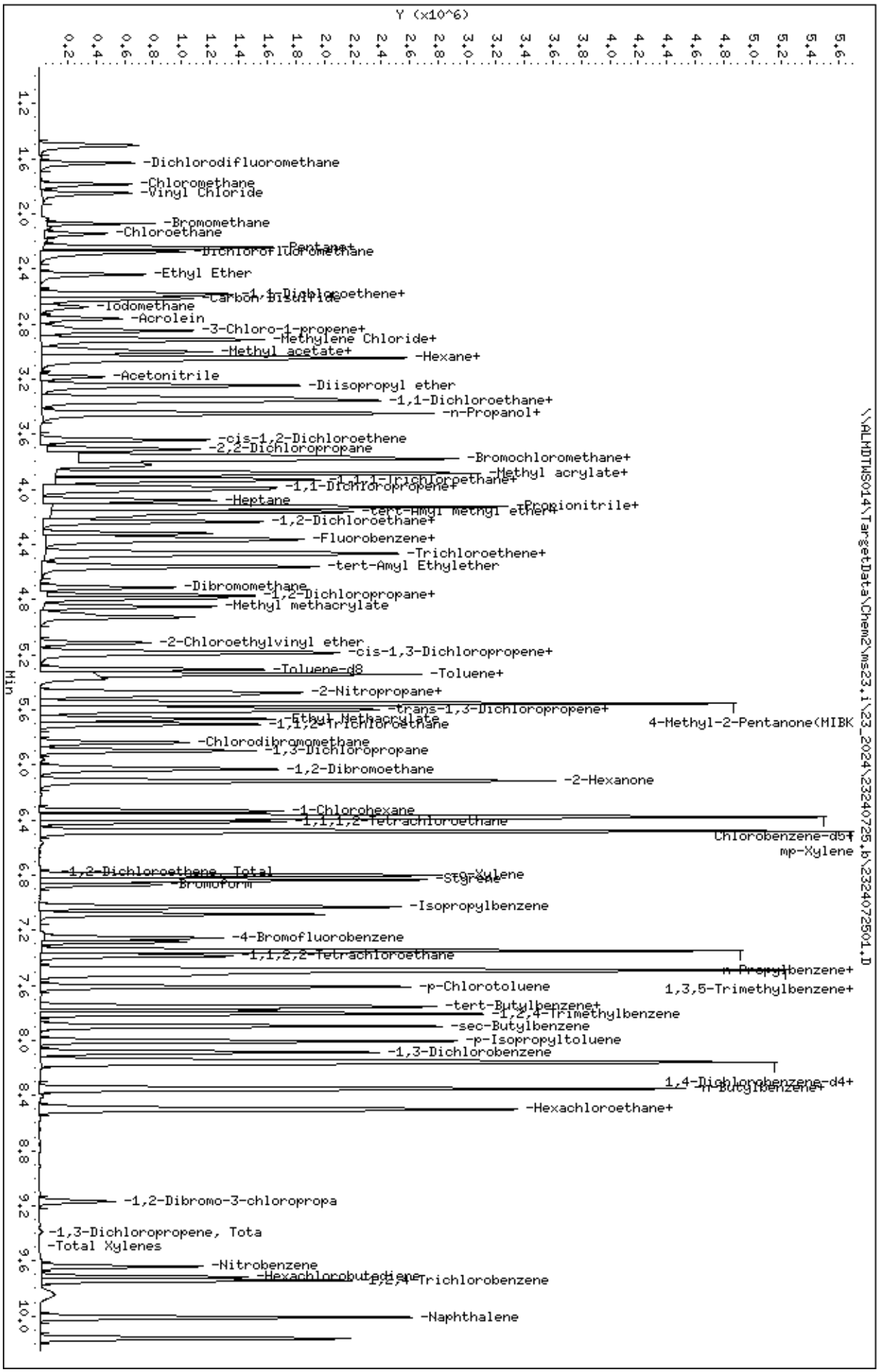
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.632	1.632	(0.375)	509418	50.0000	47.6784	
2	Chloromethane	50	1.785	1.785	(0.410)	501449	50.0000	46.0113	
3	Vinyl Chloride	62	1.849	1.849	(0.424)	493711	50.0000	51.2391	
4	Bromomethane	94	2.072	2.072	(0.476)	231844	50.0000	51.5716	
5	Chloroethane	64	2.144	2.144	(0.492)	286470	50.0000	55.1823	
6	Pentane	41	2.243	2.243	(0.515)	313802	50.0000	44.5631	
7	Trichlorofluoromethane	101	2.248	2.248	(0.516)	610206	50.0000	51.7465	
8	Dichlorofluoromethane	67	2.277	2.277	(0.523)	723152	50.0000	47.6077	
9	Ethyl Ether	74	2.439	2.439	(0.560)	245480	50.0000	50.8740	
10	1,1-Dichloroethene	61	2.578	2.578	(0.592)	509020	50.0000	48.2650	
12	Carbon Disulfide	76	2.616	2.616	(0.601)	1012313	50.0000	47.2535	
11	Freon 113	101	2.593	2.593	(0.595)	302857	50.0000	48.8574	
13	Iodomethane	127	2.674	2.674	(0.614)	145967	50.0000	47.1508	
14	Acrolein	56	2.761	2.761	(0.634)	401997	250.000	284.469	
16	3-Chloro-1-propene	41	2.851	2.851	(0.654)	570851	50.0000	51.2656	
15	Isopropyl Alcohol	45	2.824	2.824	(0.648)	178536	250.000	264.361	
17	Methylene Chloride	84	2.908	2.908	(0.668)	382372	50.0000	49.6154	
18	Acetone	58	2.920	2.920	(0.670)	244872	250.000	272.650	
19	Methyl acetate	74	2.984	2.984	(0.685)	86267	50.0000	52.5631	
20	trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	508844	50.0000	48.2529	
21	Hexane	57	3.045	3.045	(0.699)	770694	50.0000	49.1189	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.047	3.047	(0.700)	1193716	50.0000	52.7742	
	23 tert.- Butyl Alcohol	59	3.068	3.068	(0.704)	286443	250.000	292.955	
	24 Acetonitrile	41	3.183	3.183	(0.731)	365402	250.000	258.204	
	25 Diisopropyl ether	45	3.247	3.247	(0.745)	1332275	50.0000	51.5360	
	26 Chloroprene	53	3.337	3.337	(0.766)	458412	50.0000	49.1847(M)	MP
	27 1,1-Dichloroethane	63	3.346	3.346	(0.768)	691207	50.0000	49.9884	
	28 Acrylonitrile	53	3.357	3.357	(0.771)	1198413	250.000	272.676(M)	MP
	30 n-Propanol	41	3.447	3.447	(0.791)	268166	500.000	479.077	
	29 Ethyl tert-butyl ether	59	3.447	3.447	(0.791)	1280785	50.0000	52.7684	
	31 Vinyl acetate	86	3.447	3.447	(0.791)	104806	50.0000	58.0349	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	538726	50.0000	50.6805	
	33 2,2-Dichloropropane	77	3.708	3.708	(0.851)	559956	50.0000	52.7005	
M	100 1,2-Dichloroethene, Total	61				1047570	100.000	98.9334	
	34 Bromochloromethane	128	3.754	3.754	(0.862)	203190	50.0000	52.9799	
	35 Cyclohexane	84	3.780	3.780	(0.868)	516092	50.0000	47.0800	
	36 Chloroform	83	3.780	3.780	(0.868)	729765	50.0000	50.7006	
	37 Ethyl acetate	43	3.815	3.815	(0.876)	564023	50.0000	53.6388	
	38 Methyl acrylate	55	3.832	3.832	(0.880)	486670	50.0000	55.5420	
	39 Carbon Tetrachloride	117	3.887	3.887	(0.892)	481391	50.0000	51.5019(M)	MP
	40 Tetrahydrofuran	42	3.881	3.881	(0.891)	849309	250.000	279.816	
$	41 Dibromofluoromethane	113	3.881	3.881	(0.891)	230794	30.0000	31.6302	
	42 1,1,1-Trichloroethane	97	3.922	3.922	(0.900)	579130	50.0000	50.7857	
	43 2-Butanone	72	3.936	3.936	(0.904)	326564	250.000	278.865	
	44 1,1-Dichloropropene	75	3.986	3.986	(0.915)	516121	50.0000	49.0166	
	45 1-Chlorobutane	41	4.006	4.006	(0.920)	420240	50.0000	47.0429	
	46 Heptane	71	4.078	4.078	(0.936)	251420	50.0000	46.3896	
	48 Propionitrile	54	4.113	4.113	(0.944)	415405	250.000	274.338	
	47 Benzene	78	4.127	4.127	(0.947)	1479652	50.0000	50.0575	
	49 Methacrylonitrile	67	4.127	4.127	(0.947)	212740	50.0000	54.7222	
	50 tert-amyl methyl Ether	73	4.162	4.162	(0.955)	1184841	50.0000	53.4690	
$	51 1,2-Dichloroethane-d4	65	4.197	4.197	(0.963)	285842	30.0000	30.5932	
	54 Isobutyl alcohol	42	4.168	4.168	(0.957)	159433	500.000	483.190	
	52 1,2-Dichloroethane	62	4.234	4.234	(0.972)	583292	50.0000	48.9037	
	53 tert-Amyl Alcohol	59	4.237	4.237	(0.973)	237965	250.000	257.383	
*	55 Fluorobenzene	96	4.356	4.356	(1.000)	785067	30.0000		
	56 Diisobutylene	57	4.371	4.371	(1.003)	896357	50.0000	48.7643	
	57 Trichloroethene	95	4.457	4.457	(1.023)	401949	50.0000	49.5578	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	561350	50.0000	47.6004	
	59 tert-Amyl Ethylether	59	4.562	4.562	(1.047)	959915	50.0000	52.3938	
	60 Dibromomethane	93	4.712	4.712	(1.082)	280714	50.0000	52.8149	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.095)	412101	50.0000	50.6609	
	62 Bromodichloromethane	83	4.793	4.793	(1.100)	546864	50.0000	53.2091	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	475073	50.0000	53.7648	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.174)	273979	50.0000	46.5992	
	66 cis-1,3-Dichloropropene	75	5.181	5.181	(0.814)	681021	50.0000	54.7791	
	67 Octane	85	5.196	5.196	(0.817)	224476	50.0000	49.5027	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	873397	30.0000	31.0382	
	69 Toluene	92	5.343	5.343	(0.840)	908737	50.0000	49.7458	
	70 Chloroacetonitrile	75	5.378	5.378	(0.845)	160096	250.000	272.970	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	858134	250.000	259.429	
	72 1,1-Dichloro-2-propanone	63	5.494	5.494	(0.863)	67701	250.000	272.655	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.552	5.552	(0.873)	2791707	250.000	289.025	
	75 trans-1,3-Dichloropropene	75	5.592	5.592	(0.879)	653879	50.0000	56.3367	
	74 Tetrachloroethene	164	5.610	5.610	(0.882)	331522	50.0000	49.5069	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	76 Ethyl methacrylate	69	5.665	5.665	(0.890)	648122	50.0000	56.6869	
	77 1,1,2-Trichloroethane	83	5.705	5.705	(0.897)	334280	50.0000	52.8066	
	78 Chlorodibromomethane	129	5.839	5.839	(0.918)	439473	50.0000	56.1363	
	79 1,3-Dichloropropane	76	5.896	5.896	(0.927)	678481	50.0000	52.4501	
	80 1,2-Dibromoethane	107	6.018	6.018	(0.946)	368429	50.0000	54.5079	
	81 2-Hexanone	43	6.116	6.116	(0.961)	2023431	250.000	291.768	
	82 1-Chlorohexane	91	6.337	6.337	(0.996)	457737	50.0000	47.3293	
*	83 Chlorobenzene-d5	82	6.363	6.363	(1.000)	349545	30.0000		
	85 Ethylbenzene	106	6.380	6.380	(1.003)	516464	50.0000	49.8457	
	84 Chlorobenzene	112	6.377	6.377	(1.002)	1001585	50.0000	51.1964	
	86 1,1,1,2-Tetrachloroethane	131	6.412	6.412	(1.008)	373700	50.0000	54.0487	
	87 mp-Xylene	106	6.481	6.481	(1.019)	1285917	100.000	101.259	
M	120 1,3-Dichloropropene, Total	75				1334900	100.000	111.116	
	88 o-Xylene	106	6.800	6.800	(1.069)	633783	50.0000	51.2946	
	89 Styrene	104	6.835	6.835	(0.839)	1074248	50.0000	52.5177	
	90 Bromoform	173	6.869	6.869	(0.844)	300499	50.0000	57.7094	
	91 Isopropylbenzene	105	7.031	7.031	(0.863)	1437575	50.0000	50.4702	
$	92 4-Bromofluorobenzene	174	7.257	7.257	(0.891)	275747	30.0000	30.5639	
M	121 TOTAL XYLENES	106				1919700	150.000	152.553	
	94 n-Propylbenzene	120	7.347	7.347	(0.902)	435532	50.0000	49.9365	
	93 Bromobenzene	156	7.350	7.350	(0.903)	425935	50.0000	51.5225	
	95 1,1,2,2-Tetrachloroethane	83	7.388	7.388	(0.907)	574290	50.0000	55.8868	
	97 1,3,5-Trimethylbenzene	105	7.492	7.492	(0.920)	1376323	50.0000	52.0857	
	96 o-Chlorotoluene	91	7.483	7.483	(0.919)	1357864	50.0000	51.0624	
	98 1,2,3-Trichloropropane	110	7.506	7.506	(0.922)	174087	50.0000	54.7925	
	99 trans-1,4-Dichloro-2-butene	53	7.527	7.527	(0.924)	180997	50.0000	56.9399	
	101 p-Chlorotoluene	91	7.610	7.610	(0.935)	1229396	50.0000	49.8793	
	102 tert-Butylbenzene	134	7.752	7.752	(0.952)	310041	50.0000	49.9473	
	103 Pentachloroethane	117	7.778	7.778	(0.955)	287175	50.0000	55.9596(M)	MP
	104 1,2,4-Trimethylbenzene	105	7.807	7.807	(0.959)	1405467	50.0000	51.7507	
	105 sec-Butylbenzene	105	7.897	7.897	(0.970)	1654227	50.0000	50.0590	
	106 p-Isopropyltoluene	134	8.007	8.007	(0.983)	365970	50.0000	50.0808	
	107 1,3-Dichlorobenzene	146	8.085	8.085	(0.993)	784615	50.0000	50.2992	
*	108 1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	318659	30.0000		
	109 1,4-Dichlorobenzene	146	8.155	8.155	(1.001)	808937	50.0000	50.3006	
	111 n-Butylbenzene	134	8.352	8.352	(1.026)	338586	50.0000	49.0132	
	110 Benzyl Chloride	126	8.349	8.349	(1.025)	203650	50.0000	55.4021	
	112 Hexachloroethane	117	8.494	8.494	(1.043)	275202	50.0000	54.0877	
	113 1,2-Dichlorobenzene	146	8.505	8.505	(1.044)	782409	50.0000	51.9324	
	114 1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	106800	50.0000	54.8862	
	115 Nitrobenzene	77	9.640	9.640	(1.184)	447516	500.000	504.740	
	116 Hexachlorobutadiene	225	9.718	9.718	(1.193)	203822	50.0000	49.7210	
	117 1,2,4-Trichlorobenzene	180	9.741	9.741	(1.196)	507767	50.0000	51.3953	
	118 Naphthalene	128	10.011	10.011	(1.229)	1569170	50.0000	57.4934	
	119 1,2,3-Trichlorobenzene	180	10.164	10.164	(1.248)	511055	50.0000	53.5376	

QC Flag Legend

M - Compound response manually integrated.


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Operator: ILY
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Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Pentane+
-Dichlorofluoromethane
-Ethyl Ether
-1,1-Dichloroethene+
-Carbon Disulfide
-Iodomethane
-Acrolein
-3-Chloro-1-propene+
-Methylene Chloride+
-Methyl acetate+
-Hexane+
-Acetonitrile
-Diisopropyl ether
-1,1-Dichloroethane+
-n-Propanol+
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Bromochloromethane+
-Methyl acrylate+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene+
-Heptane
-Propionitrile+
-tert-Amyl methyl ether+
-1,2-Dichloroethane+
-Fluorobenzene+
-Trichloroethene+
-tert-Amyl Ethylether
-Dibromomethane
-1,2-Dichloropropane+
-Methyl methacrylate
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropene+
-Toluene-d8
-Toluene+
-2-Nitropropane+
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane
4-Methyl-2-Pentanone(MIBK
-Chlorodibromomethane
-1,3-Dichloropropane
-1,2-Dibromoethane
-2-Hexanone
-1-Chlorohexane
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Chlorobenzene-d5+
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-Bromoform
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-Styrene
-Isopropylbenzene
-4-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
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1,3,5-Trimethylbenzene+
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-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-p-Isopropyltoluene
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n-Butylbenzene+
-Hexachloroethane+
-1,2-Dibromo-3-chloropropa
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-Naphthalene

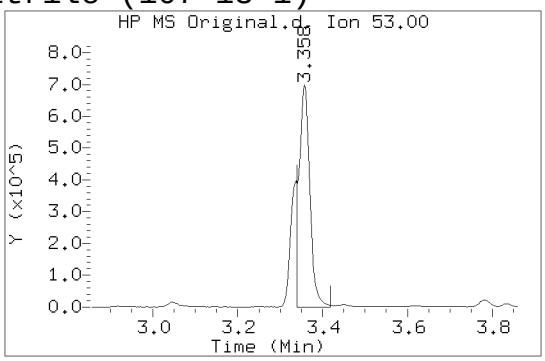
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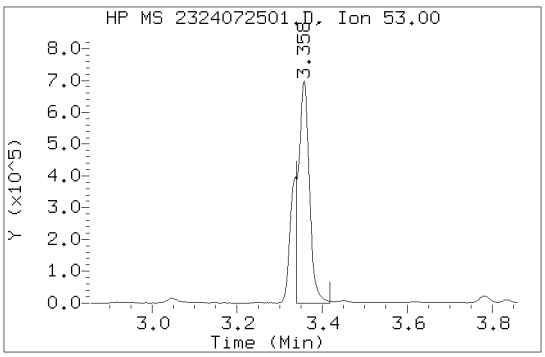
Acrylonitrile (107-13-1)

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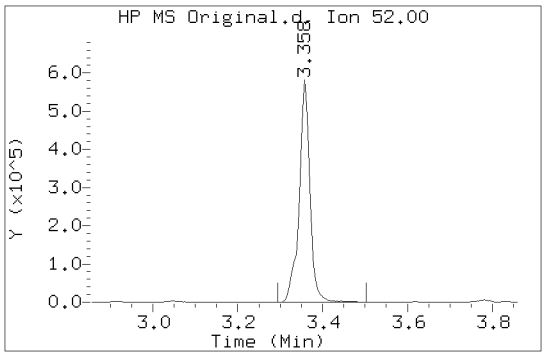
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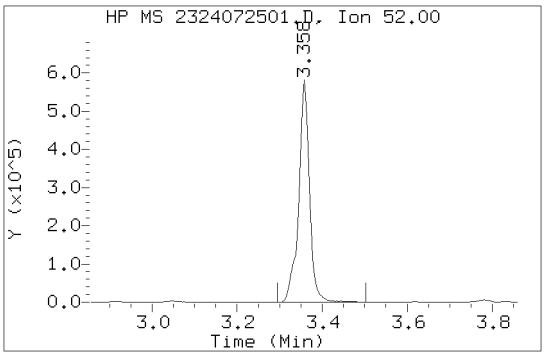
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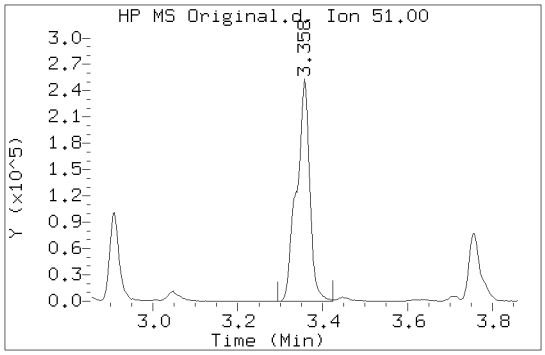
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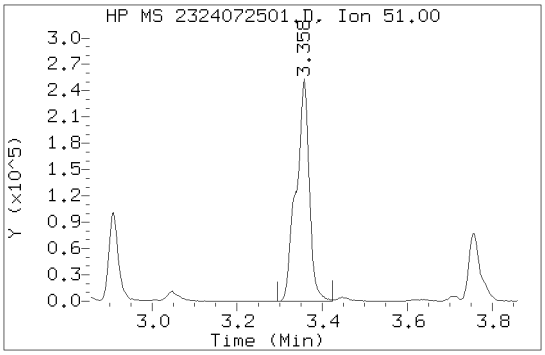
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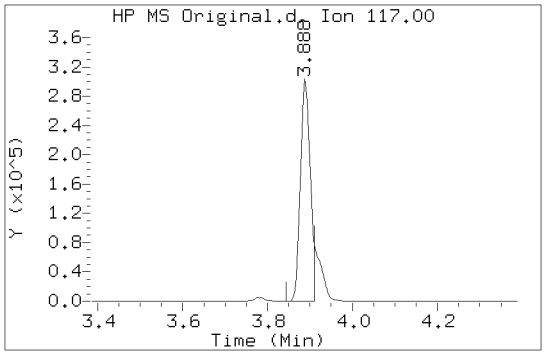
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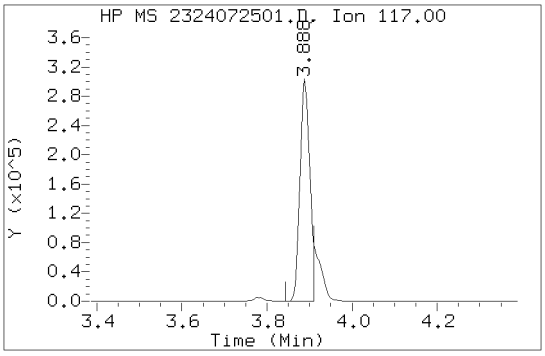
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Reason Code: MP

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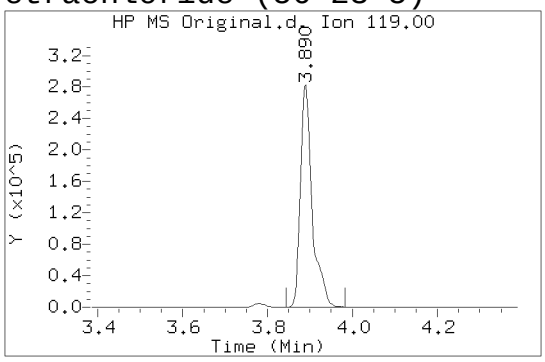
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Carbon Tetrachloride (56-23-5)

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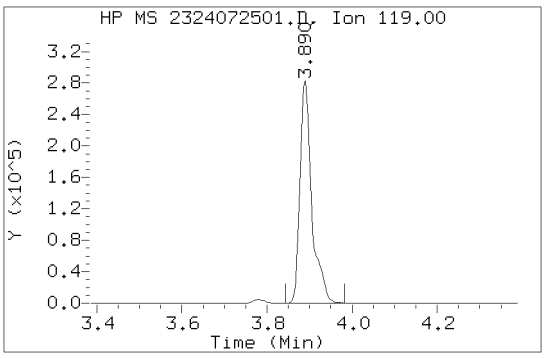
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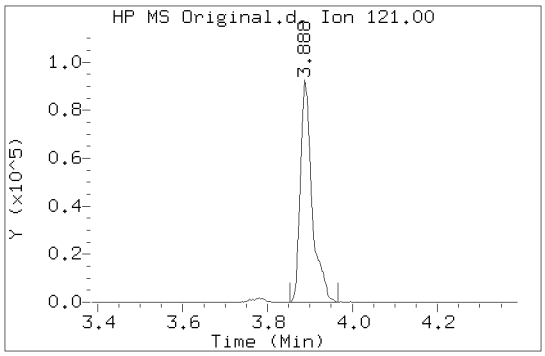
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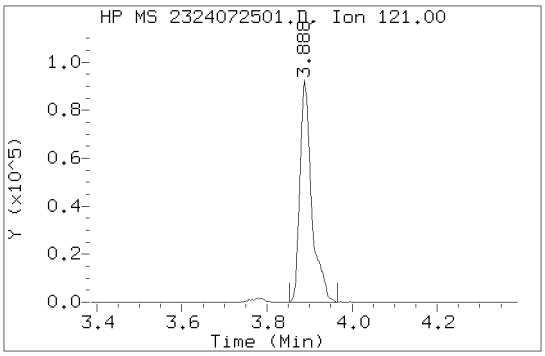
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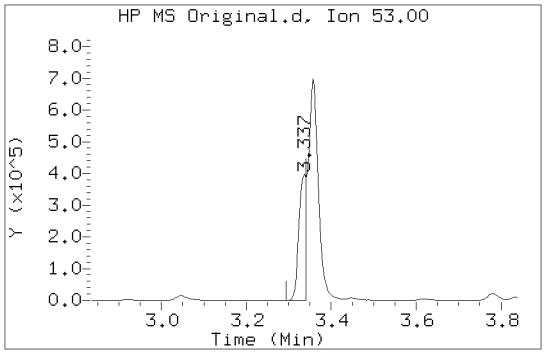


Chloroprene (126-99-8)

Reason Code: MP

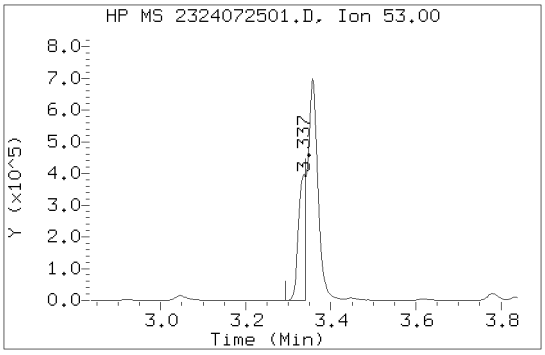
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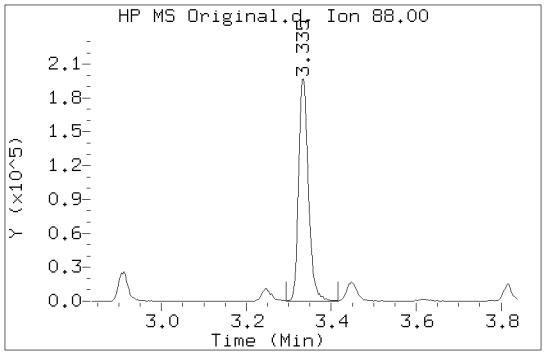
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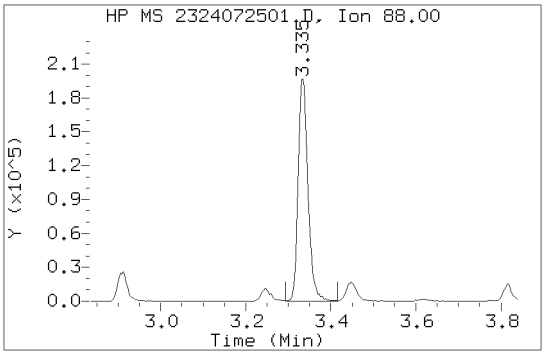
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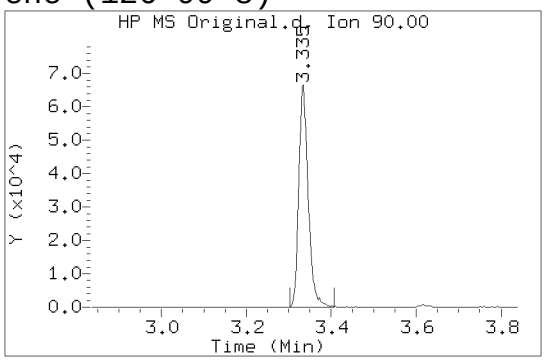
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Chloroprene (126-99-8)

Reason Code: MP

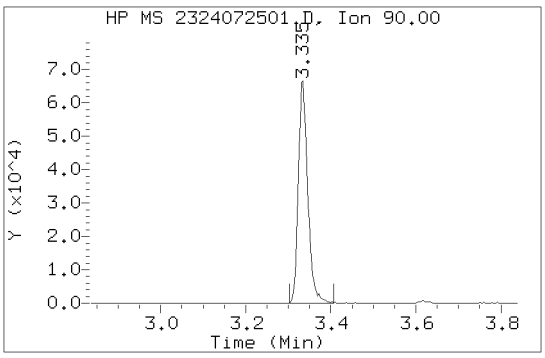
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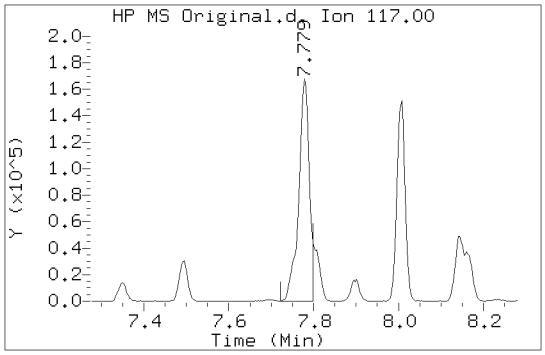


Pentachloroethane (76-01-7)

Reason Code: MP

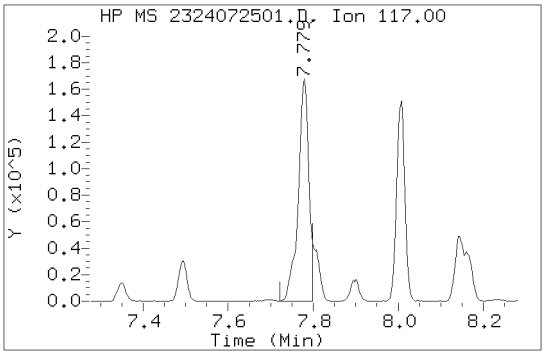
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25-Jul-2024
10:40



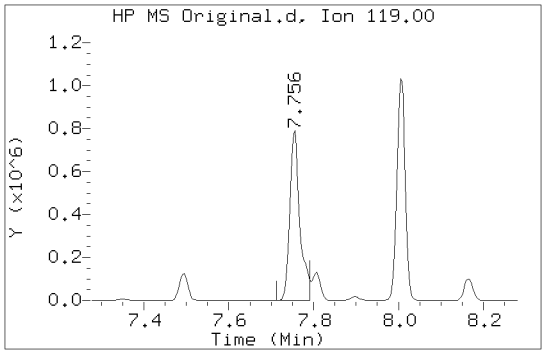
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25-Jul-2024
10:40



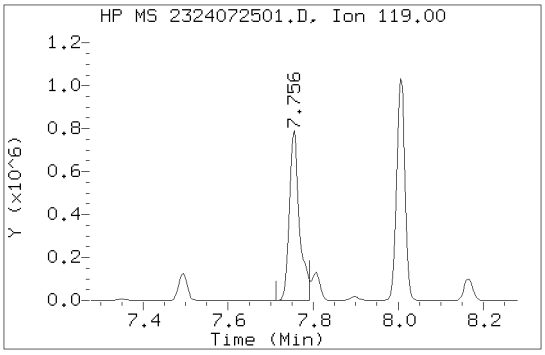
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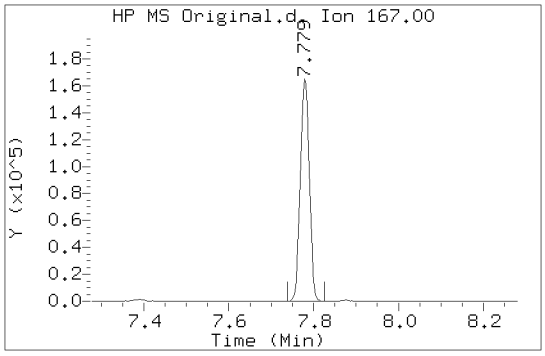
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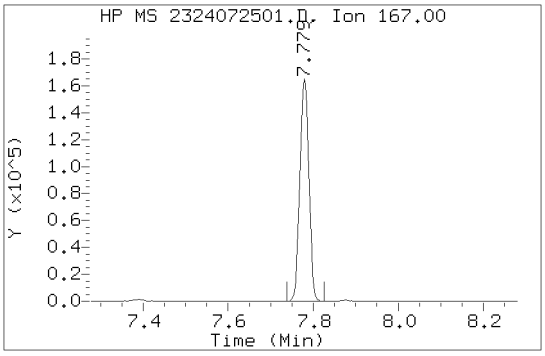
BEFORE

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AFTER

MASS
167
AREA
240084
HEIGHT
165120
25-Jul-2024
10:40



UNASSIGNED PEAK REPORT

Report Date: 07/26/2024 07:25
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240725.b/232407250
Inj Date: 25-JUL-2024 10:23
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

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Inj Date : 25-JUL-2024 10:53
Operator : ILY Inst ID: ms23.i
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Misc Info : ZZ VOMS 73988 D8260W
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Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14
Processing Host: ALMDTW7047

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
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Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

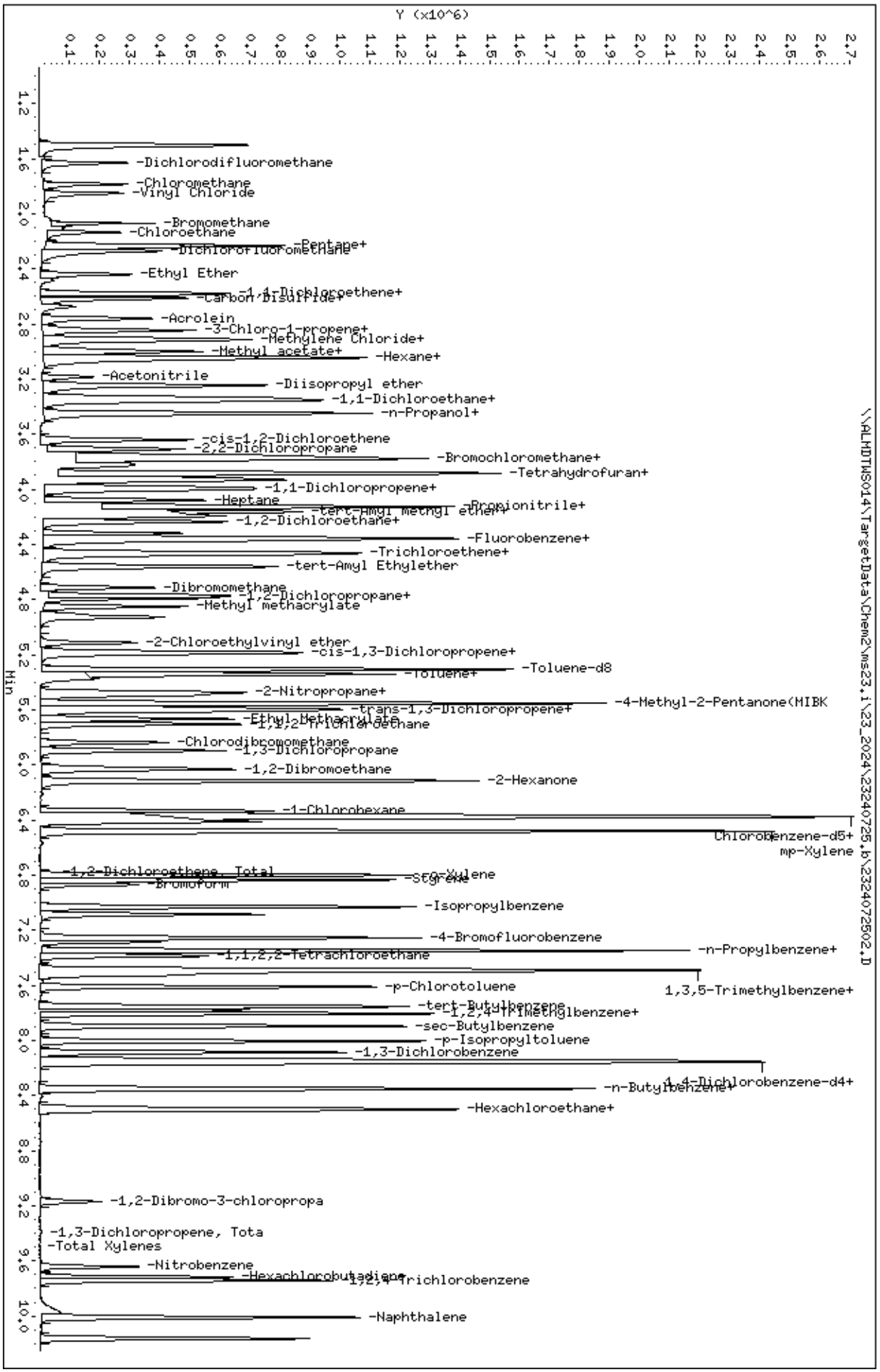
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.632	1.632	(0.375)	231532	21.3357	21.3357	
2 Chloromethane	50	1.785	1.785	(0.410)	228500	20.6430	20.6430	
3 Vinyl Chloride	62	1.849	1.849	(0.425)	217930	22.2687	22.2687	
4 Bromomethane	94	2.069	2.072	(0.475)	101093	21.8206	21.8206	
5 Chloroethane	64	2.135	2.144	(0.491)	130229	24.6989	24.6989	
6 Pentane	41	2.228	2.243	(0.512)	156392	21.8667	21.8667	
7 Trichlorofluoromethane	101	2.234	2.248	(0.513)	278373	23.2424	23.2424	
8 Dichlorofluoromethane	67	2.271	2.277	(0.522)	327679	21.2396	21.2396	
9 Ethyl Ether	74	2.442	2.439	(0.561)	104379	21.2982	21.2982	
10 1,1-Dichloroethene	61	2.572	2.578	(0.591)	236988	22.1245	22.1245	
12 Carbon Disulfide	76	2.613	2.616	(0.600)	460407	21.1598	21.1598	
11 Freon 113	101	2.587	2.593	(0.594)	136815	21.7308	21.7308	
13 Iodomethane	127	2.674	2.674	(0.614)	53207	16.9220	16.9220	
14 Acrolein	56	2.761	2.761	(0.634)	265139	184.729	184.729	
16 3-Chloro-1-propene	41	2.845	2.851	(0.654)	258415	22.8492	22.8492	
15 Isopropyl Alcohol	45	2.830	2.824	(0.650)	69306	100.573	100.573	
17 Methylene Chloride	84	2.905	2.908	(0.667)	170233	21.7482	21.7482	
18 Acetone	58	2.920	2.920	(0.671)	123915	135.844	135.844	
19 Methyl acetate	74	2.981	2.984	(0.685)	36414	21.7271	21.7271(Q)	
20 trans-1,2-Dichloroethene	61	3.001	3.004	(0.689)	230838	21.5524	21.5524	
21 Hexane	57	3.044	3.045	(0.699)	341702	21.4419	21.4419	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.047	3.047	(0.700)	509262	22.1672	22.1672	
	23 tert.- Butyl Alcohol	59	3.073	3.068	(0.706)	112550	113.333	113.333	
	24 Acetonitrile	41	3.183	3.183	(0.731)	152719	106.251	106.251	
	25 Diisopropyl ether	45	3.244	3.247	(0.745)	570444	21.7260	21.7260	
	26 Chloroprene	53	3.331	3.337	(0.765)	212416	22.4394	22.4394(M)	MP
	27 1,1-Dichloroethane	63	3.343	3.346	(0.768)	297005	21.1483	21.1483	
	28 Acrylonitrile	53	3.357	3.357	(0.771)	442196	99.0614	99.0614	
	30 n-Propanol	41	3.447	3.447	(0.792)	114296	201.040	201.040	
	29 Ethyl tert-butyl ether	59	3.447	3.447	(0.792)	547808	22.2216	22.2216	
	31 Vinyl acetate	86	3.447	3.447	(0.792)	40279	21.9599	21.9599(Q)	
	32 cis-1,2-Dichloroethene	61	3.638	3.641	(0.836)	238081	22.0519	22.0519	
	33 2,2-Dichloropropane	77	3.707	3.708	(0.852)	239377	22.1816	22.1816	
M	100 1,2-Dichloroethene, Total	61				468919	43.6044	43.6044	
	34 Bromochloromethane	128	3.754	3.754	(0.862)	86643	22.2429	22.2429	
	35 Cyclohexane	84	3.780	3.780	(0.868)	232537	20.8858	20.8858	
	36 Chloroform	83	3.774	3.780	(0.867)	314439	21.5088	21.5088	
	37 Ethyl acetate	43	3.815	3.815	(0.876)	227462	21.2981	21.2981	
	38 Methyl acrylate	55	3.829	3.832	(0.880)	196162	22.0420	22.0420	
	39 Carbon Tetrachloride	117	3.887	3.887	(0.893)	204646	21.5565	21.5565(M)	MP
	40 Tetrahydrofuran	42	3.881	3.881	(0.892)	331700	107.597	107.597	
$	41 Dibromofluoromethane	113	3.884	3.881	(0.892)	220075	29.6960	29.6960	
	42 1,1,1-Trichloroethane	97	3.919	3.922	(0.900)	254040	21.9340	21.9340	
	43 2-Butanone	72	3.936	3.936	(0.904)	140305	118.282	118.282	
	44 1,1-Dichloropropene	75	3.983	3.986	(0.915)	222991	20.8511	20.8511	
	45 1-Chlorobutane	41	4.003	4.006	(0.920)	187214	20.6341	20.6341	
	46 Heptane	71	4.078	4.078	(0.937)	115834	21.0429	21.0429	
	48 Propionitrile	54	4.110	4.113	(0.944)	170052	110.572	110.572	
	47 Benzene	78	4.127	4.127	(0.948)	653418	21.7646	21.7646	
	49 Methacrylonitrile	67	4.127	4.127	(0.948)	86996	22.0325	22.0325	
	50 tert-amyl methyl Ether	73	4.162	4.162	(0.956)	506458	22.5027	22.5027	
$	51 1,2-Dichloroethane-d4	65	4.194	4.197	(0.963)	293457	30.9238	30.9238	
	54 Isobutyl alcohol	42	4.168	4.168	(0.957)	51024	153.399	153.399(Q)	
	52 1,2-Dichloroethane	62	4.234	4.234	(0.973)	246227	20.3255	20.3255	
	53 tert-Amyl Alcohol	59	4.237	4.237	(0.973)	85624	92.1896	92.1896	
*	55 Fluorobenzene	96	4.353	4.356	(1.000)	797365	30.0000		
	56 Diisobutylene	57	4.370	4.371	(1.004)	407037	20.8223	20.8223	
	57 Trichloroethene	95	4.457	4.457	(1.024)	170567	20.7055	20.7055	
	58 Methyl cyclohexane	83	4.472	4.472	(0.703)	247277	20.6217	20.6217	
	59 tert-Amyl Ethylether	59	4.559	4.562	(1.047)	393818	21.1637	21.1637	
	60 Dibromomethane	93	4.715	4.712	(1.083)	116374	21.5575	21.5575	
	61 1,2-Dichloropropane	63	4.767	4.770	(1.095)	176199	21.3266	21.3266	
	62 Bromodichloromethane	83	4.790	4.793	(1.100)	233374	22.3568	22.3568	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	188204	20.9708	20.9708	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.175)	114265	19.1348	19.1348	
	66 cis-1,3-Dichloropropene	75	5.178	5.181	(0.814)	276505	21.8736	21.8736	
	67 Octane	85	5.196	5.196	(0.817)	97958	21.2453	21.2453	
$	68 Toluene-d8	98	5.306	5.309	(0.834)	857136	29.9570	29.9570	
	69 Toluene	92	5.340	5.343	(0.839)	397042	21.3756	21.3756	
	70 Chloroacetonitrile	75	5.375	5.378	(0.845)	57011	97.3563	97.3563	
	71 2-Nitropropane	41	5.471	5.474	(0.860)	325072	97.6189	97.6189	
	72 1,1-Dichloro-2-propanone	63	5.494	5.494	(0.863)	24529	98.3966	98.3966(Q)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.552	5.552	(0.873)	1116727	113.704	113.704	
	75 trans-1,3-Dichloropropene	75	5.592	5.592	(0.879)	270167	22.8923	22.8923	
	74 Tetrachloroethene	164	5.607	5.610	(0.881)	141640	20.8019	20.8019	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	76 Ethyl methacrylate	69	5.665	5.665	(0.890)	258622	22.2461	22.2461	
	77 1,1,2-Trichloroethane	83	5.702	5.705	(0.896)	141225	21.9408	21.9408	
	78 Chlorodibromomethane	129	5.838	5.839	(0.918)	174779	21.9566	21.9566	
	79 1,3-Dichloropropane	76	5.896	5.896	(0.927)	281862	21.4293	21.4293	
	80 1,2-Dibromoethane	107	6.018	6.018	(0.946)	148980	21.6769	21.6769	
	81 2-Hexanone	43	6.116	6.116	(0.961)	830321	117.750	117.750	
	82 1-Chlorohexane	91	6.334	6.337	(0.995)	210711	21.4272	21.4272	
*	83 Chlorobenzene-d5	82	6.362	6.363	(1.000)	355418	30.0000		
	85 Ethylbenzene	106	6.380	6.380	(1.003)	231550	21.9784	21.9784	
	84 Chlorobenzene	112	6.377	6.377	(1.002)	432955	21.7650	21.7650	
	86 1,1,1,2-Tetrachloroethane	131	6.412	6.412	(1.008)	156113	22.2057	22.2057	
	87 mp-Xylene	106	6.481	6.481	(1.019)	559462	43.3265	43.3265	
M	120 1,3-Dichloropropene, Total	75				546672	44.7660	44.7660	
	88 o-Xylene	106	6.800	6.800	(1.069)	276012	21.9696	21.9696	
	89 Styrene	104	6.834	6.835	(0.840)	459245	22.2879	22.2879	
	90 Bromoform	173	6.869	6.869	(0.844)	113981	21.7299	21.7299	
	91 Isopropylbenzene	105	7.031	7.031	(0.864)	698950	24.3598	24.3598	
$	92 4-Bromofluorobenzene	174	7.257	7.257	(0.892)	267889	29.4765	29.4765	
M	121 TOTAL XYLENES	106				835474	65.2961	65.2961	
	94 n-Propylbenzene	120	7.347	7.347	(0.903)	192210	21.8774	21.8774	
	93 Bromobenzene	156	7.347	7.350	(0.903)	182934	21.9670	21.9670	
	95 1,1,2,2-Tetrachloroethane	83	7.387	7.388	(0.908)	238110	23.0027	23.0027	
	97 1,3,5-Trimethylbenzene	105	7.492	7.492	(0.920)	596632	22.4144	22.4144	
	96 o-Chlorotoluene	91	7.483	7.483	(0.919)	579670	21.6396	21.6396	
	98 1,2,3-Trichloropropane	110	7.506	7.506	(0.922)	70596	22.0576	22.0576	
	99 trans-1,4-Dichloro-2-butene	53	7.526	7.527	(0.925)	75055	23.4395	23.4395	
	101 p-Chlorotoluene	91	7.610	7.610	(0.935)	539322	21.7220	21.7220	
	102 tert-Butylbenzene	134	7.755	7.752	(0.953)	133956	21.4228	21.4228	
	103 Pentachloroethane	117	7.778	7.778	(0.956)	116061	22.4510	22.4510(QM)	MP
	104 1,2,4-Trimethylbenzene	105	7.804	7.807	(0.959)	608336	22.2362	22.2362	
	105 sec-Butylbenzene	105	7.897	7.897	(0.970)	726567	21.8266	21.8266	
	106 p-Isopropyltoluene	134	8.004	8.007	(0.983)	158022	21.4667	21.4667	
	107 1,3-Dichlorobenzene	146	8.085	8.085	(0.993)	337993	21.5097	21.5097	
*	108 1,4-Dichlorobenzene-d4	152	8.140	8.143	(1.000)	320999	30.0000		
	109 1,4-Dichlorobenzene	146	8.155	8.155	(1.002)	350450	21.6325	21.6325	
	111 n-Butylbenzene	134	8.354	8.352	(1.026)	147990	21.2666	21.2666(Q)	
	110 Benzyl Chloride	126	8.346	8.349	(1.025)	78944	21.5097	21.5097(Q)	
	112 Hexachloroethane	117	8.493	8.494	(1.043)	111009	21.6585	21.6585	
	113 1,2-Dichlorobenzene	146	8.502	8.505	(1.044)	325380	21.4397	21.4397	
	114 1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	41502	21.1730	21.1730	
	115 Nitrobenzene	77	9.640	9.640	(1.184)	130402	169.512	169.512	
	116 Hexachlorobutadiene	225	9.715	9.718	(1.193)	90206	21.8447	21.8447	
	117 1,2,4-Trichlorobenzene	180	9.741	9.741	(1.197)	227270	22.8362	22.8362	
	118 Naphthalene	128	10.011	10.011	(1.230)	633249	23.0327	23.0327	
	119 1,2,3-Trichlorobenzene	180	10.164	10.164	(1.249)	207077	21.5351	21.5351	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.



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Column phase: DB-VRX

Instrument: ms23.i
Operator: ILY
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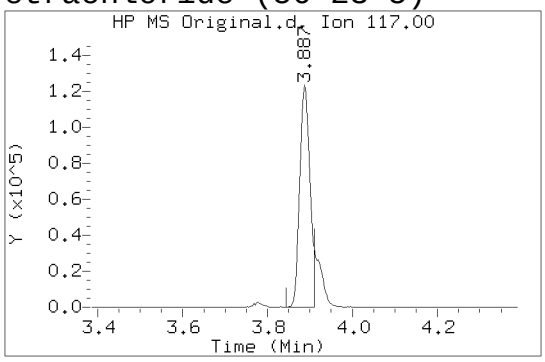
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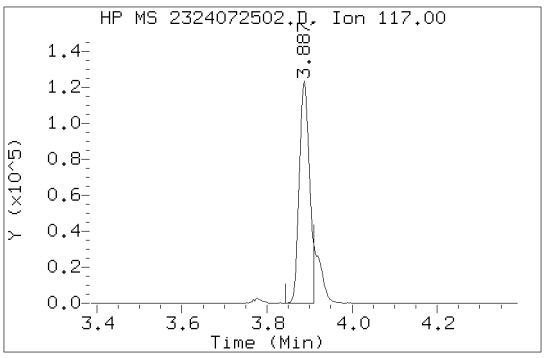
Carbon Tetrachloride (56-23-5)

Reason Code: MP

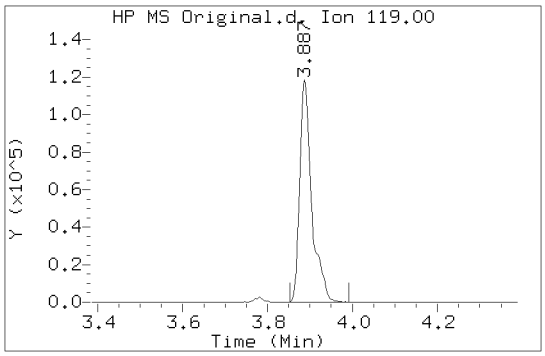
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26-Jul-2024
07:34



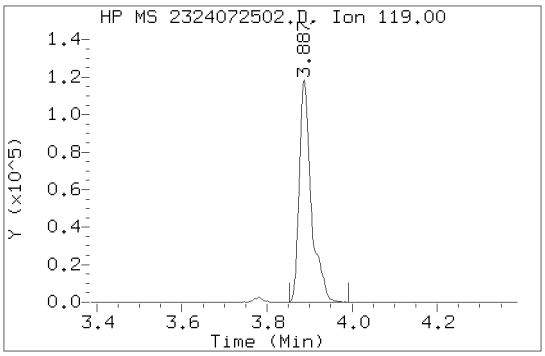
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26-Jul-2024
07:34



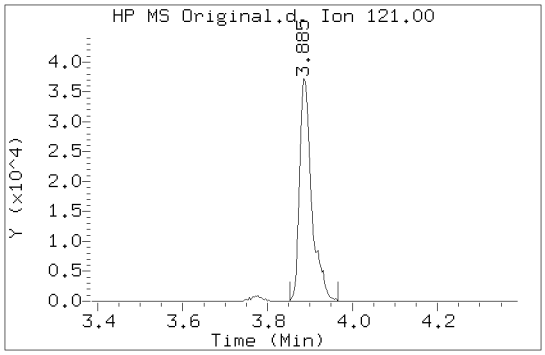
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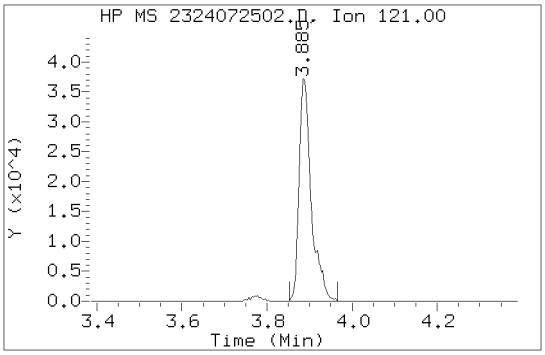
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HEIGHT
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26-Jul-2024
07:34



BEFORE
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26-Jul-2024
07:34



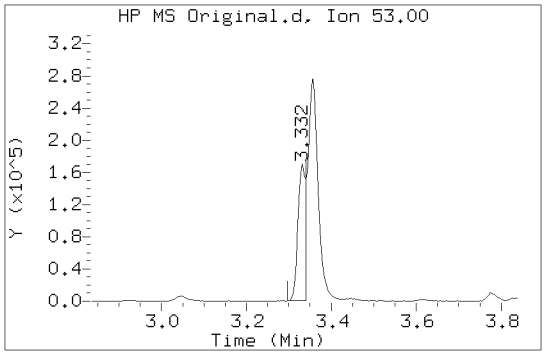
AFTER
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121
AREA
73150
HEIGHT
37176
26-Jul-2024
07:34



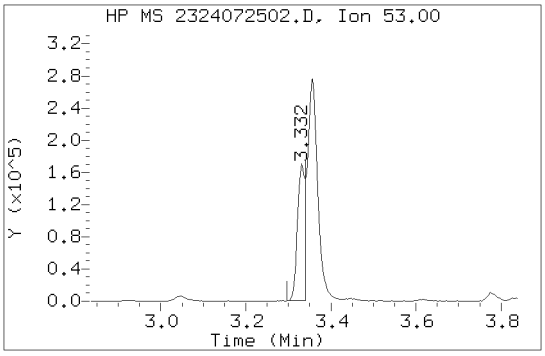
Chloroprene (126-99-8)

Reason Code: MP

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26-Jul-2024
07:34



AFTER
MASS
53
AREA
212416
HEIGHT
170841
26-Jul-2024
07:34



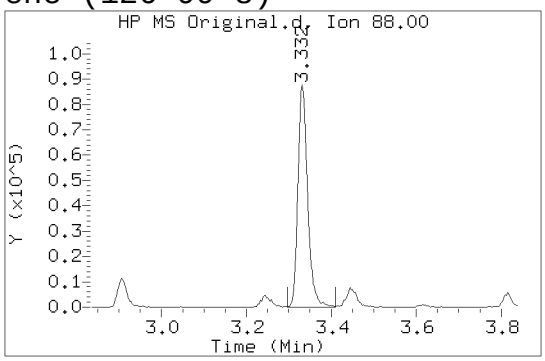
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Inj Date : 25-JUL-2024 10:53
InstruID : ms23.i
LabSampID : 3856992

Chloroprene (126-99-8)

Reason Code: MP

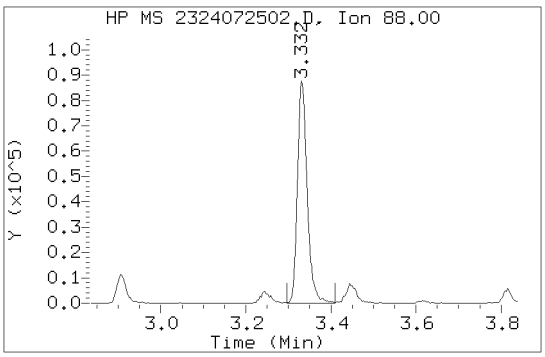
BEFORE

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HEIGHT
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26-Jul-2024
07:34



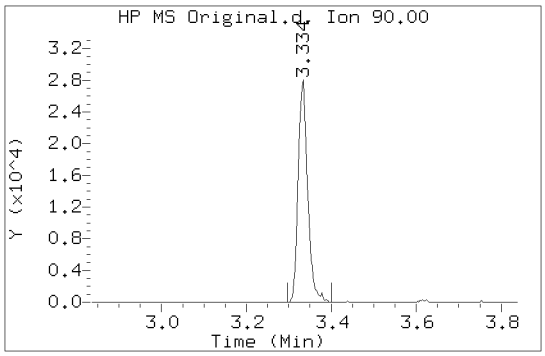
AFTER

MASS
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26-Jul-2024
07:34



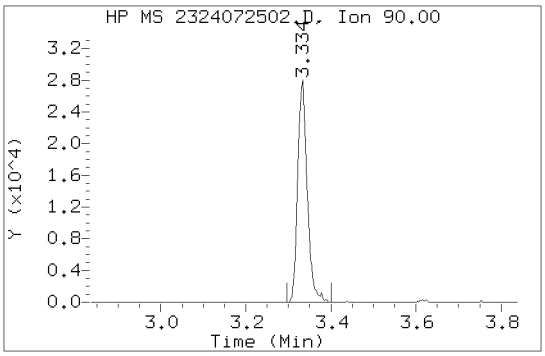
BEFORE

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AREA
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HEIGHT
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26-Jul-2024
07:34



AFTER

MASS
90
AREA
43180
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26-Jul-2024
07:34

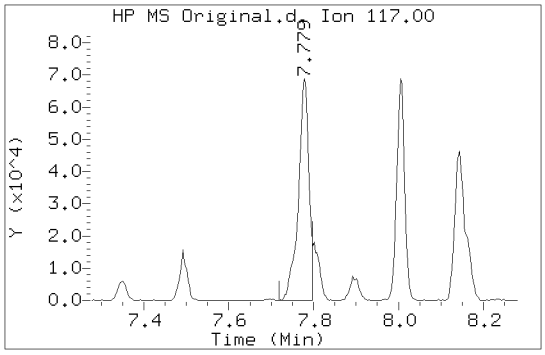


Pentachloroethane (76-01-7)

Reason Code: MP

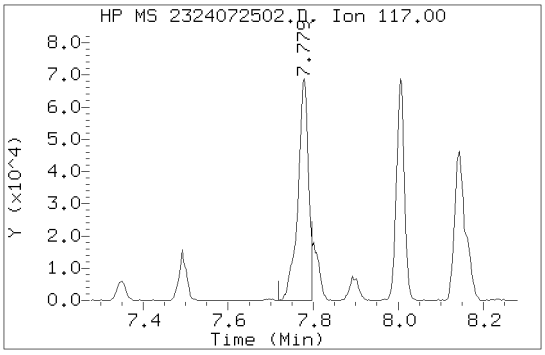
BEFORE

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AREA
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HEIGHT
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26-Jul-2024
07:34



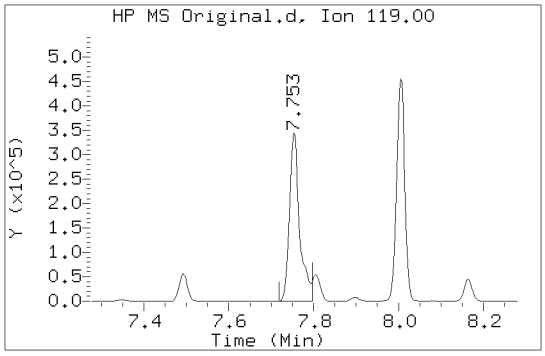
AFTER

MASS
117
AREA
116061
HEIGHT
68832
26-Jul-2024
07:34



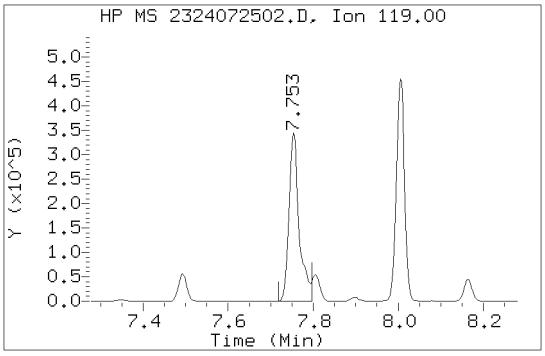
BEFORE

MASS
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AREA
577763
HEIGHT
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26-Jul-2024
07:34



AFTER

MASS
119
AREA
577763
HEIGHT
345343
26-Jul-2024
07:34



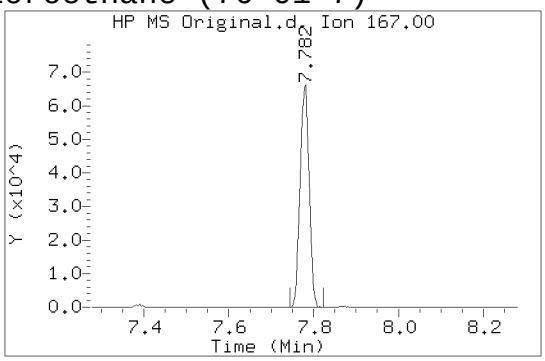
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Inj Date : 25-JUL-2024 10:53
InstruID : ms23.i
LabSampID : 3856992

Pentachloroethane (76-01-7)

Reason Code: MP

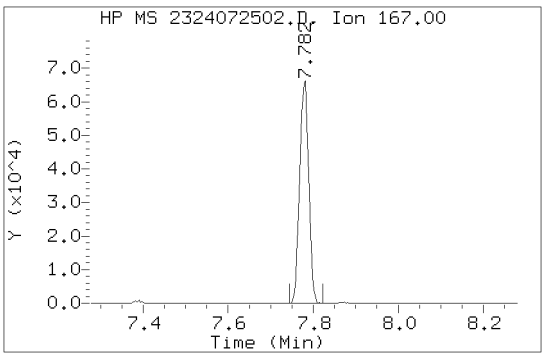
BEFORE

MASS
167
AREA
96279
HEIGHT
66192
26-Jul-2024
07:34



AFTER

MASS
167
AREA
96279
HEIGHT
66192
26-Jul-2024
07:34



UNASSIGNED PEAK REPORT

Report Date: 07/26/2024 07:34
Client ID: LCS for HBN 1260753
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240725.b/232407250
Inj Date: 25-JUL-2024 10:53
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072505.D
Lab Smp Id: 3856991 Client Smp ID: MB for HBN 1260753
Inj Date : 25-JUL-2024 12:13
Operator : ILY Inst ID: ms23.i
Smp Info : 3856991;;1;3;;MB;;
Misc Info : ZZ VOMS 73988 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\23-8260b09D.m
Meth Date : 26-Jul-2024 07:23 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14
Processing Host: ALMDTW7047

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	Compound Not Detected.						
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	Compound Not Detected.						
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	Compound Not Detected.						
21 Hexane	57	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	Compound Not Detected.						
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	Compound Not Detected.						
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61	Compound Not Detected.						
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	Compound Not Detected.						
	37 Ethyl acetate	43	Compound Not Detected.						
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.881	3.881	(0.891)	220644	29.4138	29.4138	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	Compound Not Detected.						
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.197	4.197	(0.963)	289860	30.1765	30.1765	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.356	4.356	(1.000)	807096	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	Compound Not Detected.						
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.309	5.309	(0.834)	893285	31.0722	31.0722	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
76	Ethyl methacrylate	69	Compound Not Detected.						
77	1,1,2-Trichloroethane	83	Compound Not Detected.						
78	Chlorodibromomethane	129	Compound Not Detected.						
79	1,3-Dichloropropane	76	Compound Not Detected.						
80	1,2-Dibromoethane	107	Compound Not Detected.						
81	2-Hexanone	43	Compound Not Detected.						
82	1-Chlorohexane	91	Compound Not Detected.						
* 83	Chlorobenzene-d5	82	6.365	6.363	(1.000)	357113	30.0000		
85	Ethylbenzene	106	Compound Not Detected.						
84	Chlorobenzene	112	Compound Not Detected.						
86	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
87	mp-Xylene	106	Compound Not Detected.						
M 120	1,3-Dichloropropene, Total	75	Compound Not Detected.						
88	o-Xylene	106	Compound Not Detected.						
89	Styrene	104	Compound Not Detected.						
90	Bromoform	173	Compound Not Detected.						
91	Isopropylbenzene	105	Compound Not Detected.						
$ 92	4-Bromofluorobenzene	174	7.254	7.257	(0.891)	266870	29.4972	29.4972	
M 121	TOTAL XYLENES	106	Compound Not Detected.						
94	n-Propylbenzene	120	Compound Not Detected.						
93	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
97	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
96	o-Chlorotoluene	91	Compound Not Detected.						
98	1,2,3-Trichloropropane	110	Compound Not Detected.						
99	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
101	p-Chlorotoluene	91	Compound Not Detected.						
102	tert-Butylbenzene	134	Compound Not Detected.						
103	Pentachloroethane	117	Compound Not Detected.						
104	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
105	sec-Butylbenzene	105	Compound Not Detected.						
106	p-Isopropyltoluene	134	Compound Not Detected.						
107	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 108	1,4-Dichlorobenzene-d4	152	8.140	8.143	(1.000)	319553	30.0000		(Q)
109	1,4-Dichlorobenzene	146	Compound Not Detected.						
111	n-Butylbenzene	134	Compound Not Detected.						
110	Benzyl Chloride	126	Compound Not Detected.						
112	Hexachloroethane	117	Compound Not Detected.						
113	1,2-Dichlorobenzene	146	Compound Not Detected.						
114	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
115	Nitrobenzene	77	Compound Not Detected.						
116	Hexachlorobutadiene	225	Compound Not Detected.						
117	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
118	Naphthalene	128	Compound Not Detected.						
119	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072505.D

Page 1

Date : 25-JUL-2024 12:13

Client ID: MB for HBN 1260753

Instrument: ms23.i

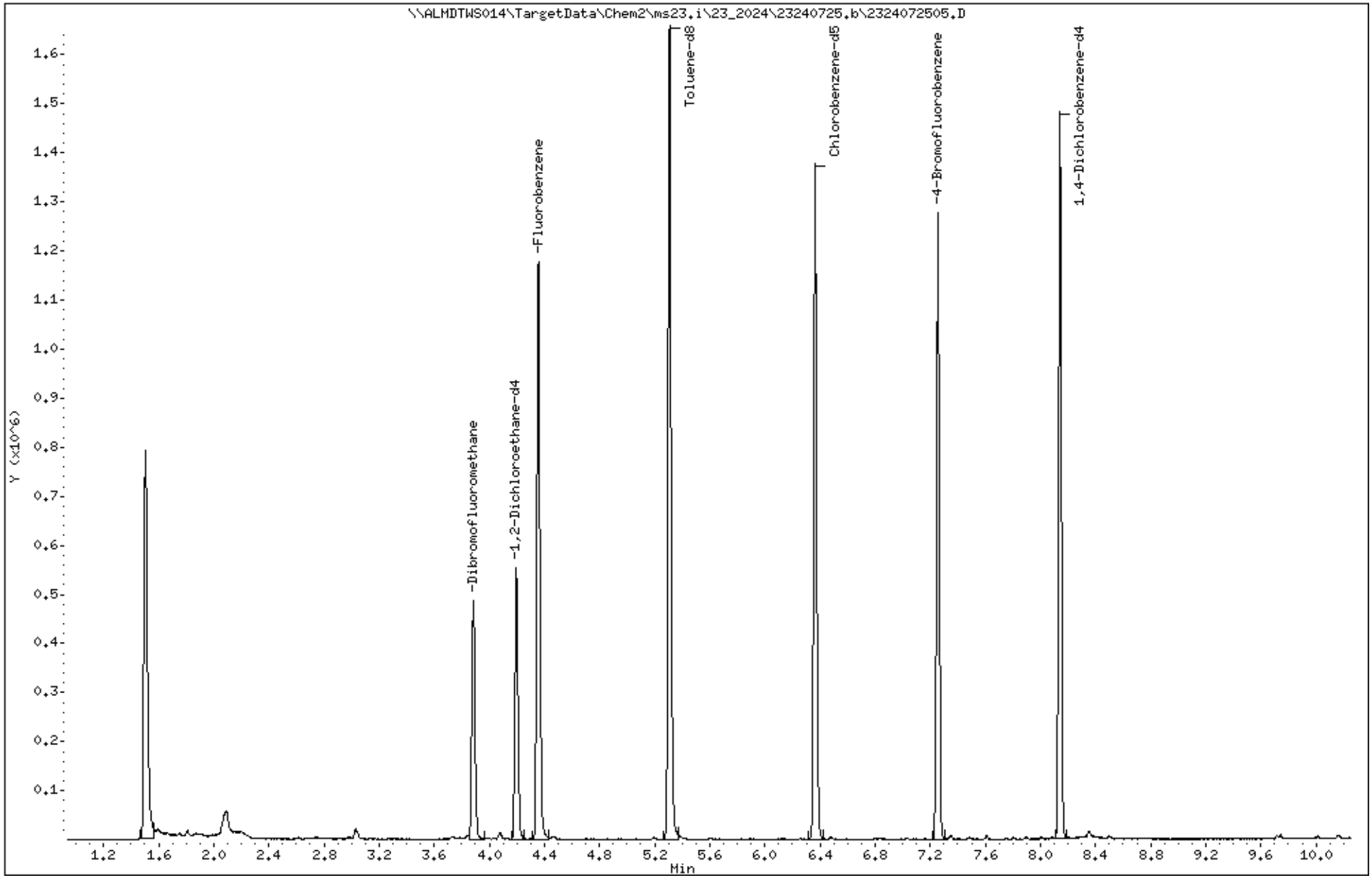
Sample Info: 3856991;;1;3;;MB;;

Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25



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Inj Date : 25-JUL-2024 12:13
InstruID : ms23.i
LabSampID : 3856991

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 07/26/2024 07:34
Client ID: MB for HBN 1260753
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240725.b/232407250
Inj Date: 25-JUL-2024 12:13
Operator: ILY

Analytes listed below were unassigned due to not meeting one or more of the following qualitative criteria (retention time, mass spectral match, extracted ion ratios)
Rationale other than qualitative criteria are noted on the quantitation report.:

Acetonitrile
Acrolein
Bromoform
1-Chlorobutane
1-Chlorohexane
1,2-Dichloroethane
1,3-Dichloropropane
Heptane
Methacrylonitrile
2-Nitropropane
Pentane

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072507.D
Lab Smp Id: 3369360023 Client Smp ID: PW13-1
Inj Date : 25-JUL-2024 12:53
Operator : ILY Inst ID: ms23.i
Smp Info : 3369360023;;1;;;;;
Misc Info : ZZ VOMS 73988 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\23-8260b09D.m
Meth Date : 26-Jul-2024 07:23 chs Quant Type: ISTD
Cal Date : 18-JUL-2024 14:43 Cal File: 2324071809.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14
Processing Host: ALMDTW7047

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	1.849	1.849	(0.425)	52049	5.27339	5.27339	
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	Compound Not Detected.						
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	Compound Not Detected.						
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	Compound Not Detected.						
21 Hexane	57	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	Compound Not Detected.						
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	Compound Not Detected.						
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61	Compound Not Detected.						
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	Compound Not Detected.						
	37 Ethyl acetate	43	3.818	3.815	(0.877)	67034	6.22338	6.22338	
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.881	3.881	(0.892)	215137	28.7833	28.7833	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	4.127	4.127	(0.948)	9429	0.31140	0.311404(a)	
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.197	4.197	(0.964)	283721	29.6441	29.6441	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.353	4.356	(1.000)	804189	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	4.460	4.457	(1.025)	4394	0.52887	0.528871(a)	
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.306	5.309	(0.834)	818993	29.0969	29.0969	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	76 Ethyl methacrylate	69	Compound Not Detected.						
	77 1,1,2-Trichloroethane	83	Compound Not Detected.						
	78 Chlorodibromomethane	129	Compound Not Detected.						
	79 1,3-Dichloropropane	76	Compound Not Detected.						
	80 1,2-Dibromoethane	107	Compound Not Detected.						
	81 2-Hexanone	43	Compound Not Detected.						
	82 1-Chlorohexane	91	Compound Not Detected.						
*	83 Chlorobenzene-d5	82	6.363	6.363	(1.000)	349641	30.0000		
	85 Ethylbenzene	106	Compound Not Detected.						
	84 Chlorobenzene	112	6.377	6.377	(1.002)	5763	0.29450	0.294497(a)	
	86 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	87 mp-Xylene	106	Compound Not Detected.						
M	120 1,3-Dichloropropene, Total	75	Compound Not Detected.						
	88 o-Xylene	106	Compound Not Detected.						
	89 Styrene	104	Compound Not Detected.						
	90 Bromoform	173	Compound Not Detected.						
	91 Isopropylbenzene	105	Compound Not Detected.						
$	92 4-Bromofluorobenzene	174	7.254	7.257	(0.891)	249273	28.4064	28.4064	
M	121 TOTAL XYLENES	106	Compound Not Detected.						
	94 n-Propylbenzene	120	Compound Not Detected.						
	93 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	97 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	96 o-Chlorotoluene	91	Compound Not Detected.						
	98 1,2,3-Trichloropropane	110	Compound Not Detected.						
	99 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	101 p-Chlorotoluene	91	Compound Not Detected.						
	102 tert-Butylbenzene	134	Compound Not Detected.						
	103 Pentachloroethane	117	Compound Not Detected.						
	104 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	105 sec-Butylbenzene	105	Compound Not Detected.						
	106 p-Isopropyltoluene	134	Compound Not Detected.						
	107 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	108 1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	309944	30.0000	(Q)	
	109 1,4-Dichlorobenzene	146	8.158	8.155	(1.002)	7852	0.50197	0.501975(aQ)	
	111 n-Butylbenzene	134	Compound Not Detected.						
	110 Benzyl Chloride	126	Compound Not Detected.						
	112 Hexachloroethane	117	Compound Not Detected.						
	113 1,2-Dichlorobenzene	146	Compound Not Detected.						
	114 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	115 Nitrobenzene	77	Compound Not Detected.						
	116 Hexachlorobutadiene	225	Compound Not Detected.						
	117 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	118 Naphthalene	128	Compound Not Detected.						
	119 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072507.D

Page 1

Date : 25-JUL-2024 12:53

Client ID: PW13-1

Instrument: ms23.i

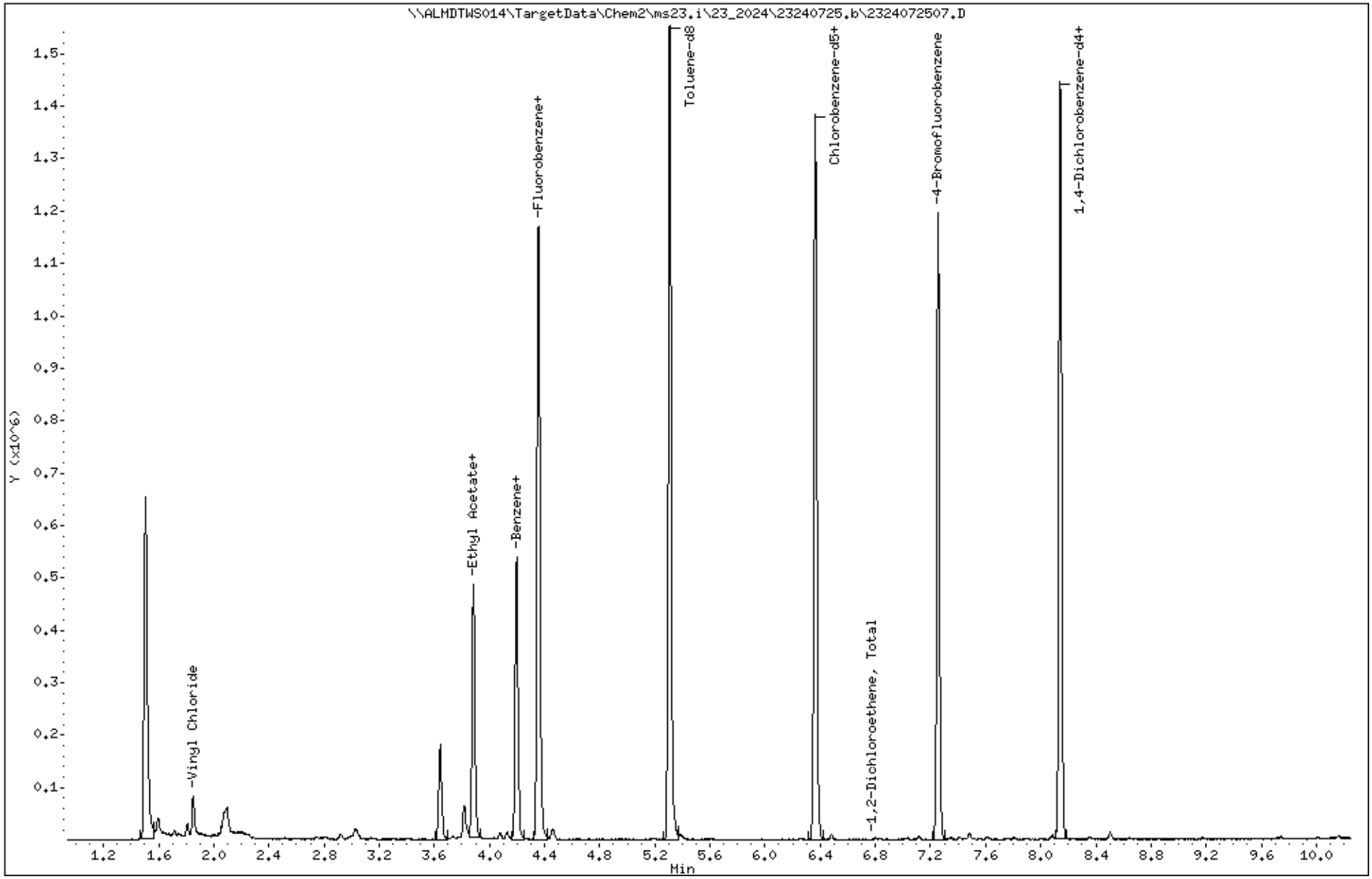
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Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25



Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072507.D

Date : 25-JUL-2024 12:53

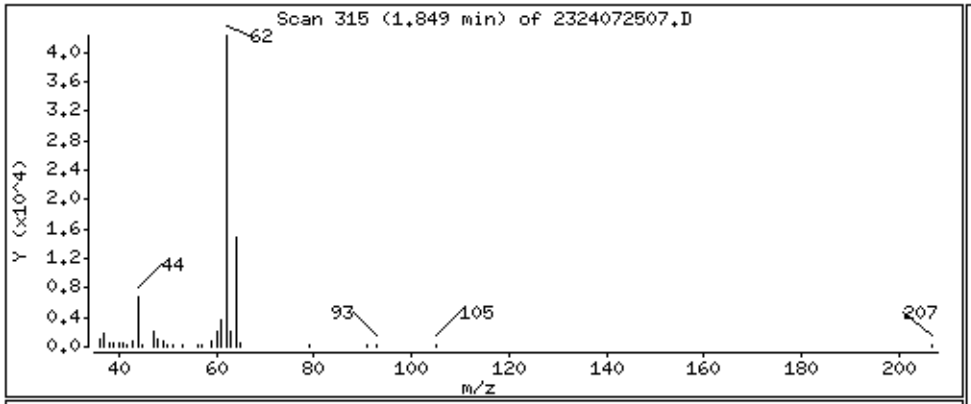
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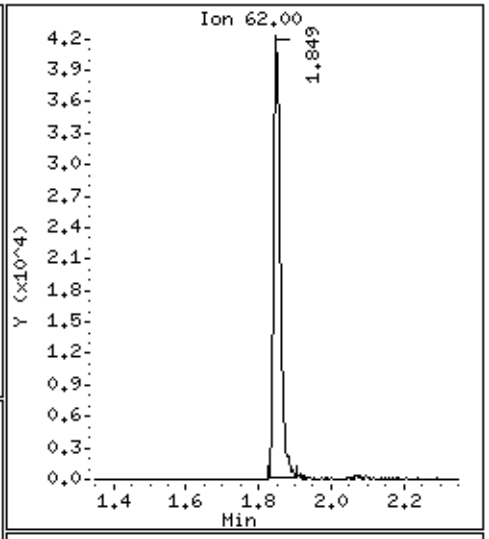
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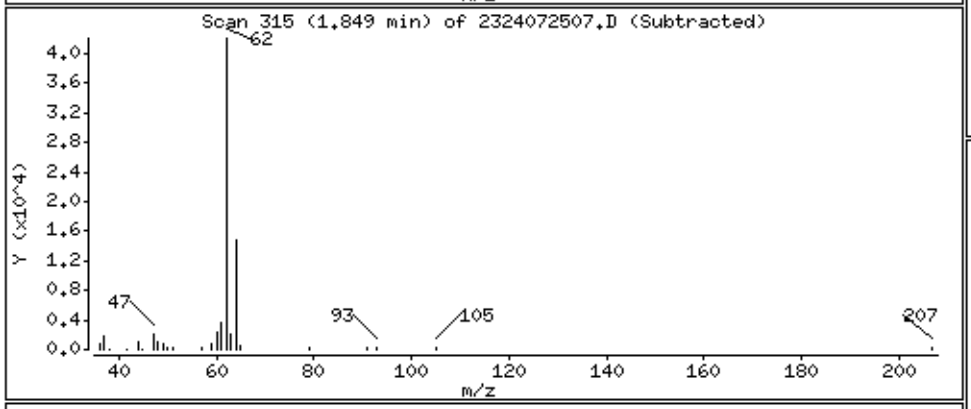
Purge Volume: 5.0 Operator: ILY

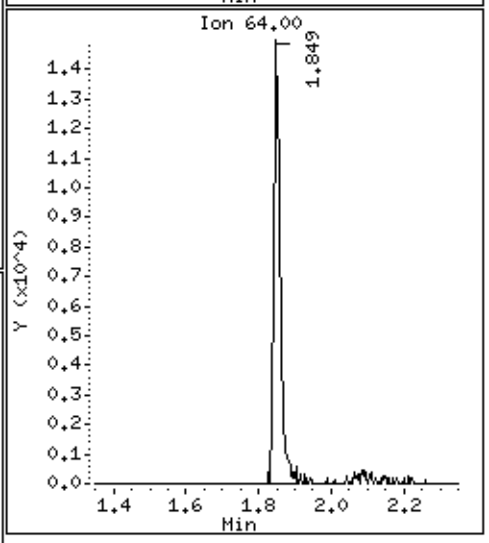
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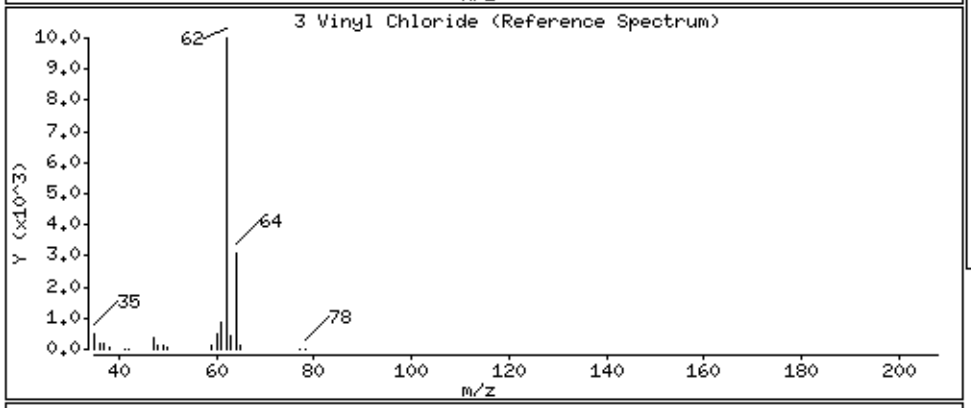
3 Vinyl Chloride Concentration: 5.27339 ug/L

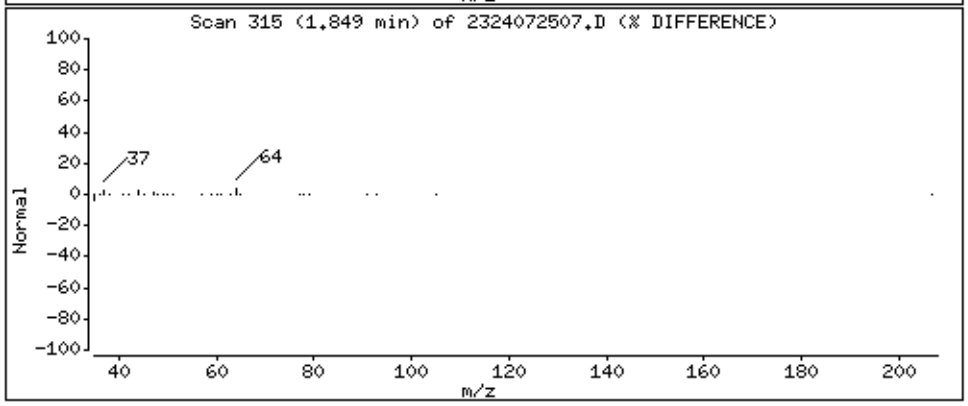












Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072507.D

Date : 25-JUL-2024 12:53

Client ID: PW13-1

Instrument: ms23.i

Sample Info: 3369360023;;1;;;;;

Purge Volume: 5.0

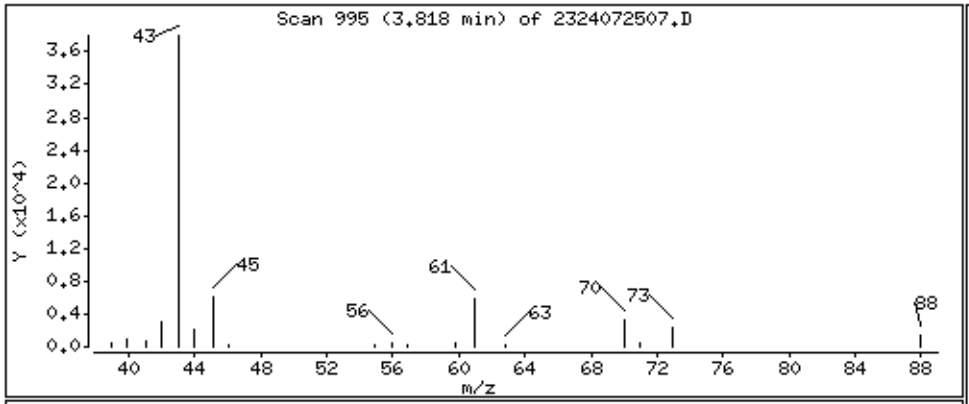
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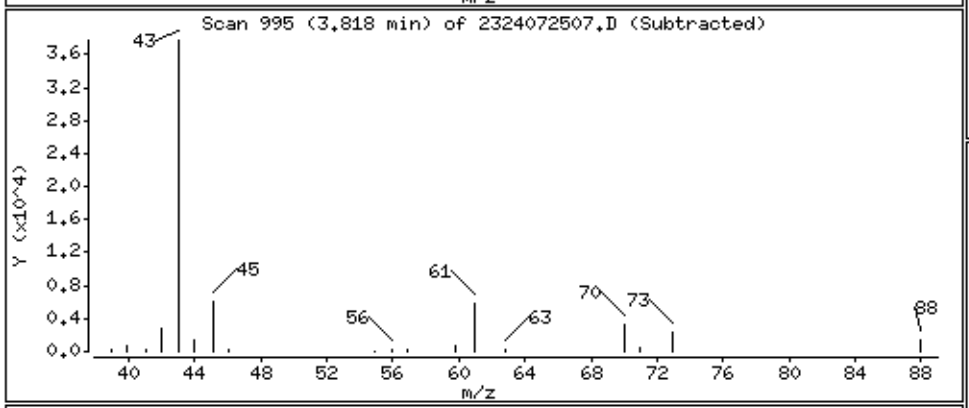
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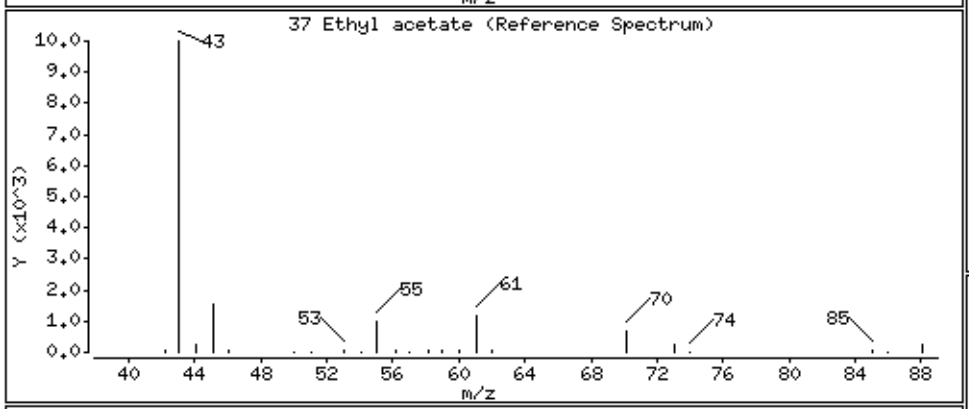
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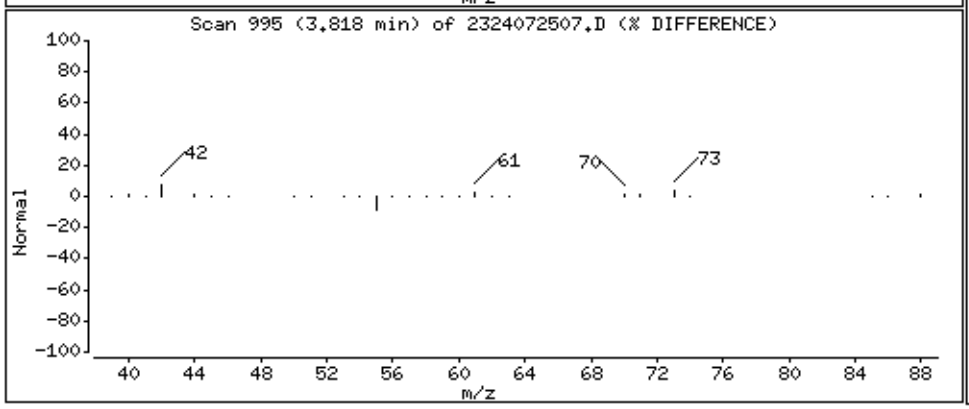
37 Ethyl acetate

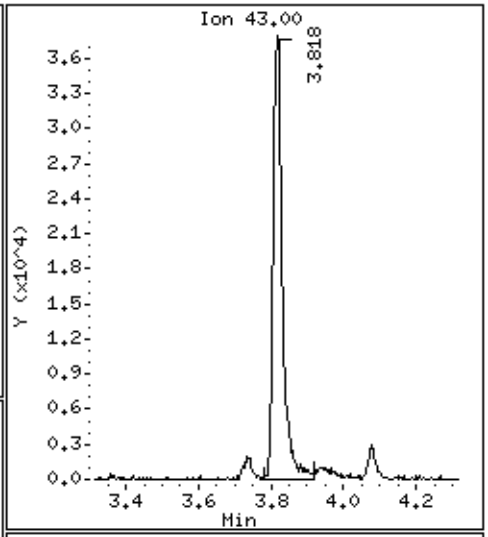
Concentration: 6.22338 ug/L

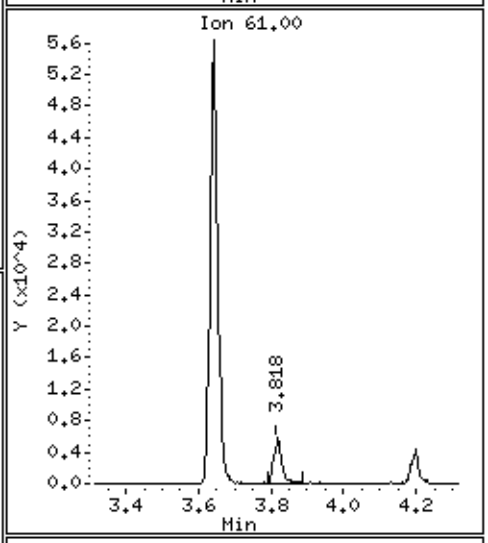


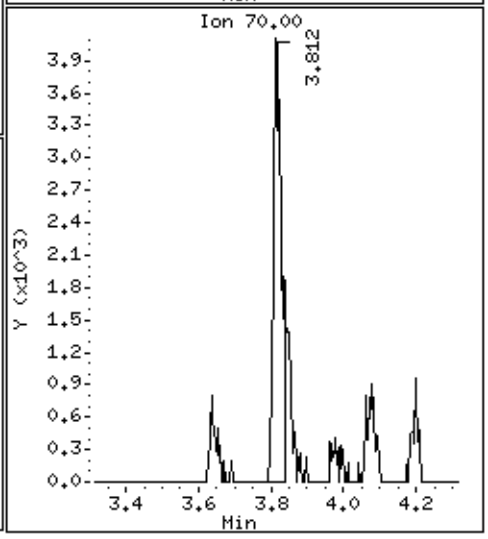












Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072507.D

Date : 25-JUL-2024 12:53

Client ID: PW13-1

Instrument: ms23.i

Sample Info: 3369360023;;1;;;;;

Purge Volume: 5.0

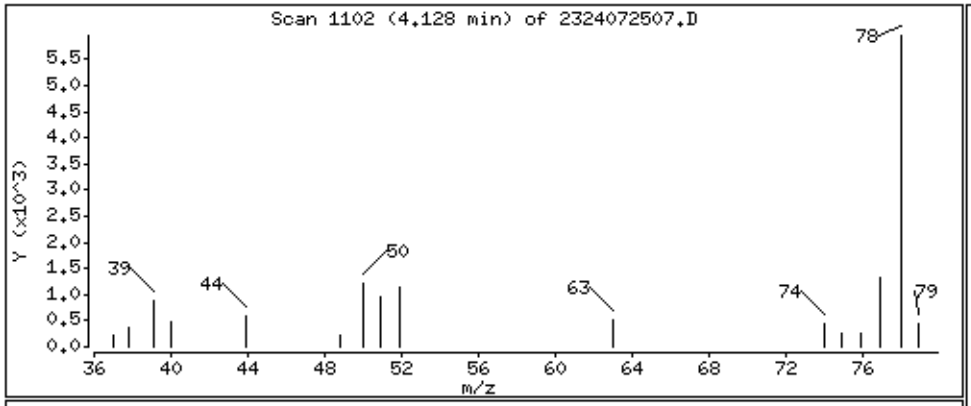
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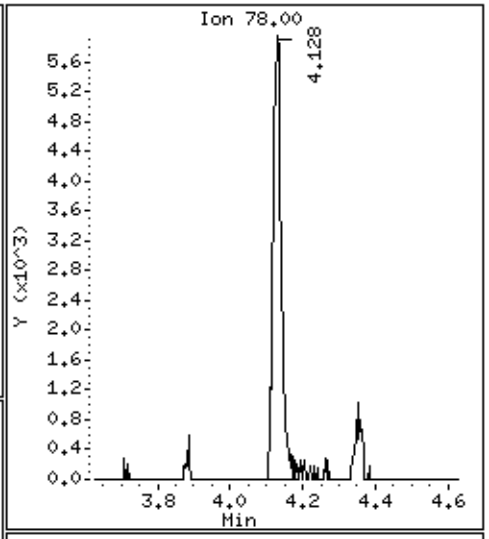
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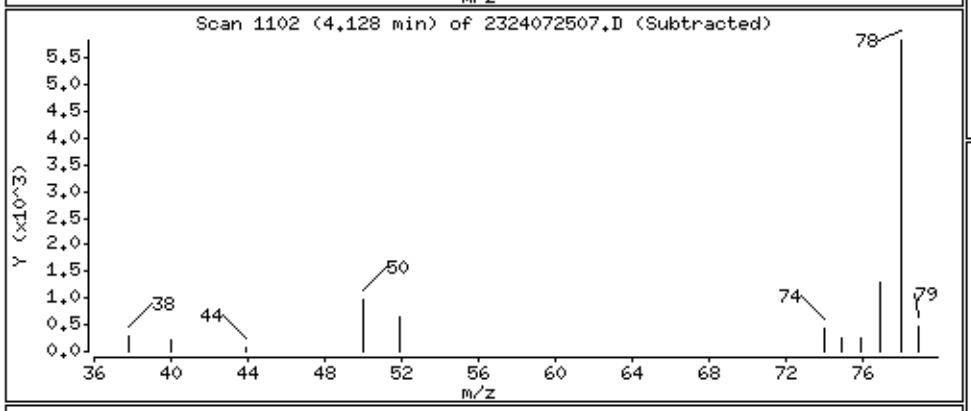
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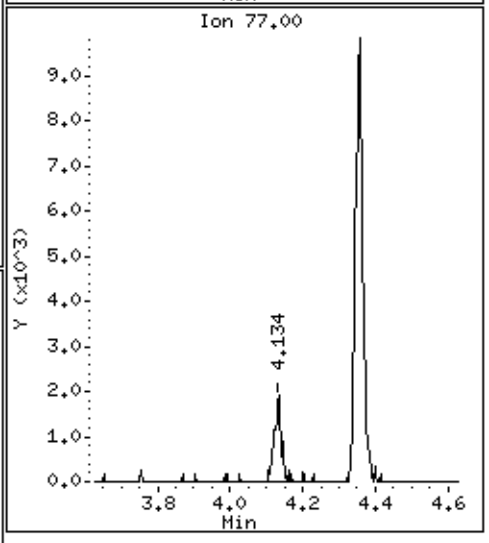
47 Benzene

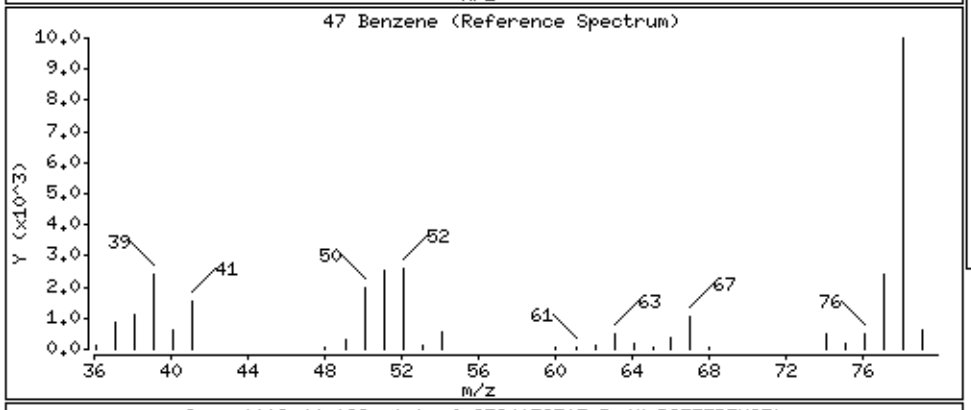
Concentration: 0.311404 ug/L

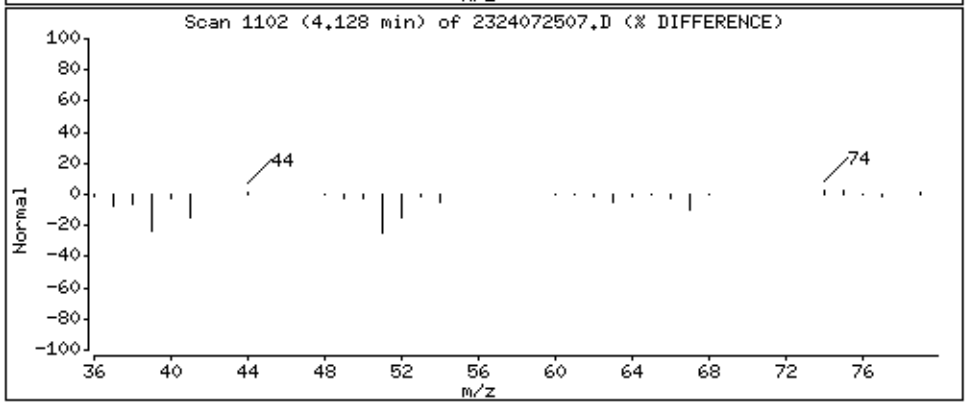












Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072507.D

Date : 25-JUL-2024 12:53

Client ID: PW13-1

Instrument: ms23.i

Sample Info: 3369360023;;1;;;;;

Purge Volume: 5.0

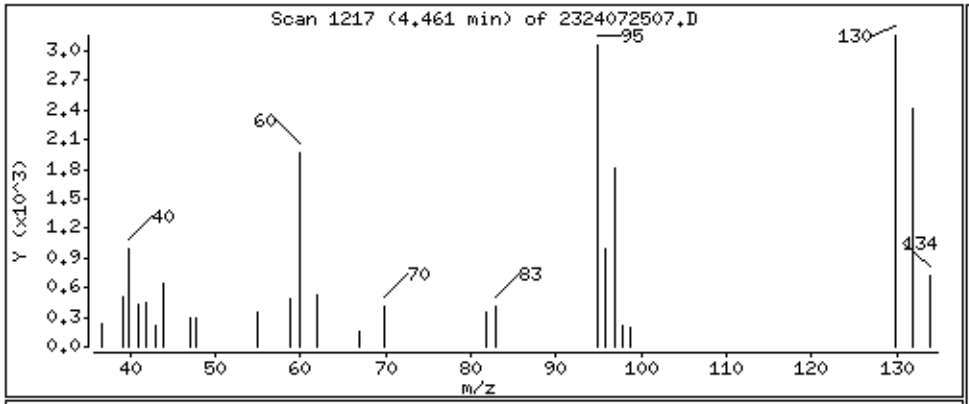
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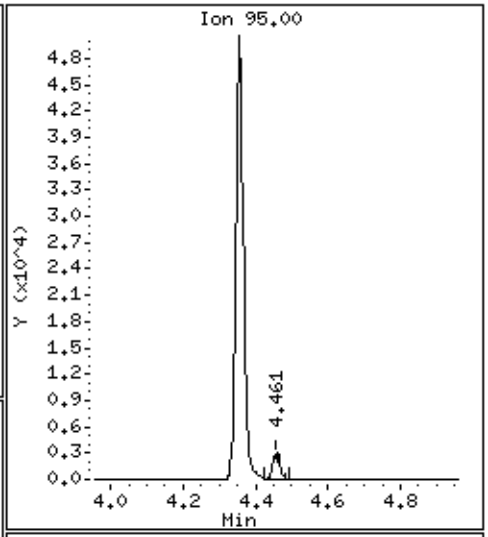
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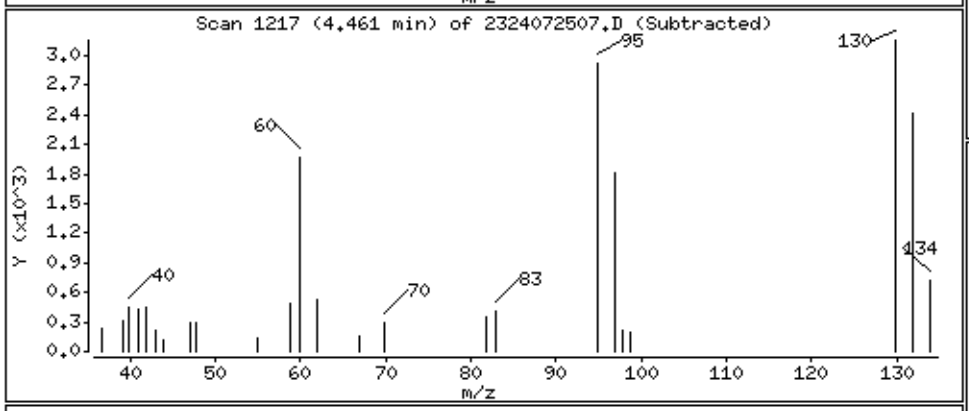
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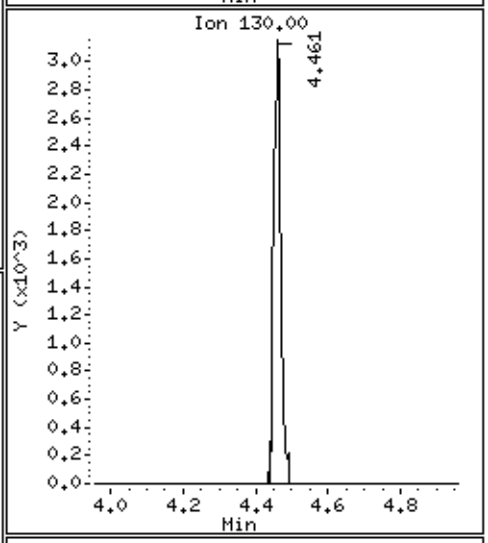
57 Trichloroethene

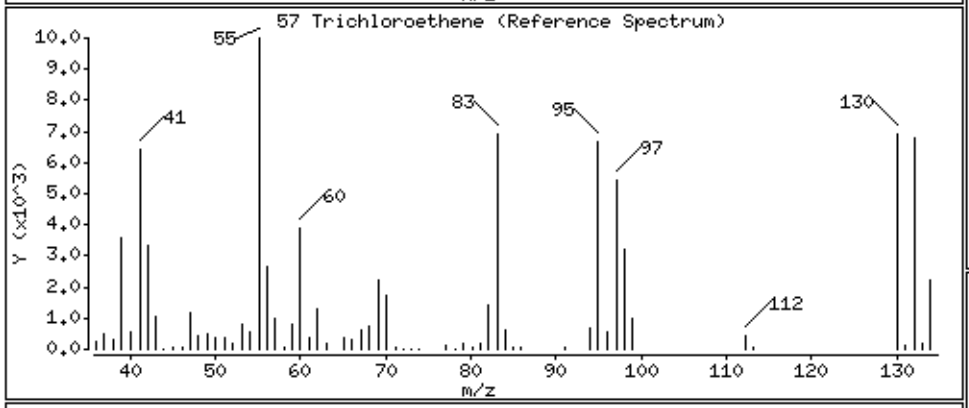
Concentration: 0.528871 ug/L

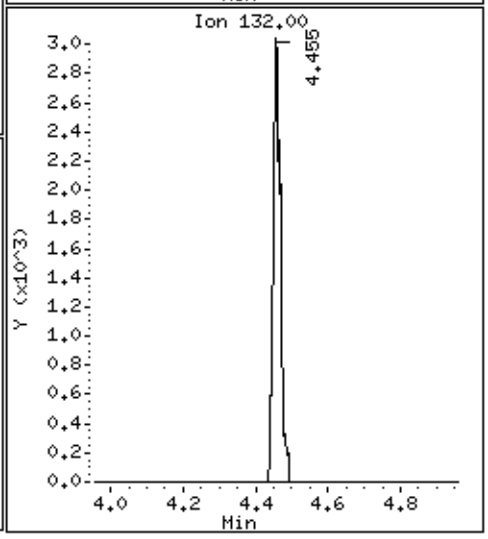


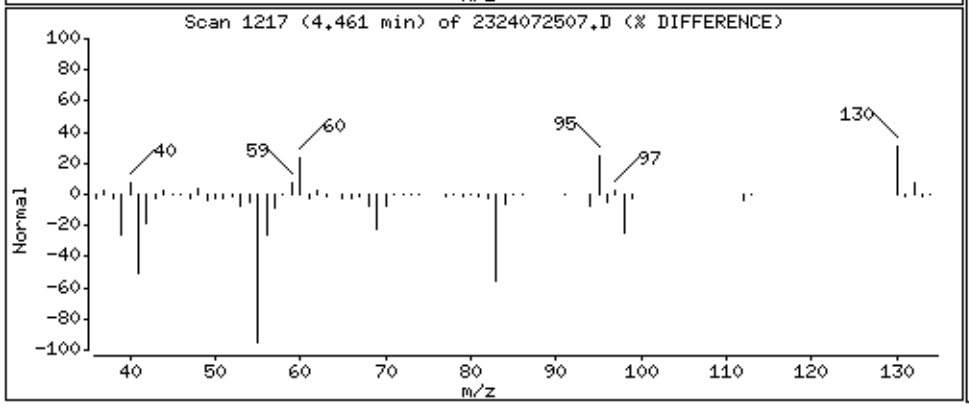












Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072507.D

Date : 25-JUL-2024 12:53

Client ID: PW13-1

Instrument: ms23.i

Sample Info: 3369360023;;1;;;;;

Purge Volume: 5.0

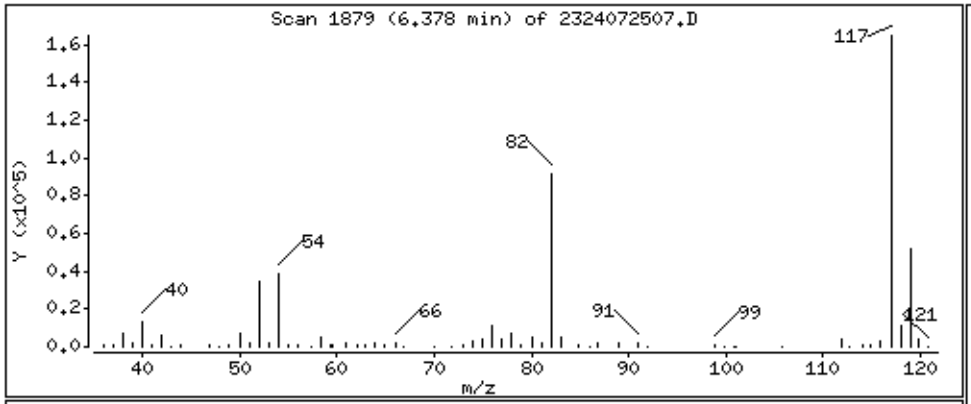
Operator: ILY

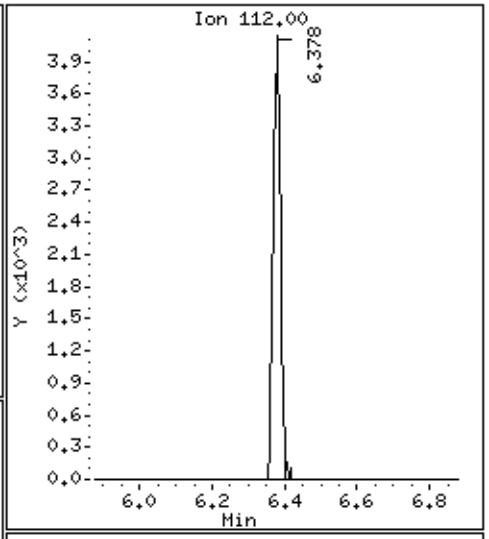
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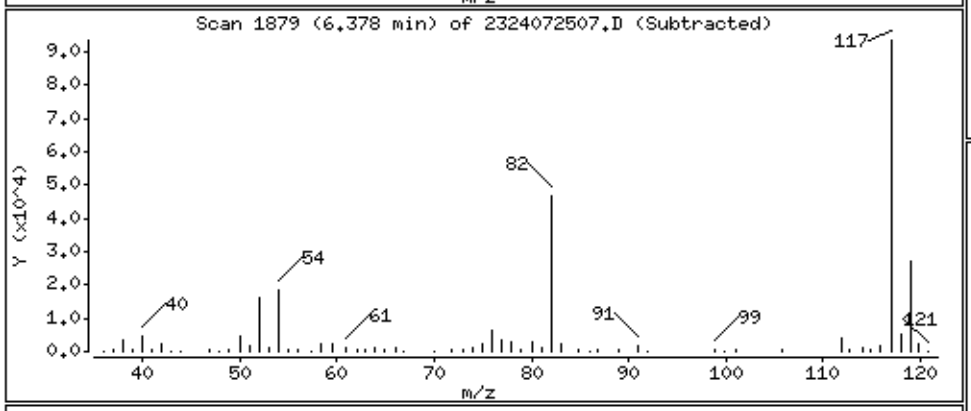
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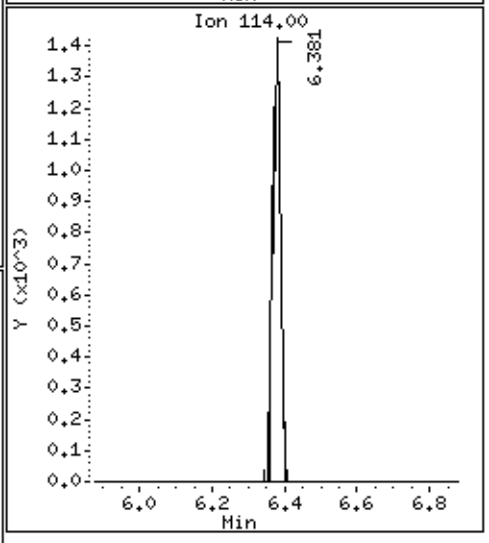
84 Chlorobenzene

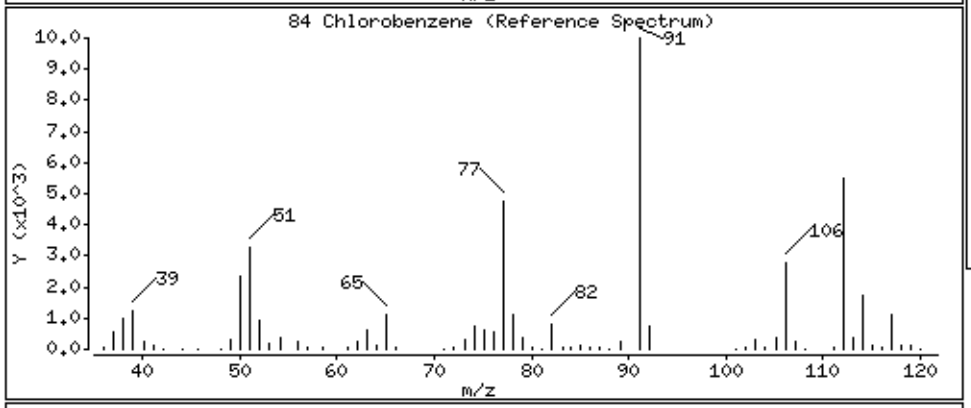
Concentration: 0.294497 ug/L

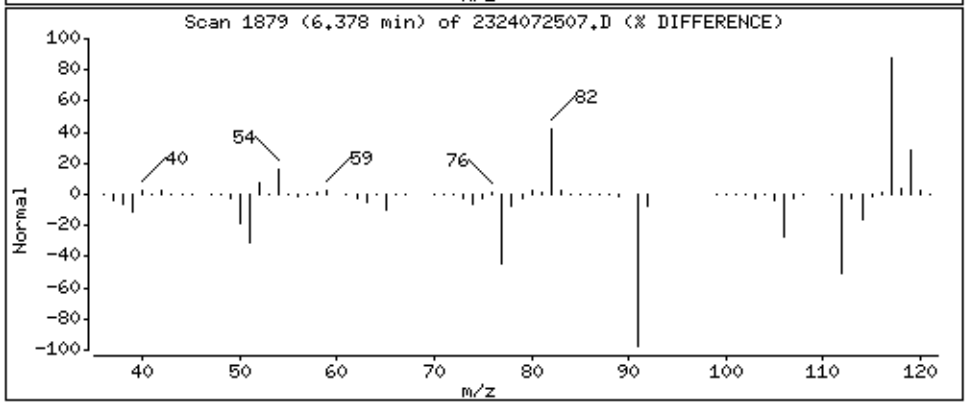












Data File: \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072507.D

Date : 25-JUL-2024 12:53

Client ID: PW13-1

Instrument: ms23.i

Sample Info: 3369360023;;1;;;;;

Purge Volume: 5.0

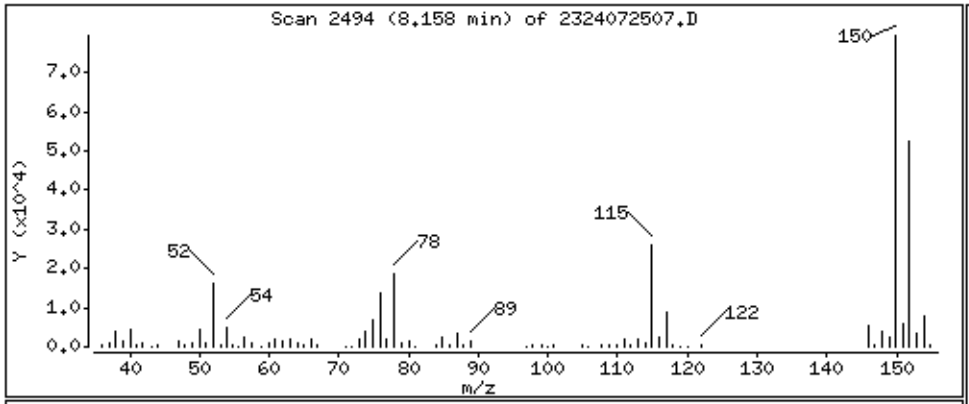
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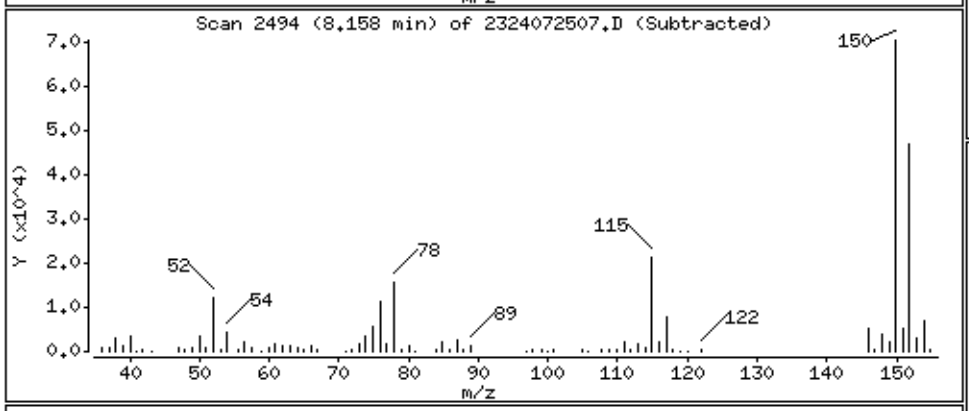
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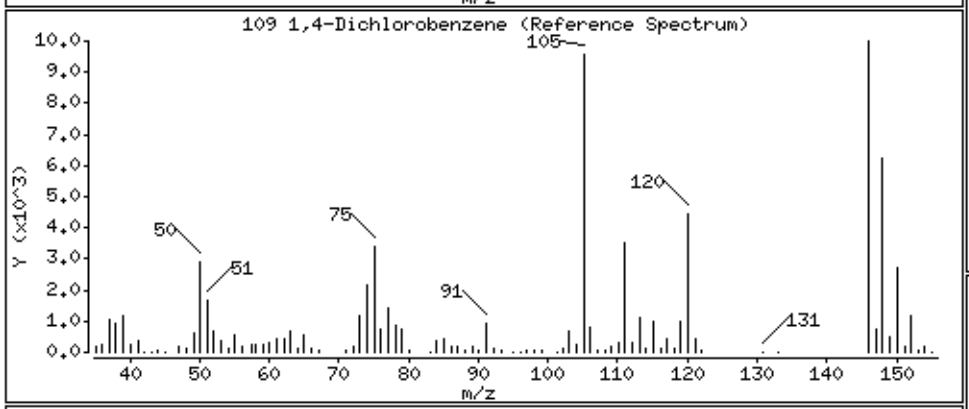
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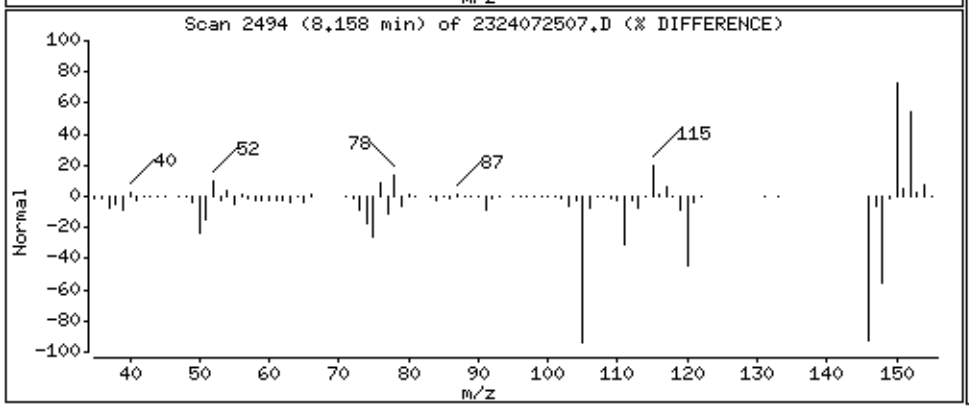
109 1,4-Dichlorobenzene

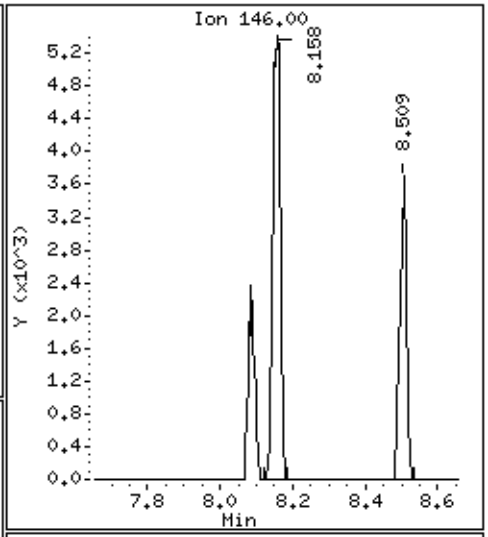
Concentration: 0.501975 ug/L

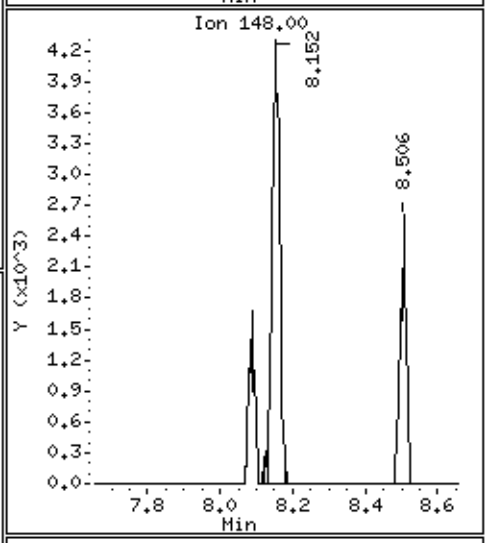


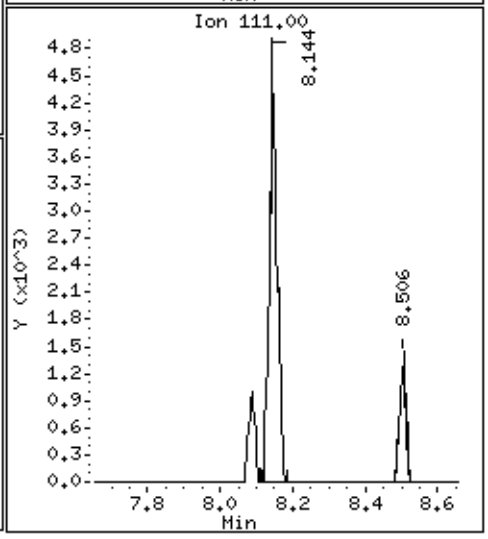












Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072507.D
Inj Date : 25-JUL-2024 12:53
InstruID : ms23.i
LabSampID : 3369360023

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 07/26/2024 08:35
Client ID: PW13-1
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240725.b/232407250
Inj Date: 25-JUL-2024 12:53
Operator: ILY

Analytes listed below were unassigned due to not meeting one or more of the following qualitative criteria (retention time, mass spectral match, extracted ion ratios)
Rationale other than qualitative criteria are noted on the quantitation report.:

Acetonitrile
Acrolein
1-Chlorobutane
1-Chlorohexane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,2-Dichloroethane
cis-1,2-Dichloroethene
Heptane
Methacrylonitrile
2-Nitropropane
Pentane
Tetrahydrofuran

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

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Inj Date : 25-JUL-2024 17:51
Operator : ILY Inst ID: ms23.i
Smp Info : 1801;;1;;;;;
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Als bottle: 22 QC Sample: ENDCCV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14
Processing Host: ALMDTW7047

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.631	1.632	(0.375)	491195	46.8545	46.8545	
2	Chloromethane	50	1.785	1.785	(0.410)	426674	39.9010	39.9010	
3	Vinyl Chloride	62	1.849	1.849	(0.424)	476972	50.4513	50.4513	
4	Bromomethane	94	2.072	2.072	(0.476)	189732	42.9206	42.9206	
5	Chloroethane	64	2.147	2.144	(0.493)	280612	55.0906	55.0906	
6	Pentane	41	2.245	2.243	(0.516)	273588	39.5974	39.5974	
7	Trichlorofluoromethane	101	2.248	2.248	(0.516)	595808	51.4945	51.4945	
8	Dichlorofluoromethane	67	2.277	2.277	(0.523)	717663	48.1525	48.1525	
9	Ethyl Ether	74	2.439	2.439	(0.560)	234158	49.4582	49.4582	
10	1,1-Dichloroethene	61	2.578	2.578	(0.592)	502064	48.5184	48.5184	
12	Carbon Disulfide	76	2.619	2.616	(0.601)	987079	46.9593	46.9593	
11	Freon 113	101	2.593	2.593	(0.595)	289291	47.5640	47.5640	
13	Iodomethane	127	2.677	2.674	(0.615)	111984	36.8672	36.8672	
14	Acrolein	56	2.761	2.761	(0.634)	268217	193.441	193.441	
16	3-Chloro-1-propene	41	2.848	2.851	(0.654)	534336	48.9066	48.9066	
15	Isopropyl Alcohol	45	2.821	2.824	(0.648)	163555	246.773	246.773	
17	Methylene Chloride	84	2.908	2.908	(0.668)	372005	49.1960	49.1960	
18	Acetone	58	2.917	2.920	(0.670)	220055	249.717	249.717	
19	Methyl acetate	74	2.986	2.984	(0.686)	79412	49.3018	49.3018	
20	trans-1,2-Dichloroethene	61	3.004	3.004	(0.690)	497532	48.0851	48.0851	
21	Hexane	57	3.044	3.045	(0.699)	694045	45.0821	45.0821	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	3.047	3.047	(0.700)	1146039	51.6381	51.6381	
	23 tert.- Butyl Alcohol	59	3.068	3.068	(0.704)	263327	274.478	274.478	
	24 Acetonitrile	41	3.183	3.183	(0.731)	346668	249.664	249.664	
	25 Diisopropyl ether	45	3.244	3.247	(0.745)	1287760	50.7694	50.7694	
	26 Chloroprene	53	3.334	3.337	(0.765)	446980	48.8779	48.8779(M)	
	27 1,1-Dichloroethane	63	3.346	3.346	(0.768)	680615	50.1664	50.1664	
	28 Acrylonitrile	53	3.357	3.357	(0.771)	1132217	262.555	262.555(M)	
	30 n-Propanol	41	3.447	3.447	(0.791)	265327	483.095	483.095	
	29 Ethyl tert-butyl ether	59	3.447	3.447	(0.791)	1241719	52.1400	52.1400	
	31 Vinyl acetate	86	3.450	3.447	(0.792)	94999	53.6133	53.6133(Q)	
	32 cis-1,2-Dichloroethene	61	3.641	3.641	(0.836)	531280	50.9385	50.9385	
	33 2,2-Dichloropropane	77	3.710	3.708	(0.852)	456681	43.8051	43.8051	
M	100 1,2-Dichloroethene, Total	61				1028812	99.0236	99.0236	
	34 Bromochloromethane	128	3.754	3.754	(0.862)	198626	52.7831	52.7831	
	35 Cyclohexane	84	3.780	3.780	(0.868)	508684	47.2941	47.2941	
	36 Chloroform	83	3.780	3.780	(0.868)	722977	51.1923	51.1923	
	37 Ethyl acetate	43	3.815	3.815	(0.876)	528773	51.2509	51.2509	
	38 Methyl acrylate	55	3.832	3.832	(0.880)	449620	52.2977	52.2977	
	39 Carbon Tetrachloride	117	3.887	3.887	(0.892)	497721	54.2702	54.2702(M)	
	40 Tetrahydrofuran	42	3.881	3.881	(0.891)	778183	261.299	261.299	
$	41 Dibromofluoromethane	113	3.884	3.881	(0.892)	214811	30.0043	30.0043	
	42 1,1,1-Trichloroethane	97	3.922	3.922	(0.900)	573004	51.2122	51.2122	
	43 2-Butanone	72	3.936	3.936	(0.904)	296029	257.680	257.680	
	44 1,1-Dichloropropene	75	3.985	3.986	(0.915)	508895	49.2572	49.2572	
	45 1-Chlorobutane	41	4.006	4.006	(0.920)	415021	47.3497	47.3497	
	46 Heptane	71	4.081	4.078	(0.937)	212798	40.0164	40.0164	
	48 Propionitrile	54	4.110	4.113	(0.944)	385506	259.475	259.475	
	47 Benzene	78	4.127	4.127	(0.947)	1460862	50.3697	50.3697	
	49 Methacrylonitrile	67	4.130	4.127	(0.948)	200721	52.6207	52.6207	
	50 tert-amyl methyl Ether	73	4.162	4.162	(0.955)	1143680	52.6013	52.6013	
$	51 1,2-Dichloroethane-d4	65	4.197	4.197	(0.963)	298793	32.5926	32.5926	
	54 Isobutyl alcohol	42	4.168	4.168	(0.957)	155586	480.602	480.602	
	52 1,2-Dichloroethane	62	4.234	4.234	(0.972)	573806	49.0310	49.0310	
	53 tert-Amyl Alcohol	59	4.237	4.237	(0.973)	211881	233.710	233.710	
*	55 Fluorobenzene	96	4.356	4.356	(1.000)	770294	30.0000		
	56 Diisobutylene	57	4.370	4.371	(1.003)	845624	46.8183	46.8183	
	57 Trichloroethene	95	4.457	4.457	(1.023)	387286	48.6657	48.6657	
	58 Methyl cyclohexane	83	4.475	4.472	(0.703)	536508	46.2300	46.2300	
	59 tert-Amyl Ethylether	59	4.559	4.562	(1.047)	922517	51.3182	51.3182	
	60 Dibromomethane	93	4.712	4.712	(1.082)	269711	51.7180	51.7180	
	61 1,2-Dichloropropane	63	4.770	4.770	(1.095)	401540	50.3093	50.3093	
	62 Bromodichloromethane	83	4.793	4.793	(1.100)	529544	52.5121	52.5121	
	63 Methyl methacrylate	41	4.851	4.851	(1.114)	445694	51.4072	51.4072	
	65 2-Chloroethylvinyl ether	63	5.115	5.115	(1.174)	215409	37.3401	37.3401	
	66 cis-1,3-Dichloropropene	75	5.181	5.181	(0.814)	639217	52.2485	52.2485	
	67 Octane	85	5.196	5.196	(0.816)	186723	41.8435	41.8435	
$	68 Toluene-d8	98	5.309	5.309	(0.834)	812553	29.3432	29.3432	
	69 Toluene	92	5.343	5.343	(0.839)	890068	49.5122	49.5122	
	70 Chloroacetonitrile	75	5.378	5.378	(0.845)	150205	260.375	260.375	
	71 2-Nitropropane	41	5.474	5.474	(0.860)	801870	246.420	246.420	
	72 1,1-Dichloro-2-propanone	63	5.497	5.494	(0.864)	61219	250.696	250.696	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.552	5.552	(0.872)	2593977	272.899	272.899	
	75 trans-1,3-Dichloropropene	75	5.592	5.592	(0.879)	614395	53.7914	53.7914	
	74 Tetrachloroethene	164	5.607	5.610	(0.881)	353570	53.6537	53.6537	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	76 Ethyl methacrylate	69	5.665	5.665	(0.890)	620010	55.1056	55.1056	
	77 1,1,2-Trichloroethane	83	5.705	5.705	(0.896)	323812	51.9807	51.9807	
	78 Chlorodibromomethane	129	5.838	5.839	(0.917)	427079	55.4359	55.4359	
	79 1,3-Dichloropropane	76	5.899	5.896	(0.927)	652430	51.2523	51.2523	
	80 1,2-Dibromoethane	107	6.021	6.018	(0.946)	359124	53.9910	53.9910	
	81 2-Hexanone	43	6.116	6.116	(0.961)	1869280	273.902	273.902	
	82 1-Chlorohexane	91	6.334	6.337	(0.995)	427189	44.8855	44.8855	
*	83 Chlorobenzene-d5	82	6.365	6.363	(1.000)	343979	30.0000		
	85 Ethylbenzene	106	6.380	6.380	(1.002)	507320	49.7555	49.7555	
	84 Chlorobenzene	112	6.377	6.377	(1.002)	979892	50.8980	50.8980	
	86 1,1,1,2-Tetrachloroethane	131	6.412	6.412	(1.007)	363527	53.4281	53.4281	
	87 mp-Xylene	106	6.481	6.481	(1.018)	1253088	100.270	100.270	
M	120 1,3-Dichloropropene, Total	75				1253612	106.040	106.040	
	88 o-Xylene	106	6.800	6.800	(1.068)	620626	51.0425	51.0425	
	89 Styrene	104	6.834	6.835	(0.839)	1062311	52.8471	52.8471	
	90 Bromoform	173	6.869	6.869	(0.844)	288512	56.3814	56.3814	
	91 Isopropylbenzene	105	7.031	7.031	(0.863)	1400469	50.0318	50.0318	
$	92 4-Bromofluorobenzene	174	7.254	7.257	(0.891)	263863	29.7608	29.7608	
M	121 TOTAL XYLENES	106				1873714	151.313	151.313	
	94 n-Propylbenzene	120	7.350	7.347	(0.903)	415876	48.5211	48.5211	
	93 Bromobenzene	156	7.350	7.350	(0.903)	416427	51.2579	51.2579	
	95 1,1,2,2-Tetrachloroethane	83	7.387	7.388	(0.907)	547506	54.2170	54.2170	
	97 1,3,5-Trimethylbenzene	105	7.495	7.492	(0.920)	1328019	51.1412	51.1412	
	96 o-Chlorotoluene	91	7.483	7.483	(0.919)	1313484	50.2618	50.2618	
	98 1,2,3-Trichloropropane	110	7.506	7.506	(0.922)	165555	53.0231	53.0231	
	99 trans-1,4-Dichloro-2-butene	53	7.526	7.527	(0.924)	157093	50.2887	50.2887(Q)	
	101 p-Chlorotoluene	91	7.610	7.610	(0.935)	1194428	49.3124	49.3124	
	102 tert-Butylbenzene	134	7.752	7.752	(0.952)	291938	47.8577	47.8577	
	103 Pentachloroethane	117	7.778	7.778	(0.955)	250486	49.6683	49.6683(QM)	
	104 1,2,4-Trimethylbenzene	105	7.807	7.807	(0.959)	1353201	50.7021	50.7021	
	105 sec-Butylbenzene	105	7.897	7.897	(0.970)	1591450	49.0059	49.0059	
	106 p-Isopropyltoluene	134	8.004	8.007	(0.983)	351752	48.9813	48.9813	
	107 1,3-Dichlorobenzene	146	8.085	8.085	(0.993)	758746	49.4959	49.4959	
*	108 1,4-Dichlorobenzene-d4	152	8.143	8.143	(1.000)	313154	30.0000		
	109 1,4-Dichlorobenzene	146	8.155	8.155	(1.001)	781009	49.4178	49.4178	
	111 n-Butylbenzene	134	8.354	8.352	(1.026)	319445	47.0552	47.0552(Q)	
	110 Benzyl Chloride	126	8.349	8.349	(1.025)	143845	39.9071	39.9071(Q)	
	112 Hexachloroethane	117	8.493	8.494	(1.043)	265630	53.1242	53.1242	
	113 1,2-Dichlorobenzene	146	8.505	8.505	(1.044)	759472	51.2961	51.2961	
	114 1,2-Dibromo-3-chloropropane	75	9.168	9.168	(1.126)	100993	52.8142	52.8142	
	115 Nitrobenzene	77	9.640	9.640	(1.184)	395778	458.783	458.783	
	116 Hexachlorobutadiene	225	9.718	9.718	(1.193)	188218	46.7216	46.7216	
	117 1,2,4-Trichlorobenzene	180	9.741	9.741	(1.196)	486701	50.1290	50.1290	
	118 Naphthalene	128	10.011	10.011	(1.229)	1491385	55.6040	55.6040	
	119 1,2,3-Trichlorobenzene	180	10.161	10.164	(1.248)	484718	51.6712	51.6712	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

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Client ID:

Instrument: ms23.i

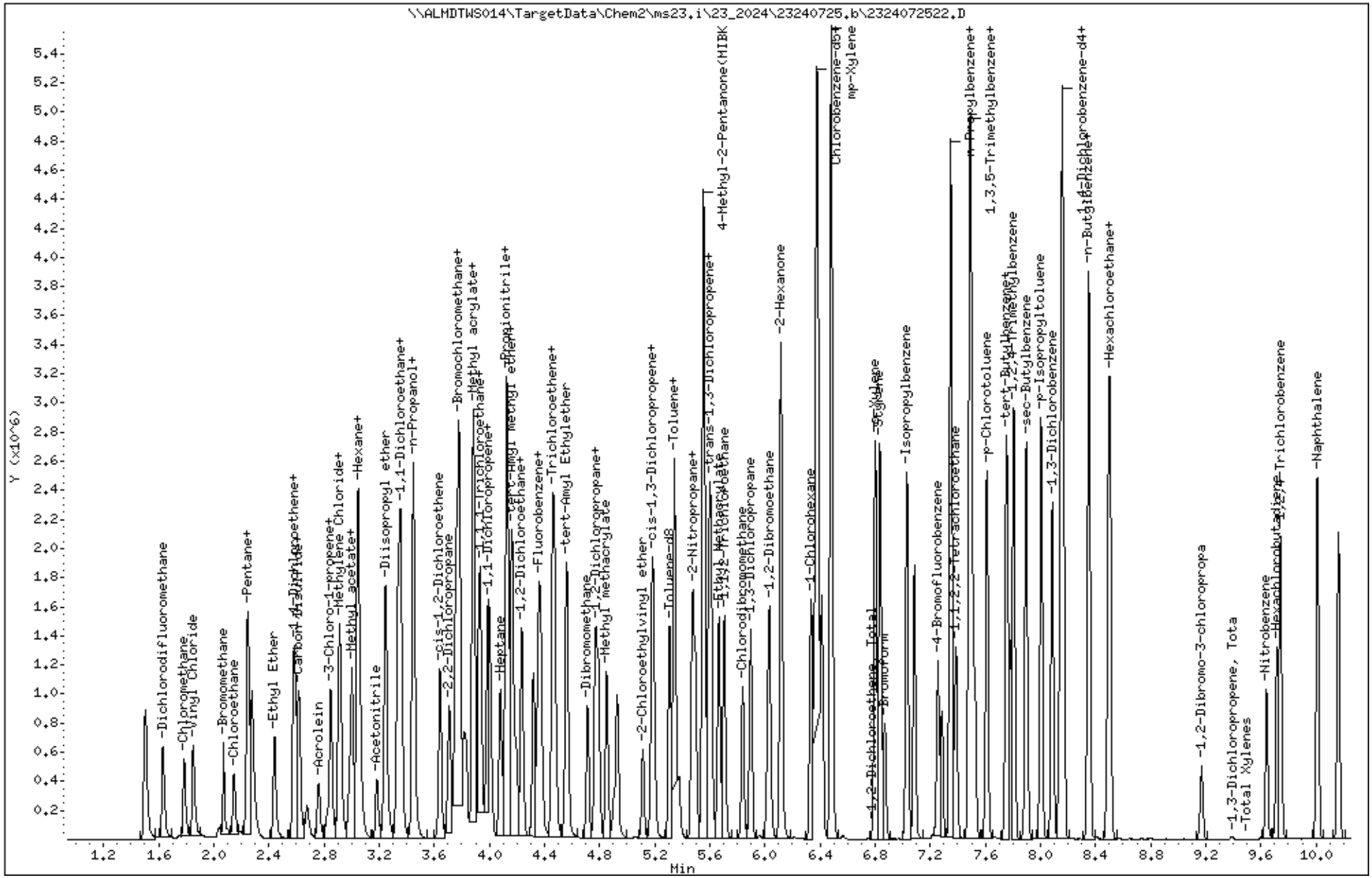
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Operator: ILY

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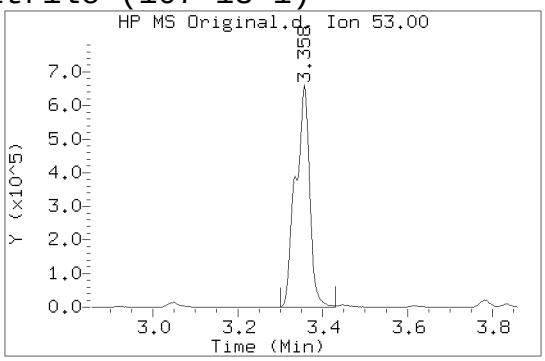
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Acrylonitrile (107-13-1)

Reason Code:

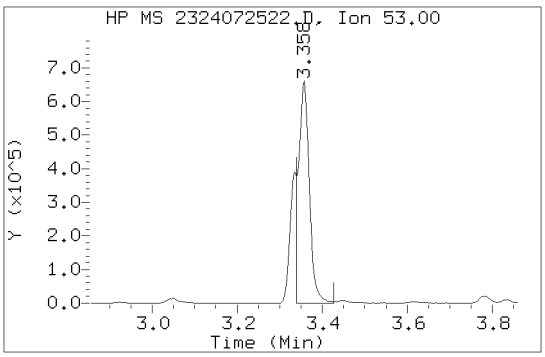
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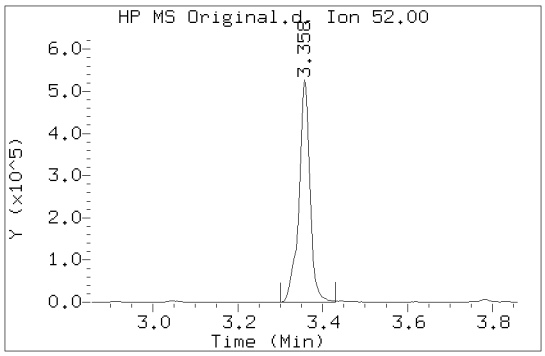
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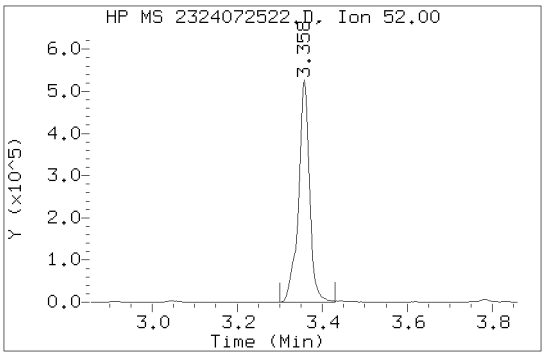
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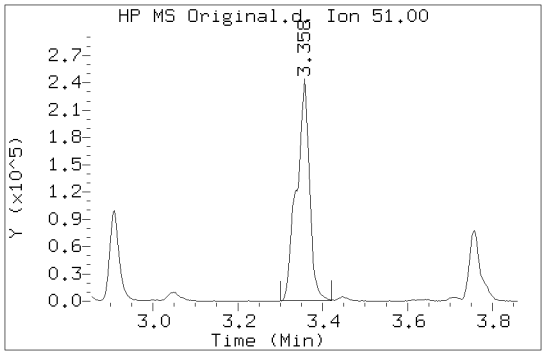
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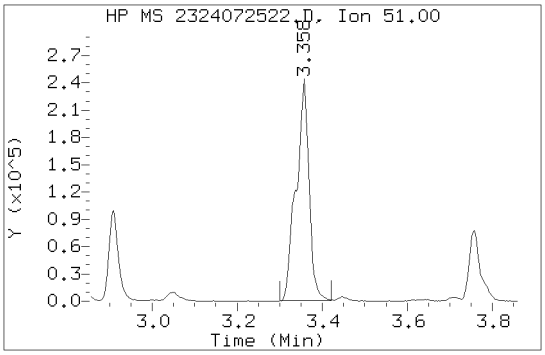
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AFTER

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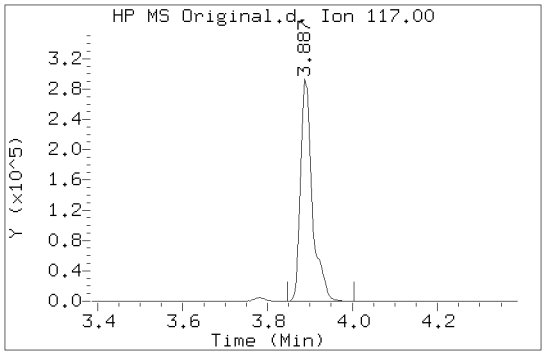


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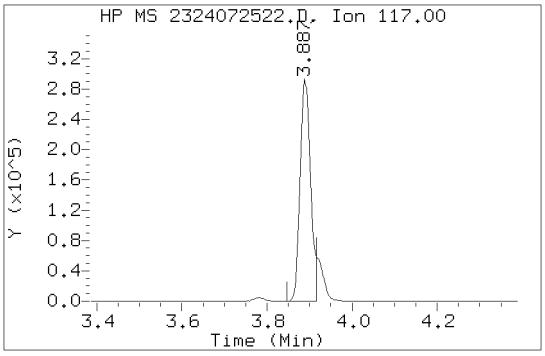
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AFTER

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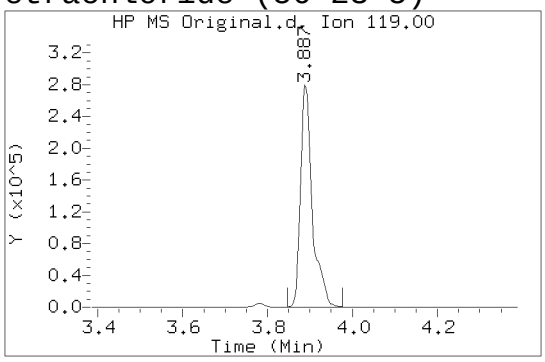


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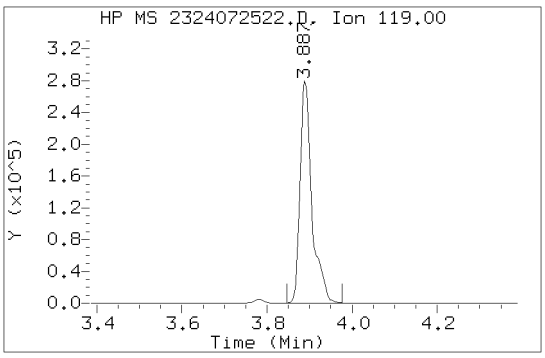
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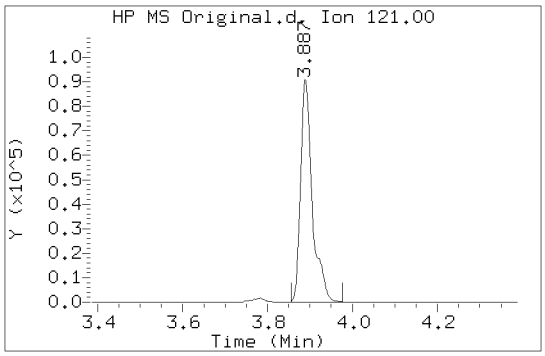
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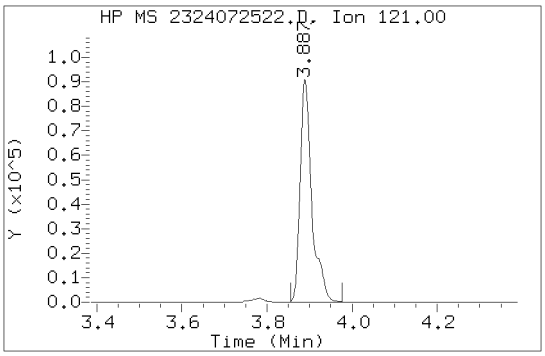
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26-Jul-2024
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BEFORE
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26-Jul-2024
08:38



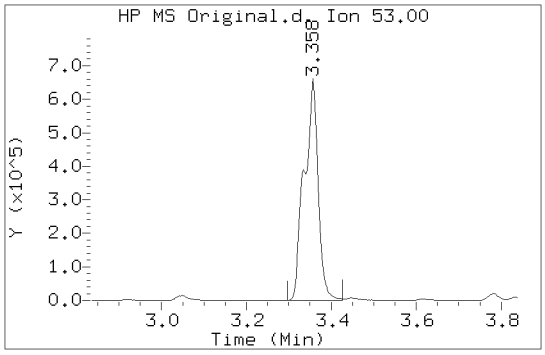
AFTER
MASS
121
AREA
172002
HEIGHT
90784
26-Jul-2024
08:42



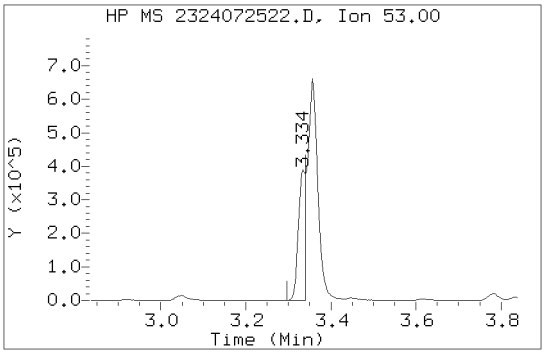
Chloroprene (126-99-8)

Reason Code:

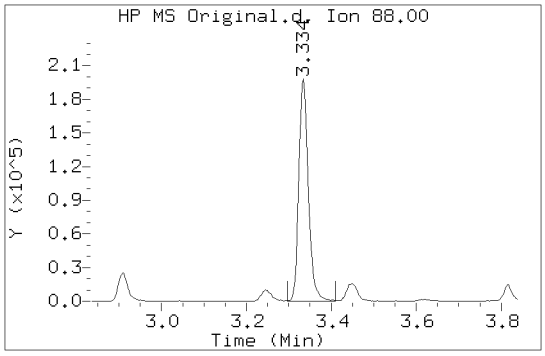
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HEIGHT
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26-Jul-2024
08:38



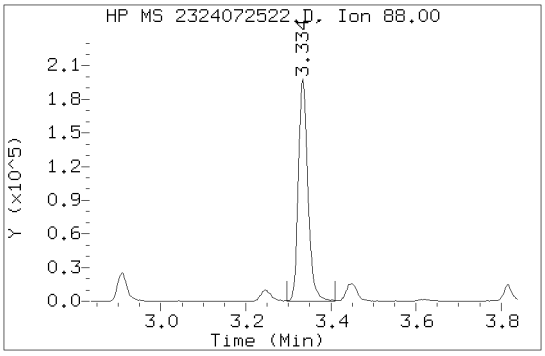
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MASS
53
AREA
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HEIGHT
390544
26-Jul-2024
08:42



BEFORE
MASS
88
AREA
304188
HEIGHT
198144
26-Jul-2024
08:38



AFTER
MASS
88
AREA
304188
HEIGHT
198144
26-Jul-2024
08:42



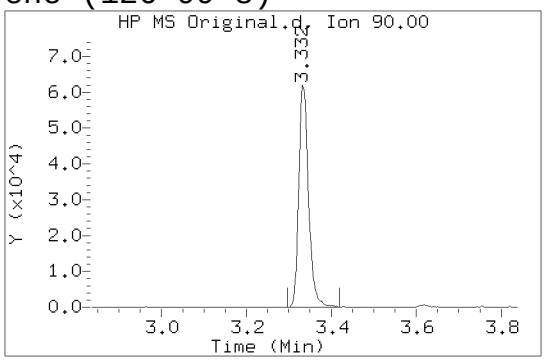
Data File : \\ALMDTWS014\TargetData\Chem2\ms23.i\23_2024\23240725.b\2324072522.D
Inj Date : 25-JUL-2024 17:51
InstruID : ms23.i
LabSampID : 1801

Chloroprene (126-99-8)

Reason Code:

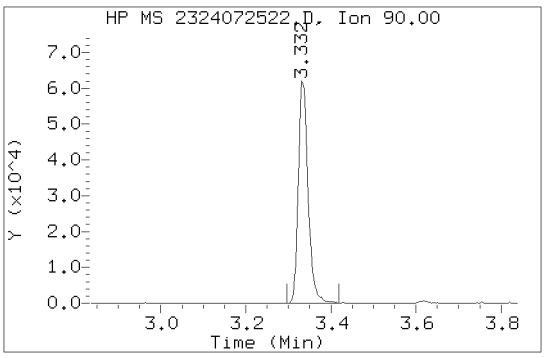
BEFORE

MASS
90
AREA
97501
HEIGHT
62072
26-Jul-2024
08:38



AFTER

MASS
90
AREA
97501
HEIGHT
62072
26-Jul-2024
08:42

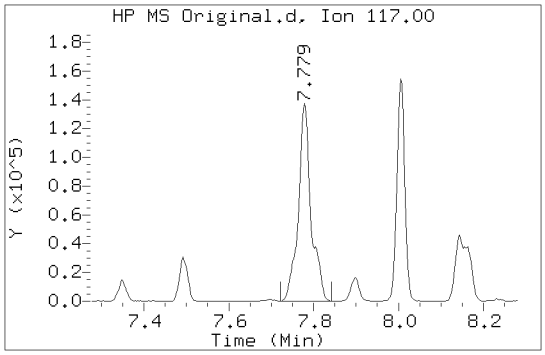


Pentachloroethane (76-01-7)

Reason Code:

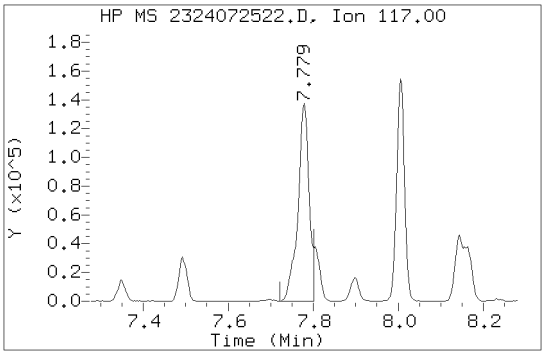
BEFORE

MASS
117
AREA
281775
HEIGHT
137536
26-Jul-2024
08:38



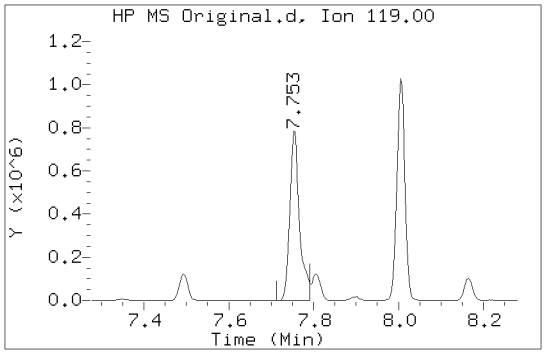
AFTER

MASS
117
AREA
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HEIGHT
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26-Jul-2024
08:42



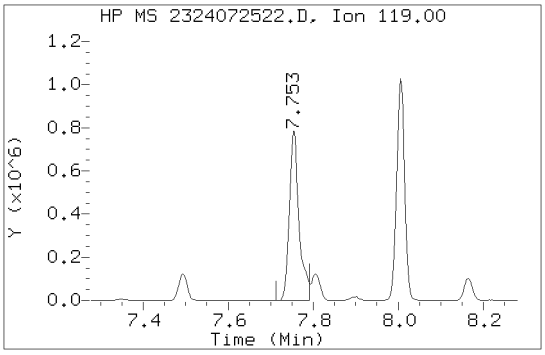
BEFORE

MASS
119
AREA
1254313
HEIGHT
785792
26-Jul-2024
08:38



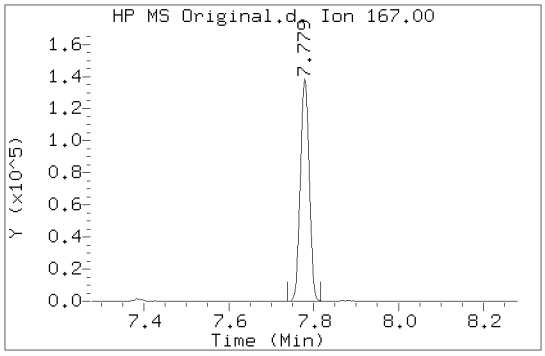
AFTER

MASS
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AREA
1254313
HEIGHT
785792
26-Jul-2024
08:42



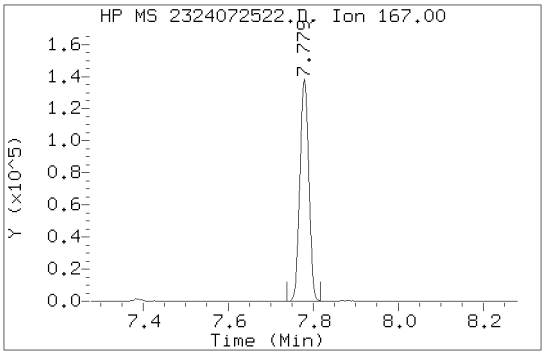
BEFORE

MASS
167
AREA
197908
HEIGHT
138560
26-Jul-2024
08:38



AFTER

MASS
167
AREA
197908
HEIGHT
138560
26-Jul-2024
08:42



UNASSIGNED PEAK REPORT

Report Date: 07/26/2024 08:42
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms23.i/23_2024/23240725.b/232407252
Inj Date: 25-JUL-2024 17:51
Operator: ILY

There were no Unassigned peaks in this sample!

Standard Traceability

Volatiles Standard Log

STANDARD NAME: BFB APR 17

VOA 0250

Prep By: TMP Prep Date: **4/17/2024** Exp Date: 10/17/2024

Final volume: 50 mL	Solvent: MeOH	Chem ID#: 240328002

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
4-Bromofluorobenzene Mix	1000	RESTEK	HS927	1000	4/17/2024	5/31/2028	231211002	TMP
	250		HS904	500				

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0197732

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	2,017.0 µg/mL	+/- 113.3177

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

4-Bromofluorobenzene

Opened By/Date
Expiration Date 05/31/2028
Lot Number A0197732
Chem ID 231211002

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

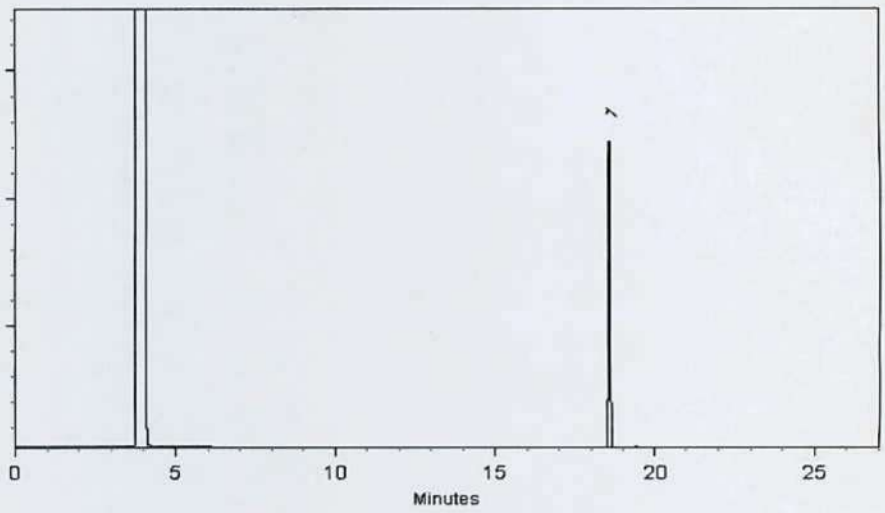
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bryan Snyder - Operations Tech I

Date Mixed: 04-May-2023 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 08-May-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: AR 8260 IS

VOA 0258

Prep By: JTH Prep Date: **5/7/2024** Exp Date: 11/7/2024

Final volume: 100 mL	Solvent: MeOH	Chem ID#: 240328002

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
8260A Internal Std. Mix	1200	RESTEK	HS927	1000	5/7/2024	5/31/2028	231205006	JTH

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 **Lot No.:** A0198297

Description : 8260A Internal Standard Mix

8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Fluorobenzene	462-06-6	BCBZ5549	99%	2,504.7 µg/mL	+/- 140.7155
2	Chlorobenzene-d5	3114-55-4	PR-29571	99%	2,513.3 µg/mL	+/- 141.2024
3	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	2,515.3 µg/mL	+/- 141.3148

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

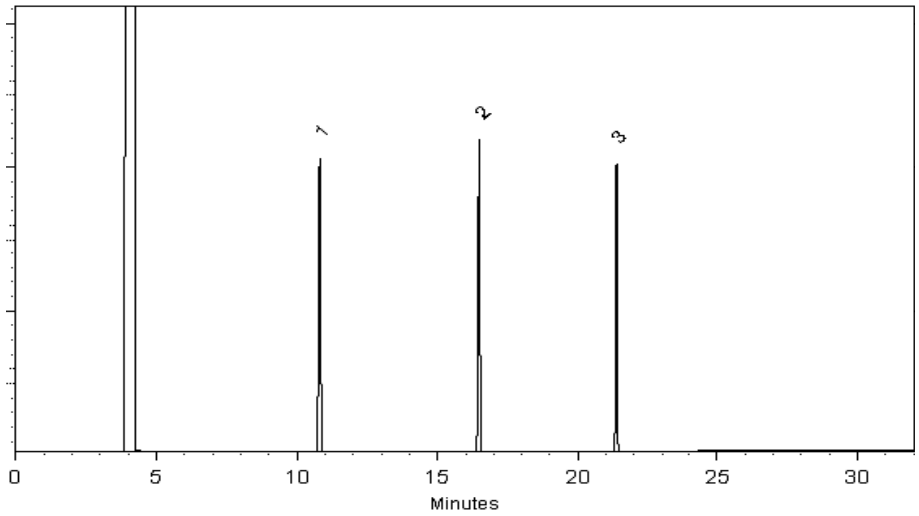
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bryan Snyder - Operations Tech I

Date Mixed: 22-May-2023 **Balance Serial #** 1128342314

Dillan Murphy - Operations Technician I

Date Passed: 24-May-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: AR 8260 SS

VOA 0259

Prep By: JTH Prep Date: **5/7/2024** Exp Date: 11/7/2024

Final volume: 100 mL	Solvent: MeOH	Chem ID#: 240328002

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
8260A Surrogate Mix	1200	RESTEK	HS927	1000	5/7/2024	5/31/2028	230725008	JTH

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed

8260A Surrogate Mix

Catalog No. : 30240 **Lot No.:** A0197611

Description : 8260A Surrogate Mix

8260A Surrogate Mix 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

Opened By/Date

Expiration Date 05/31/2028

Lot Number A0197611

Chem ID 230725008

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dibromofluoromethane	1868-53-7	022013	99%	2,500.0 µg/mL	+/- 140.4392
2	1,2-Dichloroethane-d4	17060-07-0	PR-32845	99%	2,507.0 µg/mL	+/- 140.8324
3	Toluene-d8	2037-26-5	I-27008	99%	2,503.6 µg/mL	+/- 140.6414
4	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	2,503.4 µg/mL	+/- 140.6302

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

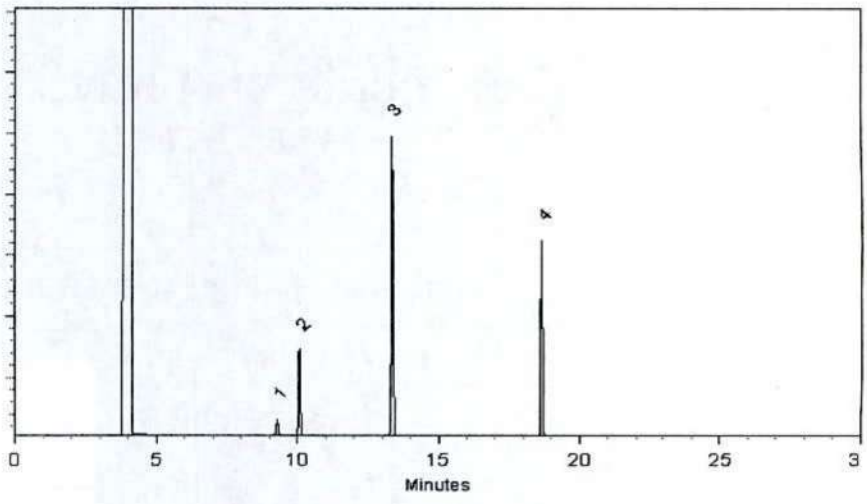
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Daniel Wasson - Operations Tech I

Date Mixed: 01-May-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-May-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: Antifoam

VOA 0261

Prep By: ILY Prep Date: **5/8/2024** Exp Date: 11/8/2024

Final volume: 200 mL	Solvent: DI H2O	Chem ID#: NA

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
Antifoam SE-15	10000	SIGMA	HS1002	10000	9/1/2021	2/17/2026	210217002	DPC

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Antifoam SE-15 - aqueous emulsion for bacterial and mammalian systems

Product Number:	**A8582**
Batch Number:	**MKCN4902**
Brand:	SIGMA
Quality Release Date:	27 JAN 2021

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Emulsion	Emulsion
Suitability Suitable for use in bacterial fermentation	Conforms	Conforms

Michael Grady, Manager
Quality Control
Milwaukee, WI US



Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Volatiles Standard Log

STANDARD NAME: QVOALCS

VOA 0270

Prep By: TMP Prep Date: **5/22/2024** Exp Date: 8/22/2024

Final volume: 50 mL	Solvent: MeOH	Chem ID#: 240328002

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
Q Ketones	500	RESTEK	HS904	500	5/22/2024	5/31/2026	230302013	TMP
Q 1-Bromopropane	500	RESTEK	HS904	500	5/22/2024	9/30/2024	221207024	TMP
Q 2-Chloroethyl vinyl ether	500	RESTEK	HS904	500	5/22/2024	2/28/2025	230302015	TMP
Q Acetates	500	RESTEK	HS904	500	5/22/2024	9/30/2024	230906016	TMP
Q Additions	500	RESTEK	HS904	500	5/22/2024	3/31/2025	230906004	TMP
Q Mega Mix	500	RESTEK	HS904	500	5/22/2024	4/30/2025	231205009	TMP
Q Acrolein	937.5	RESTEK	HS904	500	5/22/2024	8/31/2024	230906018	TMP
			HS994	25				

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 563565.SEC **Lot No.:** A0176834

Description : Custom 1-Bromopropane Standard

Custom 1-Bromopropane Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

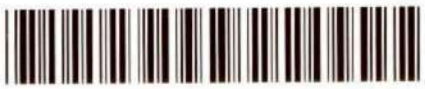
CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromopropane (n-propyl bromide)	2,008.0 µg/mL	+/- 18.6733	µg/mL	Gravimetric
	CAS # 106-94-5.SEC (Lot JB2CE)		+/- 113.5259	µg/mL	Unstressed
	Purity 99%		+/- 116.1390	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Custom 1-Bromopropane Standard

Opened By/Date
Expiration Date 09/30/2024
Lot Number A0176834
Chem ID 221207024



Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

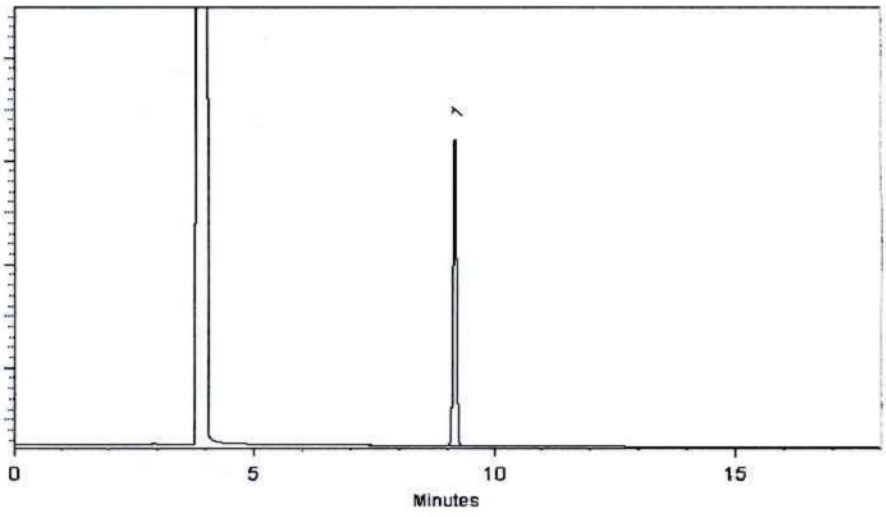
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bradley Meyer

Date Mixed: 27-Sep-2021 **Balance:** B345965662

Marlina Cowan - Operations Tech I

Date Passed: 28-Sep-2021

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 559848.SEC **Lot No.:** A0195189

Description : Custom Ketones Mix

Custom Ketones Mix 10,000µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

Custom Ketones Mix

Opened By/Date

Expiration Date 05/31/2026

Lot Number A0195189

Chem ID 230302013

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,1-Dichloro-2-propanone	513-88-2 *	RD230110	96%	10,028.2 µg/mL	+/- 346.6192
2	2-Butanone (MEK)	78-93-3.SEC	RGZ2A	99%	10,030.0 µg/mL	+/- 346.6828
3	2-Hexanone	591-78-6.SEC	V3NRA	99%	10,044.0 µg/mL	+/- 347.1667
4	4-Methyl-2-pentanone (MIBK)	108-10-1.SEC	E29T040	99%	10,030.0 µg/mL	+/- 346.6828
5	Acetone	67-64-1.SEC	T20G008	99%	10,034.0 µg/mL	+/- 346.8210

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Matt Fragassi - Mix Technician

Date Mixed: 27-Feb-2023 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30265.SEC **Lot No.:** A0157998

Description : 2-Chloroethyl vinyl ether Standard

2-Chloroethyl vinyl ether Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,005.3 µg/mL	+/- 11.7684	µg/mL	Gravimetric
	CAS # 110-75-8.SEC (Lot BQZ2K-QD)		+/- 42.9642	µg/mL	Unstressed
	Purity 99%		+/- 44.2116	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

2-Chloroethyl vinyl ether Standard

Opened By/Date
Expiration Date 02/28/2025
Lot Number A0157998
Chem ID 230302015

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

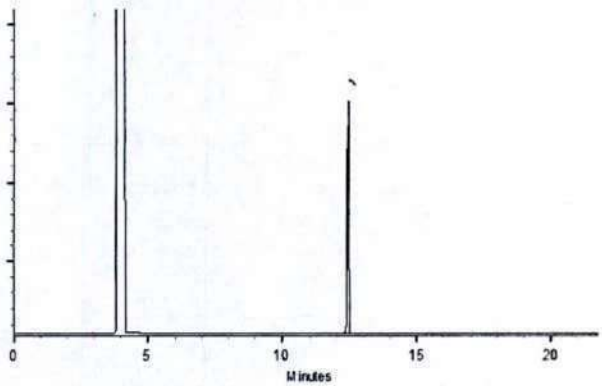
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 20-Feb-2020 **Balance:** 1127510105

Date Passed: 24-Feb-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 559847.SEC **Lot No.:** A0196255

Description : Custom VOA Additions Mix

Custom VOA Additions Mix 2,000-50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

Custom VOA Additions Mix

Opened By/Date

Expiration Date 03/31/2025

Lot Number A0196255

Chem ID 230906004

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorofluoromethane (CFC-21)	75-43-4 *	14150400	90%	2,000.3 µg/mL	+/- 24.8549
2	n-Pentane (C5)	109-66-0.SEC	FGH02	99%	2,018.5 µg/mL	+/- 25.0816
3	Diethyl ether (ethyl ether)	60-29-7.SEC	F23X068	99%	2,003.8 µg/mL	+/- 24.8983
4	2-Propanol (isopropanol)	67-63-0.SEC	TFT5I	99%	10,021.0 µg/mL	+/- 124.4566
5	1,1,2-Trichlorotrifluoroethane (CFC-113)	76-13-1.SEC	18342	99%	2,004.3 µg/mL	+/- 24.9046
6	tert-Butanol (TBA)	75-65-0.SEC	ZSJ2O	99%	10,047.3 µg/mL	+/- 124.7826
7	Acetonitrile	75-05-8.SEC	3ZDOE	99%	10,023.3 µg/mL	+/- 124.4846
8	Iodomethane (methyl iodide)	74-88-4.SEC	Y25A027	99%	2,000.8 µg/mL	+/- 24.8611
9	Allyl chloride (3-chloropropene)	107-05-1.SEC	RD210329	99%	2,010.0 µg/mL	+/- 24.9760
10	Carbon disulfide	75-15-0.SEC	MKBL1376V	99%	2,003.5 µg/mL	+/- 24.8952
11	Acrylonitrile	107-13-1.SEC	V54AD	99%	10,012.3 µg/mL	+/- 124.3480
12	Methyl acrylate	96-33-3.SEC	UASSF	99%	2,014.3 µg/mL	+/- 25.0288
13	Methyl-tert-butyl ether (MTBE)	1634-04-4.SEC	CDCQG	99%	2,003.8 µg/mL	+/- 24.8983
14	1-Propanol	71-23-8.SEC	F353E	99%	20,008.0 µg/mL	+/- 248.4910
15	n-Hexane (C6)	110-54-3.SEC	10188491	99%	2,009.3 µg/mL	+/- 24.9667
16	Diisopropyl ether (DIPE)	108-20-3.SEC	LL7TN-SH	99%	2,013.5 µg/mL	+/- 25.0195

17	Chloroprene (2-chloro-1,3-butadiene)	126-99-8 *	230308JLM	99%	2,011.3 µg/mL	+/- 24.9915
18	Ethyl-tert-butyl ether (ETBE)	637-92-3.SEC	UCI5B	98%	2,000.4 µg/mL	+/- 24.8570
19	Propionitrile	107-12-0.SEC	B4ZPC	99%	10,010.5 µg/mL	+/- 124.3262
20	Methacrylonitrile	126-98-7 *	1012014	99%	2,007.3 µg/mL	+/- 24.9418
21	Isobutanol (2-Methyl-1-propanol)	78-83-1.SEC	YNG3K	99%	20,022.5 µg/mL	+/- 248.6711
22	tert-Amyl alcohol	75-85-4.SEC	FO4AK	99%	10,011.0 µg/mL	+/- 124.3324
23	Tetrahydrofuran	109-99-9.SEC	3NYHE	99%	10,010.3 µg/mL	+/- 124.3231
24	Cyclohexane	110-82-7.SEC	YADRA	99%	2,009.3 µg/mL	+/- 24.9667
25	1-Chlorobutane (Butyl chloride)	109-69-3.SEC	Y4EUC	99%	2,006.8 µg/mL	+/- 24.9356
26	tert-Amyl methyl ether (TAME)	994-05-8.SEC	12075100	98%	2,004.6 µg/mL	+/- 24.9088
27	n-Heptane (C7)	142-82-5.SEC	TFHUC	99%	2,001.0 µg/mL	+/- 24.8642
28	Diisobutylene (2,4,4-Trimethyl-1-pentene)	107-39-1.SEC	FGJ01	97%	2,004.3 µg/mL	+/- 24.9047
29	2-Chloroethanol	107-07-3.SEC	RD230119RSRA	99%	2,005.5 µg/mL	+/- 24.9201
30	tert-Amyl ethyl ether (TAEE)	919-94-8.SEC	11370700	99%	2,012.5 µg/mL	+/- 25.0071
31	Methylcyclohexane	108-87-2.SEC	Q02QG	99%	2,010.3 µg/mL	+/- 24.9791
32	Methyl methacrylate	80-62-6.SEC	G01X021	99%	2,008.5 µg/mL	+/- 24.9574
33	Chloroacetonitrile	107-14-2.SEC	13293000	99%	10,007.0 µg/mL	+/- 124.2828
34	1,4-Dioxane	123-91-1.SEC	4ZVCG	99%	50,031.3 µg/mL	+/- 621.3601
35	2-Nitropropane	79-46-9.SEC	F43IA	99%	10,016.5 µg/mL	+/- 124.4007
36	n-Octane (C8)	111-65-9.SEC	BHIXJ	99%	2,005.3 µg/mL	+/- 24.9170
37	Ethyl methacrylate	97-63-2.SEC	AQSPO	99%	2,005.5 µg/mL	+/- 24.9201
38	1-Chlorohexane	544-10-5.SEC	13075400	99%	2,016.8 µg/mL	+/- 25.0599
39	cis-1,4-Dichloro-2-butene	1476-11-5.SEC	382409D302	96%	1,999.0 µg/mL	+/- 24.8388
40	trans-1,4-Dichloro-2-butene	110-57-6.SEC	RD230316RSR	96%	2,005.0 µg/mL	+/- 24.9134
41	Pentachloroethane	76-01-7.SEC	815779	99%	2,004.8 µg/mL	+/- 24.9108
42	1,2,3-Trimethylbenzene	526-73-8.SEC	13921700	98%	2,004.1 µg/mL	+/- 24.9027
43	Benzyl chloride	100-44-7.SEC	H29N03	99%	2,008.3 µg/mL	+/- 24.9543
44	Hexachloroethane	67-72-1.SEC	10173016	99%	2,014.3 µg/mL	+/- 25.0288
45	Nitrobenzene	98-95-3.SEC	FLYIG	99%	20,013.8 µg/mL	+/- 248.5624

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

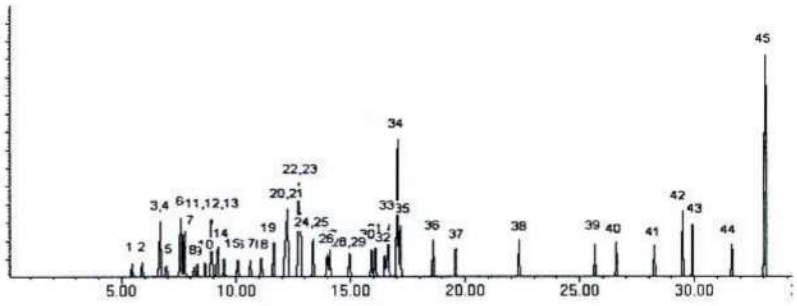
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
20.0 ml/min.

Inj. Vol
0.2µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Matt Fragassi - Mix Technician

Date Mixed: 24-Mar-2023 **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 28-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analvte(s) listed.

Catalog No. : 30489.SEC **Lot No.:** A0195744

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2024 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

8260B Acetates Mix

Opened By/Date

Expiration Date 09/30/2024

Lot Number A0195744

Chem ID 230906016

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9.SEC	LV27M	99%	2,004.0 µg/mL	+/- 69.2918
2	Vinyl acetate	108-05-4.SEC	190925KJ	99%	2,004.0 µg/mL	+/- 69.2918
3	Ethyl acetate	141-78-6.SEC	C386A-GG	99%	2,008.0 µg/mL	+/- 69.4301
4	Isopropyl acetate	108-21-4.SEC	FGL01	99%	2,012.0 µg/mL	+/- 69.5684
5	Propyl acetate	109-60-4.SEC	929400	99%	2,006.0 µg/mL	+/- 69.3609
6	Butyl acetate	123-86-4.SEC	V2L2G-GT	99%	2,002.0 µg/mL	+/- 69.2226
7	Amyl acetate	628-63-7.SEC	OGL01	99%	2,000.0 µg/mL	+/- 69.1535

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

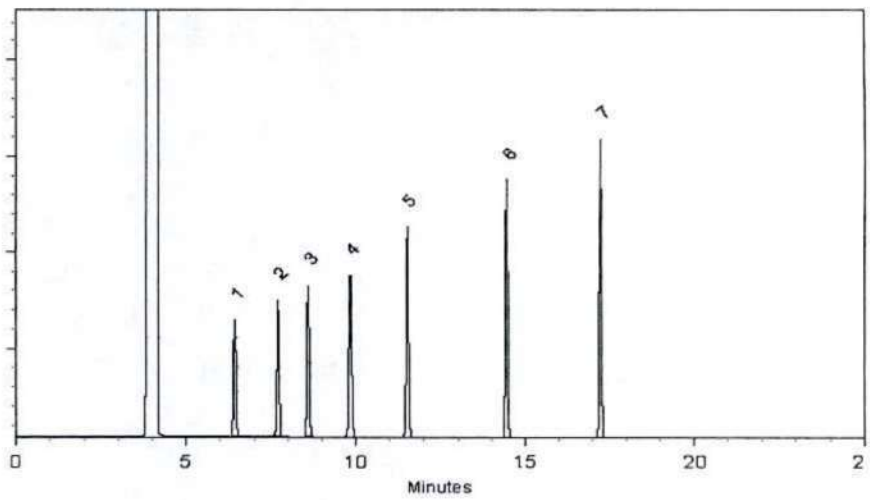
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Matt Fragassi - Mix Technician **Date Mixed:** 10-Mar-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 14-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569529.SEC **Lot No.:** A0194840

Description : Custom Acrolein Standard

Custom Acrolein Standard 8,000µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acrolein	107-02-8.SEC	RD211004S	98%	8,079.1 µg/mL	+/- 237.3697

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Water
CAS # 7732-18-5
Purity 99%

Custom Acrolein Standard

Opened By/Date
Expiration Date 08/31/2024
Lot Number A0194840
Chem ID 230906018

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

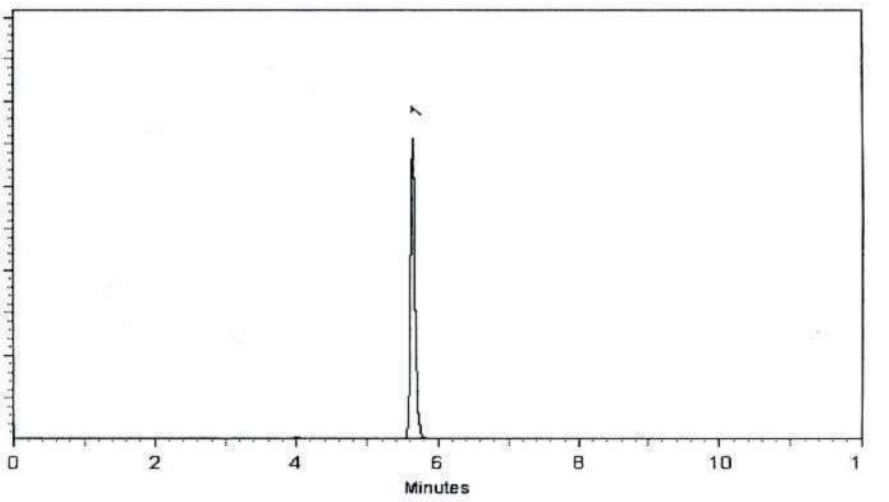
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

John Friedline - Operations Technician I

Date Mixed: 20-Feb-2023 **Balance Serial #** 1128342314

Christie Mills - Operations Tech II - ARM QC

Date Passed: 23-Feb-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

502.2 Cal200 Mega Mix

Opened By/Date
Expiration Date 04/30/2025
Lot Number A0196737
Chem ID 231205009

Catalog No. : 30431.SEC **Lot No.:** A0196737

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,1-Dichloroethene	75-35-4.SEC	9201700	99%	2,007.5 µg/mL	+/- 105.8075
2	Methylene chloride (dichloromethane)	75-09-2.SEC	FGM02	99%	2,003.5 µg/mL	+/- 105.5967
3	trans-1,2-Dichloroethene	156-60-5.SEC	TS5UB	99%	2,000.6 µg/mL	+/- 105.4439
4	1,1-Dichloroethane	75-34-3.SEC	7482000	99%	2,004.0 µg/mL	+/- 105.6231
5	2,2-Dichloropropane	594-20-7.SEC	I7E8E	99%	2,010.4 µg/mL	+/- 105.9604
6	cis-1,2-Dichloroethene	156-59-2.SEC	YZO5O	99%	2,008.6 µg/mL	+/- 105.8634
7	Chloroform	67-66-3.SEC	1297547	99%	2,001.5 µg/mL	+/- 105.4913
8	Bromochloromethane	74-97-5.SEC	13547000	99%	2,008.9 µg/mL	+/- 105.8803
9	1,1,1-trichloroethane	71-55-6 *	190123CG	98%	2,000.6 µg/mL	+/- 105.4452
10	1,1-Dichloropropene	563-58-6.SEC	556500	99%	2,007.6 µg/mL	+/- 105.8149
11	Carbon tetrachloride	56-23-5.SEC	11466	99%	2,001.5 µg/mL	+/- 105.4913
12	1,2-Dichloroethane	107-06-2.SEC	00016165	99%	2,001.3 µg/mL	+/- 105.4800
13	Benzene	71-43-2.SEC	B28Y008	99%	2,010.0 µg/mL	+/- 105.9393
14	Trichloroethene	79-01-6.SEC	H04X050	99%	2,001.8 µg/mL	+/- 105.5047
15	1,2-Dichloropropane	78-87-5.SEC	ERRBI-RH	99%	2,000.3 µg/mL	+/- 105.4270
16	Bromodichloromethane	75-27-4.SEC	13780	99%	2,001.6 µg/mL	+/- 105.4961
17	Dibromomethane	74-95-3.SEC	MOKKJ	99%	2,009.1 µg/mL	+/- 105.8908

18	cis-1,3-Dichloropropene	10061-01-5.SE487OA	98%	2,001.8	µg/mL	+/- 105.5075
19	Toluene	108-88-3.SEC YND2B-BD	99%	2,008.2	µg/mL	+/- 105.8423
20	trans-1,3-Dichloropropene	10061-02-6.SEZDMSL	96%	2,004.3	µg/mL	+/- 105.6377
21	1,1,2-Trichloroethane	79-00-5.SEC 7871500	99%	2,002.5	µg/mL	+/- 105.5440
22	1,3-Dichloropropane	142-28-9.SEC IQCON	99%	2,007.1	µg/mL	+/- 105.7875
23	Tetrachloroethene	127-18-4.SEC F09W014	99%	2,000.5	µg/mL	+/- 105.4375
24	Dibromochloromethane	124-48-1.SEC 10206360	97%	2,001.0	µg/mL	+/- 105.4636
25	1,2-Dibromoethane (EDB)	106-93-4.SEC 050675P15E	99%	2,007.5	µg/mL	+/- 105.8065
26	Chlorobenzene	108-90-7.SEC 1161936	99%	2,002.8	µg/mL	+/- 105.5585
27	1,1,1,2-Tetrachloroethane	630-20-6.SEC 13789800	99%	2,006.7	µg/mL	+/- 105.7664
28	Ethylbenzene	100-41-4.SEC XO5UA	99%	2,009.1	µg/mL	+/- 105.8929
29	m-Xylene	108-38-3.SEC 7ZV6F	99%	2,009.5	µg/mL	+/- 105.9140
30	p-Xylene	106-42-3.SEC D6UOA	99%	2,009.2	µg/mL	+/- 105.8971
31	o-Xylene	95-47-6.SEC UJ6RI	99%	2,010.8	µg/mL	+/- 105.9794
32	Styrene	100-42-5.SEC QGQ7F	99%	2,007.6	µg/mL	+/- 105.8128
33	Isopropylbenzene (cumene)	98-82-8.SEC 7P24L	99%	2,010.6	µg/mL	+/- 105.9709
34	Bromoform	75-25-2.SEC 9170700	99%	2,003.5	µg/mL	+/- 105.5957
35	1,1,2,2-Tetrachloroethane	79-34-5.SEC BCCB0724	98%	2,003.3	µg/mL	+/- 105.5855
36	1,2,3-Trichloropropane	96-18-4.SEC 6V2ED	99%	2,006.4	µg/mL	+/- 105.7496
37	n-Propylbenzene	103-65-1.SEC XCGEC	99%	2,008.2	µg/mL	+/- 105.8465
38	Bromobenzene	108-86-1.SEC 8DKWJ	99%	2,008.5	µg/mL	+/- 105.8592
39	1,3,5-Trimethylbenzene	108-67-8.SEC GI2SM	99%	2,008.7	µg/mL	+/- 105.8697
40	2-Chlorotoluene	95-49-8.SEC BRHPM	99%	2,007.4	µg/mL	+/- 105.8002
41	4-Chlorotoluene	106-43-4.SEC S5SKD	99%	2,009.2	µg/mL	+/- 105.8971
42	tert-Butylbenzene	98-06-6.SEC D6OHC	99%	2,008.7	µg/mL	+/- 105.8718
43	1,2,4-Trimethylbenzene	95-63-6.SEC JHZDD	99%	2,009.1	µg/mL	+/- 105.8929
44	sec-Butylbenzene	135-98-8.SEC O4HRF	99%	2,010.2	µg/mL	+/- 105.9520
45	4-Isopropyltoluene (p-cymene)	99-87-6.SEC 13889300	98%	2,008.3	µg/mL	+/- 105.8494
46	1,3-Dichlorobenzene	541-73-1.SEC FMDFD	99%	2,000.1	µg/mL	+/- 105.4191
47	1,4-Dichlorobenzene	106-46-7.SEC YWKDC-MK	99%	2,005.0	µg/mL	+/- 105.6742
48	n-Butylbenzene	104-51-8.SEC MMPGA	99%	2,010.8	µg/mL	+/- 105.9836
49	1,2-Dichlorobenzene	95-50-1.SEC R6QDM	99%	2,003.2	µg/mL	+/- 105.5809
50	1,2-Dibromo-3-chloropropane	96-12-8.SEC Q135-105	99%	2,008.5	µg/mL	+/- 105.8592
51	1,2,4-Trichlorobenzene	120-82-1.SEC 3LYYC	99%	2,009.2	µg/mL	+/- 105.8993
52	Hexachlorobutadiene	87-68-3.SEC 13889400	97%	2,008.5	µg/mL	+/- 105.8593
53	Naphthalene	91-20-3.SEC AM5NG	99%	2,005.4	µg/mL	+/- 105.6969

54	1,2,3-Trichlorobenzene	87-61-6.SEC A0043055	99%	2,009.3 µg/mL	+/-	105.9014

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

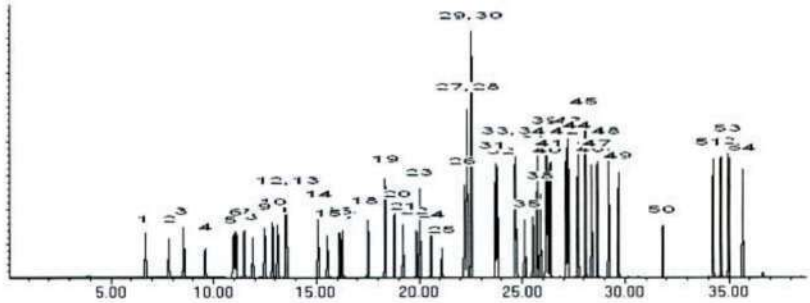
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
20.0 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Daniel Wasson - Operations Tech I **Date Mixed:** 06-Apr-2023 **Balance Serial #** 1128342314

Christie Mills - Operations Tech II - ARM QC **Date Passed:** 10-Apr-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: VOANEW

VOA 0283

Prep By: TMP Prep Date: **6/17/2024** Exp Date: 9/17/2024

Final volume: 10 mL	Solvent: MeOH	Chem ID#: 240509006

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
V Ketones	1000	RESTEK	HS927	1000	6/17/2024	2/28/2027	231115004	TMP
V 1-Bromopropane	1000	RESTEK	HS927	1000	6/17/2024	2/28/2026	240304024	TMP
V 2-Chloroethyl vinyl ether	1000	RESTEK	HS927	1000	6/17/2024	1/31/2029	240304015	TMP
V Acetates	1000	RESTEK	HS927	1000	6/17/2024	9/30/2024	231205005	TMP
V Additions	1000	RESTEK	HS927	1000	6/17/2024	3/31/2025	231205010	TMP
V Mega Mix	1000	RESTEK	HS927	1000	6/17/2024	12/31/2025	240304014	TMP
V Acrolein	1000	RESTEK	HS927	1000	6/17/2024	8/31/2025	240301002	TMP
	250		HS904	500				

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

gravimetric

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 559848 **Lot No.:** A0204299

Description : Custom Ketones Mix

Custom Ketones Mix 10,000µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,1-Dichloro-2-propanone	513-88-2	RD230110	96%	10,074.2 µg/mL	+/- 348.2119
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	10,082.0 µg/mL	+/- 348.4801
3	2-Hexanone	591-78-6	MKCQ6663	99%	10,046.0 µg/mL	+/- 347.2358
4	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	10,062.0 µg/mL	+/- 347.7888
5	Acetone	67-64-1	SHBQ8504	99%	10,052.0 µg/mL	+/- 347.4432

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Custom Ketones Mix

Opened By/Date
Expiration Date 02/28/2027
Lot Number A0204299
Chem ID 231115004

Brittany Federinko - Operations Tech I

Date Mixed: 09-Nov-2023 **Balance:** B251644995

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0196115

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2024 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

8260B Acetates Mix

Opened By/Date

Expiration Date 09/30/2024

Lot Number A0196115

Chem ID 231205005

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,013.7 µg/mL	+/- 69.6015
2	Vinyl acetate	108-05-4	RD220630	99%	2,020.0 µg/mL	+/- 69.8205
3	Ethyl acetate	141-78-6	SHBP9289	99%	2,019.3 µg/mL	+/- 69.7974
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,014.0 µg/mL	+/- 69.6131
5	Propyl acetate	109-60-4	TFFKL	99%	2,014.7 µg/mL	+/- 69.6361
6	Butyl acetate	123-86-4	SHBP6314	99%	2,014.0 µg/mL	+/- 69.6131
7	Amyl acetate	628-63-7	41325/1	97%	2,016.3 µg/mL	+/- 69.6928

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

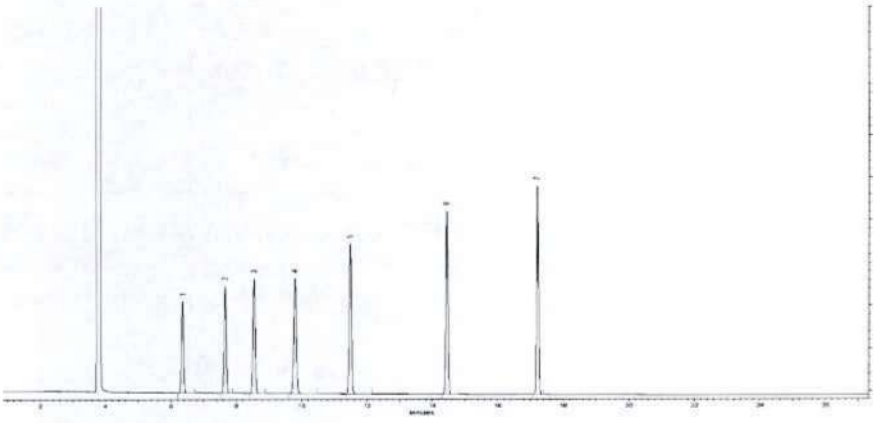
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bethany Lowery - Operations Tech I

Date Mixed: 21-Mar-2023 **Balance Serial #** B251644995

John Lidgett - AD Chemist

Date Passed: 29-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 559847 **Lot No.:** A0196230

Description : Custom VOA Additions Mix

Custom VOA Additions Mix 2,000-50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

Custom VOA Additions Mix

Opened By/Date

Expiration Date 03/31/2025

Lot Number A0196230

Chem ID 231205010

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorofluoromethane (CFC-21)	75-43-4	14150400	90%	2,000.3 µg/mL	+/- 24.8549
2	n-Pentane (C5)	109-66-0	SHBQ0917	99%	2,019.8 µg/mL	+/- 25.0972
3	Diethyl ether (ethyl ether)	60-29-7	SHBP5008	99%	2,014.3 µg/mL	+/- 25.0288
4	2-Propanol (isopropanol)	67-63-0	SHBP6610	99%	10,097.3 µg/mL	+/- 125.4036
5	1,1,2-Trichlorotrifluoroethane (CFC-113)	76-13-1	00018685	99%	2,007.5 µg/mL	+/- 24.9449
6	tert-Butanol (TBA)	75-65-0	101619K21F-1	99%	10,090.5 µg/mL	+/- 125.3198
7	Acetonitrile	75-05-8	SHBH6233	99%	10,088.8 µg/mL	+/- 125.2981
8	Iodomethane (methyl iodide)	74-88-4	MKCN8012	99%	2,006.3 µg/mL	+/- 24.9294
9	Allyl chloride (3-chloropropene)	107-05-1	RD221118RSR	99%	2,009.3 µg/mL	+/- 24.9667
10	Carbon disulfide	75-15-0	N28F701	99%	2,010.5 µg/mL	+/- 24.9822
11	Acrylonitrile	107-13-1	102466R02E	99%	10,087.8 µg/mL	+/- 125.2856
12	Methyl acrylate	96-33-3	SHBG6616V	99%	2,011.5 µg/mL	+/- 24.9947
13	Methyl-tert-butyl ether (MTBE)	1634-04-4	SHBP0179	99%	2,019.3 µg/mL	+/- 25.0910
14	1-Propanol	71-23-8	098913R02E	99%	20,180.0 µg/mL	+/- 250.6272
15	n-Hexane (C6)	110-54-3	SHBL9879	99%	2,016.3 µg/mL	+/- 25.0537
16	Diisopropyl ether (DIPE)	108-20-3	STBK3450	99%	2,019.8 µg/mL	+/- 25.0972

17	Chloroprene (2-chloro-1,3-butadiene)	126-99-8	230308JLM	99%	2,010.3	µg/mL	+/-	24.9791
18	Ethyl-tert-butyl ether (ETBE)	637-92-3	MKCP5997	99%	2,012.0	µg/mL	+/-	25.0009
19	Propionitrile	107-12-0	BCCF4167	99%	10,072.0	µg/mL	+/-	125.0900
20	Methacrylonitrile	126-98-7	1012014	99%	2,015.5	µg/mL	+/-	25.0444
21	Isobutanol (2-Methyl-1-propanol)	78-83-1	SHBP7066	99%	20,185.0	µg/mL	+/-	250.6892
22	tert-Amyl alcohol	75-85-4	STBB1898V	99%	10,088.8	µg/mL	+/-	125.2981
23	Tetrahydrofuran	109-99-9	SHBQ0910	99%	10,086.0	µg/mL	+/-	125.2639
24	Cyclohexane	110-82-7	MKCQ2001	99%	2,014.5	µg/mL	+/-	25.0319
25	1-Chlorobutane (Butyl chloride)	109-69-3	SHBG2918V	99%	2,010.5	µg/mL	+/-	24.9822
26	tert-Amyl methyl ether (TAME)	994-05-8	HMBJ0825	99%	2,010.3	µg/mL	+/-	24.9791
27	n-Heptane (C7)	142-82-5	044743N07T	99%	2,008.3	µg/mL	+/-	24.9543
28	Diisobutylene (2,4,4-Trimethyl-1-pentene)	107-39-1	MKBD3091	99%	2,011.3	µg/mL	+/-	24.9915
29	2-Chloroethanol	107-07-3	RD230123RSR	99%	2,014.5	µg/mL	+/-	25.0319
30	tert-Amyl ethyl ether (TAEE)	919-94-8	IKVYB	97%	2,014.4	µg/mL	+/-	25.0313
31	Methylcyclohexane	108-87-2	SHBN1699	99%	2,010.3	µg/mL	+/-	24.9791
32	Methyl methacrylate	80-62-6	MKCQ2756	99%	2,014.3	µg/mL	+/-	25.0288
33	Chloroacetonitrile	107-14-2	MKBG6249V	99%	10,091.8	µg/mL	+/-	125.3353
34	1,4-Dioxane	123-91-1	SHBP8653	99%	50,486.3	µg/mL	+/-	627.0109
35	2-Nitropropane	79-46-9	BCCB9352	97%	10,099.4	µg/mL	+/-	125.4303
36	n-Octane (C8)	111-65-9	SHBP9758	99%	2,012.3	µg/mL	+/-	25.0040
37	Ethyl methacrylate	97-63-2	MKCN6206	97%	2,007.7	µg/mL	+/-	24.9469
38	1-Chlorohexane	544-10-5	BCBS3368V	99%	2,009.0	µg/mL	+/-	24.9636
39	cis-1,4-Dichloro-2-butene	1476-11-5	RD220228	97%	2,015.4	µg/mL	+/-	25.0433
40	trans-1,4-dichloro-2-butene	110-57-6	RD221227RSRA	94%	2,015.4	µg/mL	+/-	25.0426
41	Pentachloroethane	76-01-7	13550700	97%	2,010.6	µg/mL	+/-	24.9831
42	1,2,3-Trimethylbenzene	526-73-8	8776.10-36	98%	2,013.4	µg/mL	+/-	25.0184
43	Benzyl chloride	100-44-7	MKCM5986	99%	2,014.8	µg/mL	+/-	25.0350
44	Hexachloroethane	67-72-1	QTORH	99%	2,011.8	µg/mL	+/-	24.9978
45	Nitrobenzene	98-95-3	10224044	99%	20,167.0	µg/mL	+/-	250.4657

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

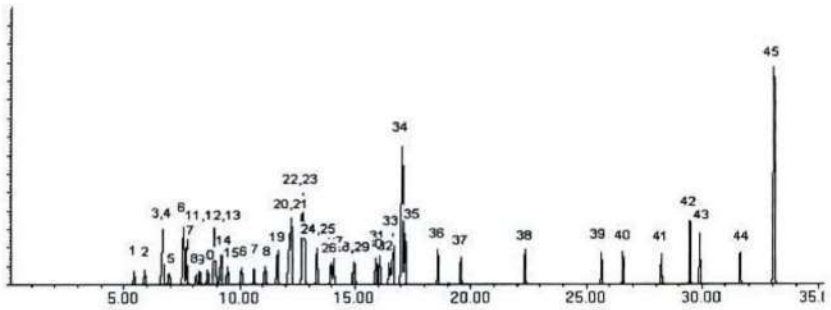
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
20.0 ml/min.

Inj. Vol
0.2µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko - Operations Tech I — **Date Mixed:** 23-Mar-2023 — **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC — **Date Passed:** 28-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569529 **Lot No.:** A0208150

Description : Custom Acrolein Standard

Custom Acrolein Standard 8,000µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acrolein	107-02-8	RP240118CTH	99%	8,080.0 µg/mL	+/- 244.3344

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Water
CAS # 7732-18-5
Purity 99%

Custom Arcolein Standard

Opened By/Date
Expiration Date 08/31/2025
Lot Number A0208150
Chem ID 240301002



Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

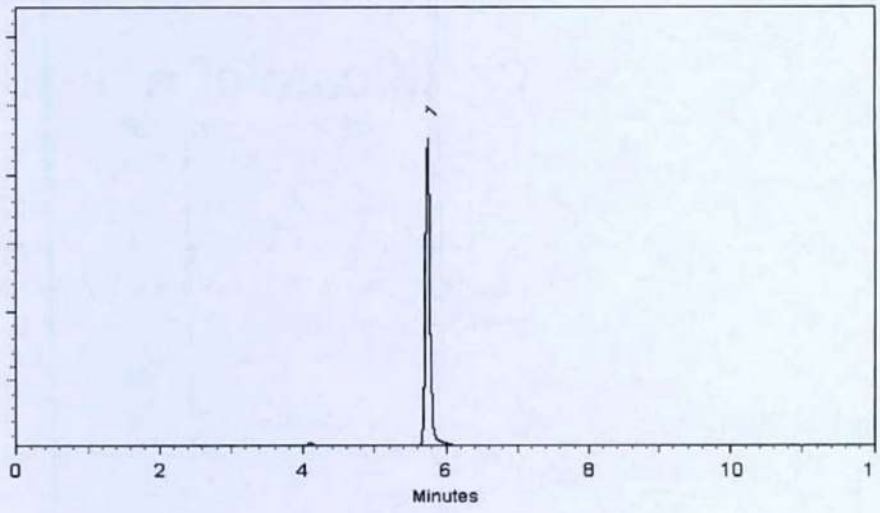
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I **Date Mixed:** 21-Feb-2024 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 23-Feb-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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chromatographic plus

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30431 **Lot No.:** A0205281

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

502.2 Cal2000 Mega-Mix

Opened By/Date	
Expiration Date	12/31/2025
Lot Number	A0205281
Chem ID	240304014

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,1-dichloroethene	75-35-4	SHBG8609V	99%	2,005.0 µg/mL	+/- 90.4381
2	Methylene chloride (dichloromethane)	75-09-2	SHBQ6376	99%	2,004.2 µg/mL	+/- 90.4020
3	trans-1,2-Dichloroethene	156-60-5	MKCP9516	99%	2,003.5 µg/mL	+/- 90.3704
4	1,1-Dichloroethane	75-34-3	852900	99%	2,004.1 µg/mL	+/- 90.3986
5	2,2-Dichloropropane	594-20-7	RD230426	99%	2,013.2 µg/mL	+/- 90.8205
6	cis-1,2-Dichloroethene	156-59-2	MKCP7830	99%	2,014.0 µg/mL	+/- 90.8529
7	chloroform	67-66-3	SHBN8469	99%	2,003.3 µg/mL	+/- 90.3625
8	Bromochloromethane	74-97-5	230810JLM	99%	2,016.0 µg/mL	+/- 90.9450
9	1,1,1-trichloroethane	71-55-6	RD230728RSR	99%	2,004.6 µg/mL	+/- 90.4189
10	1,1-Dichloropropene	563-58-6	230825JLM	99%	2,018.9 µg/mL	+/- 91.0767
11	carbon tetrachloride	56-23-5	SHBP4875	99%	2,003.6 µg/mL	+/- 90.3727
12	1,2-Dichloroethane	107-06-2	SHBQ5408	99%	2,003.4 µg/mL	+/- 90.3636
13	Benzene	71-43-2	MKCS3357	99%	2,017.4 µg/mL	+/- 91.0081
14	Trichloroethene	79-01-6	SHBN3720	99%	2,003.8 µg/mL	+/- 90.3828
15	1,2-Dichloropropane	78-87-5	BCBR0882V	99%	2,003.6 µg/mL	+/- 90.3738
16	bromodichloromethane	75-27-4	MKCF8470	99%	2,003.5 µg/mL	+/- 90.3693
17	Dibromomethane	74-95-3	10233302	99%	2,014.7 µg/mL	+/- 90.8854

18	cis-1,3-Dichloropropene	10061-01-5	RP231025CTH	99%	2,003.4	µg/mL	+/- 90.3636
19	Toluene	108-88-3	MKCS9989	99%	2,019.0	µg/mL	+/- 91.0785
20	trans-1,3-Dichloropropene	10061-02-6	RD230727RSR	99%	2,003.0	µg/mL	+/- 90.3467
21	1,1,2-Trichloroethane	79-00-5	FGB01	99%	2,003.6	µg/mL	+/- 90.3761
22	1,3-Dichloropropane	142-28-9	BCCH5357	99%	2,017.1	µg/mL	+/- 90.9955
23	Tetrachloroethene	127-18-4	SHBQ0051	99%	2,003.9	µg/mL	+/- 90.3885
24	dibromochloromethane	124-48-1	MKCQ4517	99%	2,002.8	µg/mL	+/- 90.3366
25	1,2-Dibromoethane (EDB)	106-93-4	BCCH7113	99%	2,009.0	µg/mL	+/- 90.6292
26	Chlorobenzene	108-90-7	SHBN6640	99%	2,003.3	µg/mL	+/- 90.3603
27	1,1,1,2-Tetrachloroethane	630-20-6	GC01	99%	2,013.8	µg/mL	+/- 90.8439
28	Ethylbenzene	100-41-4	094632L21G	99%	2,006.8	µg/mL	+/- 90.5299
29	m-Xylene	108-38-3	SHBN6673	99%	2,018.7	µg/mL	+/- 91.0677
30	p-Xylene	106-42-3	SHBP5191	99%	2,008.0	µg/mL	+/- 90.5841
31	o-Xylene	95-47-6	SHBN5105	99%	2,016.3	µg/mL	+/- 90.9594
32	Styrene	100-42-5	MKCQ3390	99%	2,014.8	µg/mL	+/- 90.8926
33	Isopropylbenzene (cumene)	98-82-8	Z20D022	99%	2,011.4	µg/mL	+/- 90.7393
34	bromoform	75-25-2	050494L04R	99%	2,004.6	µg/mL	+/- 90.4200
35	1,1,2,2-Tetrachloroethane	79-34-5	QQJ41	99%	2,004.1	µg/mL	+/- 90.3975
36	1,2,3-Trichloropropane	96-18-4	Q91-34	98%	2,013.8	µg/mL	+/- 90.8449
37	n-Propylbenzene	103-65-1	095067T18C	99%	2,018.4	µg/mL	+/- 91.0514
38	Bromobenzene	108-86-1	MKCQ7174	99%	2,016.9	µg/mL	+/- 90.9847
39	1,3,5-Trimethylbenzene	108-67-8	BCCF4166	99%	2,017.0	µg/mL	+/- 90.9901
40	2-Chlorotoluene	95-49-8	235783M23T	99%	2,017.8	µg/mL	+/- 91.0280
41	4-Chlorotoluene	106-43-4	BCCG9286	99%	2,014.1	µg/mL	+/- 90.8602
42	tert-Butylbenzene	98-06-6	STBJ1937	99%	2,005.2	µg/mL	+/- 90.4596
43	1,2,4-Trimethylbenzene	95-63-6	MKCS3775	99%	2,015.9	µg/mL	+/- 90.9396
44	sec-Butylbenzene	135-98-8	MKCP2266	99%	2,011.0	µg/mL	+/- 90.7194
45	p-Isopropyltoluene (p-Cymene)	99-87-6	MKCR6143	99%	2,014.6	µg/mL	+/- 90.8800
46	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	2,003.4	µg/mL	+/- 90.3670
47	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	2,005.0	µg/mL	+/- 90.4381
48	n-Butylbenzene	104-51-8	09418JJ	99%	2,005.3	µg/mL	+/- 90.4614
49	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	2,003.8	µg/mL	+/- 90.3817
50	1,2-Dibromo-3-chloropropane	96-12-8	HBMVB	97%	2,005.1	µg/mL	+/- 90.4535
51	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	2,015.0	µg/mL	+/- 90.8981
52	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	2,001.7	µg/mL	+/- 90.3003
53	Naphthalene	91-20-3	STBL1057	99%	2,008.9	µg/mL	+/- 90.6256

54	1,2,3-Trichlorobenzene	87-61-6	MKBX7627V	99%	2,012.3 µg/mL	+/- 90.7772

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

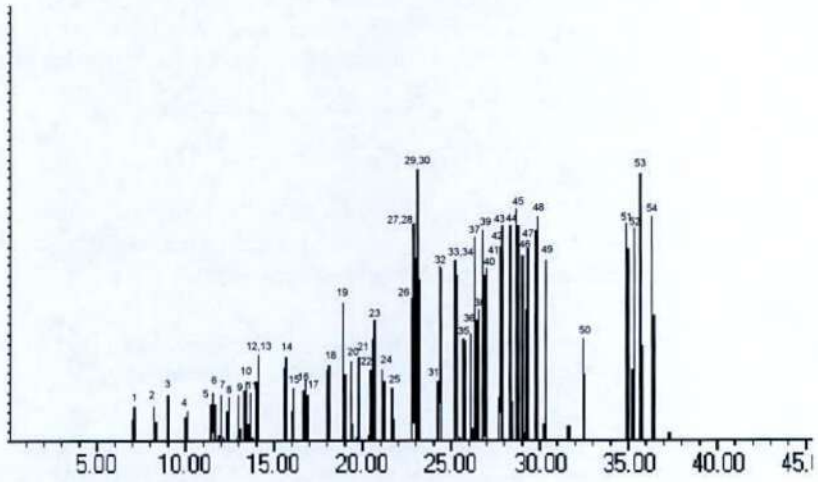
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
20.0 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope Riglin - Operations Tech I

Date Mixed: 10-Dec-2023 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

Date Passed: 13-Dec-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30265 **Lot No.:** A0206207

Description : 2-Chloroethyl vinyl ether Standard

2-Chloroethyl vinyl ether Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Chloroethyl vinyl ether	110-75-8	MKCK6742	99%	2,003.5 µg/mL	+/- 24.8952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

2-Chloroethyl vinyl ether Standard

Opened By/Date
Expiration Date 01/31/2029
Lot Number A0206207
Chem ID 240304015

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

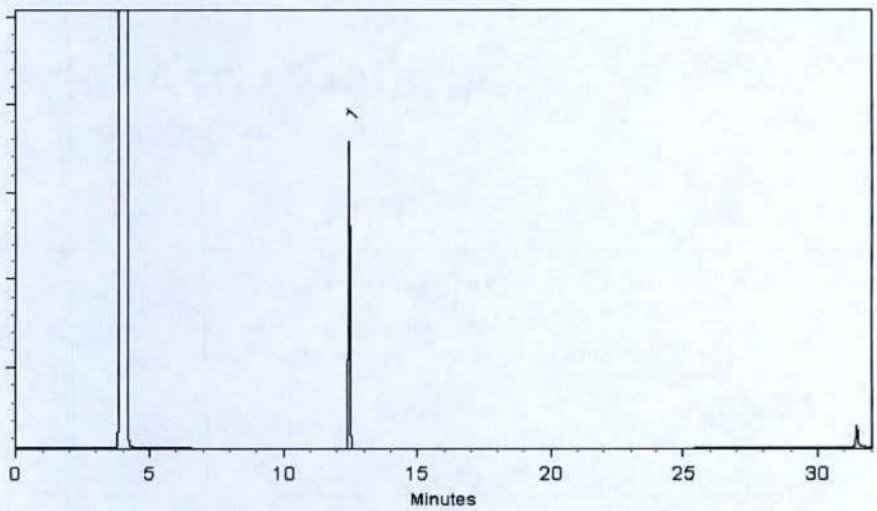
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I **Date Mixed:** 04-Jan-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 05-Jan-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 563565 **Lot No.:** A0194815

Description : Custom 1-Bromopropane Standard

Custom 1-Bromopropane Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromopropane (n-propyl bromide)	106-94-5	STBF3694V	99%	2,010.0 µg/mL	+/- 112.9395

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Custom 1-Bromopropane Standard

Opened By/Date
Expiration Date 02/28/2026
Lot Number A0194815
Chem ID 240304024

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

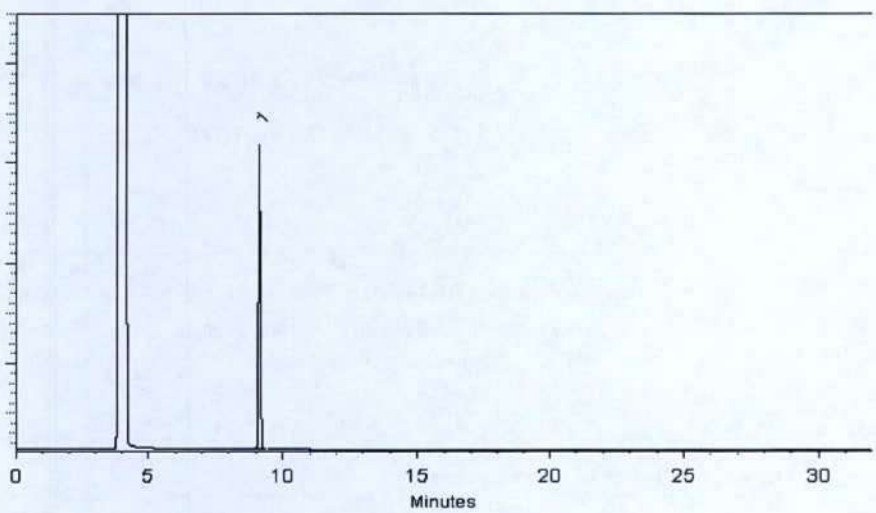
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 17-Feb-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 23-Feb-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: Q-GAS

VOA 0298

Prep By: TMP Prep Date: **7/17/2024** Exp Date: 7/24/2024

Final volume: 10 mL	Solvent: MeOH	Chem ID#: 240711004

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
502.2 Cal. Mix #1	1000	RESTEK	HS927	1000	7/17/2024	9/30/2026	240402006	TMP

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30439.SEC **Lot No.:** A0157247

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 200µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2026 **Storage:** 0°C or colder

502.2 Calibration Mix #1

Opened By/Date	
Expiration Date	09/30/2026
Lot Number	A0157247
Chem ID	240402006

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 26165) **Purity** 99%	201.2 µg/mL	+/- 2.6458 +/- 11.5302 +/- 11.7886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	201.2 µg/mL	+/- 2.8139 +/- 11.5650 +/- 11.8225	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	203.9 µg/mL	+/- 4.8113 +/- 12.3458 +/- 12.5939	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	200.4 µg/mL	+/- 4.2746 +/- 11.9627 +/- 12.2098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	202.9 µg/mL	+/- 3.2680 +/- 11.7770 +/- 12.0343	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4.SEC (Lot 253600) **Purity** 99%	200.3 µg/mL	+/- 10.4978 +/- 15.3285 +/- 15.5220	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

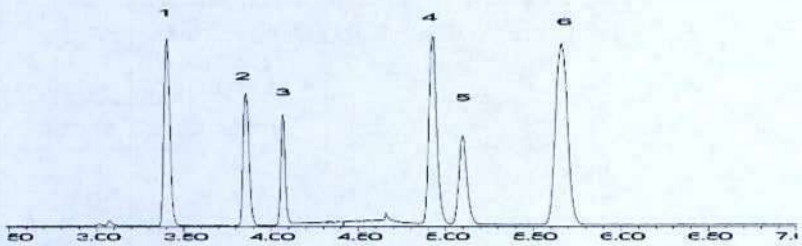
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician **Date Mixed:** 30-Jan-2020 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 10-Feb-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: V-GAS

VOA 0299

Prep By: ILY Prep Date: **7/18/2024** Exp Date: 7/25/2024

Final volume: NA mL	Solvent: NA	Chem ID#: NA

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
502.2 Cal. Mix #1	NA	RESTEK	NA	NA	7/18/2024	3/31/2030	240604002	ILY

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30439 **Lot No.:** A0200244

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 200µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2030 **Storage:** 0°C or colder

Ship: Ambient

502.2 Calibration Mix #1

Opened By/Date

Expiration Date 03/31/2030

Lot Number A0200244

Chem ID 240604002

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00012554	99%	200.1 µg/mL	+/- 11.8698
2	Chloromethane (methyl chloride)	74-87-3	SHBK6571	99%	202.8 µg/mL	+/- 13.1115
3	Vinyl chloride	75-01-4	00015559	99%	201.3 µg/mL	+/- 13.7885
4	Bromomethane (methyl bromide)	74-83-9	101604	99%	200.3 µg/mL	+/- 11.3885
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	203.4 µg/mL	+/- 12.9198
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCL8411	99%	199.5 µg/mL	+/- 13.3498

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

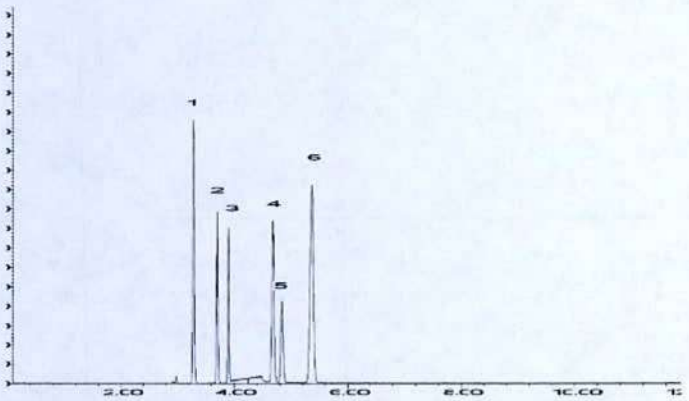
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician — **Date Mixed:** 25-Jul-2023 — **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC — **Date Passed:** 03-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: Q-GAS

VOA 0300

Prep By: ILY Prep Date: **7/24/2024** Exp Date: 7/31/2024

Final volume: 10 mL	Solvent: MeOH	Chem ID#: 240711004

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
502.2 Cal. Mix #1	1000	RESTEK	HS1006	1000	7/24/2024	9/30/2026	240502006	ILY

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

502.2 Calibration Mix #1

Catalog No. : 30439.SEC **Lot No.:** A0157247

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 200µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2026 **Storage:** 0°C or colder

Opened By/Date
Expiration Date 09/30/2026
Lot Number A0157247
Chem ID 240502006

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 26165) **Purity** 99%	201.2 µg/mL	+/- 2.6458 µg/mL +/- 11.5302 µg/mL +/- 11.7886 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	201.2 µg/mL	+/- 2.8139 µg/mL +/- 11.5650 µg/mL +/- 11.8225 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	203.9 µg/mL	+/- 4.8113 µg/mL +/- 12.3458 µg/mL +/- 12.5939 µg/mL	Gravimetric Unstressed Stressed
4	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	200.4 µg/mL	+/- 4.2746 µg/mL +/- 11.9627 µg/mL +/- 12.2098 µg/mL	Gravimetric Unstressed Stressed
5	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	202.9 µg/mL	+/- 3.2680 µg/mL +/- 11.7770 µg/mL +/- 12.0343 µg/mL	Gravimetric Unstressed Stressed
6	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4.SEC (Lot 253600) **Purity** 99%	200.3 µg/mL	+/- 10.4978 µg/mL +/- 15.3285 µg/mL +/- 15.5220 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

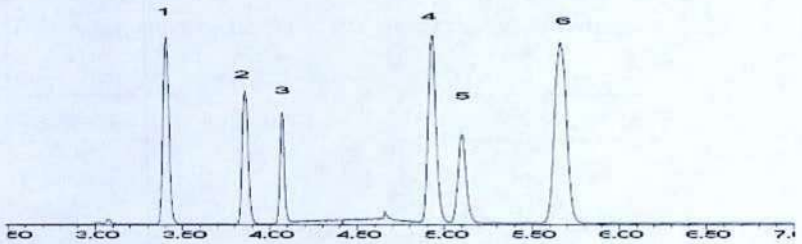
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician **Date Mixed:** 30-Jan-2020 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 10-Feb-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: Antifoam

VOA 0301

Prep By: ILY Prep Date: **7/24/2024** Exp Date: 1/24/2025

Final volume: 200 mL	Solvent: DI H2O	Chem ID#: NA

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
Antifoam SE-15	10000	SIGMA	HS1022	10000	7/24/2024	10/31/2028	231009009	ILY

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Antifoam SE-15 - aqueous emulsion for bacterial and mammalian systems

Product Number: **A8582**
Batch Number: **MKCS3097**
Brand: SIGMA
Quality Release Date: 23 SEP 2022

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Emulsion	Emulsion
Suitability Suitable for use in bacterial fermentation	Conforms	Conforms

Larry Coers, Director
Quality Control
Milwaukee, WI US

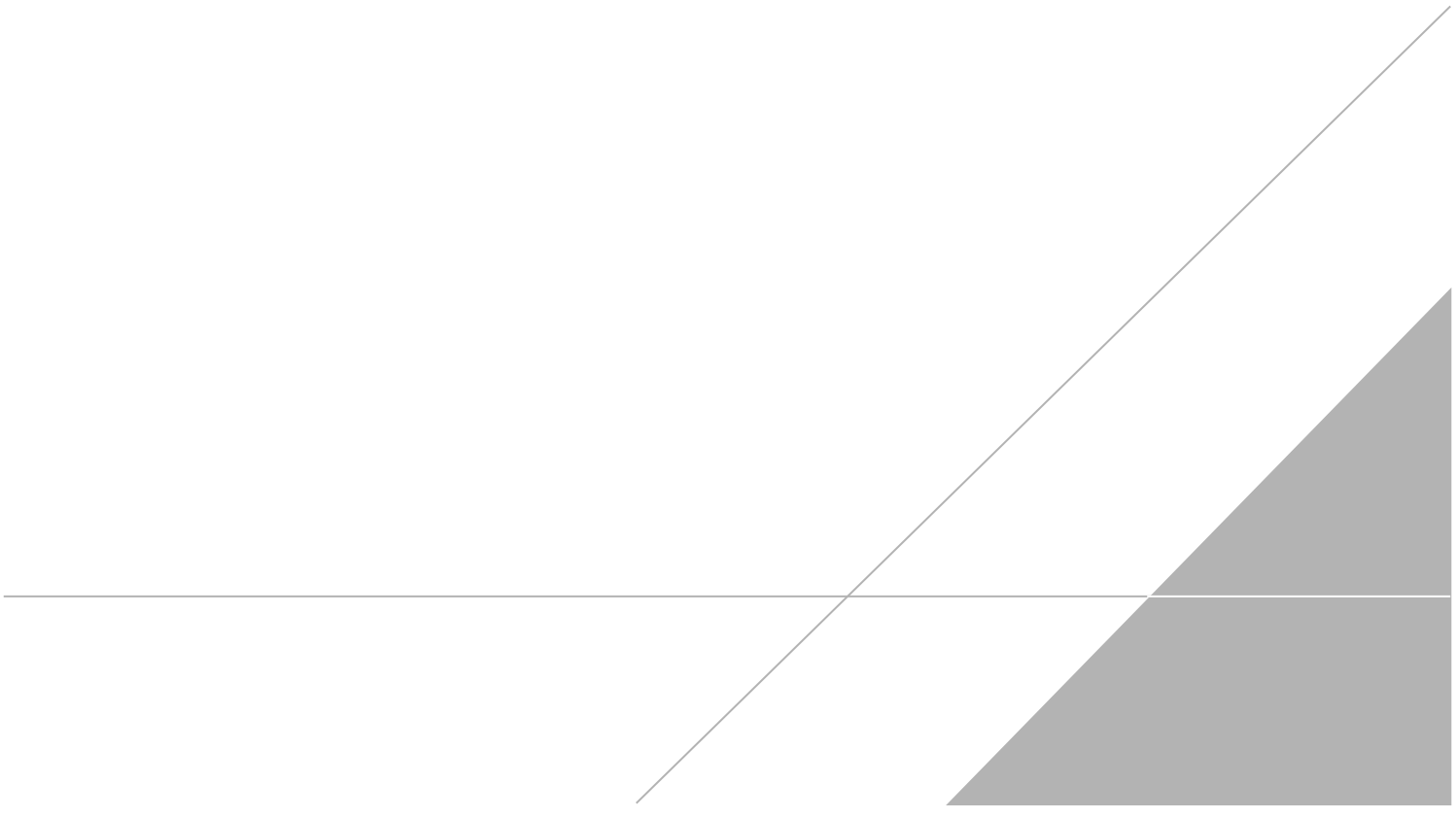
Antifoam SE-15

Opened By/Date
Expiration Date 10/31/2028
Lot Number MKCS3097
Chem ID 231009009

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Laboratory Data Reports

Fall IWGP Event



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For

ARCADIS US Inc

Project ACR594|NFARS 30036646.34CD
Workorder 3385043
Report ID 382890 on 1/23/2025 (Revised report. See Project Notations Section.)

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Oct 29, 2024.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Susan Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

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ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Andy Vitolins - Arcadis
Erika Denkenberger - Arcadis
Katherine Clubine - Arcadis
Corey Averill - Arcadis

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

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Certificate of Analysis

Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For **ARCADIS US Inc**

Project ACR594|NFARS 30036646.34CD
Workorder 3385043
Report ID 382890 on 1/23/2025 (Revised report. See Project Notations Section.)

Certificate of Analysis

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Recipient(s):
Andy Vitolins - Arcadis
Erika Denkenberger - Arcadis
Katherine Clubine - Arcadis
Corey Averill - Arcadis

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Susan Scherer

Susan Scherer *(ALS Digital Signature)*
Project Coordinator

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Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3385043001	MW5-1DA	Ground Water	10/28/2024 09:05	10/29/2024 09:16	CBC	Collected By Client
3385043002	MW5-6	Ground Water	10/28/2024 08:35	10/29/2024 09:16	CBC	Collected By Client
3385043003	RW5-2	Ground Water	10/28/2024 08:45	10/29/2024 09:16	CBC	Collected By Client
3385043004	MW5-5D	Ground Water	10/28/2024 08:30	10/29/2024 09:16	CBC	Collected By Client
3385043005	RW5-1	Ground Water	10/28/2024 09:00	10/29/2024 09:16	CBC	Collected By Client
3385043006	RW5-4	Ground Water	10/28/2024 08:50	10/29/2024 09:16	CBC	Collected By Client
3385043007	DUP	Ground Water	10/28/2024 00:00	10/29/2024 09:16	CBC	Collected By Client
3385043008	MW13-4D	Ground Water	10/28/2024 08:10	10/29/2024 09:16	CBC	Collected By Client
3385043009	MW13-5D	Ground Water	10/28/2024 07:55	10/29/2024 09:16	CBC	Collected By Client
3385043010	PW13-1	Ground Water	10/28/2024 07:50	10/29/2024 09:16	CBC	Collected By Client
3385043011	PW13-4D	Ground Water	10/28/2024 08:05	10/29/2024 09:16	CBC	Collected By Client
3385043012	SW99-10	Water	10/28/2024 09:55	10/29/2024 09:16	CBC	Collected By Client
3385043013	SW10-7	Water	10/28/2024 10:10	10/29/2024 09:16	CBC	Collected By Client
3385043014	SW10-8	Water	10/28/2024 11:00	10/29/2024 09:16	CBC	Collected By Client
3385043015	MW10-4D	Ground Water	10/28/2024 10:32	10/29/2024 09:16	CBC	Collected By Client
3385043016	MW10-1DA	Ground Water	10/28/2024 10:40	10/29/2024 09:16	CBC	Collected By Client
3385043017	MW10-10D	Ground Water	10/28/2024 10:50	10/29/2024 09:16	CBC	Collected By Client
3385043018	PW10-2	Ground Water	10/28/2024 10:45	10/29/2024 09:16	CBC	Collected By Client
3385043019	MW10-4E	Ground Water	10/28/2024 10:35	10/29/2024 09:16	CBC	Collected By Client
3385043020	PW10-1	Ground Water	10/28/2024 10:20	10/29/2024 09:16	CBC	Collected By Client
3385043021	MW10-9D	Ground Water	10/28/2024 10:30	10/29/2024 09:16	CBC	Collected By Client
3385043022	MW10-3D	Ground Water	10/28/2024 10:15	10/29/2024 09:16	CBC	Collected By Client
3385043023	MW1-1DA	Ground Water	10/28/2024 11:15	10/29/2024 09:16	CBC	Collected By Client
3385043024	SW3-2	Water	10/28/2024 11:35	10/29/2024 09:16	CBC	Collected By Client
3385043025	SW3-3	Water	10/28/2024 11:40	10/29/2024 09:16	CBC	Collected By Client
3385043026	SW3-15	Water	10/28/2024 11:25	10/29/2024 09:16	CBC	Collected By Client
3385043027	DUP-SW	Water	10/28/2024 00:00	10/29/2024 09:16	CBC	Collected By Client
3385043028	TRIP BLANK	Water	10/28/2024 00:00	10/29/2024 09:16	CBC	Collected By Client

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Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
  EPA 300.1 Rev. 1.0-1997
  EPA 300.0 Rev. 2.1-1993
  EPA 353.2 Rev. 2.0-1993
  EPA 410.4 Rev. 1.0-1993
  EPA 420.4 Rev. 1.0-1993
  EPA 365.1 Rev. 2.0-1993
  EPA 200.7 Rev. 4.4-1994
  EPA 200.8 Rev. 5.4-1994
  EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.

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Project Notations

P1 This certificate of analysis was modified to include the Level IV data package request based on the email request from Corey Averill on 01/22/25. SJS

We're getting ready to prepare the 2024 Annual Report for NFARS. We have the attached lab reports, but I don't see that we ever received the EDDs. It looks like we forgot to note to split off 10% of the samples for Level IV data package. Would it be possible to provide Level IV data packages for the Site 13 wells (MW13-4D, MW13-5D, PW13-1, and PW13-4D) for each event? Sorry we didn't catch this previously.

Thanks,
Corey

Sample Notations

Lab ID	Sample ID

Result Notations

Notation Ref.	
1	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Bromomethane. The % Recovery was reported as 45.4 and the control limits were 53 to 141.
2	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Bromomethane. The % Recovery was reported as 47.4 and the control limits were 53 to 141.
3	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Iodomethane. The RPD was reported as 26.6 and the upper control limit is 20.
4	The QC sample type MS for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 47.2 and the control limits were 69 to 131.
5	The QC sample type MSD for method SW846 8260C was outside the control limits for the analyte Iodomethane. The % Recovery was reported as 61.7 and the control limits were 69 to 131.

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Detected Results Summary

Client Sample ID	MW5-1DA	Collected	10/28/2024 09:05
Lab Sample ID	3385043001	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.4J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.56J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW5-6	Collected	10/28/2024 08:35
Lab Sample ID	3385043002	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.8J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	1.7	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloroform	0.47J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloromethane	0.34J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	3.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methyl acetate	0.41J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	2.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	1.6	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	RW5-2	Collected	10/28/2024 08:45
Lab Sample ID	3385043003	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.7J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	0.79J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloroform	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.67J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	0.73J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW5-5D	Collected	10/28/2024 08:30
Lab Sample ID	3385043004	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.8J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	0.54J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloroform	0.43J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloromethane	0.52J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	8.4	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	0.52J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	6.4	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	6.8	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	RW5-1	Collected	10/28/2024 09:00
Lab Sample ID	3385043005	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	4.5J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	0.89J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloroform	0.49J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	1.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	3.8	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	0.47J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	0.89J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	1.5	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	RW5-4	Collected	10/28/2024 08:50
Lab Sample ID	3385043006	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.7J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.48J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.43J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	0.55J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	0.49J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	DUP	Collected	10/28/2024 00:00
Lab Sample ID	3385043007	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	4.6J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.44J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.98J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	4.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	0.55J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	0.81J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	1.3	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW13-4D	Collected	10/28/2024 08:10
Lab Sample ID	3385043008	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Chloroform	0.50J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	7.5	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	3.9	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW13-5D	Collected	10/28/2024 07:55
Lab Sample ID	3385043009	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.4J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.43J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	13.6	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	1.0	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PW13-1	Collected	10/28/2024 07:50
Lab Sample ID	3385043010	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Chloroform	0.40J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	1.1	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PW13-4D	Collected	10/28/2024 08:05
Lab Sample ID	3385043011	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.9J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	4.4	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	0.48J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	SW99-10	Collected	10/28/2024 09:55
Lab Sample ID	3385043012	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Chloroform	0.52J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	SW10-7	Collected	10/28/2024 10:10
Lab Sample ID	3385043013	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Chloroform	0.57J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	SW10-8	Collected	10/28/2024 11:00
Lab Sample ID	3385043014	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Chloroform	0.68J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW10-4D	Collected	10/28/2024 10:32
Lab Sample ID	3385043015	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.3J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Benzene	0.99J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloroform	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	2.5	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	0.34J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	8.0	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW10-1DA	Collected	10/28/2024 10:40
Lab Sample ID	3385043016	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.4J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Benzene	3.6	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloroform	0.47J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	1.5	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methyl acetate	0.52J	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	0.33J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	3.4	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW10-10D	Collected	10/28/2024 10:50
Lab Sample ID	3385043017	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
2-Butanone	10.1	ug/L	5.0	3.8	1.6	SW846 8260C	#
Benzene	2.0	ug/L	1.0	0.75	0.33	SW846 8260C	#
Carbon Disulfide	0.35J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	120	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methyl acetate	15.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methyl t-Butyl Ether	1.0	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methylene Chloride	0.69J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Toluene	8.4	ug/L	1.0	0.75	0.33	SW846 8260C	#
trans-1,2-Dichloroethene	2.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Trichloroethene	13.6	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	6.0	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PW10-2	Collected	10/28/2024 10:45
Lab Sample ID	3385043018	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.7J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.34J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW10-4E	Collected	10/28/2024 10:35
Lab Sample ID	3385043019	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.6J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	0.98J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloroform	0.38J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	6.3	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	1.2	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	PW10-1	Collected	10/28/2024 10:20
Lab Sample ID	3385043020	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.9J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	0.41J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloroform	0.35J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	0.80J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Iodomethane	1.1	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methyl acetate	0.40J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	1.2	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW10-9D	Collected	10/28/2024 10:30
Lab Sample ID	3385043021	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	3.3J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.36J	ug/L	1.0	0.75	0.33	SW846 8260C	#
cis-1,2-Dichloroethene	5.4	ug/L	1.0	0.75	0.33	SW846 8260C	#
Methyl acetate	0.42J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Vinyl Chloride	6.2	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW10-3D	Collected	10/28/2024 10:15
Lab Sample ID	3385043022	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	4.7J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.34J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	MW1-1DA	Collected	10/28/2024 11:15
Lab Sample ID	3385043023	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Chloroform	0.33J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Iodomethane	0.48J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	SW3-2	Collected	10/28/2024 11:35
Lab Sample ID	3385043024	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Chloroform	0.93J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	SW3-3	Collected	10/28/2024 11:40
Lab Sample ID	3385043025	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Chloroform	0.74J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	SW3-15	Collected	10/28/2024 11:25
Lab Sample ID	3385043026	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	4.9J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Chloroform	0.51J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Detected Results Summary

Client Sample ID	DUP-SW	Collected	10/28/2024 00:00
Lab Sample ID	3385043027	Lab Receipt	10/29/2024 09:16

Compound	Result	Units	LOQ	LOD	DL	Method	Flag
VOLATILE ORGANICS							
Acetone	4.6J	ug/L	5.0	3.8	1.6	SW846 8260C	#
Carbon Disulfide	0.47J	ug/L	1.0	0.75	0.33	SW846 8260C	#
Chloroform	0.57J	ug/L	1.0	0.75	0.33	SW846 8260C	#

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Results

Client Sample ID	MW5-1DA	Collected	10/28/2024 09:05
Lab Sample ID	3385043001	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:07	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:07	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:07	ILY	A
Acetone	3.4J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:07	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Chloroform	0.42J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
cis-1,2-Dichloroethene	0.56J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 12:07	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A

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Results

Client Sample ID	MW5-1DA	Collected	10/28/2024 09:05
Lab Sample ID	3385043001	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	81 – 118	11/05/2024 12:07	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/05/2024 12:07	
Dibromofluoromethane	1868-53-7	99.8%	80 – 119	11/05/2024 12:07	
Toluene-d8	2037-26-5	104%	89 – 112	11/05/2024 12:07	

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Results

Client Sample ID	MW5-6	Collected	10/28/2024 08:35
Lab Sample ID	3385043002	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:27	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:27	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:27	ILY	A
Acetone	3.8J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:27	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Carbon Disulfide	1.7	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Chloroform	0.47J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Chloromethane	0.34J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
cis-1,2-Dichloroethene	3.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Methyl acetate	0.41J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Toluene	2.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 12:27	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A

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Results

Client Sample ID	MW5-6	Collected	10/28/2024 08:35
Lab Sample ID	3385043002	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	1.6	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	81 – 118	11/05/2024 12:27	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	11/05/2024 12:27	
Dibromofluoromethane	1868-53-7	100%	80 – 119	11/05/2024 12:27	
Toluene-d8	2037-26-5	102%	89 – 112	11/05/2024 12:27	

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Results

Client Sample ID	RW5-2	Collected	10/28/2024 08:45
Lab Sample ID	3385043003	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:47	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:47	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:47	ILY	A
Acetone	3.7J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:47	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Carbon Disulfide	0.79J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Chloroform	0.42J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
cis-1,2-Dichloroethene	0.67J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Toluene	0.73J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 12:47	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A

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Results

Client Sample ID	RW5-2	Collected	10/28/2024 08:45
Lab Sample ID	3385043003	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/05/2024 12:47	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/05/2024 12:47	
Dibromofluoromethane	1868-53-7	98.5%	80 – 119	11/05/2024 12:47	
Toluene-d8	2037-26-5	100%	89 – 112	11/05/2024 12:47	

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Results

Client Sample ID	MW5-5D	Collected	10/28/2024 08:30
Lab Sample ID	3385043004	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:08	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:08	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:08	ILY	A
Acetone	3.8J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:08	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Carbon Disulfide	0.54J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Chloroform	0.43J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Chloromethane	0.52J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
cis-1,2-Dichloroethene	8.4	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 13:08	ILY	A
trans-1,2-Dichloroethene	0.52J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A

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Results

Client Sample ID	MW5-5D	Collected	10/28/2024 08:30
Lab Sample ID	3385043004	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	6.4	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Vinyl Chloride	6.8	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	11/05/2024 13:08	
4-Bromofluorobenzene	460-00-4	99.7%	85 – 114	11/05/2024 13:08	
Dibromofluoromethane	1868-53-7	99.6%	80 – 119	11/05/2024 13:08	
Toluene-d8	2037-26-5	103%	89 – 112	11/05/2024 13:08	

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Results

Client Sample ID	RW5-1	Collected	10/28/2024 09:00
Lab Sample ID	3385043005	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:28	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:28	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:28	ILY	A
Acetone	4.5J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:28	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Bromomethane	0.75U	U,1,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Carbon Disulfide	0.89J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Chloroform	0.49J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
cis-1,2-Dichloroethene	1.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Toluene	3.8	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 13:28	ILY	A
trans-1,2-Dichloroethene	0.47J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A

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Results

Client Sample ID	RW5-1	Collected	10/28/2024 09:00
Lab Sample ID	3385043005	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.89J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Vinyl Chloride	1.5	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	81 – 118	11/05/2024 13:28	
4-Bromofluorobenzene	460-00-4	104%	85 – 114	11/05/2024 13:28	
Dibromofluoromethane	1868-53-7	104%	80 – 119	11/05/2024 13:28	
Toluene-d8	2037-26-5	101%	89 – 112	11/05/2024 13:28	

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Results

Client Sample ID	RW5-4	Collected	10/28/2024 08:50
Lab Sample ID	3385043006	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:49	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:49	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:49	ILY	A
Acetone	3.7J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:49	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Chloroform	0.48J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
cis-1,2-Dichloroethene	0.43J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Toluene	0.55J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 13:49	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A

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Results

Client Sample ID	RW5-4	Collected	10/28/2024 08:50
Lab Sample ID	3385043006	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Vinyl Chloride	0.49J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	11/05/2024 13:49	
4-Bromofluorobenzene	460-00-4	105%	85 – 114	11/05/2024 13:49	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/05/2024 13:49	
Toluene-d8	2037-26-5	102%	89 – 112	11/05/2024 13:49	

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Results

Client Sample ID	DUP	Collected	10/28/2024 00:00
Lab Sample ID	3385043007	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:09	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:09	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:09	ILY	A
Acetone	4.6J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:09	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Chloroform	0.44J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
cis-1,2-Dichloroethene	0.98J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Toluene	4.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 14:09	ILY	A
trans-1,2-Dichloroethene	0.55J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A

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Results

Client Sample ID	DUP	Collected	10/28/2024 00:00
Lab Sample ID	3385043007	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.81J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Vinyl Chloride	1.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	11/05/2024 14:09	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/05/2024 14:09	
Dibromofluoromethane	1868-53-7	103%	80 – 119	11/05/2024 14:09	
Toluene-d8	2037-26-5	101%	89 – 112	11/05/2024 14:09	

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Results

Client Sample ID	MW13-4D	Collected	10/28/2024 08:10
Lab Sample ID	3385043008	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:29	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:29	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:29	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:29	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Chloroform	0.50J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
cis-1,2-Dichloroethene	7.5	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 14:29	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A

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Results

Client Sample ID	MW13-4D	Collected	10/28/2024 08:10
Lab Sample ID	3385043008	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Vinyl Chloride	3.9	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.8%	81 – 118	11/05/2024 14:29	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/05/2024 14:29	
Dibromofluoromethane	1868-53-7	99.9%	80 – 119	11/05/2024 14:29	
Toluene-d8	2037-26-5	101%	89 – 112	11/05/2024 14:29	

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Results

Client Sample ID	MW13-5D	Collected	10/28/2024 07:55
Lab Sample ID	3385043009	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:50	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:50	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:50	ILY	A
Acetone	3.4J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:50	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Chloroform	0.43J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
cis-1,2-Dichloroethene	13.6	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 14:50	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A

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Results

Client Sample ID	MW13-5D	Collected	10/28/2024 07:55
Lab Sample ID	3385043009	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Vinyl Chloride	1.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	11/05/2024 14:50	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	11/05/2024 14:50	
Dibromofluoromethane	1868-53-7	99.8%	80 – 119	11/05/2024 14:50	
Toluene-d8	2037-26-5	102%	89 – 112	11/05/2024 14:50	

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Results

Client Sample ID	PW13-1	Collected	10/28/2024 07:50
Lab Sample ID	3385043010	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:10	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:10	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:10	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:10	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Chloroform	0.40J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
cis-1,2-Dichloroethene	1.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 15:10	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A

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Results

Client Sample ID	PW13-1	Collected	10/28/2024 07:50
Lab Sample ID	3385043010	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	81 – 118	11/05/2024 15:10	
4-Bromofluorobenzene	460-00-4	99.8%	85 – 114	11/05/2024 15:10	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/05/2024 15:10	
Toluene-d8	2037-26-5	104%	89 – 112	11/05/2024 15:10	

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Results

Client Sample ID	PW13-4D	Collected	10/28/2024 08:05
Lab Sample ID	3385043011	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:31	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:31	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:31	ILY	A
Acetone	3.9J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:31	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Chloroform	0.42J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
cis-1,2-Dichloroethene	4.4	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 15:31	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A

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Results

Client Sample ID	PW13-4D	Collected	10/28/2024 08:05
Lab Sample ID	3385043011	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Vinyl Chloride	0.48J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96%	81 – 118	11/05/2024 15:31	
4-Bromofluorobenzene	460-00-4	97.1%	85 – 114	11/05/2024 15:31	
Dibromofluoromethane	1868-53-7	95.3%	80 – 119	11/05/2024 15:31	
Toluene-d8	2037-26-5	96.8%	89 – 112	11/05/2024 15:31	

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Results

Client Sample ID	SW99-10	Collected	10/28/2024 09:55
Lab Sample ID	3385043012	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:51	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:51	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:51	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:51	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Chloroform	0.52J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 15:51	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A

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Results

Client Sample ID	SW99-10	Collected	10/28/2024 09:55
Lab Sample ID	3385043012	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	11/05/2024 15:51	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	11/05/2024 15:51	
Dibromofluoromethane	1868-53-7	99.2%	80 – 119	11/05/2024 15:51	
Toluene-d8	2037-26-5	100%	89 – 112	11/05/2024 15:51	

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Results

Client Sample ID	SW10-7	Collected	10/28/2024 10:10
Lab Sample ID	3385043013	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:11	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:11	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:11	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:11	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Chloroform	0.57J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 16:11	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A

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Results

Client Sample ID	SW10-7	Collected	10/28/2024 10:10
Lab Sample ID	3385043013	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.9%	81 – 118	11/05/2024 16:11	
4-Bromofluorobenzene	460-00-4	98.7%	85 – 114	11/05/2024 16:11	
Dibromofluoromethane	1868-53-7	99.3%	80 – 119	11/05/2024 16:11	
Toluene-d8	2037-26-5	101%	89 – 112	11/05/2024 16:11	

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Results

Client Sample ID	SW10-8	Collected	10/28/2024 11:00
Lab Sample ID	3385043014	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:32	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:32	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:32	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:32	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Chloroform	0.68J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 16:32	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A

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Results

Client Sample ID	SW10-8	Collected	10/28/2024 11:00
Lab Sample ID	3385043014	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	11/05/2024 16:32	
4-Bromofluorobenzene	460-00-4	97.3%	85 – 114	11/05/2024 16:32	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/05/2024 16:32	
Toluene-d8	2037-26-5	102%	89 – 112	11/05/2024 16:32	

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Results

Client Sample ID	MW10-4D	Collected	10/28/2024 10:32
Lab Sample ID	3385043015	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:52	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:52	ILY	A
Acetone	3.3J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:52	ILY	A
Benzene	0.99J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Chloroform	0.42J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
cis-1,2-Dichloroethene	2.5	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 16:52	ILY	A
trans-1,2-Dichloroethene	0.34J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A

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Results

Client Sample ID	MW10-4D	Collected	10/28/2024 10:32
Lab Sample ID	3385043015	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Vinyl Chloride	8.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/05/2024 16:52	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/05/2024 16:52	
Dibromofluoromethane	1868-53-7	101%	80 – 119	11/05/2024 16:52	
Toluene-d8	2037-26-5	102%	89 – 112	11/05/2024 16:52	

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Results

Client Sample ID	MW10-1DA	Collected	10/28/2024 10:40
Lab Sample ID	3385043016	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:12	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:12	ILY	A
Acetone	3.4J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:12	ILY	A
Benzene	3.6	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Chloroform	0.47J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
cis-1,2-Dichloroethene	1.5	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Methyl acetate	0.52J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 17:12	ILY	A
trans-1,2-Dichloroethene	0.33J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A

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Results

Client Sample ID	MW10-1DA	Collected	10/28/2024 10:40
Lab Sample ID	3385043016	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Vinyl Chloride	3.4	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	11/05/2024 17:12	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/05/2024 17:12	
Dibromofluoromethane	1868-53-7	99.3%	80 – 119	11/05/2024 17:12	
Toluene-d8	2037-26-5	99.7%	89 – 112	11/05/2024 17:12	

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Results

Client Sample ID	MW10-10D	Collected	10/28/2024 10:50
Lab Sample ID	3385043017	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
2-Butanone	10.1	P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:33	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:33	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:33	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:33	ILY	A
Benzene	2.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Carbon Disulfide	0.35J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
cis-1,2-Dichloroethene	120	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Methyl acetate	15.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Methyl t-Butyl Ether	1.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Methylene Chloride	0.69J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Toluene	8.4	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 17:33	ILY	A
trans-1,2-Dichloroethene	2.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A

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Results

Client Sample ID	MW10-10D	Collected	10/28/2024 10:50
Lab Sample ID	3385043017	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	13.6	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Vinyl Chloride	6.0	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.4%	81 – 118	11/05/2024 17:33	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/05/2024 17:33	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/05/2024 17:33	
Toluene-d8	2037-26-5	99.6%	89 – 112	11/05/2024 17:33	

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Results

Client Sample ID	PW10-2	Collected	10/28/2024 10:45
Lab Sample ID	3385043018	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:53	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:53	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:53	ILY	A
Acetone	3.7J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:53	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Chloroform	0.42J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
cis-1,2-Dichloroethene	0.34J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 17:53	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A

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Results

Client Sample ID	PW10-2	Collected	10/28/2024 10:45
Lab Sample ID	3385043018	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/05/2024 17:53	
4-Bromofluorobenzene	460-00-4	103%	85 – 114	11/05/2024 17:53	
Dibromofluoromethane	1868-53-7	98%	80 – 119	11/05/2024 17:53	
Toluene-d8	2037-26-5	99.9%	89 – 112	11/05/2024 17:53	

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Results

Client Sample ID	MW10-4E	Collected	10/28/2024 10:35
Lab Sample ID	3385043019	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:19	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:19	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:19	ILY	A
Acetone	3.6J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:19	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Carbon Disulfide	0.98J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Chloroform	0.38J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
cis-1,2-Dichloroethene	6.3	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 14:19	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A

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Results

Client Sample ID	MW10-4E	Collected	10/28/2024 10:35
Lab Sample ID	3385043019	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Vinyl Chloride	1.2	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.9%	81 – 118	11/06/2024 14:19	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/06/2024 14:19	
Dibromofluoromethane	1868-53-7	97.9%	80 – 119	11/06/2024 14:19	
Toluene-d8	2037-26-5	103%	89 – 112	11/06/2024 14:19	

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Results

Client Sample ID	PW10-1	Collected	10/28/2024 10:20
Lab Sample ID	3385043020	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:40	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:40	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:40	ILY	A
Acetone	3.9J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:40	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Carbon Disulfide	0.41J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Chloroform	0.35J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
cis-1,2-Dichloroethene	0.80J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Iodomethane	1.1	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Methyl acetate	0.40J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 14:40	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A

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Results

Client Sample ID	PW10-1	Collected	10/28/2024 10:20
Lab Sample ID	3385043020	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Vinyl Chloride	1.2	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/06/2024 14:40	
4-Bromofluorobenzene	460-00-4	99.4%	85 – 114	11/06/2024 14:40	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/06/2024 14:40	
Toluene-d8	2037-26-5	103%	89 – 112	11/06/2024 14:40	

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Results

Client Sample ID	MW10-9D	Collected	10/28/2024 10:30
Lab Sample ID	3385043021	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:00	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:00	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:00	ILY	A
Acetone	3.3J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:00	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Chloroform	0.36J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
cis-1,2-Dichloroethene	5.4	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Methyl acetate	0.42J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 15:00	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A

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Results

Client Sample ID	MW10-9D	Collected	10/28/2024 10:30
Lab Sample ID	3385043021	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Vinyl Chloride	6.2	P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	11/06/2024 15:00	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/06/2024 15:00	
Dibromofluoromethane	1868-53-7	98.6%	80 – 119	11/06/2024 15:00	
Toluene-d8	2037-26-5	103%	89 – 112	11/06/2024 15:00	

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Results

Client Sample ID	MW10-3D	Collected	10/28/2024 10:15
Lab Sample ID	3385043022	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:20	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:20	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:20	ILY	A
Acetone	4.7J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:20	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Chloroform	0.34J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 15:20	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A

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Results

Client Sample ID	MW10-3D	Collected	10/28/2024 10:15
Lab Sample ID	3385043022	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	11/06/2024 15:20	
4-Bromofluorobenzene	460-00-4	99.3%	85 – 114	11/06/2024 15:20	
Dibromofluoromethane	1868-53-7	103%	80 – 119	11/06/2024 15:20	
Toluene-d8	2037-26-5	102%	89 – 112	11/06/2024 15:20	

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Results

Client Sample ID	MW1-1DA	Collected	10/28/2024 11:15
Lab Sample ID	3385043023	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:41	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:41	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:41	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:41	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Chloroform	0.33J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Iodomethane	0.48J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 15:41	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A

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Results

Client Sample ID	MW1-1DA	Collected	10/28/2024 11:15
Lab Sample ID	3385043023	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	81 – 118	11/06/2024 15:41	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/06/2024 15:41	
Dibromofluoromethane	1868-53-7	100%	80 – 119	11/06/2024 15:41	
Toluene-d8	2037-26-5	102%	89 – 112	11/06/2024 15:41	

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Results

Client Sample ID	SW3-2	Collected	10/28/2024 11:35
Lab Sample ID	3385043024	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:01	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:01	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:01	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:01	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Chloroform	0.93J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 16:01	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A

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Results

Client Sample ID	SW3-2	Collected	10/28/2024 11:35
Lab Sample ID	3385043024	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.2%	81 – 118	11/06/2024 16:01	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/06/2024 16:01	
Dibromofluoromethane	1868-53-7	103%	80 – 119	11/06/2024 16:01	
Toluene-d8	2037-26-5	102%	89 – 112	11/06/2024 16:01	

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Results

Client Sample ID	SW3-3	Collected	10/28/2024 11:40
Lab Sample ID	3385043025	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:22	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:22	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:22	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:22	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Chloroform	0.74J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 16:22	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A

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Results

Client Sample ID	SW3-3	Collected	10/28/2024 11:40
Lab Sample ID	3385043025	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/06/2024 16:22	
4-Bromofluorobenzene	460-00-4	103%	85 – 114	11/06/2024 16:22	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	11/06/2024 16:22	
Toluene-d8	2037-26-5	104%	89 – 112	11/06/2024 16:22	

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Results

Client Sample ID	SW3-15	Collected	10/28/2024 11:25
Lab Sample ID	3385043026	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:42	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:42	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:42	ILY	A
Acetone	4.9J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:42	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Bromomethane	0.75U	U,2,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Chloroform	0.51J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Iodomethane	0.75U	U,3,4,5, P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 16:42	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A

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Results

Client Sample ID	SW3-15	Collected	10/28/2024 11:25
Lab Sample ID	3385043026	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/06/2024 16:42	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	11/06/2024 16:42	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/06/2024 16:42	
Toluene-d8	2037-26-5	106%	89 – 112	11/06/2024 16:42	

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Results

Client Sample ID	DUP-SW	Collected	10/28/2024 00:00
Lab Sample ID	3385043027	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 17:02	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 17:02	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 17:02	ILY	A
Acetone	4.6J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 17:02	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Carbon Disulfide	0.47J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Chloroform	0.57J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 17:02	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A

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Results

Client Sample ID	DUP-SW	Collected	10/28/2024 00:00
Lab Sample ID	3385043027	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.3%	81 – 118	11/06/2024 17:02	
4-Bromofluorobenzene	460-00-4	99.7%	85 – 114	11/06/2024 17:02	
Dibromofluoromethane	1868-53-7	98.9%	80 – 119	11/06/2024 17:02	
Toluene-d8	2037-26-5	105%	89 – 112	11/06/2024 17:02	

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Results

Client Sample ID	TRIP BLANK	Collected	10/28/2024 00:00
Lab Sample ID	3385043028	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 13:18	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 13:18	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 13:18	ILY	A
Acetone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 13:18	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Chloroform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
cis-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 13:18	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A

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Results

Client Sample ID	TRIP BLANK	Collected	10/28/2024 00:00
Lab Sample ID	3385043028	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Trichlorofluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Vinyl Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.5%	81 – 118	11/06/2024 13:18	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/06/2024 13:18	
Dibromofluoromethane	1868-53-7	97%	80 – 119	11/06/2024 13:18	
Toluene-d8	2037-26-5	104%	89 – 112	11/06/2024 13:18	

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Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3385043001	MW5-1DA	SW846 8260C	N/A	
3385043002	MW5-6	SW846 8260C	N/A	
3385043003	RW5-2	SW846 8260C	N/A	
3385043004	MW5-5D	SW846 8260C	N/A	
3385043005	RW5-1	SW846 8260C	N/A	
3385043006	RW5-4	SW846 8260C	N/A	
3385043007	DUP	SW846 8260C	N/A	
3385043008	MW13-4D	SW846 8260C	N/A	
3385043009	MW13-5D	SW846 8260C	N/A	
3385043010	PW13-1	SW846 8260C	N/A	
3385043011	PW13-4D	SW846 8260C	N/A	
3385043012	SW99-10	SW846 8260C	N/A	
3385043013	SW10-7	SW846 8260C	N/A	
3385043014	SW10-8	SW846 8260C	N/A	
3385043015	MW10-4D	SW846 8260C	N/A	
3385043016	MW10-1DA	SW846 8260C	N/A	
3385043017	MW10-10D	SW846 8260C	N/A	
3385043018	PW10-2	SW846 8260C	N/A	
3385043019	MW10-4E	SW846 8260C	N/A	
3385043020	PW10-1	SW846 8260C	N/A	
3385043021	MW10-9D	SW846 8260C	N/A	
3385043022	MW10-3D	SW846 8260C	N/A	
3385043023	MW1-1DA	SW846 8260C	N/A	
3385043024	SW3-2	SW846 8260C	N/A	
3385043025	SW3-3	SW846 8260C	N/A	
3385043026	SW3-15	SW846 8260C	N/A	
3385043027	DUP-SW	SW846 8260C	N/A	
3385043028	TRIP BLANK	SW846 8260C	N/A	

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS

QC Batch

QC Batch	1327406	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260C
Tech.			

Associated Samples

3385043001	3385043002	3385043003	3385043004
3385043005	3385043006	3385043007	3385043008
3385043009	3385043010	3385043011	3385043012
3385043013	3385043014	3385043015	3385043016
3385043017	3385043018		

Method Blank 3901013 (MB) Created on 11/05/2024 11:26 For QC Batch 1327406

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
1,1,1-Trichloroethane	71-55-6	BLK	0.75U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	0.75U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	0.75U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	0.75U	ug/L	1.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	0.75U	ug/L	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	2.5U	ug/L	5.0	U
1,2-Dibromoethane	106-93-4	BLK	0.75U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	0.75U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	0.75U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	0.75U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	0.75U	ug/L	1.0	U
1,3-Dichloropropene, Total	542-75-6	BLK	1.5U	ug/L	2.0	U
1,4-Dichlorobenzene	106-46-7	BLK	0.75U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	3.8U	ug/L	5.0	U
2-Hexanone	591-78-6	BLK	3.8U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	3.8U	ug/L	5.0	U
Acetone	67-64-1	BLK	3.8U	ug/L	5.0	U
Benzene	71-43-2	BLK	0.75U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	0.75U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	0.75U	ug/L	1.0	U
Bromoform	75-25-2	BLK	0.75U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	0.75U	ug/L	1.0	U
Carbon Disulfide	75-15-0	BLK	0.75U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	0.75U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	0.75U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	0.75U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	0.75U	ug/L	1.0	U
Chloroform	67-66-3	BLK	0.75U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	0.75U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	0.75U	ug/L	1.0	U
Cyclohexane	110-82-7	BLK	0.75U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	0.75U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	0.75U	ug/L	1.0	U
Freon 113	76-13-1	BLK	0.75U	ug/L	1.0	U
Iodomethane	74-88-4	BLK	0.75U	ug/L	1.0	U

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Isopropylbenzene	98-82-8	BLK	0.75U	ug/L	1.0	U
Methyl acetate	79-20-9	BLK	0.75U	ug/L	1.0	U
Methyl cyclohexane	108-87-2	BLK	0.75U	ug/L	1.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	0.75U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	0.75U	ug/L	1.0	U
Styrene	100-42-5	BLK	0.75U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	0.75U	ug/L	1.0	U
Toluene	108-88-3	BLK	0.75U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	2.3U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	0.75U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	0.75U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	0.75U	ug/L	1.0	U
Vinyl Chloride	75-01-4	BLK	0.75U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	30.8	30	103	81 - 118	
4-Bromofluorobenzene	460-00-4	BLK	30.9	30	103	85 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.9	30	99.8	80 - 119	
Toluene-d8	2037-26-5	BLK	31.1	30	104	89 - 112	

Lab Control Standard 3901014 (LCS) Created on 11/05/2024 11:26 For QC Batch 1327406

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	LCS	22.9		20	114	74 - 131		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	20.2		20	101	71 - 121		
1,1,2-Trichloroethane	79-00-5	LCS	21.4		20	107	80 - 119		
1,1-Dichloroethane	75-34-3	LCS	21.7		20	108	77 - 125		
1,1-Dichloroethene	75-35-4	LCS	22.1		20	111	71 - 131		
1,2,3-Trichlorobenzene	87-61-6	LCS	21.8		20	109	69 - 129		
1,2,4-Trichlorobenzene	120-82-1	LCS	24.9		20	125	69 - 130		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	17.1		20	85.6	62 - 128		
1,2-Dibromoethane	106-93-4	LCS	21.9		20	109	77 - 121		
1,2-Dichlorobenzene	95-50-1	LCS	21.4		20	107	80 - 119		
1,2-Dichloroethane	107-06-2	LCS	21.1		20	105	73 - 128		
1,2-Dichloropropane	78-87-5	LCS	21.5		20	108	78 - 122		
1,3-Dichlorobenzene	541-73-1	LCS	22		20	110	80 - 119		
1,3-Dichloropropene, Total	542-75-6	LCS	41.1		40	103	75 - 124		
1,4-Dichlorobenzene	106-46-7	LCS	21.3		20	107	79 - 118		
2-Butanone	78-93-3	LCS	111		100	111	56 - 143		
2-Hexanone	591-78-6	LCS	105		100	105	57 - 139		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	102		100	102	67 - 130		
Acetone	67-64-1	LCS	114		100	114	39 - 160		

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Benzene	71-43-2	LCS	21.1		20	105	79 - 120		
Bromochloromethane	74-97-5	LCS	21.7		20	108	78 - 123		
Bromodichloromethane	75-27-4	LCS	23.1		20	115	79 - 125		
Bromoform	75-25-2	LCS	17.8		20	89	66 - 130		
Bromomethane	74-83-9	LCS	19.5		20	97.7	53 - 141		
Carbon Disulfide	75-15-0	LCS	21.4		20	107	64 - 133		
Carbon Tetrachloride	56-23-5	LCS	19.3		20	96.4	72 - 136		
Chlorobenzene	108-90-7	LCS	20.9		20	105	82 - 118		
Chlorodibromomethane	124-48-1	LCS	18.3		20	91.7	74 - 126		
Chloroethane	75-00-3	LCS	20.9		20	104	60 - 138		
Chloroform	67-66-3	LCS	22		20	110	79 - 124		
Chloromethane	74-87-3	LCS	21.3		20	107	50 - 139		
cis-1,2-Dichloroethene	156-59-2	LCS	22.1		20	110	78 - 123		
Cyclohexane	110-82-7	LCS	22.1		20	110	71 - 130		
Dichlorodifluoromethane	75-71-8	LCS	20.3		20	102	32 - 152		
Ethylbenzene	100-41-4	LCS	21.7		20	108	79 - 121		
Freon 113	76-13-1	LCS	22.1		20	110	70 - 136		
Iodomethane	74-88-4	LCS	22.7		20	114	69 - 131		
Isopropylbenzene	98-82-8	LCS	23.8		20	119	72 - 131		
Methyl acetate	79-20-9	LCS	19.5		20	97.3	56 - 136		
Methyl cyclohexane	108-87-2	LCS	22		20	110	72 - 132		
Methyl t-Butyl Ether	1634-04-4	LCS	22.4		20	112	71 - 124		
Methylene Chloride	75-09-2	LCS	21.3		20	107	74 - 124		
Styrene	100-42-5	LCS	23.2		20	116	78 - 123		
Tetrachloroethene	127-18-4	LCS	21		20	105	74 - 129		
Toluene	108-88-3	LCS	20.8		20	104	80 - 121		
Total Xylenes	1330-20-7	LCS	65.1		60	109	79 - 121		
trans-1,2-Dichloroethene	156-60-5	LCS	21.8		20	109	75 - 124		
Trichloroethene	79-01-6	LCS	19.7		20	98.5	79 - 123		
Trichlorofluoromethane	75-69-4	LCS	21		20	105	65 - 141		
Vinyl Chloride	75-01-4	LCS	22.2		20	111	58 - 137		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	30.2	30	101	81 - 118	
4-Bromofluorobenzene	460-00-4	LCS	30.9	30	103	85 - 114	
Dibromofluoromethane	1868-53-7	LCS	30.9	30	103	80 - 119	
Toluene-d8	2037-26-5	LCS	30.3	30	101	89 - 112	

Matrix Spike 3901015 (MS) 3385043005 For QC Batch 1327406

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3901016 (MSD) 3385043005 For QC Batch 1327406

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	MS	22	0	20	110	74 - 131		
1,1,1-Trichloroethane	71-55-6	MSD	23	0	20	115	74 - 131	RPD 4.54 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	20.1	0	20	100	71 - 121		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	20.4	0	20	102	71 - 121	RPD 1.33 (Max-20)	
1,1,2-Trichloroethane	79-00-5	MS	22.1	0	20	111	80 - 119		
1,1,2-Trichloroethane	79-00-5	MSD	22.4	0	20	112	80 - 119	RPD 1.50 (Max-20)	
1,1-Dichloroethane	75-34-3	MS	21.9	0	20	109	77 - 125		
1,1-Dichloroethane	75-34-3	MSD	22.5	0	20	113	77 - 125	RPD 2.87 (Max-20)	
1,1-Dichloroethene	75-35-4	MS	22.4	0	20	112	71 - 131		
1,1-Dichloroethene	75-35-4	MSD	23.1	0	20	115	71 - 131	RPD 2.97 (Max-20)	
1,2,3-Trichlorobenzene	87-61-6	MS	21.1	0	20	106	69 - 129		
1,2,3-Trichlorobenzene	87-61-6	MSD	22.4	0	20	112	69 - 129	RPD 5.86 (Max-20)	
1,2,4-Trichlorobenzene	120-82-1	MS	23.3	0	20	117	69 - 130		
1,2,4-Trichlorobenzene	120-82-1	MSD	24.4	0	20	122	69 - 130	RPD 4.73 (Max-20)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	16.3	0	20	81.7	62 - 128		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	17.2	0	20	85.9	62 - 128	RPD 4.97 (Max-20)	
1,2-Dibromoethane	106-93-4	MS	22.5	0	20	112	77 - 121		
1,2-Dibromoethane	106-93-4	MSD	23	0	20	115	77 - 121	RPD 2.29 (Max-20)	
1,2-Dichlorobenzene	95-50-1	MS	21.2	0	20	106	80 - 119		
1,2-Dichlorobenzene	95-50-1	MSD	21.5	0	20	107	80 - 119	RPD 1.55 (Max-20)	
1,2-Dichloroethane	107-06-2	MS	20.9	0	20	105	73 - 128		
1,2-Dichloroethane	107-06-2	MSD	21.2	0	20	106	73 - 128	RPD 1.45 (Max-20)	
1,2-Dichloropropane	78-87-5	MS	22	0	20	110	78 - 122		
1,2-Dichloropropane	78-87-5	MSD	22.4	0	20	112	78 - 122	RPD 1.94 (Max-20)	
1,3-Dichlorobenzene	541-73-1	MS	21.4	0	20	107	80 - 119		
1,3-Dichlorobenzene	541-73-1	MSD	21.7	0	20	108	80 - 119	RPD 1.23 (Max-20)	
1,3-Dichloropropene, Total	542-75-6	MS	39.9	0	40	99.7	75 - 124		
1,3-Dichloropropene, Total	542-75-6	MSD	41.8	0	40	104	75 - 124	RPD 4.70 (Max-20)	
1,4-Dichlorobenzene	106-46-7	MS	20.8	0	20	104	79 - 118		
1,4-Dichlorobenzene	106-46-7	MSD	21	0	20	105	79 - 118	RPD 1.21 (Max-20)	
2-Butanone	78-93-3	MS	104	0	100	104	56 - 143		
2-Butanone	78-93-3	MSD	105	0	100	105	56 - 143	RPD 0.91 (Max-20)	
2-Hexanone	591-78-6	MS	103	0	100	103	57 - 139		
2-Hexanone	591-78-6	MSD	104	0	100	104	57 - 139	RPD 0.90 (Max-20)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	105	0	100	105	67 - 130		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	107	0	100	107	67 - 130	RPD 1.22 (Max-20)	
Acetone	67-64-1	MS	88	4.50	100	83.4	39 - 160		
Acetone	67-64-1	MSD	95	4.50	100	90.5	39 - 160	RPD 7.70 (Max-20)	
Benzene	71-43-2	MS	21.5	0	20	107	79 - 120		
Benzene	71-43-2	MSD	22	0	20	110	79 - 120	RPD 2.57 (Max-20)	
Bromochloromethane	74-97-5	MS	22.5	0	20	113	78 - 123		
Bromochloromethane	74-97-5	MSD	22.7	0	20	114	78 - 123	RPD 0.84 (Max-20)	
Bromodichloromethane	75-27-4	MS	22.6	0	20	113	79 - 125		
Bromodichloromethane	75-27-4	MSD	23.3	0	20	117	79 - 125	RPD 3.22 (Max-20)	
Bromoform	75-25-2	MS	17	0	20	84.8	66 - 130		
Bromoform	75-25-2	MSD	18	0	20	90.1	66 - 130	RPD 6.08 (Max-20)	
Bromomethane	74-83-9	MS	10.8	0	20	53.8	53 - 141		
Bromomethane	74-83-9	MSD	9.1	0	20	45.4*	53 - 141	RPD 17 (Max-20)	

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Carbon Disulfide	75-15-0	MS	24.3	0.89	20	117	64 - 133		
Carbon Disulfide	75-15-0	MSD	24.2	0.89	20	117	64 - 133	RPD 0.40 (Max-20)	
Carbon Tetrachloride	56-23-5	MS	19.3	0	20	96.5	72 - 136		
Carbon Tetrachloride	56-23-5	MSD	19.8	0	20	99.2	72 - 136	RPD 2.79 (Max-20)	
Chlorobenzene	108-90-7	MS	21.4	0	20	107	82 - 118		
Chlorobenzene	108-90-7	MSD	21.8	0	20	109	82 - 118	RPD 1.57 (Max-20)	
Chlorodibromomethane	124-48-1	MS	19.1	0	20	95.4	74 - 126		
Chlorodibromomethane	124-48-1	MSD	19.6	0	20	97.8	74 - 126	RPD 2.44 (Max-20)	
Chloroethane	75-00-3	MS	18.3	0	20	91.7	60 - 138		
Chloroethane	75-00-3	MSD	19.7	0	20	98.3	60 - 138	RPD 6.95 (Max-20)	
Chloroform	67-66-3	MS	21.9	0.49	20	107	79 - 124		
Chloroform	67-66-3	MSD	21.9	0.49	20	107	79 - 124	RPD 0.11 (Max-20)	
Chloromethane	74-87-3	MS	19.5	0	20	97.3	50 - 139		
Chloromethane	74-87-3	MSD	18.2	0	20	91	50 - 139	RPD 6.76 (Max-20)	
cis-1,2-Dichloroethene	156-59-2	MS	22.6	1.10	20	108	78 - 123		
cis-1,2-Dichloroethene	156-59-2	MSD	23.5	1.10	20	112	78 - 123	RPD 3.68 (Max-20)	
Cyclohexane	110-82-7	MS	20.6	0	20	103	71 - 130		
Cyclohexane	110-82-7	MSD	20.5	0	20	102	71 - 130	RPD 0.48 (Max-20)	
Dichlorodifluoromethane	75-71-8	MS	17.2	0	20	86.2	32 - 152		
Dichlorodifluoromethane	75-71-8	MSD	16.9	0	20	84.3	32 - 152	RPD 2.27 (Max-20)	
Ethylbenzene	100-41-4	MS	22	0	20	110	79 - 121		
Ethylbenzene	100-41-4	MSD	22	0	20	110	79 - 121	RPD 0.26 (Max-20)	
Freon 113	76-13-1	MS	19.3	0	20	96.3	70 - 136		
Freon 113	76-13-1	MSD	19.8	0	20	99.1	70 - 136	RPD 2.91 (Max-20)	
Iodomethane	74-88-4	MS	19.1	0	20	95.3	69 - 131		
Iodomethane	74-88-4	MSD	19.5	0	20	97.4	69 - 131	RPD 2.23 (Max-20)	
Isopropylbenzene	98-82-8	MS	22.6	0	20	113	72 - 131		
Isopropylbenzene	98-82-8	MSD	22.7	0	20	114	72 - 131	RPD 0.49 (Max-20)	
Methyl acetate	79-20-9	MS	16.6	0	20	82.9	56 - 136		
Methyl acetate	79-20-9	MSD	17.2	0	20	85.8	56 - 136	RPD 3.51 (Max-20)	
Methyl cyclohexane	108-87-2	MS	19.2	0	20	95.8	72 - 132		
Methyl cyclohexane	108-87-2	MSD	19	0	20	95.2	72 - 132	RPD 0.64 (Max-20)	
Methyl t-Butyl Ether	1634-04-4	MS	21.7	0	20	108	71 - 124		
Methyl t-Butyl Ether	1634-04-4	MSD	22.5	0	20	112	71 - 124	RPD 3.64 (Max-20)	
Methylene Chloride	75-09-2	MS	21.5	0	20	107	74 - 124		
Methylene Chloride	75-09-2	MSD	21.3	0	20	107	74 - 124	RPD 0.80 (Max-20)	
Styrene	100-42-5	MS	22.7	0	20	113	78 - 123		
Styrene	100-42-5	MSD	22.8	0	20	114	78 - 123	RPD 0.66 (Max-20)	
Tetrachloroethene	127-18-4	MS	18.7	0	20	93.6	74 - 129		
Tetrachloroethene	127-18-4	MSD	18.8	0	20	94	74 - 129	RPD 0.42 (Max-20)	
Toluene	108-88-3	MS	24.1	3.80	20	102	80 - 121		
Toluene	108-88-3	MSD	25.2	3.80	20	107	80 - 121	RPD 4.39 (Max-20)	
Total Xylenes	1330-20-7	MS	66.2	0	60	110	79 - 121		
Total Xylenes	1330-20-7	MSD	67.1	0	60	112	79 - 121	RPD 1.33 (Max-20)	
trans-1,2-Dichloroethene	156-60-5	MS	22.1	0.47	20	108	75 - 124		
trans-1,2-Dichloroethene	156-60-5	MSD	22.4	0.47	20	110	75 - 124	RPD 1.56 (Max-20)	
Trichloroethene	79-01-6	MS	20.7	0.89	20	99.2	79 - 123		
Trichloroethene	79-01-6	MSD	21.1	0.89	20	101	79 - 123	RPD 1.73 (Max-20)	
Trichlorofluoromethane	75-69-4	MS	19.5	0	20	97.7	65 - 141		

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Trichlorofluoromethane	75-69-4	MSD	19.2	0	20	96.2	65 - 141	RPD 1.56 (Max-20)	
Vinyl Chloride	75-01-4	MS	21.1	1.50	20	97.8	58 - 137		
Vinyl Chloride	75-01-4	MSD	21.3	1.50	20	98.9	58 - 137	RPD 1.11 (Max-20)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	31.6	30	105	81 - 118	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.6	30	102	81 - 118	
4-Bromofluorobenzene	460-00-4	MS	30.3	30	101	85 - 114	
4-Bromofluorobenzene	460-00-4	MSD	29.2	30	97.4	85 - 114	
Dibromofluoromethane	1868-53-7	MS	30.6	30	102	80 - 119	
Dibromofluoromethane	1868-53-7	MSD	31.1	30	104	80 - 119	
Toluene-d8	2037-26-5	MS	30.6	30	102	89 - 112	
Toluene-d8	2037-26-5	MSD	30	30	100	89 - 112	

QC Batch

QC Batch	1327630	Prep Method	N/A
Date	N/A	Analysis Method	SW846 8260C
Tech.			

Associated Samples

3385043019	3385043020	3385043021	3385043022
3385043023	3385043024	3385043025	3385043026
3385043027	3385043028		

Method Blank 3901672 (MB) Created on 11/06/2024 12:10 For QC Batch 1327630

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
1,1,1-Trichloroethane	71-55-6	BLK	0.75U	ug/L	1.0	U
1,1,2,2-Tetrachloroethane	79-34-5	BLK	0.75U	ug/L	1.0	U
1,1,2-Trichloroethane	79-00-5	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethane	75-34-3	BLK	0.75U	ug/L	1.0	U
1,1-Dichloroethene	75-35-4	BLK	0.75U	ug/L	1.0	U
1,2,3-Trichlorobenzene	87-61-6	BLK	0.75U	ug/L	1.0	U
1,2,4-Trichlorobenzene	120-82-1	BLK	0.75U	ug/L	1.0	U
1,2-Dibromo-3-chloropropane	96-12-8	BLK	2.5U	ug/L	5.0	U
1,2-Dibromoethane	106-93-4	BLK	0.75U	ug/L	1.0	U
1,2-Dichlorobenzene	95-50-1	BLK	0.75U	ug/L	1.0	U
1,2-Dichloroethane	107-06-2	BLK	0.75U	ug/L	1.0	U
1,2-Dichloropropane	78-87-5	BLK	0.75U	ug/L	1.0	U
1,3-Dichlorobenzene	541-73-1	BLK	0.75U	ug/L	1.0	U
1,3-Dichloropropene, Total	542-75-6	BLK	1.5U	ug/L	2.0	U
1,4-Dichlorobenzene	106-46-7	BLK	0.75U	ug/L	1.0	U
2-Butanone	78-93-3	BLK	3.8U	ug/L	5.0	U
2-Hexanone	591-78-6	BLK	3.8U	ug/L	5.0	U
4-Methyl-2-Pentanone(MIBK)	108-10-1	BLK	3.8U	ug/L	5.0	U

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result	Units	LOQ	Qualifiers
Acetone	67-64-1	BLK	3.8U	ug/L	5.0	U
Benzene	71-43-2	BLK	0.75U	ug/L	1.0	U
Bromochloromethane	74-97-5	BLK	0.75U	ug/L	1.0	U
Bromodichloromethane	75-27-4	BLK	0.75U	ug/L	1.0	U
Bromoform	75-25-2	BLK	0.75U	ug/L	1.0	U
Bromomethane	74-83-9	BLK	0.75U	ug/L	1.0	U
Carbon Disulfide	75-15-0	BLK	0.75U	ug/L	1.0	U
Carbon Tetrachloride	56-23-5	BLK	0.75U	ug/L	1.0	U
Chlorobenzene	108-90-7	BLK	0.75U	ug/L	1.0	U
Chlorodibromomethane	124-48-1	BLK	0.75U	ug/L	1.0	U
Chloroethane	75-00-3	BLK	0.75U	ug/L	1.0	U
Chloroform	67-66-3	BLK	0.75U	ug/L	1.0	U
Chloromethane	74-87-3	BLK	0.75U	ug/L	1.0	U
cis-1,2-Dichloroethene	156-59-2	BLK	0.75U	ug/L	1.0	U
Cyclohexane	110-82-7	BLK	0.75U	ug/L	1.0	U
Dichlorodifluoromethane	75-71-8	BLK	0.75U	ug/L	1.0	U
Ethylbenzene	100-41-4	BLK	0.75U	ug/L	1.0	U
Freon 113	76-13-1	BLK	0.75U	ug/L	1.0	U
Iodomethane	74-88-4	BLK	0.75U	ug/L	1.0	U
Isopropylbenzene	98-82-8	BLK	0.75U	ug/L	1.0	U
Methyl acetate	79-20-9	BLK	0.75U	ug/L	1.0	U
Methyl cyclohexane	108-87-2	BLK	0.75U	ug/L	1.0	U
Methyl t-Butyl Ether	1634-04-4	BLK	0.75U	ug/L	1.0	U
Methylene Chloride	75-09-2	BLK	0.75U	ug/L	1.0	U
Styrene	100-42-5	BLK	0.75U	ug/L	1.0	U
Tetrachloroethene	127-18-4	BLK	0.75U	ug/L	1.0	U
Toluene	108-88-3	BLK	0.75U	ug/L	1.0	U
Total Xylenes	1330-20-7	BLK	2.3U	ug/L	3.0	U
trans-1,2-Dichloroethene	156-60-5	BLK	0.75U	ug/L	1.0	U
Trichloroethene	79-01-6	BLK	0.75U	ug/L	1.0	U
Trichlorofluoromethane	75-69-4	BLK	0.75U	ug/L	1.0	U
Vinyl Chloride	75-01-4	BLK	0.75U	ug/L	1.0	U

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	BLK	30.6	30	102	81 - 118	
4-Bromofluorobenzene	460-00-4	BLK	30.1	30	100	85 - 114	
Dibromofluoromethane	1868-53-7	BLK	29.8	30	99.4	80 - 119	
Toluene-d8	2037-26-5	BLK	30.5	30	102	89 - 112	

Lab Control Standard 3901673 (LCS) Created on 11/06/2024 12:10 For QC Batch 1327630

RESULTS

Compound	CAS No	Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	LCS	22.5		20	112	74 - 131		
1,1,2,2-Tetrachloroethane	79-34-5	LCS	20.8		20	104	71 - 121		
1,1,2-Trichloroethane	79-00-5	LCS	21.4		20	107	80 - 119		
1,1-Dichloroethane	75-34-3	LCS	21.7		20	108	77 - 125		
1,1-Dichloroethene	75-35-4	LCS	20.2		20	101	71 - 131		
1,2,3-Trichlorobenzene	87-61-6	LCS	22.6		20	113	69 - 129		
1,2,4-Trichlorobenzene	120-82-1	LCS	25.4		20	127	69 - 130		
1,2-Dibromo-3-chloropropane	96-12-8	LCS	18.6		20	93.2	62 - 128		
1,2-Dibromoethane	106-93-4	LCS	22.5		20	112	77 - 121		
1,2-Dichlorobenzene	95-50-1	LCS	21.4		20	107	80 - 119		
1,2-Dichloroethane	107-06-2	LCS	21.2		20	106	73 - 128		
1,2-Dichloropropane	78-87-5	LCS	22.2		20	111	78 - 122		
1,3-Dichlorobenzene	541-73-1	LCS	21.7		20	108	80 - 119		
1,3-Dichloropropene, Total	542-75-6	LCS	42		40	105	75 - 124		
1,4-Dichlorobenzene	106-46-7	LCS	21.3		20	107	79 - 118		
2-Butanone	78-93-3	LCS	123		100	123	56 - 143		
2-Hexanone	591-78-6	LCS	114		100	114	57 - 139		
4-Methyl-2-Pentanone(MIBK)	108-10-1	LCS	109		100	109	67 - 130		
Acetone	67-64-1	LCS	122		100	122	39 - 160		
Benzene	71-43-2	LCS	21.1		20	105	79 - 120		
Bromochloromethane	74-97-5	LCS	21.8		20	109	78 - 123		
Bromodichloromethane	75-27-4	LCS	22.3		20	112	79 - 125		
Bromoform	75-25-2	LCS	18.3		20	91.3	66 - 130		
Bromomethane	74-83-9	LCS	14.8		20	74.2	53 - 141		
Carbon Disulfide	75-15-0	LCS	20.2		20	101	64 - 133		
Carbon Tetrachloride	56-23-5	LCS	19.5		20	97.3	72 - 136		
Chlorobenzene	108-90-7	LCS	21.4		20	107	82 - 118		
Chlorodibromomethane	124-48-1	LCS	19.4		20	96.9	74 - 126		
Chloroethane	75-00-3	LCS	22		20	110	60 - 138		
Chloroform	67-66-3	LCS	21.9		20	109	79 - 124		
Chloromethane	74-87-3	LCS	18.9		20	94.7	50 - 139		
cis-1,2-Dichloroethene	156-59-2	LCS	21.7		20	108	78 - 123		
Cyclohexane	110-82-7	LCS	21.5		20	107	71 - 130		
Dichlorodifluoromethane	75-71-8	LCS	19.4		20	96.8	32 - 152		
Ethylbenzene	100-41-4	LCS	22.2		20	111	79 - 121		
Freon 113	76-13-1	LCS	20.7		20	103	70 - 136		
Iodomethane	74-88-4	LCS	16.2		20	81.2	69 - 131		
Isopropylbenzene	98-82-8	LCS	23.3		20	117	72 - 131		
Methyl acetate	79-20-9	LCS	21.6		20	108	56 - 136		
Methyl cyclohexane	108-87-2	LCS	21.4		20	107	72 - 132		
Methyl t-Butyl Ether	1634-04-4	LCS	22.4		20	112	71 - 124		
Methylene Chloride	75-09-2	LCS	21.2		20	106	74 - 124		
Styrene	100-42-5	LCS	21.6		20	108	78 - 123		
Tetrachloroethene	127-18-4	LCS	22		20	110	74 - 129		
Toluene	108-88-3	LCS	20.9		20	104	80 - 121		
Total Xylenes	1330-20-7	LCS	66.3		60	110	79 - 121		
trans-1,2-Dichloroethene	156-60-5	LCS	21.1		20	105	75 - 124		

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VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Trichloroethene	79-01-6	LCS	20.1		20	101	79 - 123		
Trichlorofluoromethane	75-69-4	LCS	21.7		20	108	65 - 141		
Vinyl Chloride	75-01-4	LCS	21.7		20	109	58 - 137		

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	LCS	29.8	30	99.3	81 - 118	
4-Bromofluorobenzene	460-00-4	LCS	30.4	30	101	85 - 114	
Dibromofluoromethane	1868-53-7	LCS	31	30	103	80 - 119	
Toluene-d8	2037-26-5	LCS	29.8	30	99.4	89 - 112	

Matrix Spike 3901674 (MS) 3385043026 For QC Batch 1327630

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Matrix Spike Duplicate 3901675 (MSD) 3385043026 For QC Batch 1327630

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,1,1-Trichloroethane	71-55-6	MS	23.1	0	20	115	74 - 131		
1,1,1-Trichloroethane	71-55-6	MSD	24.2	0	20	121	74 - 131	RPD 4.69 (Max-20)	
1,1,2,2-Tetrachloroethane	79-34-5	MS	20.2	0	20	101	71 - 121		
1,1,2,2-Tetrachloroethane	79-34-5	MSD	20.4	0	20	102	71 - 121	RPD 0.91 (Max-20)	
1,1,2-Trichloroethane	79-00-5	MS	22.8	0	20	114	80 - 119		
1,1,2-Trichloroethane	79-00-5	MSD	23.6	0	20	118	80 - 119	RPD 3.22 (Max-20)	
1,1-Dichloroethane	75-34-3	MS	23	0	20	115	77 - 125		
1,1-Dichloroethane	75-34-3	MSD	23.4	0	20	117	77 - 125	RPD 2.01 (Max-20)	
1,1-Dichloroethene	75-35-4	MS	22.5	0	20	113	71 - 131		
1,1-Dichloroethene	75-35-4	MSD	23.5	0	20	118	71 - 131	RPD 4.24 (Max-20)	
1,2,3-Trichlorobenzene	87-61-6	MS	20.4	0	20	102	69 - 129		
1,2,3-Trichlorobenzene	87-61-6	MSD	21.5	0	20	107	69 - 129	RPD 4.83 (Max-20)	
1,2,4-Trichlorobenzene	120-82-1	MS	23.4	0	20	117	69 - 130		
1,2,4-Trichlorobenzene	120-82-1	MSD	23.8	0	20	119	69 - 130	RPD 1.86 (Max-20)	
1,2-Dibromo-3-chloropropane	96-12-8	MS	17	0	20	85	62 - 128		
1,2-Dibromo-3-chloropropane	96-12-8	MSD	17.6	0	20	87.9	62 - 128	RPD 3.32 (Max-20)	
1,2-Dibromoethane	106-93-4	MS	22.7	0	20	114	77 - 121		
1,2-Dibromoethane	106-93-4	MSD	23.8	0	20	119	77 - 121	RPD 4.59 (Max-20)	
1,2-Dichlorobenzene	95-50-1	MS	21.1	0	20	105	80 - 119		
1,2-Dichlorobenzene	95-50-1	MSD	21.5	0	20	107	80 - 119	RPD 1.87 (Max-20)	
1,2-Dichloroethane	107-06-2	MS	22	0	20	110	73 - 128		
1,2-Dichloroethane	107-06-2	MSD	22.1	0	20	111	73 - 128	RPD 0.50 (Max-20)	
1,2-Dichloropropane	78-87-5	MS	23	0	20	115	78 - 122		
1,2-Dichloropropane	78-87-5	MSD	23.2	0	20	116	78 - 122	RPD 0.96 (Max-20)	
1,3-Dichlorobenzene	541-73-1	MS	21.6	0	20	108	80 - 119		

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
1,3-Dichlorobenzene	541-73-1	MSD	21.6	0	20	108	80 - 119	RPD 0.15 (Max-20)	
1,3-Dichloropropene, Total	542-75-6	MS	41.1	0	40	103	75 - 124		
1,3-Dichloropropene, Total	542-75-6	MSD	42.1	0	40	105	75 - 124	RPD 2.26 (Max-20)	
1,4-Dichlorobenzene	106-46-7	MS	20.7	0	20	103	79 - 118		
1,4-Dichlorobenzene	106-46-7	MSD	21.1	0	20	105	79 - 118	RPD 1.95 (Max-20)	
2-Butanone	78-93-3	MS	111	0	100	111	56 - 143		
2-Butanone	78-93-3	MSD	115	0	100	115	56 - 143	RPD 3.20 (Max-20)	
2-Hexanone	591-78-6	MS	111	0	100	111	57 - 139		
2-Hexanone	591-78-6	MSD	112	0	100	112	57 - 139	RPD 0.98 (Max-20)	
4-Methyl-2-Pentanone(MIBK)	108-10-1	MS	111	0	100	111	67 - 130		
4-Methyl-2-Pentanone(MIBK)	108-10-1	MSD	113	0	100	113	67 - 130	RPD 1.29 (Max-20)	
Acetone	67-64-1	MS	103	4.90	100	97.7	39 - 160		
Acetone	67-64-1	MSD	105	4.90	100	99.7	39 - 160	RPD 1.97 (Max-20)	
Benzene	71-43-2	MS	22.4	0	20	112	79 - 120		
Benzene	71-43-2	MSD	22.9	0	20	115	79 - 120	RPD 2.31 (Max-20)	
Bromochloromethane	74-97-5	MS	22.8	0	20	114	78 - 123		
Bromochloromethane	74-97-5	MSD	23.6	0	20	118	78 - 123	RPD 3.38 (Max-20)	
Bromodichloromethane	75-27-4	MS	23	0	20	115	79 - 125		
Bromodichloromethane	75-27-4	MSD	23.7	0	20	118	79 - 125	RPD 2.89 (Max-20)	
Bromoform	75-25-2	MS	17.4	0	20	86.9	66 - 130		
Bromoform	75-25-2	MSD	17.8	0	20	89.1	66 - 130	RPD 2.43 (Max-20)	
Bromomethane	74-83-9	MS	9.5	0	20	47.4*	53 - 141		
Bromomethane	74-83-9	MSD	10.9	0	20	54.6	53 - 141	RPD 14.10 (Max-20)	
Carbon Disulfide	75-15-0	MS	23.5	0.28	20	116	64 - 133		
Carbon Disulfide	75-15-0	MSD	24.9	0.28	20	123	64 - 133	RPD 5.52 (Max-20)	
Carbon Tetrachloride	56-23-5	MS	20.2	0	20	101	72 - 136		
Carbon Tetrachloride	56-23-5	MSD	21.3	0	20	106	72 - 136	RPD 5.26 (Max-20)	
Chlorobenzene	108-90-7	MS	22	0	20	110	82 - 118		
Chlorobenzene	108-90-7	MSD	22.3	0	20	112	82 - 118	RPD 1.73 (Max-20)	
Chlorodibromomethane	124-48-1	MS	19.8	0	20	99	74 - 126		
Chlorodibromomethane	124-48-1	MSD	20.2	0	20	101	74 - 126	RPD 2.17 (Max-20)	
Chloroethane	75-00-3	MS	23.3	0	20	116	60 - 138		
Chloroethane	75-00-3	MSD	25	0	20	125	60 - 138	RPD 7.02 (Max-20)	
Chloroform	67-66-3	MS	22.5	0.51	20	110	79 - 124		
Chloroform	67-66-3	MSD	23.6	0.51	20	116	79 - 124	RPD 4.82 (Max-20)	
Chloromethane	74-87-3	MS	15.9	0	20	79.4	50 - 139		
Chloromethane	74-87-3	MSD	17	0	20	85	50 - 139	RPD 6.85 (Max-20)	
cis-1,2-Dichloroethene	156-59-2	MS	22.7	0	20	114	78 - 123		
cis-1,2-Dichloroethene	156-59-2	MSD	23.4	0	20	117	78 - 123	RPD 2.71 (Max-20)	
Cyclohexane	110-82-7	MS	22	0	20	110	71 - 130		
Cyclohexane	110-82-7	MSD	23.5	0	20	117	71 - 130	RPD 6.46 (Max-20)	
Dichlorodifluoromethane	75-71-8	MS	16.8	0	20	83.9	32 - 152		
Dichlorodifluoromethane	75-71-8	MSD	18.7	0	20	93.3	32 - 152	RPD 10.50 (Max-20)	
Ethylbenzene	100-41-4	MS	22.8	0	20	114	79 - 121		
Ethylbenzene	100-41-4	MSD	22.9	0	20	115	79 - 121	RPD 0.70 (Max-20)	
Freon 113	76-13-1	MS	21.6	0	20	108	70 - 136		
Freon 113	76-13-1	MSD	23.5	0	20	118	70 - 136	RPD 8.41 (Max-20)	
Iodomethane	74-88-4	MS	9.4	0	20	47.2*	69 - 131		
Iodomethane	74-88-4	MSD	12.3	0	20	61.7*	69 - 131	RPD 26.60* (Max-20)	

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QUALITY CONTROL SAMPLES

VOLATILE ORGANICS (cont.)

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)	Spk Added (ug/L)	Rec. (%)	Limits (%)	RPD Limit (%)	Qualifiers
Isopropylbenzene	98-82-8	MS	22.8	0	20	114	72 - 131		
Isopropylbenzene	98-82-8	MSD	23	0	20	115	72 - 131	RPD 0.93 (Max-20)	
Methyl acetate	79-20-9	MS	21.2	0	20	106	56 - 136		
Methyl acetate	79-20-9	MSD	19.6	0	20	98.1	56 - 136	RPD 7.82 (Max-20)	
Methyl cyclohexane	108-87-2	MS	21.1	0	20	106	72 - 132		
Methyl cyclohexane	108-87-2	MSD	21.9	0	20	110	72 - 132	RPD 3.69 (Max-20)	
Methyl t-Butyl Ether	1634-04-4	MS	22.8	0	20	114	71 - 124		
Methyl t-Butyl Ether	1634-04-4	MSD	23.8	0	20	119	71 - 124	RPD 4 (Max-20)	
Methylene Chloride	75-09-2	MS	22.7	0	20	113	74 - 124		
Methylene Chloride	75-09-2	MSD	23.2	0	20	116	74 - 124	RPD 2.24 (Max-20)	
Styrene	100-42-5	MS	22	0	20	110	78 - 123		
Styrene	100-42-5	MSD	21.6	0	20	108	78 - 123	RPD 1.85 (Max-20)	
Tetrachloroethene	127-18-4	MS	19.8	0	20	98.8	74 - 129		
Tetrachloroethene	127-18-4	MSD	20.1	0	20	101	74 - 129	RPD 1.90 (Max-20)	
Toluene	108-88-3	MS	22.2	0	20	111	80 - 121		
Toluene	108-88-3	MSD	22.3	0	20	111	80 - 121	RPD 0.27 (Max-20)	
Total Xylenes	1330-20-7	MS	66.7	0	60	111	79 - 121		
Total Xylenes	1330-20-7	MSD	68.7	0	60	115	79 - 121	RPD 2.97 (Max-20)	
trans-1,2-Dichloroethene	156-60-5	MS	22.1	0	20	110	75 - 124		
trans-1,2-Dichloroethene	156-60-5	MSD	23.1	0	20	115	75 - 124	RPD 4.32 (Max-20)	
Trichloroethene	79-01-6	MS	20.7	0	20	103	79 - 123		
Trichloroethene	79-01-6	MSD	20.4	0	20	102	79 - 123	RPD 1.38 (Max-20)	
Trichlorofluoromethane	75-69-4	MS	19.4	0	20	96.8	65 - 141		
Trichlorofluoromethane	75-69-4	MSD	21	0	20	105	65 - 141	RPD 7.92 (Max-20)	
Vinyl Chloride	75-01-4	MS	19.7	0	20	98.5	58 - 137		
Vinyl Chloride	75-01-4	MSD	21.1	0	20	105	58 - 137	RPD 6.85 (Max-20)	

SURROGATES

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	MS	30.2	30	101	81 - 118	
1,2-Dichloroethane-d4	17060-07-0	MSD	30.1	30	100	81 - 118	
4-Bromofluorobenzene	460-00-4	MS	30.1	30	100	85 - 114	
4-Bromofluorobenzene	460-00-4	MSD	30.8	30	103	85 - 114	
Dibromofluoromethane	1868-53-7	MS	30.6	30	102	80 - 119	
Dibromofluoromethane	1868-53-7	MSD	31	30	103	80 - 119	
Toluene-d8	2037-26-5	MS	30.3	30	101	89 - 112	
Toluene-d8	2037-26-5	MSD	30.6	30	102	89 - 112	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3385043001	MW5-1DA	N/A	N/A	N/A		SW846 8260C	1327406
3385043002	MW5-6	N/A	N/A	N/A		SW846 8260C	1327406
3385043003	RW5-2	N/A	N/A	N/A		SW846 8260C	1327406
3385043004	MW5-5D	N/A	N/A	N/A		SW846 8260C	1327406
3385043005	RW5-1	N/A	N/A	N/A		SW846 8260C	1327406
3385043006	RW5-4	N/A	N/A	N/A		SW846 8260C	1327406
3385043007	DUP	N/A	N/A	N/A		SW846 8260C	1327406
3385043008	MW13-4D	N/A	N/A	N/A		SW846 8260C	1327406
3385043009	MW13-5D	N/A	N/A	N/A		SW846 8260C	1327406
3385043010	PW13-1	N/A	N/A	N/A		SW846 8260C	1327406
3385043011	PW13-4D	N/A	N/A	N/A		SW846 8260C	1327406
3385043012	SW99-10	N/A	N/A	N/A		SW846 8260C	1327406
3385043013	SW10-7	N/A	N/A	N/A		SW846 8260C	1327406
3385043014	SW10-8	N/A	N/A	N/A		SW846 8260C	1327406
3385043015	MW10-4D	N/A	N/A	N/A		SW846 8260C	1327406
3385043016	MW10-1DA	N/A	N/A	N/A		SW846 8260C	1327406
3385043017	MW10-10D	N/A	N/A	N/A		SW846 8260C	1327406
3385043018	PW10-2	N/A	N/A	N/A		SW846 8260C	1327406
3385043019	MW10-4E	N/A	N/A	N/A		SW846 8260C	1327630
3385043020	PW10-1	N/A	N/A	N/A		SW846 8260C	1327630
3385043021	MW10-9D	N/A	N/A	N/A		SW846 8260C	1327630
3385043022	MW10-3D	N/A	N/A	N/A		SW846 8260C	1327630
3385043023	MW1-1DA	N/A	N/A	N/A		SW846 8260C	1327630
3385043024	SW3-2	N/A	N/A	N/A		SW846 8260C	1327630
3385043025	SW3-3	N/A	N/A	N/A		SW846 8260C	1327630
3385043026	SW3-15	N/A	N/A	N/A		SW846 8260C	1327630
3385043027	DUP-SW	N/A	N/A	N/A		SW846 8260C	1327630
3385043028	TRIP BLANK	N/A	N/A	N/A		SW846 8260C	1327630

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P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3385043
Logged By: GRD
PM: SJB
ALS Quote
1 of 3

Client Name: Arcadis
Address: 10405 Lockport Rd
Niagara Falls, NY 14304
Contact: Cory Averill
Phone#: 716-249-9880
Project Name/#: 30036646.34CD
Bill To:
Purchase Order #:
TAT ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? ☐

Container Type: G
Container Size: 40 mL GRD 10/29/24
Preservative: HCl
Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	82605	Enter Number of Containers Per Sample or Field Results Below.
1	MW5-1DA	10/28/24	905		G	GW	3	
2	MW5-6		925		G	GW	3	
3	PW5-2 RW5-2		945		G	GW	3	
4	MW5-5D		830		G	GW	3	
5	RW5-1		700		G	GW	3	
6	RW5-4		850		G	GW	3	
7	DUP		—		G	GW	3	
8	MS/MSD		900		G	GW	6	
9	MW13-4D		810		G	GW	3	
10	MW13-5D		755		G	GW	3	

Temp Taken By: GRD Therm ID: 352 WO Temp (°C) 3
Receipt Info completed by: GRD WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N
Courier/Tracking # 7467 3851 7698

Deviations? NO YES
If YES, list below
bottle info
no sampler name legibility
GRD 10/29/24

Client contact:
Data/Tech:

Sample(s) for Radiation testing? Y N
Reportable SDWA Sample(s)? Y N
SDWA State of Origin?
PWSID #
Rad Screen (uCi)
New Source? Y N
New Source Contact:
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
MS/MSD collected at RW5-1

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Circle Sample Collector: ALS Tech / Client
Name: ID:
Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
		1		2	
10/28/24	1300	3	Shawn Pred / Arcadis	4	Fedex
10/29/24	0916	5	Fedex	6	CW ALS
		7		8	
		9		10	

Data Deliverables: ☐ Standard Lvl 1 ☐ Standard Lvl 2 ☐ Standard Lvl 3 ☐ Standard Lvl 4 ☐ CLP-like ☐ DOD ☐ NJ RED ☐ NJ Full ☐ HSCA ☐ Landfill ☐ NJ GW

EDDs: ☐ Excel Summary ☐ Equis ☐ Custom

Sample Disposal: Lab ☐ Special ☐

EDDS: Format Type:

State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ WV ☐ FL ☐ other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05.01.2024

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3385043 2 of 3

ALS Quote #:

Client Name: Arcadis

Address: 6405 Lockport Rd Niagara Falls, NY 1304

Contact: (Corey Averill)

Phone#: 716-248-8886

Project Name/#: 30036646.3400

Bill To:

Purchase Order #:

TAT ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? ☐

Container Type: G

Container Size: 40 mL GRB 10 Tabs

Preservative: HCl

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Enter Number of Containers Per Sample or Field Results Below.
1	PW13-1	10/28/24	750		G	SW	3
2	PW13-4D		805		G	SW	3
3	SW99-10		955		G	SW	3
4	SW10-7		1010		G	SW	3
5	SW10-8		1100		G	SW	3
6	MW10-4D		1032		G	GW	3
7	MW10-1DA		1040		G	GW	3
8	MW10-10D		1050		G	GW	3
9	PW10-2		1045		G	GW	3
10	MW10-4E		1035		G	SW	3

Circle Sample Collector: ALS Tech / Client

Name: ID:

Comments:

Date	Time		Relinquished By / Company Name		Received By / Company Name
		1		2	
10/28/24	1300	3	Shawn Pred / Arcadis	4	Fedex
10/29/24	0916	5	Fedex	6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA	Deviations? NO YES
Sample Custody Seal Intact	Y	N	NA	If YES, list below:
Received on Ice	Y	N	NA	
Coolers & Samples Intact	Y	N		
Correct Containers Provided	Y	N		
Sample Label/COC Agree	Y	N		
Adequate Sample Volumes	Y	N		
VOA only: Trip Blank	Y	N	NA	
NJ ≤ 4 days?	Y	N		Client contact:

Courier/Tracking # Date/Tech:

Sample(s) for Radiation testing? Y N Rad Screen (uCi)

Reportable SDWA Sample(s)? Y N New Source? Y N

SDWA State of Origin? New Source Contact:

PWSID #

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES NO

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: ☐ Standard Lvl 1 ☐ Standard Lvl 2 ☐ Standard Lvl 3 ☐ Standard Lvl 4 ☐ CLP-like ☐ DOD ☐ NJ RED ☐ NJ Full ☐ HSCA ☐ Landfill ☐ NJ GW ☐ _____

EDDs: ☐ Excel Summary ☐ Equis ☐ Custom

Sample Disposal: ☐ Lab ☐ Special

EDDS: Format Type

State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ WV ☐ FL ☐ other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05 01 2024

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 33850473 3 of 3
ALS Quote #:

Client Name: Arcadis
Address: 10405 Lockport Rd Niagara Falls, NY 14304
Contact: Corey Averill
Phone#: 716-248-8886
Project Name/#: 30036646.3420
Bill To:
Purchase Order #:
TAT ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? ☐

Container Type: G
Container Size: 40 mL
Preservative: HCl
GRD 10/29/24
Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

8260C

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Enter Number of Containers Per Sample or Field Results Below.
1	PW 10-1	10/28/24	1020		G	SW	3
2	MW10-9D		1030		G	SW	3
3	MW10-3D		1015		G	SW	3
4	MWHDA MW1-1DA		1115		G	SW	3
5	SW 3-2		1135		G	SW	3
6	SW 3-3		1140		G	SW	3
7	SW 3-15		1125		G	SW	3
8	MS/MSD -SW		1125		G	SW	6
9	DUP -SW		—		G	SW	3
10	TRIP BLANK		—		G	GW	3

Circle Sample Collector: ALS Tech / Client
Name: ID:

Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
		1		2	
10/28/24	1300	3	Shawn Ford / Arcadis	4	Fedex
10/29/24	0916	5	Fedex	6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)
Temp Taken By: Therm ID: WO Temp (°C)
Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA	Deviations? NO YES
Sample Custody Seal Intact	Y	N	NA	If YES, list below
Received on Ice	Y	N	NA	
Coolers & Samples Intact	Y	N		
Correct Containers Provided	Y	N		
Sample Label/COC Agree	Y	N		
Adequate Sample Volumes	Y	N		
VOA only: Trip Blank	Y	N	NA	

NJ ≤ 4 days? Y N
Courier/Tracking #
Client contact: Date/Tech

Sample(s) for Radiation testing? Y N Rad Screen (uCi)
Reportable SDWA Sample(s)? Y N New Source? Y N
SDWA State of Origin? New Source Contact:
PWSID #
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
MS/MSD-SW collected @ SW3-15

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: ☐ Standard Lvl 1 ☐ Standard Lvl 2 ☐ Standard Lvl 3 ☐ Standard Lvl 4 ☐ CLP-like ☐ DOD ☐ NJ RED ☐ NJ Full ☐ HSCA ☐ Landfill ☐ NJ GW ☐ _____
EDDs: ☐ Excel Summary ☐ Equis ☐ Custom
Sample Disposal: ☐ Lab ☐ Special
EDDS: Format Type
State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ WV ☐ FL ☐ other

* G=Grab; C=Composite
**Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05.01 2024

3385043

ALSI BOTTLE REQUEST FORM

Order ID:	241023013	Date Due:	10/23/24	Completed:	
		Time Due:	17:00		

Date Ordered:	10/23/24	Company Name:	ARCADIS
Time Ordered:	10:05	Requested By:	Shannon Fred
Order Taken By:	Sue Scherer	Project Name/No.:	ARCADIS/QU802674 NFARS

Method of Delivery:	Fed Ex Ground	Additional Supplies	Labels Trip Blanks Project Specific Labels (See Notes) Chain of Custodies - 4 Coolers Custody Seals - 4
Address:	Chase Chodkowski 287 Union Rd West Seneca, NY 14224		
Attn:			
Phone:	(716) 248-8886		

# of Bot.	# in Set	Size	Type	Preservation	Analyses
72	3	40 mL	C - Clear Glass	HCl	DOD 8260C
3	3	40 mL	C - Clear Glass	HCl	Trip Blank DOD 8260C

Special Notes	Please ship for delivery by Friday, 10/25/24. 30036646.34CD submitted based on email request: Could you please place the attached bottle order for the NFARS Fall Semiannual sampling delivery to Chase Chodkowski (address below) by 10/25/2024 Please include a few extras in case of breakage, preprinted labels as noted in attached excel and include FedEx return labels. Please include bubble wrap and a fully functioning cooler (no missing or broken handles).	Sample Point ID's	MW1-1DA, MW5-1DA, MW5-5D, MW5-6, RW5-1, RW5-2, RW5-4, MW10-1DA, MW10-3D, MW10-4D, MW10-4E, MW10-9D, MW10-10D, PW10-1, PW10-2, MW13-4D, MS, MSD, DUP, _, __, MW13-5D, PW13-1, PW13-4D

ID	Tracking Number	ID	Tracking Number	ID	Tracking Number

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1/23/2025 7:01 AM

Case Narrative

Case Narrative
ACR-594
(3385043)

Sample Management

This report contains the results of the analysis of four (4) ground water samples collected on October 28, 2024. Analytical results and quality control information are summarized in this data package.

Sample Receipt

The sample arrived at ALS - Middletown via courier on October 29, 2024. Upon receipt, the sample was inspected and compared to the Chain of Custody. Sample temperature was documented on the enclosed Chain of Custody. The sample was received intact and properly preserved, unless noted on the enclosed Certificate of Analysis and/or Chain of Custody.

Qualifier Symbol Definitions:

U = Qualifier indicates that the analyte was not detected above the LOD.
J = Qualifier indicates that the analyte value is between the DL and the LOQ.
B = Qualifier indicates that the analyte was detected in the blank.
E = Qualifier indicates that the analyte result exceeds the calibration range.
P = Qualifier indicates that the RPD between the two analytical columns is > 40%.
NSC = Qualifier indicates that spike recoveries were not calculated based on the spiking concentration.

Result Symbol Definitions:

DL = The smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration at the 99% level of confidence.
LOD = The smallest analyte concentration that must be present in a sample in order to be detected at a high level of confidence.
LOQ = The lowest concentration that produces a quantitative result within specified limits of precision or bias.

Manual Integration Symbol Definitions

I = Peak was not integrated properly by chromatographic software. This may be due to baseline irregularities resulting from sample matrix, elevated baseline, or incorrect integration by software on a sample. Integration was adjusted by operator to ensure proper quantitation.

H = The incorrect peak was identified, or the chromatographic software did not identify an analyte peak. Operator manually identified the correct peak as the appropriate target analyte. This flag is automatically assigned by the Target software.

SP = Peak was erroneously split. The operator manually integrated the peak to include all the area of the analyte peak to ensure proper quantitation.

MP = Two peaks were erroneously merged. This may include two discrete peaks separated by a distinguishable valley or a larger peak with a clearly identifiable shoulder. Operator manually split peaks.

AB = Integration of group of adjacent peaks did not follow baseline. Operator manually assigned integration to follow baseline.

NP = Negative spike in the baseline resulted in overstating area of analyte peaks. Analyte peaks were re-assigned.

AC = Integration of aggregate or multi-component analyte to include area off all components of the analyte (i.e., toxaphene).

Manual Integrations

If manual integrations were performed, they are indicated on the raw data quantification files for each method.

Volatile Organics by SW-846 Method 8260C

Sample Handling. Four (4) ground water samples was analyzed by SW-846 Method 8260C for volatile organic compounds. The analysis was performed within holding time.

Initial Calibrations. Initial calibrations were properly analyzed and met method criteria for all target analytes. **Note:** The batch LCS also serves as a second source (ICV).

Continuing Calibration Verification. Target analytes were recovered within control limits.

Blanks. Target analytes were not detected in the blanks.

Surrogates. All surrogates were recovered within control limits.

Laboratory control samples. Target analytes were recovered within control limits.

Internal Standards. All internal standard results met method criteria.

V 8

g | Q | T| | l

o | fi UhQF9D7S

h vx

SSbUMTS

Mfk

Q |

a xu

QSkCHBf VQkl A77ADDBD5ABST

7869A6979C



V 84g | Q | T| | l

o K usvfl

XPKcd8558==9=3B9MN 2KMc: C9

p

SSbUMTS

r mbRVMb

e p 8A4BT o

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Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
6162Nflufi x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
6161772ex sufi x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	6645:479 69D7C	7:79665:	7:79665:683N
6172Nft x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
6172Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
6172Nflufi x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
6172Nflufi s x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
617182e flufi t x x x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
617192e flufi t x x x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
6182Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	6645:479 69D7C	7:79665:	7:79665:683N
6192Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
72L s x	XN f z4V	63=	83B	:35	6	6645:479 69D7C	7:79665:	7:79665:683N
72Rx s x	XN f z4V	63=	83B	:35	6	6645:479 69D7C	7:79665:	7:79665:683N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	6645:479 69D7C	7:79665:	7:79665:683N
Kux x	XN f z4V	63=	83B	:35	6	6645:479 69D7C	7:79665:	7:79665:683N
Lx x x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
L ufi x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
L y	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
L x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
Mst Nfl vx	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
Mst ex sufi flvx	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
Mfi t x x x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
Mfi x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
Mfi y	535 T z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
Mfi x fis x	XN f z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N
ufl26172Nflufi x fix x	A3 z4V	5388	53A:	635	6	6645:479 69D7C	7:79665:	7:79665:683N

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Q	k i n	Td	dgT	dgi	TV	Q	T	k aT	T	V
Mu fix s x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
Ofi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
P x 668	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
S v x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
S t x x x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
Wx fi sux s x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
d x x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
ex sufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
e x x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
e s i x x	XN f z4V	635	738	835	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
s 26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
e flufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		
gfl Mfi flvx	83C z4V	5388	53A:	635	6	6645: 479 69D7C	7: 79665:	7: 79665: 683N		



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Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
6162Nflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
6161772ex sufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
6172Nft x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
6172Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
6172Nflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
6172Nflufi s x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
617182e flufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
617192e flufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
6182Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
6192Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
72L s x	XN f z4V	63=	83B	:35	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
72Rx s x	XN f z4V	63=	83B	:35	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Kux x	839 T z4V	63=	83B	:35	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Lx x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
L ufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
L y	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
L x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Ms t Nfl vx	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Ms t ex sufi flvx	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Mfi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Mfi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Mfi y	5398 T z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Mfi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
ufl26172Nflufi x fix x	683= z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N



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Qh

Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
M u fix s x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Ofi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
P x 668	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
S v x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
S t x x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Wx fi sux s x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
d x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
ex sufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
e x x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
e s i x x	XN f z4V	635	738	835	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
s 26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
e flufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N
gfl Mfi flvx	635 z4V	5388	53A:	635	6	6645: 479 69D5	7: 79665:	7: 79665: 693N



V 84g | Q | T| | l

o K usvfl

XPKcd8558==9=3B9MN 2KMc: C9

p

SSbUMTS

r mbRVMb

hp 8A4B o

88B: 598565 6547B479 5AD5 6547C479 5CDb= Qh

Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
6162Nflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
6161772ex sufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
6172Nft x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
6172Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
6172Nflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
6172Nflufi s x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
617182e flufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
617192e flufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
6182Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
6192Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
72L s x	XN f z4V	63=	83B	:35	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
72Rx s x	XN f z4V	63=	83B	:35	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Kux x	XN f z4V	63=	83B	:35	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Lx x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
L ufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
L y	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
L x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Ms t Nfl vx	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Ms t ex sufi flvx	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Mfi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Mfi y	5395 T z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
ufl26172Nflufi x fix x	636 z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N



V 84g | Q | T| | l

o K usvfl

XPKcd8558==9=389MN 2KMc: C9

p

SSbUMTS

r mbRVMb

hp 8A48 o

88B: 598565 6547B479 5AD5 6547C479 5CDb= Qh

Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
M u fix s x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Ofi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
P x 668	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
S v x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
S t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Wx fi sux s x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
d x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
ex sufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
e x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
e s i x x	XN f z4V	635	738	835	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
s 2617 2Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
e flufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N
gfl Mfi flvx	XN f z4V	5388	53A:	635	6	6645: 479 6: D65	7: 79665:	7: 79665: 6: 3N



V 84g | Q | T| | l

o K usvfl p

XPKcd8558==9=3B9MN 2KMc: C9 SSbUMTS

r mbRVMb

hp 8A4BT o

88B: 598566 6547B479 5BD5: 6547C479 5CD6= Qh

Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
6162Nflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
6161772ex sufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
6172Nft x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
6172Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
6172Nflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
6172Nflufi s x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
617182e flufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
617192e flufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
6182Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
6192Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
72L s x	XN f z4V	63=	83B	:35	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
72Rx s x	XN f z4V	63=	83B	:35	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
Kux x	83C T z4V	63=	83B	:35	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
Lx x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
L ufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
L y	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
L x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
Ms t Nfl vx	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
Ms t ex sufi flvx	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
Mfi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
Mfi y	5397 T z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N
ufl26172Nflufi x fix x	939 z4V	5388	53A:	635	6	6645: 479 6: D86	7: 79665:	7: 79665: 6=3N

r mbRVMb

hp 8A4BT o

88B: 598566 6547B479 5BD5: 6547C479 5CD6= Qh

Q	k i n	Td	dgT	dgi	TV	Q	T	k aT	T	V
M u fix s x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
Ofi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
P x 668	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
S v x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
S t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
Wx fi sux s x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
d x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
ex sufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
e x x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
e s i x x	XN f z4V	635	738	835	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
s 2617 2Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
e flufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	
gfl Mfi flvx	539B T z4V	5388	53A:	635	6	6645: 479 6: D86		7: 79665:	7: 79665: 6=3N	



V 84g | Q | T| | l

o K usvfl p

XPKcd8558==9=3B9MN 2KMc: C9 **SSbUMTS**

r mbRVMb

e R [Rf 8A9EB7Duogel6ECADE

8C56568 h b

Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
6162Nflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
6162Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
616162e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
616172e flufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
6161772ex sufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
6172Nft 282ufi s x	XN f z4V	63=	73	:35	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
6172Nft x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
6172Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
6172Nflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
6172Nflufi s x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
617182e flufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
617192e flufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
6182Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
6182Nflufi x x1e s	XN f z4V	53==	63	735	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
6192Nflufi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
72L s x	XN f z4V	63=	83B	:35	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
72Rx s x	XN f z4V	63=	83B	:35	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
92Wx fi 272ax s x-WSLU.	XN f z4V	63=	83B	:35	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
Kux x	XN f z4V	63=	83B	:35	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
Lx x x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
L ufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
L vflufi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
L y	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
L x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
Mst Nfl vx	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
Mst ex sufi flvx	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
Mfi t x x x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
Mfi vft x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
Mfi y	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
Mfi x fis x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N
ufl26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645: 479 6659:	7: 79665:	7: 79665: 5: 3N



r mbRVMb

e R [Rf 8A9EB7Duogel6ECADE

8C56568 h b

Q	k i n	Td	dgT	dgi	TV	Q	T|	k aT	T| |V
M u fix s x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
Nflufi vfl x fis x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
Ofi t x x x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
P x 668	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
S v x fis x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
S t x x x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
Wx fi sux s x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
Wx fi u u fix s x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
Wx fi 2L Ofix	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
Wx fi x x Mfi flvx	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
d x x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
ex sufi x fix x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
e x x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
e s i x x	XN f z4V	635	738	835	6	6645:479 66D9:	7:79665:	7:79665:5:3N
s 26172Nflufi x fix x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
e flufi x fix x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
e flufi x fis x	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N
gfl Mfi flvx	XN f z4V	5388	53A:	635	6	6645:479 66D9:	7:79665:	7:79665:5:3N



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Q |	k i n	Td	dgT	dgi	TV	Q | T|	k aT	T| |V
6162Nflufi x fis x	763A z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
6162Nflufi x fix x	7736 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
616162e flufi x fis x	773C z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
616172e flufi x fis x	7639 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
6161772ex sufi x fis x	7537 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
6172Nft 282ufi s x	6A36 z4V	63=	73	:35	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
6172Nft x fis x	763C z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
6172Nflufi t x x x	7639 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
6172Nflufi x fis x	7636 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
6172Nflufi s x	763 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
617182e flufi t x x x	763B z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
617192e flufi t x x x	793C z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
6182Nflufi t x x x	7735 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
6182Nflufi x x1e s	9636 z4V	53==	63	735	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
6192Nflufi t x x x	763B z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
72L s x	666 z4V	63=	83B	:35	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
72Rx s x	65: z4V	63=	83B	:35	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
92Wx fi 272ax s x-WSLU.	657 z4V	63=	83B	:35	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
Kux x	669 z4V	63=	83B	:35	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
Lx x x	7636 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
L ufi x fis x	763A z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
L vflufi x fis x	7836 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
L y	6A3B z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
L x fis x	6C3 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
Mst Nfl vx	7639 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
Mst ex sufi flvx	6C3B z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
Mfi t x x x	753C z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
Mfi vft x fis x	6B3B z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
Mfi x fis x	753C z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
Mfi y	7735 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
Mfi x fis x	763B z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N
ufl26172Nflufi x fix x	7736 z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N

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Q	k i n	Td	dgT	dgi	TV	Q	T	k aT	T		V
M u fix s x	7736	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
Nflufi vfl x fis x	7538	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
Ofi t x x x	763A	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
P x 668	7736	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
S v x fis x	773A	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
S t x x x	783B	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
Wx fi sux s x	6C3	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
Wx fi u u fix s x	7735	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
Wx fi 2L Ofix	7739	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
Wx fi x x Mfi flvx	763B	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
d x x	7837	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
ex sufi x fix x	7635	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
e x x	753B	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
e s i x x	=: 36	z4V	635	73B	835	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
s 26172Nflufi x fix x	763B	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
e flufi x fix x	6C3A	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
e flufi x fis x	7635	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		
gfl Mfi flvx	7737	z4V	5388	53A:	635	6	6645: 479 65D78	7: 79665:	7: 79665: 573N		

right solutions.
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a e| Q.| T| S n T

88B: 59855B Wd7: Qh 6645: 479 69D7C z4V 6

l	V aT	k S	l S	, k	i , k d
6172Nflufi x fis x2v9	7: 79665: 683N	7C3A	85	CC	B6266B
92L t x x x	7: 79665: 683N	8536	85	655	B: 2669
Nft x fis x	7: 79665: 683N	85	85	655	B5266C
e x x2vB	7: 79665: 683N	8539	85	656	BC2667

e p 8A4CT

a e| Q.| T| S n T

88B: 59855C Wd7: Qh 6645: 479 69D5 z4V 6

l	V aT	k S	l S	, k	i , k d
6172Nflufi x fis x2v9	7: 79665: 693N	8533	85	657	B6266B
92L t x x x	7: 79665: 693N	853A	85	657	B: 2669
Nft x fis x	7: 79665: 693N	7C3C	85	655	B5266C
e x x2vB	7: 79665: 693N	853=	85	657	BC2667

hp 8A4B

a e| Q.| T| S n T

88B: 598565 Wd7: Qh 6645: 479 6: D65 z4V 6

l	V aT	k S	l S	, k	i , k d
6172Nflufi x fis x2v9	7: 79665: 6: 3N	8639	85	65:	B6266B
92L t x x x	7: 79665: 6: 3N	7C3C	85	655	B: 2669
Nft x fis x	7: 79665: 6: 3N	8533	85	657	B5266C
e x x2vB	7: 79665: 6: 3N	8637	85	659	BC2667

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a e| Q.| T| S n T

88B: 598566 Wd7: Qh 6645: 479 6: D86 z4V 6

l	V aT	k S	l S	, k	i , k d
6172Nflufi x fis x2v9	7: 79665: 6=3N	7B3B	85	C=	B6266B
92L t x x x	7: 79665: 6=3N	7C36	85	CA	B: 2669
Nft x fis x	7: 79665: 6=3N	7B3=	85	C:	B5266C
e x x2vB	7: 79665: 6=3N	7C	85	CA	BC2667

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a e| Q.| T| S n T

8C56568 Wd7: h b z4V 6

l	V aT	k S	l S	, k	i , k d
6172Nflufi x fis x2v9	7: 79665: 5: 3N	853B	85	658	B6266B
92L t x x x	7: 79665: 5: 3N	853C	85	658	B: 2669
Nft x fis x	7: 79665: 5: 3N	7C3C	85	655	B5266C
e x x2vB	7: 79665: 5: 3N	8636	85	659	BC2667

dSl [Rf 8A9EB7Duog e l 6ECAD

a e| Q.| T| S n T

8C56569 Wd7: h b 6645: 479 65D78 z4V 6

l	V aT	k S	l S	, k	i , k d
6172Nflufi x fis x2v9	7: 79665: 573N	8537	85	656	B6266B
92L t x x x	7: 79665: 573N	853C	85	658	B: 2669
Nft x fis x	7: 79665: 573N	853C	85	658	B5266C
e x x2vB	7: 79665: 573N	853B	85	656	BC2667

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h b		687A95=	p	6645: 479 65D78		
Q |	, k d	l Q	dSl k	, k	i	
6162Nflufi x fis x	AA267:	75	763A	PMb		
6162Nflufi x fix x	A62686	75	7736	PPP		
616162e flufi x fis x	A92686	75	773C	PPT		
616172e flufi x fis x	B5266C	75	7639	PMa		
6161 7172ex sufi x fis x	A62676	75	7537	PMP		
6172Nft 282ufi s x	=7267B	75	6A36	bV		
6172Nft x fis x	AA2676	75	763C	PMt		
6172Nflufi t x x x	B5266C	75	7639	PMa		
6172Nflufi x fis x	A8267B	75	7636	PMU		
6172Nflufi s x	AB2677	75	763	PMb		
617182e flufi t x x x	=C267C	75	763B	PMt		
617192e flufi t x x x	=C2685	75	793C	PRU		
6182Nflufi t x x x	B5266C	75	77	PPM		
6182Nflufi x x	A: 2679	95	9636	PMS		
6192Nflufi t x x x	AC266B	75	763B	PMa		
72L s x	: =2698	655	666	PPP		
72Rx s x	: A268C	655	65:	PMU		
92Wx fi 272ax s x-WSLU.	=A2685	655	657	PMR		
Kux x	8C26=5	655	669	PPT		
Lx x x	AC2675	75	7636	PMU		
L ufi x fis x	AB2678	75	763A	PMb		
L vflufi x fis x	AC267:	75	7836	PPU		
L y	==2685	75	6A3B	bc		
L x fis x	: 82696	75	6C3	cb		
Mst Nfl vx	=92688	75	7639	PMa		
Mst ex sufi flvx	A7268=	75	6C3B	cV		
Mfi t x x x	B7266B	75	753C	PMU		
Mfi vft x fis x	A9267=	75	6B3B	cR		
Mfi x fis x	=5268B	75	753C	PMT		
Mfi y	AC2679	75	77	PPM		
Mfi x fis x	: 5268C	75	763B	PMa		
ufl 26172Nflufi x fix x	AB2678	75	7736	PPM		
M u fix s x	A62685	75	7736	PPM		
Nflufi vfl x fis x	8726: 7	75	753B	PMR		
Ofi t x x x	AC2676	75	763A	PMb		

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h b		687A95=	p	6645: 479 65D78	
Q |	, k d	l Q	dSl k	, k	i
P x 668	A5268=	75	7736	PPM	
S v x fis x	=C2686	75	773A	PPT	
S t x x x	A72686	75	783B	PPc	
Wx fi sux s x	: =268=	75	6C3	ca	
Wx fi u u fix s x	A72687	75	77	PPM	
Wx fi 2L Ofix	A62679	75	7739	PPR	
Wx fi x x Mfi flvx	A92679	75	763B	PMa	
d x x	AB2678	75	7837	PPV	
ex sufi x fix x	A9267C	75	76	PMU	
e x x	B52676	75	753B	PMT	
e s i x x	AC2676	=5	=: 36	PMc	
s 26172Nflufi x fix x	A: 2679	75	763B	PMc	
e flufi x fix x	AC2678	75	6C3A	cb	
e flufi x fis x	=: 2696	75	76	PMU	
gfl Mfi flvx	: B268A	75	7737	PPP	

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S l| aT	m	d|fi l| aT	V aT	Q.| T|	Q.| R|	a aT
Wh : 26NK	dKWaVO	88B: 598556	7: 79665: 5=3N	6645: 479 67D5A	687A95=	Wd7:
Wh : 2=	dKWaVO	88B: 598557	7: 79665: 5A3N	6645: 479 67D7A	687A95=	Wd7:
ch : 27	dKWaVO	88B: 598558	7: 79665: 5B3N	6645: 479 67D9A	687A95=	Wd7:
Wh : 2 N	dKWaVO	88B: 598559	7: 79665: 5C3N	6645: 479 68D5B	687A95=	Wd7:
ch : 26	dKWaVO	88B: 59855:	7: 79665: 653N	6645: 479 68D7B	687A95=	Wd7:
ch : 29	dKWaVO	88B: 59855=	7: 79665: 663N	6645: 479 68D9C	687A95=	Wd7:
Nf a	dKWaVO	88B: 59855A	7: 79665: 673N	6645: 479 69D5C	687A95=	Wd7:
Wh 6829N	dKWaVO	88B: 59855B	7: 79665: 683N	6645: 479 69D7C	687A95=	Wd7:
Wh 682 N	dKWaVO	88B: 59855C	7: 79665: 693N	6645: 479 69D 5	687A95=	Wd7:
ah 6826	dKWaVO	88B: 598565	7: 79665: 6: 3N	6645: 479 6: D65	687A95=	Wd7:
ah 6829N	dKWaVO	88B: 598566	7: 79665: 6=3N	6645: 479 6: D86	687A95=	Wd7:
dh CC265	dKWaVO	88B: 598567	7: 79665: 6A3N	6645: 479 6: D 6	687A95=	Wd7:
dh 652A	dKWaVO	88B: 598568	7: 79665: 6B3N	6645: 479 6=D66	687A95=	Wd7:
dh 652B	dKWaVO	88B: 598569	7: 79665: 6C3N	6645: 479 6=D87	687A95=	Wd7:
Wh 6529N	dKWaVO	88B: 59856:	7: 79665: 753N	6645: 479 6=D 7	687A95=	Wd7:
Wh 6526NK	dKWaVO	88B: 59856=	7: 79665: 763N	6645: 479 6AD67	687A95=	Wd7:
Wh 6526 5N	dKWaVO	88B: 59856A	7: 79665: 773N	6645: 479 6AD88	687A95=	Wd7:
ah 6527	dKWaVO	88B: 59856B	7: 79665: 783N	6645: 479 6AD 8	687A95=	Wd7:
VMdy RLX 687A95= lg[Wd4A: 8=	VMd	8C56569	7: 79665: 573N	6645: 479 65D78	687A95=	Wd7:
ch : 26Wd	Wd	8C5656:	7: 79665: 7=3N	6645: 479 6BD 9	687A95=	Wd7:
ch : 26WdN	WdN	8C5656=	7: 79665: 7A3N	6645: 479 6CD6:	687A95=	Wd7:

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6	a Qfi	|	S	, kQ		d| fi l |	aT	m	T|	d| fi V	aT	l |	aT
HC	Ls x axs 1655* cK			655355	8		6555	ef XO	664594 67D9:	7: 79665955	LPL								
C7	6: 355 29535 5* y s C:			6A358	9		678:	SMKV7	664594 69D8=	7: 7966595:	VOgOV7								
EC	85355 2=5355* y s C:			9C397	A		gdeN553	SMKVB	664594 68D:	7: 79665958	VOgOVB								
HD	: 355 2 C355* y s C:			A358	B		678A	SMKV9	664596: D8A	7: 7966595A	VOgOV9								
8EA	Vx fis 7355* y s 6A9			5355	C		678C	SMKV=	664596: DA	7: 7966595C	VOgOV=								
8EB	Q xs x fis : 5355* y s C:			BA36=	D		678=	SMKV8	664594 69D=	7: 7966595=	VOgOV8								
8EC	: 355 2 C355* y s 6A9			A379	E		678B	SMKV:	664596: D8A	7: 7966595B	VOgOV:								
8ED	C: 355 26563 5* y s 6A9			B=3=6	F		6789	SMKV6	664594 69D6:	7: 79665959	VOgOV6								
8EE	: 355 2 C355* y s 6A=			: 3BB	H		SMgb	SMg	664596 BD55	7: 7966596: SM SMg									
* cK 2ax ux cx s fl x Kt vs ux					87		6B56	MMg	664597 85A	7: 79665985	MMg								

m V 7: 79665: 553N 6645: 479 5CD58	m		

6	a Qfi | S	, kQ.
HC	Ls x axs 1655* cK	655355
C7	6: 355 295355* y s C:	6C3B7
EC	85355 2=5355* y s C:	: 537C
HD	: 355 2 C355* y s C:	A367
8EA	Vx fis 7355* y s 6A9	53AC
8EB	Q xs x fis : 5355* y s C:	BA3=:
8EC	: 355 2 C355* y s 6A9	A3=:
8ED	C: 355 265635* y s 6A9	B839:
8EE	: 355 2 C355* y s 6A=	: 3=B

	d| fi l | aT	m	T|	d| fi V aT	l | aT
8	6555	ef XO	6645: 5CD58	7: 79665: 55	LPL
9	6B55	MMg	6645: 5CD89	7: 79665: 56	MMg
A	6B56	MMg	6645: 6CD8:	7: 79665: 7B	MMg
B	8C56569	VMd	6645: 65D78	7: 79665: 57	VMd y RLX 687A95=
C	8C56568	WL	6645: 66D9:	7: 79665: 5:	WL y RLX 687A95=
D	88B: 59855B	dKWa	6645: 69D7C	7: 79665: 68	Wh 6829N
E	88B: 59855C	dKWa	6645: 69D 5	7: 79665: 69	Wh 682 N
F	88B: 598565	dKWa	6645: 6: D10	7: 79665: 65	ah 68-1
H	88B: 598566	dKWa	6645: 6: D86	7: 79665: 6=	ah 6829N

* cK 2ax ux cx s flx Kt vs ux

a | S| fi | T| |

o | fi UhQF9D7S

h vx

SSbUMTS

Mfk

Q |

a xu

QSkCHBf VQkl A77ADDBD5ABST

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Form 6 Initial Calibration Data

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 25241104

Volatiles by EPA 8260C

Instrument ID MS25
ICAL Start Date 04-NOV-2024 1355
ICAL End Date 04-NOV-2024 1557

Calibration Files

Level1 - 25241104.b\2524110404.D
Level2 - 25241104.b\2524110405.D
Level3 - 25241104.b\2524110406.D
Level4 - 25241104.b\2524110407.D
Level5 - 25241104.b\2524110408.D
Level6 - 25241104.b\2524110409.D
Level8 - 25241104.b\2524110403.D

Compound	0.500 Level 8 / 1.00 Level 1	5.00 Level 2	20.0 Level 3	50.0 Level 4	100 Level 5	200 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Dichlorodifluoromethane	0.294 / 0.279	0.241	0.295	0.308	0.326	0.328	AVRG		0.296		10.1	
Chloromethane	0.307 / 0.281	0.241	0.275	0.279	0.294	0.288	AVRG		0.281		7.35	
Vinyl Chloride	0.316 / 0.306	0.293	0.332	0.361	0.368	0.359	AVRG		0.334		8.93	
Bromomethane	7462 / 12345	44784	208859	552515	1329316	2785382	QUAD	0.000e+000	0.341	0.006	0.999	
Chloroethane	0.288 / 0.270	0.224	0.241	0.255	0.259	0.264	AVRG		0.257		7.95	
Pentane	6276 / 10826	30547	115218	307343	656039	1412853	WLINR	-0.016	5.37		0.998	
Trichlorofluoromethane	0.396 / 0.401	0.395	0.447	0.476	0.485	0.483	AVRG		0.440		9.62	
Dichlorofluoromethane	0.559 / 0.461	0.418	0.463	0.471	0.488	0.484	AVRG		0.478		8.92	
Ethyl Ether	0.152 / 0.135	0.120	0.136	0.142	0.153	0.154	AVRG		0.142		8.63	
1,1-Dichloroethene	0.272 / 0.254	0.231	0.251	0.259	0.288	0.289	AVRG		0.263		7.95	

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ICAL Start Date 04-NOV-2024 13:55 **ICAL End Date** 04-NOV-2024 15:57

Compound	0.500 Level 8 / 1.00 Level 1	5.00 Level 2	20.0 Level 3	50.0 Level 4	100 Level 5	200 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Freon 113	0.183 0.167	0.145	0.161	0.163	0.175	0.177	AVRG		0.167		7.67	
Carbon Disulfide	0.530 0.490	0.470	0.517	0.557	0.622	0.617	AVRG		0.543		10.9	
Iodomethane	688 1474	6538	40004	132371	349151	NE	QUAD	0.000e+000	0.052	0.014	1.000	
Acrolein	2958 6193	24842	113697	312904	669896	1457594	WLINR	0.028	26.1		0.997	
Isopropyl Alcohol	0.017 0.013	0.013	0.013	0.013	0.013	0.014	AVRG		0.014		11.8	
3-Chloro-1-propene	0.196 0.211	0.182	0.217	0.229	0.248	0.247	AVRG		0.219		11.4	
Methylene Chloride	0.249 0.248	0.214	0.231	0.248	0.257	0.258	AVRG		0.243		6.53	
Acetone	0.033 0.025	0.021	0.025	0.025	0.026	0.026	AVRG		0.026		13.9	
Methyl acetate	1520 1842	6986	30089	80276	170630	370896	WLINR	-0.007	20.5		0.997	
trans-1,2-Dichloroethene	0.274 0.273	0.247	0.266	0.272	0.293	0.296	AVRG		0.274		6.09	
Hexane	0.407 0.344	0.325	0.352	0.364	0.384	0.396	AVRG		0.367		8.07	
Methyl t-Butyl Ether	0.583 0.611	0.582	0.636	0.681	0.719	0.737	AVRG		0.650		9.75	

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tert.- Butyl Alcohol	0.022 0.022	0.024	0.023	0.023	0.025	0.026	AVRG		0.024		6.12	
Acetonitrile	3594 5002	24427	93463	237916	520296	1084002	WLINR	-0.018	34.4		0.999	
Diisopropyl ether	0.593 0.558	0.571	0.603	0.638	0.686	0.695	AVRG		0.621		8.75	
Chloroprene	0.211 0.256	0.253	0.272	0.289	0.312	0.325	AVRG		0.274		14.1	
1,1-Dichloroethane	0.338 0.345	0.342	0.372	0.394	0.424	0.431	AVRG		0.378		10.3	
Acrylonitrile	0.086 0.087	0.084	0.093	0.103	0.104	0.105	AVRG		0.094		9.76	
Ethyl tert-butyl ether	0.616 0.615	0.589	0.659	0.701	0.756	0.790	AVRG		0.675		11.3	
n-Propanol	3344 4712	20665	84341	221020	478291	1021155	WLINR	-0.025	73.8		0.998	
Vinyl Acetate	673 1264	7136	35635	97565	214480	466274	WLINR	0.013	16.3		0.997	
cis-1,2-Dichloroethene	0.292 0.283	0.273	0.290	0.298	0.320	0.327	AVRG		0.298		6.50	
2,2-Dichloropropane	0.260 0.237	0.219	0.250	0.261	0.287	0.296	AVRG		0.259		10.4	
Bromochloromethane	0.116 0.138	0.123	0.127	0.134	0.141	0.137	AVRG		0.131		6.88	

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Compound	0.500 Level 8 1.00 Level 1	5.00 Level 2	20.0 Level 3	50.0 Level 4	100 Level 5	200 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Cyclohexane	0.267 0.271	0.246	0.276	0.286	0.309	0.320	AVRG		0.282		8.95	
Chloroform	0.410 0.403	0.392	0.412	0.434	0.467	0.477	AVRG		0.428		7.62	
Ethyl Acetate	0.258 0.183	0.182	0.209	0.214	0.238	0.248	AVRG		0.219		13.8	
Methyl acrylate	0.186 0.189	0.172	0.213	0.213	0.243	0.242	AVRG		0.208		13.3	
Carbon Tetrachloride	2671 6240	33090	158626	433902	993508	2150801	WLINR	0.014	3.55		0.995	
Tetrahydrofuran	0.065 0.060	0.059	0.064	0.066	0.071	0.075	AVRG		0.066		8.59	
1,1,1-Trichloroethane	0.306 0.267	0.269	0.295	0.311	0.342	0.348	AVRG		0.306		10.4	
2-Butanone	0.029 0.031	0.030	0.033	0.033	0.035	0.034	AVRG		0.032		6.79	
1,1-Dichloropropene	0.282 0.268	0.240	0.272	0.280	0.306	0.311	AVRG		0.280		8.61	
1-Chlorobutane	0.230 0.159	0.163	0.175	0.176	0.193	0.196	AVRG		0.185		13.3	
Heptane	3560 4893	20141	87460	214595	462152	1010832	WLINR	-0.005	7.52		0.998	
Benzene	0.940 0.880	0.838	0.878	0.908	0.978	0.984	AVRG		0.915		5.98	

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Propionitrile	0.041 0.034	0.031	0.038	0.038	0.040	0.041	AVRG		0.038		10.2	
Methacrylonitrile	0.104 0.112	0.101	0.115	0.116	0.124	0.131	AVRG		0.115		9.21	
tert-Amyl methyl ether	0.605 0.585	0.566	0.606	0.668	0.719	0.747	AVRG		0.642		10.9	
Isobutyl alcohol	0.004 0.006	0.006	0.006	0.006	0.007	0.007	AVRG		0.006		14.8	
1,2-Dichloroethane	0.334 0.302	0.282	0.307	0.319	0.339	0.346	AVRG		0.318		7.15	
tert-Amyl Alcohol	3328 3516	12939	59303	144839	332348	748831	WLINR	-0.036	52.1		0.993	
Diisobutylene	39368 45304	95407	312729	761465	1631071	3499815	WLINR	-0.063	2.19		0.998	
Trichloroethene	0.288 0.270	0.194	0.222	0.228	0.246	0.255	AVRG		0.243		13.0	
Methyl cyclohexane	0.737 0.717	0.683	0.737	0.738	0.762	0.795	AVRG		0.738		4.72	
tert-Amyl Ethylether	0.430 0.453	0.410	0.471	0.514	0.561	0.592	AVRG		0.490		13.9	
Dibromomethane	0.159 0.168	0.143	0.156	0.166	0.178	0.181	AVRG		0.164		7.94	
1,2-Dichloropropane	0.221 0.206	0.210	0.227	0.238	0.254	0.257	AVRG		0.230		8.72	

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Compound	0.500 Level 8 / 1.00 Level 1	5.00 Level 2	20.0 Level 3	50.0 Level 4	100 Level 5	200 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Bromodichloromethane	0.246 0.254	0.259	0.283	0.305	0.329	0.340	AVRG		0.288		13.1	
Methyl methacrylate	0.195 0.177	0.142	0.170	0.187	0.205	0.215	AVRG		0.185		13.2	
1,4-Dioxane	0.004 0.003	0.003	0.004	0.003	0.003	0.003	AVRG		0.003		4.99	
2-Chloroethylvinyl ether	429 752	6322	42845	120137	317943	753544	QUAD	-0.005	0.073	0.005	0.999	
cis-1,3-Dichloropropene	0.761 0.748	0.734	0.859	0.933	1.00	1.04	AVRG		0.868		14.5	
Octane	0.244 0.225	0.243	0.256	0.263	0.272	0.287	AVRG		0.256		8.04	
Toluene	1.67 1.41	1.23	1.33	1.36	1.43	1.45	AVRG		1.41		9.49	
Chloroacetonitrile	449 1203	8342	45989	114978	274813	598303	WLINR	0.085	27.0		0.996	
2-Nitropropane	3338 6345	32342	168446	485480	1151797	2604985	WLINR	0.075	6.34		0.992	
1,1-Dichloro-2-Propanone	107 871	3332	17607	44195	102248	243564	WLINR	0.075	68.6		0.992	
4-Methyl-2-Pentanone(MIBK)	0.476 0.484	0.488	0.580	0.568	0.606	0.606	AVRG		0.544		10.9	
trans-1,3-Dichloropropene	4283 7855	46122	217003	628974	1425902	3152837	WLINR	0.013	1.03		0.995	

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Tetrachloroethene	0.483 0.482	0.468	0.496	0.508	0.530	0.547	AVRG		0.502		5.65	
Ethyl Methacrylate	3828 8590	43245	212724	581924	1315136	2886150	WLINR	0.011	1.12		0.997	
1,1,2-Trichloroethane	0.437 0.430	0.452	0.468	0.482	0.497	0.508	AVRG		0.468		6.40	
Chlorodibromomethane	3433 6137	32923	160873	446123	990826	2133322	WLINR	0.010	1.50		0.998	
1,3-Dichloropropane	0.866 0.897	0.834	0.935	0.975	0.993	0.999	AVRG		0.928		6.98	
1,2-Dibromoethane	0.477 0.488	0.493	0.543	0.578	0.611	0.622	AVRG		0.545		11.1	
2-Hexanone	0.328 0.331	0.325	0.394	0.388	0.405	0.414	AVRG		0.369		10.7	
1-Chlorohexane	0.668 0.592	0.586	0.602	0.658	0.711	0.718	AVRG		0.648		8.56	
Chlorobenzene	1.51 1.54	1.40	1.48	1.52	1.63	1.66	AVRG		1.53		5.78	
Ethylbenzene	0.758 0.761	0.687	0.765	0.791	0.848	0.872	AVRG		0.783		7.89	
1,1,1,2-Tetrachloroethane	0.511 0.437	0.448	0.510	0.534	0.572	0.581	AVRG		0.513		10.8	
mp-Xylene	0.964 0.915	0.809	0.919	0.948	1.03	1.04	AVRG		0.946		8.13	

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o-Xylene	0.832 0.898	0.818	0.879	0.942	1.01	1.00	AVRG		0.911		8.37	
Styrene	1.47 1.60	1.50	1.68	1.67	1.86	1.91	AVRG		1.67		9.96	
Bromoform	2048 3591	20647	104824	293070	682692	1513870	WLINR	0.012	1.96		0.994	
Isopropylbenzene	12640 24600	121739	536614	1457065	3216009	6706624	WLINR	0.003	0.427		0.999	
100 1,2-Dichloroethene, Total	0.283 0.278	0.260	0.278	0.285	0.306	0.311	AVRG		0.286		6.20	
Bromobenzene	0.810 0.644	0.646	0.701	0.708	0.762	0.774	AVRG		0.721		8.89	
n-Propylbenzene	0.763 0.634	0.595	0.681	0.666	0.733	0.737	AVRG		0.687		8.86	
1,1,2,2-Tetrachloroethane	0.844 0.706	0.718	0.776	0.738	0.809	0.830	AVRG		0.774		7.13	
o-Chlorotoluene	1.88 1.85	1.84	1.92	1.93	2.12	2.14	AVRG		1.95		6.44	
1,3,5-Trimethylbenzene	1.80 1.83	1.80	1.95	1.97	2.15	2.15	AVRG		1.95		7.79	
1,2,3-Trichloropropane	0.220 0.242	0.221	0.250	0.237	0.249	0.257	AVRG		0.239		6.10	
trans-1,4-Dichloro-2-butene	603 1605	10016	48173	129910	307882	679150	WLINR	0.014	4.36		0.995	

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p-Chlorotoluene	1.79 1.85	1.60	1.77	1.77	1.91	1.93	AVRG		1.80		6.13	
tert-Butylbenzene	0.487 0.435	0.440	0.466	0.465	0.495	0.486	AVRG		0.468		5.01	
Pentachloroethane	0.425 0.304	0.364	0.369	0.389	0.427	0.440	AVRG		0.388		12.2	
1,2,4-Trimethylbenzene	2.03 1.93	1.78	1.99	2.01	2.17	2.12	AVRG		2.00		6.47	
sec-Butylbenzene	2.13 2.18	2.19	2.39	2.41	2.55	2.44	AVRG		2.33		6.80	
p-Isopropyltoluene	0.513 0.486	0.461	0.530	0.539	0.574	0.565	AVRG		0.524		7.77	
1,3-Dichlorobenzene	1.16 1.18	1.08	1.17	1.19	1.28	1.27	AVRG		1.19		5.68	
1,4-Dichlorobenzene	1.39 1.31	1.09	1.22	1.21	1.31	1.34	AVRG		1.27		7.92	
Benzyl Chloride	747 1719	8890	46063	140330	341943	779803	QUAD	0.000e+000	0.211	0.010	0.999	
n-Butylbenzene	0.419 0.435	0.391	0.459	0.473	0.503	0.498	AVRG		0.454		9.11	
Hexachloroethane	1366 4471	17656	78649	231428	534912	1157844	WLINR	0.009	2.54		0.995	
1,2-Dichlorobenzene	1.24 1.06	1.09	1.14	1.14	1.22	1.25	AVRG		1.16		6.45	

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1,2-Dibromo-3-chloropropane	0.146 0.136	0.110	0.117	0.113	0.132	0.142	AVRG		0.128		11.5	
Nitrobenzene	1153 3609	11537	63756	201408	574692	1537021	QUAD	0.000e+000	0.027	0.000	0.999	
Hexachlorobutadiene	0.209 0.260	0.279	0.297	0.293	0.316	0.320	AVRG		0.282		13.5	
120 1,3-Dichloropropene, Total	9296 17927	96401	452714	1294245	2912944	6383209	WLINR	0.023	1.01		0.996	
1,2,4-Trichlorobenzene	0.534 0.592	0.599	0.700	0.714	0.778	0.781	AVRG		0.671		14.5	
121 Total Xylenes	0.920 0.909	0.812	0.906	0.946	1.02	1.02	AVRG		0.934		7.87	
Naphthalene	7170 15275	86709	444817	1276594	2857487	6216840	WLINR	0.013	0.471		0.997	
1,2,3-Trichlorobenzene	0.653 0.547	0.613	0.672	0.723	0.770	0.802	AVRG		0.683		13.1	
41 Dibromofluoromethane	0.252 0.256	0.259	0.267	0.270	0.272	0.268	AVRG		0.263		2.95	
51 1,2-Dichloroethane-d4	0.295 0.302	0.295	0.300	0.297	0.297	0.294	AVRG		0.297		0.912	
68 Toluene-d8	2.55 2.54	2.53	2.51	2.47	2.40	2.36	AVRG		2.48		3.04	
92 4-Bromofluorobenzene	0.796 0.803	0.809	0.791	0.785	0.782	0.760	AVRG		0.789		2.03	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

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Form 6I Initial Calibration Verification (ICV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110415ICVQ.D

Sample Matrix LIQUID
Lab Smp Id ICVQ
Data Type MS DATA
File ID 2524110415ICVQ.D
Fraction VOA
SampleType ICV
Inj Date 04-NOV-2024 1800

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Dichlorodifluoromethane	20.0	19.1	95.6	80-120	
Chloromethane	20.0	19.5	97.6	80-120	
Vinyl Chloride	20.0	21.0	105	80-120	
Bromomethane	20.0	16.0	80.0	80-120	
Chloroethane	20.0	21.2	106	80-120	
Pentane	20.0	19.9	99.6	80-120	
Trichlorofluoromethane	20.0	20.9	105	80-120	
Dichlorofluoromethane	20.0	20.8	104	80-120	
Ethyl Ether	20.0	20.4	102	80-120	
1,1-Dichloroethene	20.0	20.8	104	80-120	
Freon 113	20.0	21.3	106	80-120	
Carbon Disulfide	20.0	19.9	99.3	80-120	
Iodomethane	20.0	16.5	82.5	80-120	
Acrolein	150	167	111	80-120	
Isopropyl Alcohol	100	95.9	95.9	80-120	
3-Chloro-1-propene	20.0	21.9	109	80-120	
Methylene Chloride	20.0	20.6	103	80-120	
Acetone	100	107	107	80-120	
Methyl acetate	20.0	21.5	107	80-120	
trans-1,2-Dichloroethene	20.0	20.8	104	80-120	
Hexane	20.0	20.4	102	80-120	
Methyl t-Butyl Ether	20.0	22.1	110	80-120	
tert.- Butyl Alcohol	100	98.4	98.4	80-120	
Acetonitrile	100	100	100	80-120	
Diisopropyl ether	20.0	21.5	107	80-120	
Chloroprene	20.0	21.8	109	80-120	
1,1-Dichloroethane	20.0	21.3	107	80-120	
Acrylonitrile	100	112	112	80-120	
Ethyl tert-butyl ether	20.0	21.7	108	80-120	
n-Propanol	200	200	99.8	80-120	
Vinyl acetate	20.0	17.0	85.2	80-120	
cis-1,2-Dichloroethene	20.0	20.7	103	80-120	
2,2-Dichloropropane	20.0	20.0	100	80-120	
Bromochloromethane	20.0	21.2	106	80-120	

Form 6I Initial Calibration Verification (ICV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110415ICVQ.D

Sample Matrix LIQUID
Lab Smp Id ICVQ
Data Type MS DATA
File ID 2524110415ICVQ.D
Fraction VOA
SampleType ICV
Inj Date 04-NOV-2024 1800

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Cyclohexane	20.0	21.6	108	80-120	
Chloroform	20.0	21.1	106	80-120	
Ethyl acetate	20.0	18.3	91.5	80-120	
Methyl acrylate	20.0	21.1	105	80-120	
Carbon Tetrachloride	20.0	18.4	92.1	80-120	
Tetrahydrofuran	100	106	106	80-120	
1,1,1-Trichloroethane	20.0	21.5	108	80-120	
2-Butanone	100	111	111	80-120	
1,1-Dichloropropene	20.0	21.0	105	80-120	
1-Chlorobutane	20.0	20.1	101	80-120	
Heptane	20.0	19.4	97.1	80-120	
Benzene	20.0	20.3	102	80-120	
Propionitrile	100	108	108	80-120	
Methacrylonitrile	20.0	21.6	108	80-120	
tert-amyl methyl E	20.0	22.7	113	80-120	
1,2-Dichloroethane	20.0	21.0	105	80-120	
tert-Amyl Alcohol	100	84.0	84.0	80-120	
Isobutyl alcohol	200	183	91.3	80-120	
Diisobutylene	20.0	18.6	92.9	80-120	
Trichloroethene	20.0	18.8	94.2	80-120	
Methyl cyclohexane	20.0	21.1	105	80-120	
tert-Amyl Ethylether	20.0	20.7	104	80-120	
Dibromomethane	20.0	20.7	103	80-120	
1,2-Dichloropropane	20.0	21.7	109	80-120	
Bromodichloromethane	20.0	22.4	112	80-120	
Methyl methacrylate	20.0	20.0	99.8	80-120	
1,4-Dioxane	500	0.000		80-120	*
2-Chloroethylvinyl ether	20.0	18.8	94.2	80-120	
cis-1,3-Dichloropropene	20.0	20.9	104	80-120	
Octane	20.0	20.7	103	80-120	
Toluene	20.0	20.5	103	80-120	
Chloroacetonitrile	100	91.0	91.0	80-120	
2-Nitropropane	100	82.2	82.2	80-120	
1,1-Dichloro-2-pro	100	86.5	86.5	80-120	

Form 6I Initial Calibration Verification (ICV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110415ICVQ.D

Sample Matrix LIQUID
Lab Smp Id ICVQ
Data Type MS DATA
File ID 2524110415ICVQ.D
Fraction VOA
SampleType ICV
Inj Date 04-NOV-2024 1800

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
4-Methyl-2-Pentanone(MIBK)	100	106	106	80-120	
Tetrachloroethene	20.0	21.7	108	80-120	
trans-1,3-Dichloropropene	20.0	18.3	91.3	80-120	
Ethyl methacrylate	20.0	18.5	92.5	80-120	
1,1,2-Trichloroethane	20.0	21.6	108	80-120	
Chlorodibromomethane	20.0	18.4	91.9	80-120	
1,3-Dichloropropane	20.0	21.3	106	80-120	
1,2-Dibromoethane	20.0	22.1	111	80-120	
2-Hexanone	100	104	104	80-120	
1-Chlorohexane	20.0	21.4	107	80-120	
Chlorobenzene	20.0	20.5	102	80-120	
Ethylbenzene	20.0	21.2	106	80-120	
1,1,1,2-Tetrachloroethane	20.0	21.7	109	80-120	
mp-Xylene	40.0	42.4	106	80-120	
o-Xylene	20.0	21.8	109	80-120	
Styrene	20.0	22.5	112	80-120	
Bromoform	20.0	18.0	90.2	80-120	
Isopropylbenzene	20.0	23.1	115	80-120	
Bromobenzene	20.0	21.2	106	80-120	
n-Propylbenzene	20.0	21.2	106	80-120	
1,1,2,2-Tetrachloroethane	20.0	20.8	104	80-120	
o-Chlorotoluene	20.0	21.4	107	80-120	
1,3,5-Trimethylbenzene	20.0	22.0	110	80-120	
1,2,3-Trichloropropane	20.0	21.4	107	80-120	
trans-1,4-Dichloro-2-butene	20.0	18.4	92.1	80-120	
1,2-Dichloroethene, Total	40.0	41.5	104	80-120	
p-Chlorotoluene	20.0	21.1	105	80-120	
tert-Butylbenzene	20.0	21.4	107	80-120	
Pentachloroethane	20.0	19.6	98.0	80-120	
1,2,4-Trimethylbenzene	20.0	21.7	108	80-120	
sec-Butylbenzene	20.0	21.8	109	80-120	
p-Isopropyltoluene	20.0	21.9	110	80-120	
1,3-Dichlorobenzene	20.0	21.2	106	80-120	
1,4-Dichlorobenzene	20.0	20.3	102	80-120	

Form 6I Initial Calibration Verification (ICV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110415ICVQ.D

Sample Matrix LIQUID
Lab Smp Id ICVQ
Data Type MS DATA
File ID 2524110415ICVQ.D
Fraction VOA
SampleType ICV
Inj Date 04-NOV-2024 1800

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Benzyl Chloride	20.0	17.2	85.8	80-120	
n-Butylbenzene	20.0	21.7	108	80-120	
Hexachloroethane	20.0	17.6	88.1	80-120	
1,2-Dichlorobenzene	20.0	20.9	104	80-120	
1,2-Dibromo-3-chloropropane	20.0	17.9	89.5	80-120	
Nitrobenzene	200	170	84.9	80-120	
Hexachlorobutadiene	20.0	22.6	113	80-120	
1,2,4-Trichlorobenzene	20.0	23.5	117	80-120	
Naphthalene	20.0	18.8	94.1	80-120	
1,2,3-Trichlorobenzene	20.0	20.7	104	80-120	
1,3-Dichloropropene, Total	40.0	39.1	97.9	80-120	
121 TOTAL XYLENES	60.0	64.1	107	80-120	

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Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110501.D

Volatiles by EPA 8260C

Instrument ID ms25.i
Lab File ID 2524110501.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 05-NOV-2024 0934
ICAL Date(s) 04-NOV-2024, 04-NOV-2024
ICAL Times 13:55, 15:57
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dichlorodifluoromethane	0.296	0.335	0.335	0.010	13.1	20.0	Averaged	
Chloromethane	0.281	0.312	0.312	0.100	11.1	20.0	Averaged	
Vinyl Chloride	0.334	0.377	0.377	0.010	12.9	20.0	Averaged	
Bromomethane	50.0	52.0	2.74	0.010	3.97	20.0	Quadratic	
Chloroethane	0.257	0.254	0.254	0.010	-1.095	20.0	Averaged	
Pentane	50.0	57.1	4.67	0.010	14.1	20.0	Wt Linear	
Trichlorofluoromethane	0.440	0.484	0.484	0.010	9.97	20.0	Averaged	
Dichlorofluoromethane	0.478	0.512	0.512	0.010	7.15	20.0	Averaged	
Ethyl Ether	0.142	0.156	0.156	0.010	10.3	20.0	Averaged	
1,1-Dichloroethene	0.263	0.292	0.292	0.010	11.1	20.0	Averaged	
Carbon Disulfide	0.543	0.610	0.610	0.010	12.3	20.0	Averaged	
Freon 113	0.167	0.184	0.184	0.010	9.86	20.0	Averaged	
Iodomethane	50.0	56.6	11.2	0.010	13.3	20.0	Quadratic	
Acrolein	250	262	24.9	0.000	4.94	20.0	Wt Linear	
3-Chloro-1-propene	0.219	0.257	0.257	0.010	17.7	20.0	Averaged	
Isopropyl Alcohol	0.014	0.012	0.012	0.000	-10.786	20.0	Averaged	
Methylene Chloride	0.243	0.265	0.265	0.010	8.87	20.0	Averaged	
Acetone	0.026	0.026	0.026	0.000	-0.706	20.0	Averaged	
Methyl acetate	50.0	48.8	20.9	0.005	-2.455	20.0	Wt Linear	
trans-1,2-Dichloroethene	0.274	0.316	0.316	0.010	15.0	20.0	Averaged	
Hexane	0.367	0.416	0.416	0.010	13.2	20.0	Averaged	
Methyl t-Butyl Ether	0.650	0.717	0.717	0.010	10.2	20.0	Averaged	
tert.- Butyl Alcohol	0.024	0.020	0.020	0.000	-15.346	20.0	Averaged	
Acetonitrile	250	251	34.2	0.000	0.469	20.0	Wt Linear	
Diisopropyl ether	0.621	0.708	0.708	0.010	14.1	20.0	Averaged	
Chloroprene	0.274	0.321	0.321	0.010	17.1	20.0	Averaged	
1,1-Dichloroethane	0.378	0.435	0.435	0.100	15.1	20.0	Averaged	
Acrylonitrile	0.094	0.103	0.103	0.000	8.92	20.0	Averaged	
n-Propanol	500	511	72.1	0.000	2.24	20.0	Wt Linear	
Ethyl tert-butyl ether	0.675	0.757	0.757	0.010	12.2	20.0	Averaged	
Vinyl Acetate	50.0	49.1	16.7	0.010	-1.731	20.0	Wt Linear	
cis-1,2-Dichloroethene	0.298	0.329	0.329	0.010	10.6	20.0	Averaged	
2,2-Dichloropropane	0.259	0.306	0.306	0.010	18.2	20.0	Averaged	
100 1,2-Dichloroethene, Total	0.286	0.322	0.322	0.010	12.8	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110501.D

Volatiles by EPA 8260C

Instrument ID ms25.i
Lab File ID 2524110501.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 05-NOV-2024 0934
ICAL Date(s) 04-NOV-2024, 04-NOV-2024
ICAL Times 13:55, 15:57
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromochloromethane	0.131	0.149	0.149	0.010	14.0	20.0	Averaged	
Cyclohexane	0.282	0.322	0.322	0.010	14.1	20.0	Averaged	
Chloroform	0.428	0.479	0.479	0.010	11.9	20.0	Averaged	
Ethyl Acetate	0.219	0.217	0.217	0.010	-0.992	20.0	Averaged	
Methyl acrylate	0.208	0.221	0.221	0.010	6.18	20.0	Averaged	
Carbon Tetrachloride	50.0	49.4	3.63	0.010	-1.176	20.0	Wt Linear	
Tetrahydrofuran	0.066	0.069	0.069	0.000	5.40	20.0	Averaged	
41 Dibromofluoromethane	0.263	0.271	0.271	0.010	2.82	20.0	Averaged	
1,1,1-Trichloroethane	0.306	0.341	0.341	0.010	11.5	20.0	Averaged	
2-Butanone	0.032	0.033	0.033	0.000	2.81	20.0	Averaged	
1,1-Dichloropropene	0.280	0.319	0.319	0.010	13.9	20.0	Averaged	
1-Chlorobutane	0.185	0.203	0.203	0.010	10.2	20.0	Averaged	
Heptane	50.0	58.0	6.46	0.000	16.1	20.0	Wt Linear	
Propionitrile	0.038	0.039	0.039	0.000	4.07	20.0	Averaged	
Benzene	0.915	1.00	1.00	0.010	9.37	20.0	Averaged	
Methacrylonitrile	0.115	0.124	0.124	0.010	7.82	20.0	Averaged	
tert-Amyl methyl ether	0.642	0.702	0.702	0.010	9.23	20.0	Averaged	
51 1,2-Dichloroethane-d4	0.297	0.300	0.300	0.010	1.05	20.0	Averaged	
Isobutyl alcohol	0.006	0.005	0.005	0.000	-9.925	20.0	Averaged	
1,2-Dichloroethane	0.318	0.346	0.346	0.010	8.58	20.0	Averaged	
tert-Amyl Alcohol	250	205	63.2	0.002	-18.057	20.0	Wt Linear	
Diisobutylene	50.0	53.9	1.96	0.010	7.79	20.0	Wt Linear	
Trichloroethene	0.243	0.253	0.253	0.010	3.76	20.0	Averaged	
Methyl cyclohexane	0.738	0.833	0.833	0.005	12.7	20.0	Averaged	
tert-Amyl Ethylether	0.490	0.562	0.562	0.010	14.7	20.0	Averaged	
Dibromomethane	0.164	0.177	0.177	0.010	8.05	20.0	Averaged	
1,2-Dichloropropane	0.230	0.262	0.262	0.010	13.7	20.0	Averaged	
Bromodichloromethane	0.288	0.326	0.326	0.010	13.3	20.0	Averaged	
Methyl methacrylate	0.185	0.197	0.197	0.010	6.80	20.0	Averaged	
2-Chloroethylvinyl ether	50.0	48.4	13.4	0.010	-3.131	20.0	Quadratic	
cis-1,3-Dichloropropene	0.868	0.993	0.993	0.010	14.4	20.0	Averaged	
Octane	0.256	0.320	0.320	0.010	25.2	20.0	Averaged	*
68 Toluene-d8	2.48	2.44	2.44	0.010	-1.465	20.0	Averaged	
Toluene	1.41	1.48	1.48	0.010	4.63	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110501.D

Volatiles by EPA 8260C

Instrument ID ms25.i
Lab File ID 2524110501.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 05-NOV-2024 0934
ICAL Date(s) 04-NOV-2024, 04-NOV-2024
ICAL Times 13:55, 15:57
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Chloroacetonitrile	250	208	32.9	0.000	-16.998	20.0	Wt Linear	
2-Nitropropane	250	206	7.77	0.005	-17.511	20.0	Wt Linear	
1,1-Dichloro-2-Propanone	250	213	81.4	0.001	-14.899	20.0	Wt Linear	
4-Methyl-2-Pentanone(MIBK)	0.544	0.568	0.568	0.010	4.44	20.0	Averaged	
trans-1,3-Dichloropropene	50.0	49.1	1.06	0.010	-1.774	20.0	Wt Linear	
Tetrachloroethene	0.502	0.514	0.514	0.010	2.48	20.0	Averaged	
Ethyl Methacrylate	50.0	47.2	1.19	0.010	-5.573	20.0	Wt Linear	
1,1,2-Trichloroethane	0.468	0.504	0.504	0.010	7.82	20.0	Averaged	
Chlorodibromomethane	50.0	48.3	1.56	0.010	-3.330	20.0	Wt Linear	
1,3-Dichloropropane	0.928	1.02	1.02	0.010	9.97	20.0	Averaged	
1,2-Dibromoethane	0.545	0.603	0.603	0.010	10.8	20.0	Averaged	
2-Hexanone	0.369	0.378	0.378	0.010	2.31	20.0	Averaged	
1-Chlorohexane	0.648	0.724	0.724	0.010	11.7	20.0	Averaged	
Ethylbenzene	0.783	0.841	0.841	0.010	7.41	20.0	Averaged	
Chlorobenzene	1.53	1.62	1.62	0.300	5.94	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.513	0.558	0.558	0.010	8.69	20.0	Averaged	
mp-Xylene	0.946	1.03	1.03	0.010	9.25	20.0	Averaged	
120 1,3-Dichloropropene, Total	100	106	1.03	0.010	6.34	20.0	Wt Linear	
o-Xylene	0.911	1.00	1.00	0.010	9.91	20.0	Averaged	
Styrene	1.67	1.88	1.88	0.010	12.4	20.0	Averaged	
Bromoform	50.0	44.0	2.25	0.100	-11.997	20.0	Wt Linear	
Isopropylbenzene	50.0	52.9	0.404	0.010	5.87	20.0	Wt Linear	
92 4-Bromofluorobenzene	0.789	0.764	0.764	0.010	-3.254	20.0	Averaged	
121 Total Xylenes	0.934	1.02	1.02	0.010	9.46	20.0	Averaged	
n-Propylbenzene	0.687	0.742	0.742	0.010	8.08	20.0	Averaged	
Bromobenzene	0.721	0.765	0.765	0.010	6.14	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.774	0.777	0.777	0.300	0.293	20.0	Averaged	
1,3,5-Trimethylbenzene	1.95	2.21	2.21	0.010	13.4	20.0	Averaged	
o-Chlorotoluene	1.95	2.16	2.16	0.010	10.7	20.0	Averaged	
1,2,3-Trichloropropane	0.239	0.243	0.243	0.010	1.32	20.0	Averaged	
trans-1,4-Dichloro-2-butene	50.0	45.2	4.87	0.010	-9.586	20.0	Wt Linear	
p-Chlorotoluene	1.80	1.97	1.97	0.010	9.57	20.0	Averaged	
tert-Butylbenzene	0.468	0.528	0.528	0.010	12.9	20.0	Averaged	
Pentachloroethane	0.388	0.449	0.449	0.010	15.7	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110501.D

Volatiles by EPA 8260C

Instrument ID ms25.i
Lab File ID 2524110501.D
Analysis Type WATER
Lab Sample ID 1800

Injection Date 05-NOV-2024 0934
ICAL Date(s) 04-NOV-2024, 04-NOV-2024
ICAL Times 13:55, 15:57
Quant Type ISTD

Compound	RRF / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2,4-Trimethylbenzene	2.00	2.24	2.24	0.010	11.6	20.0	Averaged	
sec-Butylbenzene	2.33	2.73	2.73	0.010	17.1	20.0	Averaged	
p-Isopropyltoluene	0.524	0.613	0.613	0.010	17.0	20.0	Averaged	
1,3-Dichlorobenzene	1.19	1.31	1.31	0.010	9.99	20.0	Averaged	
1,4-Dichlorobenzene	1.27	1.34	1.34	0.010	5.56	20.0	Averaged	
n-Butylbenzene	0.454	0.539	0.539	0.010	18.7	20.0	Averaged	
Benzyl Chloride	50.0	52.9	4.13	0.010	5.79	20.0	Quadratic	
Hexachloroethane	50.0	47.4	2.69	0.010	-5.121	20.0	Wt Linear	
1,2-Dichlorobenzene	1.16	1.25	1.25	0.010	7.61	20.0	Averaged	
1,2-Dibromo-3-chloropropane	0.128	0.113	0.113	0.010	-11.653	20.0	Averaged	
Nitrobenzene	500	398	38.7	0.000	-20.481	20.0	Quadratic	*
Hexachlorobutadiene	0.282	0.347	0.347	0.000	23.1	20.0	Averaged	*
1,2,4-Trichlorobenzene	0.671	0.788	0.788	0.010	17.3	20.0	Averaged	
Naphthalene	50.0	47.1	0.504	0.010	-5.770	20.0	Wt Linear	
1,2,3-Trichlorobenzene	0.683	0.765	0.765	0.010	12.1	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110528.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2524110528.D
Fraction VOA
SampleType ENDCCV
Inj Date 05-NOV-2024 1935

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Dichlorodifluoromethane	50.0	50.2	100	50-150	
Chloromethane	50.0	41.6	83.1	50-150	
Vinyl Chloride	50.0	48.3	96.7	50-150	
Bromomethane	50.0	27.6	55.2	50-150	
Chloroethane	50.0	54.8	110	50-150	
Pentane	50.0	44.0	88.0	50-150	
Trichlorofluoromethane	50.0	49.7	99.3	50-150	
Dichlorofluoromethane	50.0	49.2	98.3	50-150	
Ethyl Ether	50.0	53.6	107	50-150	
1,1-Dichloroethene	50.0	50.2	100	50-150	
Freon 113	50.0	49.5	99.0	50-150	
Carbon Disulfide	50.0	53.9	108	50-150	
Iodomethane	50.0	27.3	54.6	50-150	
Acrolein	250	237	94.9	50-150	
Isopropyl Alcohol	250	244	97.5	50-150	
3-Chloro-1-propene	50.0	52.8	106	50-150	
Methylene Chloride	50.0	51.7	103	50-150	
Acetone	250	236	94.2	50-150	
Methyl acetate	50.0	50.9	102	50-150	
trans-1,2-Dichloroethene	50.0	51.1	102	50-150	
Hexane	50.0	48.3	96.6	50-150	
Methyl t-Butyl Ether	50.0	55.1	110	50-150	
tert.- Butyl Alcohol	250	253	101	50-150	
Acetonitrile	250	244	97.8	50-150	
Diisopropyl ether	50.0	54.2	108	50-150	
Chloroprene	50.0	44.5	89.0	50-150	
1,1-Dichloroethane	50.0	54.4	109	50-150	
Acrylonitrile	250	302	121	50-150	
n-Propanol	500	488	97.6	50-150	
Ethyl tert-butyl ether	50.0	54.2	108	50-150	
Vinyl acetate	50.0	46.3	92.6	50-150	
cis-1,2-Dichloroethene	50.0	51.3	103	50-150	
2,2-Dichloropropane	50.0	47.6	95.1	50-150	
Bromochloromethane	50.0	55.0	110	50-150	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110528.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2524110528.D
Fraction VOA
SampleType ENDCCV
Inj Date 05-NOV-2024 1935

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Cyclohexane	50.0	51.6	103	50-150	
Chloroform	50.0	53.5	107	50-150	
Ethyl acetate	50.0	51.5	103	50-150	
Methyl acrylate	50.0	55.1	110	50-150	
Carbon Tetrachloride	50.0	47.7	95.3	50-150	
Tetrahydrofuran	250	258	103	50-150	
1,1,1-Trichloroethane	50.0	52.9	106	50-150	
2-Butanone	250	269	108	50-150	
1,1-Dichloropropene	50.0	51.5	103	50-150	
1-Chlorobutane	50.0	50.3	101	50-150	
Heptane	50.0	42.9	85.8	50-150	
Benzene	50.0	51.8	104	50-150	
Propionitrile	250	258	103	50-150	
Methacrylonitrile	50.0	53.6	107	50-150	
tert-amyl methyl E	50.0	53.5	107	50-150	
Isobutyl alcohol	500	655	131	50-150	
1,2-Dichloroethane	50.0	51.5	103	50-150	
tert-Amyl Alcohol	250	217	87.0	50-150	
Diisobutylene	50.0	46.4	92.8	50-150	
Trichloroethene	50.0	47.5	94.9	50-150	
Methyl cyclohexane	50.0	49.0	98.0	50-150	
tert-Amyl Ethylether	50.0	54.7	109	50-150	
Dibromomethane	50.0	52.2	104	50-150	
1,2-Dichloropropane	50.0	52.6	105	50-150	
Bromodichloromethane	50.0	55.1	110	50-150	
Methyl methacrylate	50.0	52.3	105	50-150	
1,4-Dioxane	1250	0.000		50-150	*
2-Chloroethylvinyl ether	50.0	34.7	69.5	50-150	
cis-1,3-Dichloropropene	50.0	53.1	106	50-150	
Octane	50.0	45.6	91.3	50-150	
Toluene	50.0	48.7	97.3	50-150	
Chloroacetonitrile	250	234	93.7	50-150	
2-Nitropropane	250	219	87.8	50-150	
1,1-Dichloro-2-pro	250	210	84.0	50-150	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110528.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2524110528.D
Fraction VOA
SampleType ENDCCV
Inj Date 05-NOV-2024 1935

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
4-Methyl-2-Pentanone(MIBK)	250	263	105	50-150	
Tetrachloroethene	50.0	55.9	112	50-150	
trans-1,3-Dichloropropene	50.0	45.4	90.9	50-150	
Ethyl methacrylate	50.0	47.1	94.2	50-150	
1,1,2-Trichloroethane	50.0	51.7	103	50-150	
Chlorodibromomethane	50.0	47.4	94.8	50-150	
1,2-Dibromoethane	50.0	54.9	110	50-150	
2-Hexanone	250	257	103	50-150	
1-Chlorohexane	50.0	43.9	87.8	50-150	
1,3-Dichloropropane	50.0	52.4	105	50-150	
Chlorobenzene	50.0	50.5	101	50-150	
Ethylbenzene	50.0	50.2	100	50-150	
1,1,1,2-Tetrachloroethane	50.0	52.9	106	50-150	
mp-Xylene	100	102	102	50-150	
o-Xylene	50.0	52.3	105	50-150	
Styrene	50.0	53.6	107	50-150	
Bromoform	50.0	44.7	89.4	50-150	
Isopropylbenzene	50.0	48.4	96.8	50-150	
Bromobenzene	50.0	50.5	101	50-150	
n-Propylbenzene	50.0	50.6	101	50-150	
1,1,2,2-Tetrachloroethane	50.0	49.5	99.0	50-150	
o-Chlorotoluene	50.0	50.4	101	50-150	
1,2-Dichloroethene, Total	100	102	102	50-150	
1,3,5-Trimethylbenzene	50.0	51.4	103	50-150	
1,2,3-Trichloropropane	50.0	50.1	100	50-150	
trans-1,4-Dichloro-2-butene	50.0	42.3	84.6	50-150	
p-Chlorotoluene	50.0	50.1	100	50-150	
tert-Butylbenzene	50.0	51.2	102	50-150	
Pentachloroethane	50.0	44.2	88.4	50-150	
1,2,4-Trimethylbenzene	50.0	51.5	103	50-150	
sec-Butylbenzene	50.0	52.3	105	50-150	
p-Isopropyltoluene	50.0	52.1	104	50-150	
1,3-Dichlorobenzene	50.0	51.3	102	50-150	
1,4-Dichlorobenzene	50.0	49.7	99.5	50-150	

Form 7 Continuing Calibration Verification (CCV)

Client Arcadis
Project ACR594|NFARS 30036646.34CD

Workorder 3385043

RunID 2524110528.D

Volatiles by EPA 8260C

Sample Matrix LIQUID
Lab Smp Id 1801
Data Type MS DATA
File ID 2524110528.D
Fraction VOA
SampleType ENDCCV
Inj Date 05-NOV-2024 1935

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
Benzyl Chloride	50.0	39.1	78.1	50-150	
n-Butylbenzene	50.0	51.7	103	50-150	
Hexachloroethane	50.0	45.3	90.5	50-150	
1,2-Dichlorobenzene	50.0	51.4	103	50-150	
1,2-Dibromo-3-chloropropane	50.0	45.4	90.9	50-150	
Nitrobenzene	500	468	93.6	50-150	
Hexachlorobutadiene	50.0	53.7	107	50-150	
1,2,4-Trichlorobenzene	50.0	55.5	111	50-150	
Naphthalene	50.0	49.0	98.0	50-150	
1,3-Dichloropropene, Total	100	98.5	98.5	50-150	
1,2,3-Trichlorobenzene	50.0	55.6	111	50-150	
121 TOTAL XYLENES	150	154	103	50-150	

right solutions.
right partner.

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lmT4SSo	9C9B887C785T	877AADC		B5BE		B8HE7A		D8BE		AEAF9H		E5HC		
88B: 59855B	7: 79665: 683N	6557: 67		936A		8CA8C5		=36A		8: 6A77		A3C:		
88B: 59855C	7: 79665: 693N	CB=CB:		936A		8C==9:		=36A		897: A6		A3C:		
88B: 598565	7: 79665: 6: 3N	CC7: C=		936A		8C: 98:		=36A		8965: A		A3C:		
88B: 598566	7: 79665: 6=3N	658CA9:		936A		96=565		=36A		8: B=76		A3C:		
WL2BC56568	7: 79665: 5: 3N	657B689		936A		9595C:		=36A		8: 6555		A3C:		
VMd2BC56569	7: 79665: 573N	659A: : :		936A		97CB6A		=36A		8A86C:		A3C:		

KcOK faaOc VSWSe G0655* ydeN SdK xs
KcOK V[h Oc VSWSe G 2 : 5* ydeN SdK xs
ce2cx x fl Sd2S x s d s vs vefl x

ce faaOc VSWSe G 0 535 ydeN Sdce
ceV[h Oc VSWSe G 2535 ydeN Sdce
MMg2M fl fl z Msft s fl gx flus fl

(2K xs ceVfl fl Psz
/2gs x[flvx K xs ce fl fl
R 2R deN2d s vs v

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GCMS ANALYSIS - VOLATILE ORGANICS

DATE(S):	11/4/2024	Analyst:	TMP		SOP ID:	02 8260	
DATA FILE:	25241104xx.d	BFB INJ :	11/4/24 12:45	INSTRUMENT: MS25	METHOD(S)	D8260W LIBV	D8260DW
BATCH:	25241104.b	12-HOUR ENDING:	11/5/24 0:45	ICAL DATE: 11/4/2024	LIMS BATCH:	75354	

Pos #	Run #	ALS Sample ID (w/ Container ID)	Dilution	Test	pH	HDSP / Wt.	CL^-	Comment	Pos #	Run #	ALS Sample ID (w/ Container ID)	Dilution	Test	pH	HDSP / Wt.	CL^-	Comment
0	00	1000	1	BFB	-	-	-		33	33							
1	01	WP	1	8260	-	-	-		34	34							
2	02	WP	1	8260	-	-	-		35	35							
3	03	VST00.5	1	8260	-	-	-		36	36							
4	04	1234	1	8260	-	-	-		37	37							
5	05	1235	1	8260	-	-	-		38	38							
6	06	1236	1	8260	-	-	-		39	39							
7	07	1237	1	8260	-	-	-		40	40							
8	08	1238	1	8260	-	-	-		41	41							
9	09	1239	1	8260	-	-	-		42	42							
10	10	WP	1	8260	-	-	-		43	43							
11	11	WP	1	8260	-	-	-		44	44							
12	12	WP	1	8260	-	-	-		45	45							
13	13	WP	1	8260	-	-	-		46	46							
14	14	3900593	1	8260	-	-	-		47	47							
15	15	3900594	1	8260	-	-	-		48	48							
16	16	WP	1	8260	-	-	-		49	49							
17	17	3385474009-A	1	D8260W V	<2	N	N		50	50							
18	18	3384988001-B	1	D8260W V	<2	N	N	(RR)	51	51							
19	19	3385233001-A	1	D8260W V	<2	N	N		52	52							
20	20	3385233002-A	1	D8260W V	<2	N	N		53	53							
21	21	3385474002-A	1	D8260W V	<2	N	N		54	54							
22	22	3385474003-A	1	D8260W V	<2	N	N		55	55							
23	23	3385474004-A	1	D8260W V	<2	N	N		56	56							
24	24	3385474006-A	1	D8260W V	<2	N	N		57	57							
25	25	3385474007-A	1	D8260W V	<2	N	N		58	58							
26	26	3385474008-A	1	D8260W V	<2	N	N		59	59							
27	27	3385474001-A	1	D8260W V	<2	N	N	DL20 tce	60	60							
28	28	3385474005-A	1	D8260W V	<2	N	N	DL20 tce	61	61							
29	29	WP	1	D8260W V	-	-	-		62	62							
30	30	1801	1	D8260W V	-	-	-		63	63							
31	31								64	64							
32	32								65	65							

IS:	VOA0340	Vnew:	VOA0356
SS:	VOA0341	Vgas:	VOA0363
BFB:	VOA0353	Qvoa:	VOA0344
AF:	VOA0359	Qgas:	VOA0364

ABBREVIATIONS

CO: Suspect Carryover	SS: Surrogate Failure	NB: Needs Batched
LS: Library Search	IS: ISTD Failure	AAS: Autosampler Adds Surrogate (Soil)
RR: Rerun same dilution	DNR: Do not Report	(**): Sample is an RR, DF, or DL
DFx: Rerun @ less diln x	NU: Not Used	WP: Water Blank
DLx: Rerun @ diln x	AF: Antifoam was used	COMP: Composite
HDSP: Headspase	Cl^-: Chlorine Check	Wt: Weight

10ul :	HS972
25ul :	HS995
100ul :	HS986
1 mL :	HS1006
5 mL :	HS1003
10 mL :	HS1022

Batch Review Checklist

Rev. 8/07/2022

TARGET BATCH:	25241104.b	**HORIZON BATCH:**	75354			**ICAL DATE(S):**	11/4/2024	
INSTRUMENT:	MS25	**METHOD:**	D8260W	LIBV	D8260DW	**SOP ID:**	02 8260	

DATA REVIEW

Reviewer 1	Reviewer 2		
PDK	CHS	BFB Reviewed	
PDK	CHS	Calibration/Continuing Calibration reviewed	
PDK	CHS	Continuing Calibration passes +/- ISTD area - CCAL is zeroed	
PDK	CHS	Correct ICAL referenced	
PDK	CHS	Correct start/end times/dates for ICAL	
PDK	CHS	Any elavated reporting limits due to ICAL?	Yes/No: **N**
PDK	CHS	Blank reviewed.	
PDK	CHS	LCS/second source reviewed	
-	-	MS/MSD reviewed - List failures on native sample	
PDK	CHS	All samples within 12/24-hour tune period?	
PDK	CHS	Compound retention times reviewed	
PDK	CHS	ISTDs for each sample reviewed	
PDK	CHS	Surrogates for each sample reviewed	
PDK	-	Soil weights/volumes correct	
PDK	CHS	Samples checked for over-range detections and put back in for reanalysis	
PDK	CHS	Spectra and ions have been reviewed for each analyte detected	
-	-	Library search has been performed for clients requesting it	
PDK	CHS	Container IDs in LIMS batch	

REPORTS REVIEW:

CHS	Runlog printed to PDF
PDK	Batch summary printed to PDF
PDK	ICAL Summary printed to PDF
PDK	BFB Reports printed to PDF
PDK	Calibration/CCAL reports printed to PDF
PDK	Reports printed to PDF for all samples (w/ LS if needed)
PDK	Logbook complete - All standard information included
CHS	Tests scheduled in LIMS

Signature	Date	
PDK	11/4/2024:11/5/2024	Data 1st Review
CHS	11/5/2024	Data 2nd Review
CHS	11/5/2024	Data Reported
CHS	11/5/2024	Data Approved

COMMENTS:

Iodomethane reporting limit lowered to **100ppb**

LL Readback Outliers: 2-Chloroethylvinyl ether

MIDL Readback Outliers: None

ICVLCS Outliers (70-130%) : NONE

DOD ICVLCS Outliers (80-120%): NONE

GCMS ANALYSIS - VOLATILE ORGANICS

DATE(S):	11/5/2024	Analyst:	ILY		SOP ID:	02 8260	
DATA FILE:	25241105xx.d	BFB INJ :	11/5/24 9:03	INSTRUMENT: MS25	METHOD(S)	D8260W LIBV	D8260DW
BATCH:	25241105.b	12-HOUR ENDING:	11/5/24 21:03	ICAL DATE: 11/4/2024	LIMS BATCH:	75367	

Pos #	Run #	ALS Sample ID (w/ Container ID)	Dilution	Test	pH	HDSP / Wt.	CL^-	Comment	Pos #	Run #	ALS Sample ID (w/ Container ID)	Dilution	Test	pH	HDSP / Wt.	CL^-	Comment
0	00	1000	1	BFB	-	-	-		33	33							
1	01	1800	1	8260	-	-	-		34	34							
2	02	3901014	1	8260	-	-	-		35	35							
3	03	WP	1	8260	-	-	-		36	36							
4	04	WP	1	8260	-	-	-		37	37							
5	05	3901013	1	8260	-	-	-		38	38							
6	06	3385043001-A	1	D8260W V	<2	N	N		39	39							
7	07	3385043002-A	1	D8260W V	<2	N	N		40	40							
8	08	3385043003-A	1	D8260W V	<2	N	N		41	41							
9	09	3385043004-A	1	D8260W V	<2	N	N		42	42							
10	10	3385043005-A	1	D8260W V	<2	N	N	PD MSD	43	43							
11	11	3385043006-A	1	D8260W V	<2	N	N		44	44							
12	12	3385043007-A	1	D8260W V	<2	N	N		45	45							
13	13	3385043008-A	1	D8260W V	<2	N	N		46	46							
14	14	3385043009-A	1	D8260W V	<2	N	N		47	47							
15	15	3385043010-A	1	D8260W V	<2	N	N		48	48							
16	16	3385043011-A	1	D8260W V	<2	N	N		49	49							
17	17	3385043012-A	1	D8260W V	<2	N	N		50	50							
18	18	3385043013-A	1	D8260W V	<2	N	N		51	51							
19	19	3385043014-A	1	D8260W V	<2	N	N		52	52							
20	20	3385043015-A	1	D8260W V	<2	N	N		53	53							
21	21	3385043016-A	1	D8260W V	<2	N	N		54	54							
22	22	3385043017-A	1	D8260W V	<2	N	N		55	55							
23	23	3385043018-A	1	D8260W V	<2	N	N		56	56							
24	24	3385474001-B	20	D8260W V	<2	N	N	(DL)	57	57							
25	25	3385474005-B	20	D8260W V	<2	N	N	(DL)	58	58							
26	26	3901015	1	8260	<2	N	N	"B"	59	59							
27	27	3901016	1	8260	<2	N	N	"C"	60	60							
28	28	1801	1	8260	-	-	-		61	61							
29	29								62	62							
30	30								63	63							
31	31								64	64							
32	32								65	65							

IS:	VOA0340	Vnew:	VOA0356
SS:	VOA0341	Vgas:	VOA0363
BFB:	VOA0353	Qvoa:	VOA0344
AF:	VOA0359	Qgas:	VOA0364

ABBREVIATIONS

CO: Suspect Carryover	SS: Surrogate Failure	NB: Needs Batched
LS: Library Search	IS: ISTD Failure	AAS: Autosampler Adds Surrogate (Soil)
RR: Rerun same dilution	DNR: Do not Report	(**): Sample is an RR, DF, or DL
DFx: Rerun @ less diln x	NU: Not Used	WP: Water Blank
DLx: Rerun @ diln x	AF: Antifoam was used	COMP: Composite
HDSP: Headspase	Cl^-: Chlorine Check	Wt: Weight

10ul :	HS972
25ul :	HS995
100ul :	HS986
1 mL :	HS1006
5 mL :	HS1003
10 mL :	HS1022

Batch Review Checklist

Rev. 8/07/2022

TARGET BATCH:	25241105.b	**HORIZON BATCH:**	75367			**ICAL DATE(S):**	11/4/2024	
INSTRUMENT:	MS25	**METHOD:**	D8260W	LIBV	D8260DW	**SOP ID:**	02 8260	

DATA REVIEW

Reviewer 1	Reviewer 2		
CHS	ILY	BFB Reviewed	
CHS	ILY	Calibration/Continuing Calibration reviewed	
CHS	ILY	Continuing Calibration passes +/- ISTD area - CCAL is zeroed	
CHS	ILY	Correct ICAL referenced	
CHS	ILY	Correct start/end times/dates for ICAL	
CHS	ILY	Any elavated reporting limits due to ICAL?	Yes/No: **N**
CHS	ILY	Blank reviewed.	
CHS	ILY	LCS/second source reviewed	
CHS	ILY	MS/MSD reviewed - List failures on native sample	
CHS	ILY	All samples within 12/24-hour tune period?	
CHS	ILY	Compound retention times reviewed	
CHS	ILY	ISTDs for each sample reviewed	
CHS	ILY	Surrogates for each sample reviewed	
-	-	Soil weights/volumes correct	
CHS	ILY	Samples checked for over-range detections and put back in for reanalysis	
CHS	ILY	Spectra and ions have been reviewed for each analyte detected	
-	-	Library search has been performed for clients requesting it	
CHS	ILY	Container IDs in LIMS batch	

REPORTS REVIEW:

ILY	Runlog printed to PDF
CHS	Batch summary printed to PDF
CHS	ICAL Summary printed to PDF
CHS	BFB Reports printed to PDF
CHS	Calibration/CCAL reports printed to PDF
CHS	Reports printed to PDF for all samples (w/ LS if needed)
CHS	Logbook complete - All standard information included
ILY	Tests scheduled in LIMS

Signature	Date	
CHS	11/6/2024	Data 1st Review
ILY	11/6/2024	Data 2nd Review
ILY	11/6/2024	Data Reported
ILY	11/6/2024	Data Approved

COMMENTS:

Iodomethane reporting limit lowered to **100ppb**

LL Readback Outliers: 2-Chloroethylvinyl ether

MIDL Readback Outliers: None

ICVLCS Outliers (70-130%) : NONE

DOD ICVLCS Outliers (80-120%): NONE

right solutions.
right partner.

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Mfk

Q |

a xu

QSkCHBf VQkl A77ADDBD5ABST

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ALS Environmental Services

BFB Tune

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110400.D
Lab Smp Id: 1000
Inj Date : 04-NOV-2024 12:45
Operator : TMP Inst ID: ms25.i
Smp Info : 1000
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\bfb288.m
Meth Date : 15-Oct-2024 09:42 tmp Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
7.051	8.129	(0.000)	95	91248			0.00- 100.00	100.00
7.051	8.129	(0.000)	50	15539			15.00- 40.00	17.03
7.051	8.129	(0.000)	75	45096			30.00- 60.00	49.42
7.051	8.129	(0.000)	96	6413			5.00- 9.00	7.03
7.051	8.129	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
7.051	8.129	(0.000)	174	79536			50.00- 0.00	87.16
7.051	8.129	(0.000)	175	6604			5.00- 9.00	8.30
7.051	8.129	(0.000)	176	79032			95.00- 101.00	99.37
7.051	8.129	(0.000)	177	4913			5.00- 9.00	6.22

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.03
75	30.00 - 60.00% of mass 95	49.42
96	5.00 - 9.00% of mass 95	7.03
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	87.16
175	5.00 - 9.00% of mass 174	7.24 (8.30)
176	95.00 - 101.00% of mass 174	86.61 (99.37)
177	5.00 - 9.00% of mass 176	5.38 (6.22)

Data File: 2524110400.D
Spectrum: Avg. Scans 1083-1085 (7.05), Background Scan 1077
Location of Maximum: 95.00
Number of points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	942	64.00	448	94.00	11463	144.00	69
37.00	4318	66.00	145	95.00	91248	145.00	64
38.00	4194	67.00	420	96.00	6413	146.00	202
39.00	1627	68.00	8716	97.00	181	147.00	69
41.00	51	69.00	8637	104.00	570	149.00	62
42.00	71	70.00	1159	105.00	143	150.00	167
43.00	51	71.00	110	106.00	463	153.00	71
44.00	643	72.00	753	113.00	53	155.00	146
45.00	913	73.00	3810	115.00	199	156.00	138
46.00	122	74.00	16095	116.00	307	159.00	159
47.00	1199	75.00	45096	117.00	991	161.00	225
48.00	657	76.00	4432	118.00	403	170.00	193
49.00	3792	77.00	807	119.00	566	171.00	362
50.00	15539	78.00	188	128.00	487	172.00	734
51.00	4818	79.00	3452	129.00	58	174.00	79536
52.00	260	80.00	998	130.00	464	175.00	6604
55.00	326	81.00	3889	131.00	180	176.00	79032
56.00	1584	82.00	953	134.00	53	177.00	4913
57.00	3132	83.00	140	135.00	74	178.00	180
58.00	80	86.00	63	136.00	91	181.00	78
59.00	180	87.00	4251	137.00	404	190.00	81
60.00	902	88.00	3895	140.00	74	233.00	58
61.00	3805	91.00	549	141.00	1208		
62.00	3968	92.00	2838	142.00	145		
63.00	3667	93.00	4278	143.00	1006		

Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110400.D

Date : 04-NOV-2024 12:45

Client ID:

Instrument: ms25.i

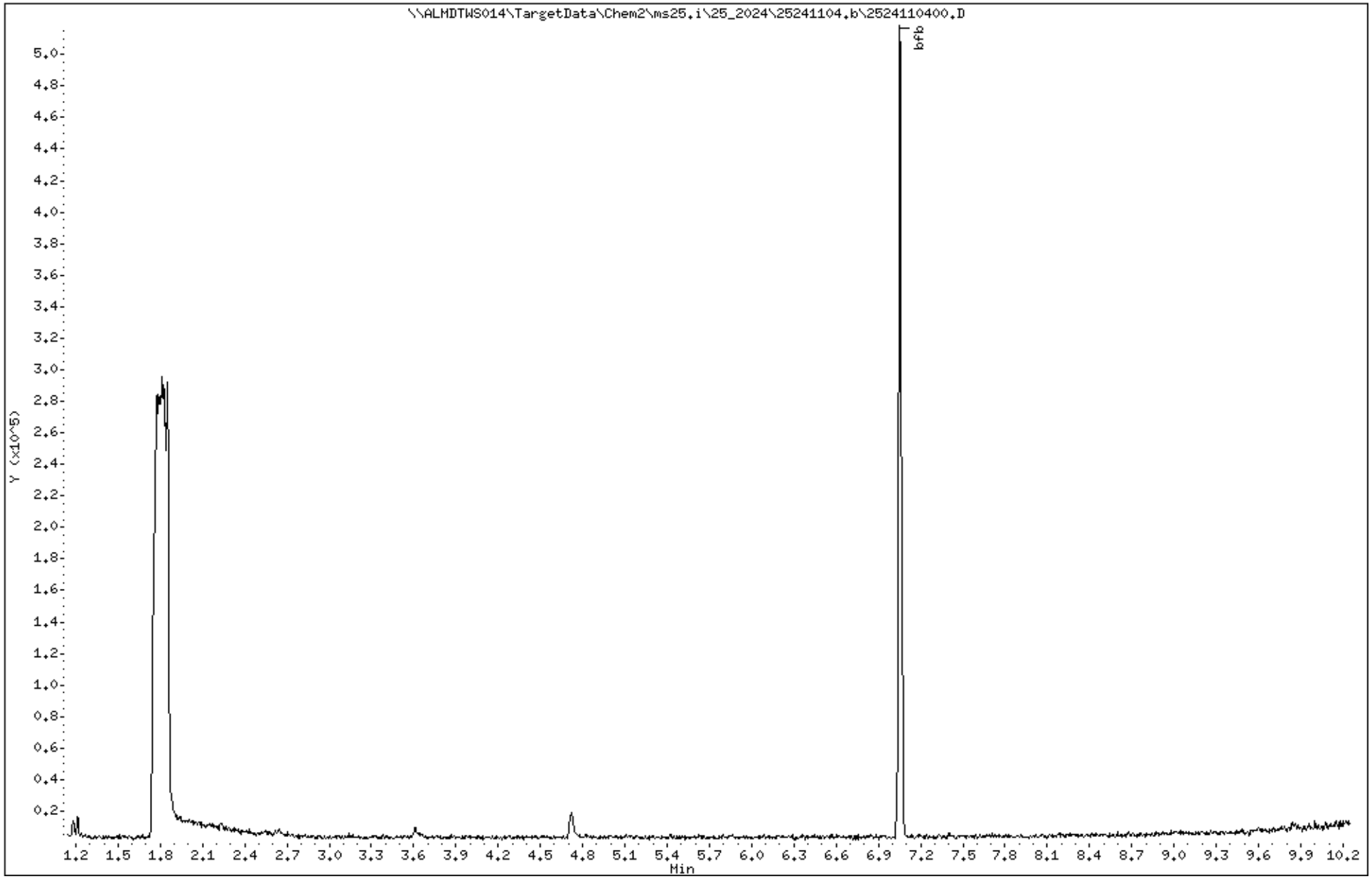
Sample Info: 1000

Volume Injected (uL): 1.0

Operator: TMP

Column phase: DB624

Column diameter: 0.53



Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110400.D
Inj Date : 04-NOV-2024 12:45
InstruID : ms25.i
LabSampID : 1000

NO MANUAL INTEGRATIONS

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110403.D
Lab Smp Id: VSTD00.5
Inj Date : 04-NOV-2024 13:55
Operator : TMP Inst ID: ms25.i
Smp Info : VSTD00.5;;1;1;8;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\25-8260b09.m
Meth Date : 04-Nov-2024 19:36 pdk Quant Type: ISTD
Cal Date : 04-NOV-2024 14:36 Cal File: 2524110405.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.497	1.497	(0.359)	5012	0.50000	0.491987(a)	
2	Chloromethane	50	1.644	1.645	(0.395)	5239	0.50000	0.547551(a)	
3	Vinyl Chloride	62	1.704	1.705	(0.409)	5379	0.50000	0.466596(a)	
4	Bromomethane	94	1.923	1.923	(0.462)	7462	0.50000	0.630847(a)	
5	Chloroethane	64	2.004	2.005	(0.481)	4901	0.50000	0.563449(a)	
6	Pentane	41	2.092	2.097	(0.502)	6276	0.50000	0.868231(aQ)	
7	Trichlorofluoromethane	101	2.103	2.097	(0.505)	6748	0.50000	0.442915(a)	
8	Dichlorofluoromethane	67	2.124	2.125	(0.510)	9534	0.50000	0.581823(a)	
9	Ethyl Ether	74	2.283	2.278	(0.548)	2589	0.50000	0.531689(aQ)	
10	1,1-Dichloroethene	61	2.414	2.409	(0.580)	4629	0.50000	0.513081(a)	
11	Freon 113	101	2.425	2.419	(0.582)	3120	0.50000	0.547133(aQ)	
12	Carbon Disulfide	76	2.446	2.447	(0.587)	9041	0.50000	0.480220(a)	
13	Iodomethane	127	2.506	2.507	(0.602)	688	0.50000	0.291973(aQM)	IH
14	Acrolein	56	2.594	2.605	(0.623)	2958	2.50000	2.46728	
15	Isopropyl Alcohol	45	2.643	2.654	(0.635)	1475	2.50000	3.10971	
16	3-Chloro-1-propene	41	2.681	2.676	(0.644)	3343	0.50000	0.445964(aQ)	
17	Methylene Chloride	84	2.736	2.736	(0.657)	4252	0.50000	0.514006(a)	
18	Acetone	58	2.757	2.752	(0.662)	2830	2.50000	3.18658(Q)	
19	Methyl acetate	74	2.812	2.818	(0.675)	1520	0.50000	0.837294(aQ)	
20	trans-1,2-Dichloroethene	61	2.823	2.823	(0.678)	4675	0.50000	0.499247(a)	
21	Hexane	57	2.866	2.867	(0.688)	6937	0.50000	0.548153(a)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	2.872	2.878	(0.690)	9943	0.50000	0.444226(a)	
	23 tert.- Butyl Alcohol	59	2.894	2.900	(0.695)	1915	2.50000	2.35257	
	24 Acetonitrile	41	3.019	3.020	(0.725)	3594	2.50000	3.42394(QM)	MP
	25 Diisopropyl ether	45	3.068	3.063	(0.737)	10104	0.50000	0.469627(a)	
	26 Chloroprene	53	3.156	3.151	(0.758)	3603	0.50000	0.381397(aM)	IH
	27 1,1-Dichloroethane	63	3.172	3.162	(0.762)	5764	0.50000	0.441086(a)	
	28 Acrylonitrile	53	3.188	3.189	(0.766)	7332	2.50000	2.24599(M)	MP
	29 Ethyl tert-butyl ether	59	3.265	3.265	(0.784)	10497	0.50000	0.449488(a)	
	30 n-Propanol	41	3.259	3.260	(0.783)	3344	5.00000	6.97861(Q)	
	31 Vinyl Acetate	86	3.281	3.271	(0.788)	673	0.50000	0.376968(aQ)	
	32 cis-1,2-Dichloroethene	61	3.461	3.462	(0.831)	4985	0.50000	0.487523(a)	
	33 2,2-Dichloropropane	77	3.527	3.522	(0.847)	4434	0.50000	0.495929(aM)	H
	34 Bromochloromethane	128	3.576	3.571	(0.859)	1984	0.50000	0.447909(aQM)	IH
	35 Cyclohexane	84	3.587	3.587	(0.861)	4559	0.50000	0.470473(a)	
	36 Chloroform	83	3.603	3.598	(0.865)	6989	0.50000	0.474514(a)	
	37 Ethyl Acetate	43	3.641	3.631	(0.874)	4395	0.50000	0.573266(a)	
	38 Methyl acrylate	55	3.652	3.658	(0.877)	3174	0.50000	0.439898(a)	
	39 Carbon Tetrachloride	117	3.701	3.696	(0.889)	2671	0.50000	0.333778(aM)	MP
$	41 Dibromofluoromethane	113	3.701	3.702	(0.889)	257937	30.0000	28.5894	
	40 Tetrahydrofuran	42	3.701	3.702	(0.889)	5521	2.50000	2.43058(M)	MP
	42 1,1,1-Trichloroethane	97	3.734	3.729	(0.897)	5217	0.50000	0.490566(a)	
	43 2-Butanone	72	3.761	3.762	(0.903)	2509	2.50000	2.27146(QM)	MP
	44 1,1-Dichloropropene	75	3.794	3.795	(0.911)	4810	0.50000	0.500519(a)	
	45 1-Chlorobutane	41	3.821	3.816	(0.917)	3928	0.50000	0.610142(aQ)	
	46 Heptane	71	3.881	3.876	(0.932)	3560	0.50000	0.735237(a)	
	47 Benzene	78	3.941	3.942	(0.946)	16023	0.50000	0.510327(a)	
	48 Propionitrile	54	3.941	3.942	(0.946)	3510	2.50000	2.69128(M)	I
	49 Methacrylonitrile	67	3.952	3.953	(0.949)	1775	0.50000	0.452640(aQM)	H
	50 tert-Amyl methyl ether	73	3.974	3.975	(0.954)	10305	0.50000	0.463765(a)	
	54 Isobutyl alcohol	42	3.996	3.996	(0.959)	745	5.00000	3.73738(QM)	H
$	51 1,2-Dichloroethane-d4	65	4.012	4.013	(0.963)	302176	30.0000	29.9123	
	52 1,2-Dichloroethane	62	4.051	4.056	(0.972)	5701	0.50000	0.520742(a)	
	53 tert-Amyl Alcohol	59	4.051	4.062	(0.972)	3328	2.50000	4.59096(Q)	
*	55 Fluorobenzene	96	4.165	4.166	(1.000)	1022748	30.0000		
	56 Diisobutylene	57	4.165	4.171	(1.000)	39368	0.50000	1.36497(Q)	
	57 Trichloroethene	95	4.269	4.269	(1.025)	4917	0.50000	0.603489(aQ)	
	58 Methyl cyclohexane	83	4.280	4.275	(0.694)	4856	0.50000	0.496422(a)	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.048)	7327	0.50000	0.433107(a)	
	60 Dibromomethane	93	4.525	4.526	(1.086)	2718	0.50000	0.487110(a)	
	61 1,2-Dichloropropane	63	4.580	4.586	(1.100)	3759	0.50000	0.470247(aM)	H
	62 Bromodichloromethane	83	4.607	4.602	(1.106)	4189	0.50000	0.418520(a)	
	63 Methyl methacrylate	41	4.667	4.668	(1.121)	3319	0.50000	0.523954(aQM)	IH
	64 1,4-Dioxane	88	4.716	4.717	(1.132)	1583	12.5000	13.4442(Q)	
	65 2-Chloroethylvinyl ether	63	4.924	4.935	(1.182)	429	0.50000	0.195035(aM)	H
	66 cis-1,3-Dichloropropene	75	4.995	4.995	(0.810)	5013	0.50000	0.428370(a)	
	67 Octane	85	4.995	5.000	(0.810)	1609	0.50000	0.477464(a)	
$	68 Toluene-d8	98	5.115	5.115	(0.829)	1007887	30.0000	30.9807	
	69 Toluene	92	5.147	5.153	(0.835)	10976	0.50000	0.590177(a)	
	70 Chloroacetonitrile	75	5.213	5.213	(0.845)	449	2.50000	1.14024(QM)	H
	71 2-Nitropropane	41	5.300	5.295	(0.859)	3338	2.50000	1.95468(Q)	
	72 1,1-Dichloro-2-Propanone	63	5.284	5.317	(0.857)	107	2.50000	0.720089(aQM)	H
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.871)	15676	2.50000	2.14676	
	75 trans-1,3-Dichloropropene	75	5.404	5.404	(0.876)	4283	0.50000	0.392254(a)	
	74 Tetrachloroethene	164	5.415	5.404	(0.878)	3183	0.50000	0.478006(a)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.480	5.481	(0.889)	3828	0.50000	0.377384(aM)	H
77	1,1,2-Trichloroethane	83	5.518	5.524	(0.895)	2878	0.50000	0.460446(a)	
78	Chlorodibromomethane	129	5.644	5.650	(0.915)	3433	0.50000	0.438123(aM)	IH
79	1,3-Dichloropropane	76	5.715	5.710	(0.927)	5709	0.50000	0.463875(a)	
80	1,2-Dibromoethane	107	5.829	5.830	(0.945)	3146	0.50000	0.430753(a)	
81	2-Hexanone	43	5.933	5.933	(0.962)	10825	2.50000	2.18577	
82	1-Chlorohexane	91	6.140	6.141	(0.996)	4404	0.50000	0.508424(aM)	MP
* 83	Chlorobenzene-d5	82	6.168	6.168	(1.000)	395461	30.0000		
84	Chlorobenzene	112	6.184	6.184	(1.003)	9928	0.50000	0.491411(a)	
85	Ethylbenzene	106	6.189	6.190	(1.004)	4998	0.50000	0.481789(aQM)	MP
86	1,1,1,2-Tetrachloroethane	131	6.222	6.223	(1.009)	3365	0.50000	0.485249(a)	
87	mp-Xylene	106	6.288	6.288	(1.019)	12711	1.00000	1.01432	
88	o-Xylene	106	6.604	6.599	(1.071)	5486	0.50000	0.455573(aM)	MP
89	Styrene	104	6.642	6.643	(0.836)	8261	0.50000	0.435904(aM)	MP
90	Bromoform	173	6.681	6.681	(0.841)	2048	0.50000	0.414207(aM)	IH
91	Isopropylbenzene	105	6.833	6.839	(0.860)	12640	0.50000	0.498806(a)	
M 100	1,2-Dichloroethene, Total	61				9660	1.00000	0.986770(a)	
$ 92	4-Bromofluorobenzene	174	7.063	7.063	(0.889)	269039	30.0000	30.3222	
93	Bromobenzene	156	7.155	7.150	(0.900)	4568	0.50000	0.552426(a)	
94	n-Propylbenzene	120	7.150	7.150	(0.900)	4300	0.50000	0.548222(aQ)	
95	1,1,2,2-Tetrachloroethane	83	7.199	7.205	(0.906)	4755	0.50000	0.536912(a)	
96	o-Chlorotoluene	91	7.292	7.287	(0.918)	10570	0.50000	0.475953(a)	
97	1,3,5-Trimethylbenzene	105	7.297	7.298	(0.918)	10156	0.50000	0.457199(a)	
98	1,2,3-Trichloropropane	110	7.330	7.319	(0.922)	1239	0.50000	0.460080(aQ)	
99	trans-1,4-Dichloro-2-butene	53	7.352	7.336	(0.925)	603	0.50000	0.281287(aQM)	IH
101	p-Chlorotoluene	91	7.417	7.418	(0.933)	10090	0.50000	0.498777(a)	
102	tert-Butylbenzene	134	7.559	7.565	(0.951)	2743	0.50000	0.514199(aQM)	MP
103	Pentachloroethane	117	7.570	7.581	(0.953)	2396	0.50000	0.528353(aQM)	IH
104	1,2,4-Trimethylbenzene	105	7.608	7.614	(0.957)	11466	0.50000	0.504093(a)	
105	sec-Butylbenzene	105	7.695	7.701	(0.968)	12032	0.50000	0.453873(a)	
106	p-Isopropyltoluene	134	7.810	7.805	(0.983)	2894	0.50000	0.483850(a)	
107	1,3-Dichlorobenzene	146	7.886	7.887	(0.992)	6525	0.50000	0.485967(a)	
* 108	1,4-Dichlorobenzene-d4	152	7.946	7.947	(1.000)	338183	30.0000		
109	1,4-Dichlorobenzene	146	7.957	7.963	(1.001)	7812	0.50000	0.549531(aQ)	
110	Benzyl Chloride	126	8.154	8.148	(1.026)	747	0.50000	0.327178(aQ)	
111	n-Butylbenzene	134	8.154	8.154	(1.026)	2359	0.50000	0.457674(aQ)	
112	Hexachloroethane	117	8.296	8.285	(1.044)	1366	0.50000	0.359352(aQM)	IH
113	1,2-Dichlorobenzene	146	8.312	8.307	(1.046)	6985	0.50000	0.525103(a)	
114	1,2-Dibromo-3-chloropropane	75	8.983	8.973	(1.130)	824	0.50000	0.577450(aQ)	
115	Nitrobenzene	77	9.452	9.469	(1.190)	1153	5.00000	3.67112(QM)	IH
116	Hexachlorobutadiene	225	9.518	9.524	(1.198)	1179	0.50000	0.375389(aM)	IH
M 120	1,3-Dichloropropene, Total	75				9296	1.00000	0.820625(a)	
117	1,2,4-Trichlorobenzene	180	9.556	9.551	(1.203)	3012	0.50000	0.390307(a)	
M 121	Total Xylenes	106				18197	1.50000	1.46989	
118	Naphthalene	128	9.829	9.824	(1.237)	7170	0.50000	0.352397(a)	
119	1,2,3-Trichlorobenzene	180	9.976	9.982	(1.255)	3678	0.50000	0.462414(aQ)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110403.D

Date : 04-NOV-2024 13:55

Client ID:

Instrument: ms25.i

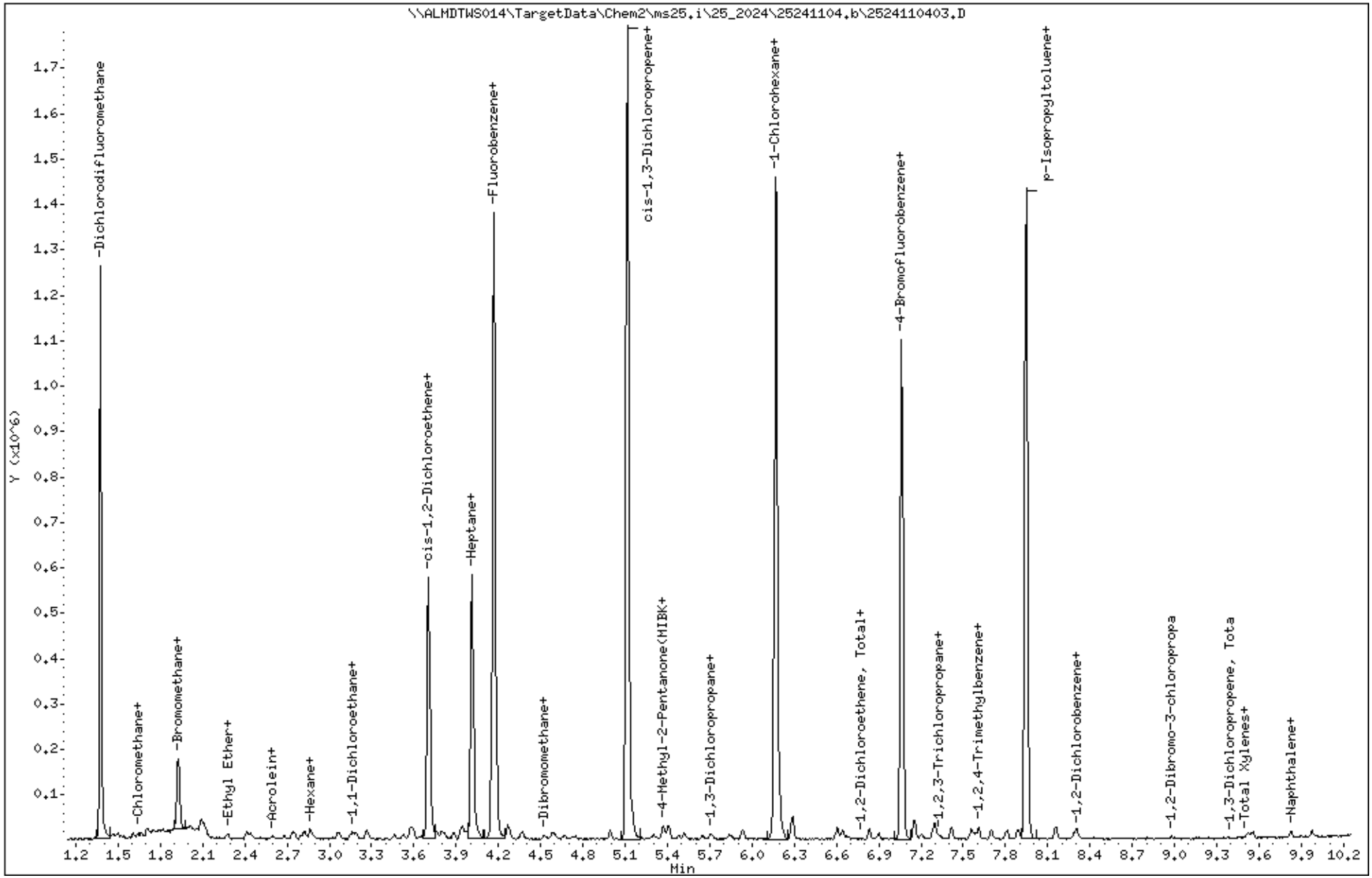
Sample Info: VSTD00.5;;1;1;8;;;

Purge Volume: 5.0

Operator: TMP

Column phase: DB-VRX

Column diameter: 0.25

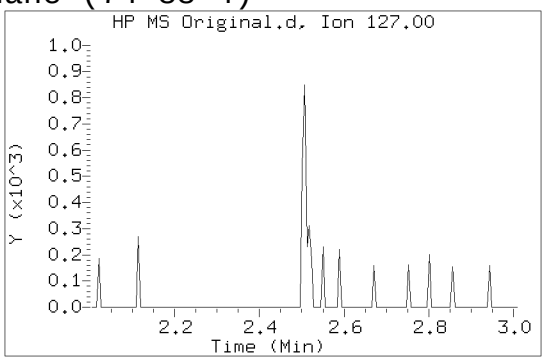


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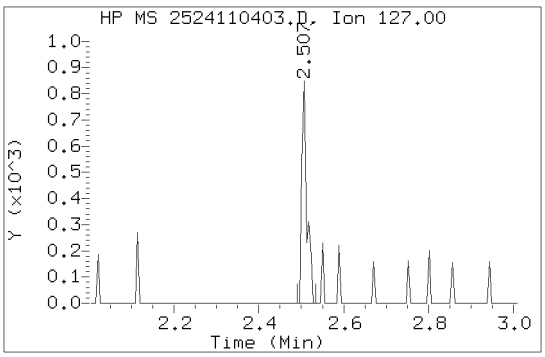
Iodomethane (74-88-4)

Reason Code: IH

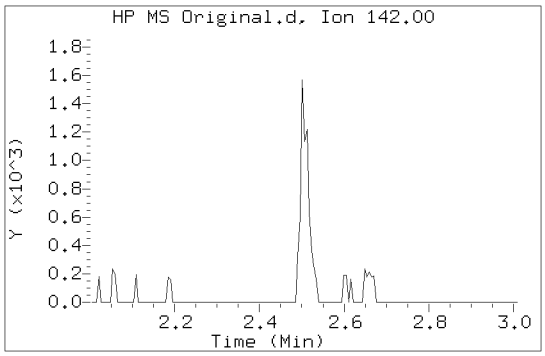
BEFORE
MASS
127
AREA
0
HEIGHT
0
04-Nov-2024
18:35



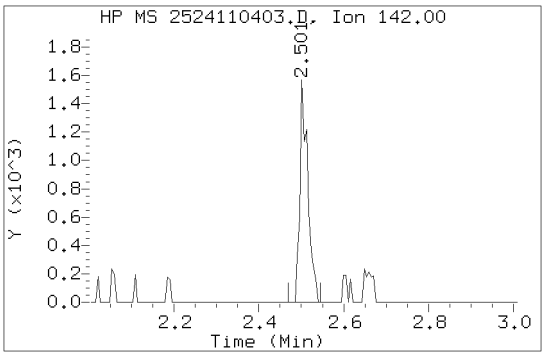
AFTER
MASS
127
AREA
688
HEIGHT
849
04-Nov-2024
18:49



BEFORE
MASS
142
AREA
0
HEIGHT
0
04-Nov-2024
18:35



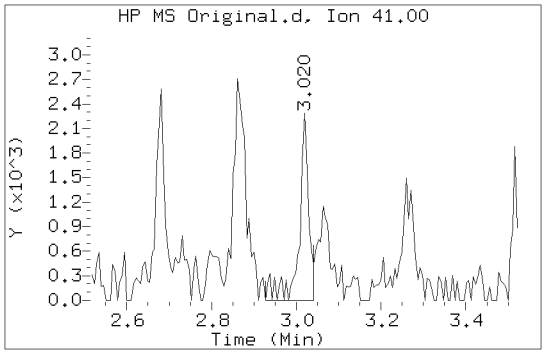
AFTER
MASS
142
AREA
2047
HEIGHT
1568
04-Nov-2024
18:49



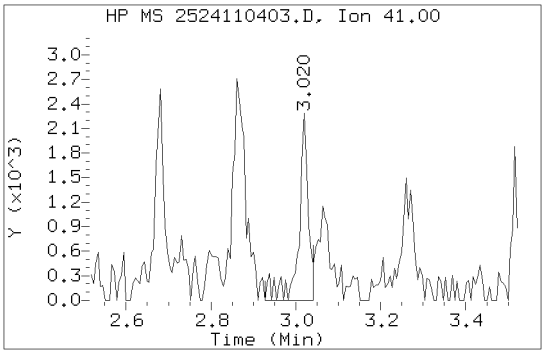
Acetonitrile (75-05-8)

Reason Code: MP

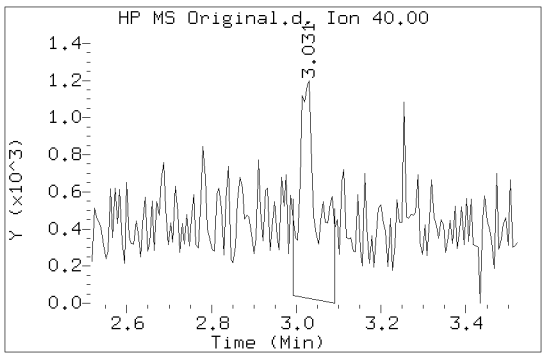
BEFORE
MASS
41
AREA
3594
HEIGHT
2283
04-Nov-2024
18:35



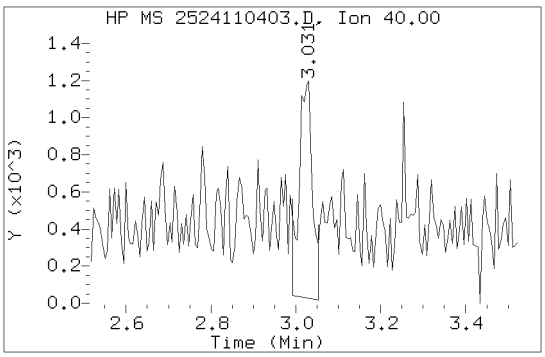
AFTER
MASS
41
AREA
3594
HEIGHT
2283
04-Nov-2024
18:49



BEFORE
MASS
40
AREA
3684
HEIGHT
1171
04-Nov-2024
18:35



AFTER
MASS
40
AREA
2594
HEIGHT
1171
04-Nov-2024
18:49

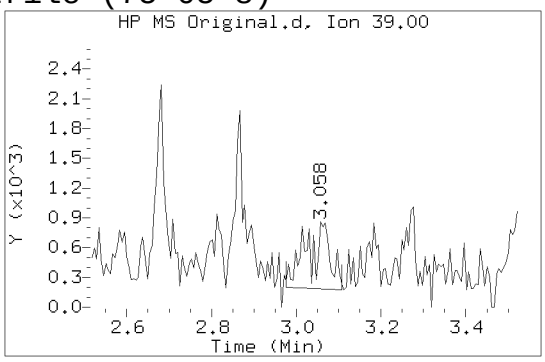


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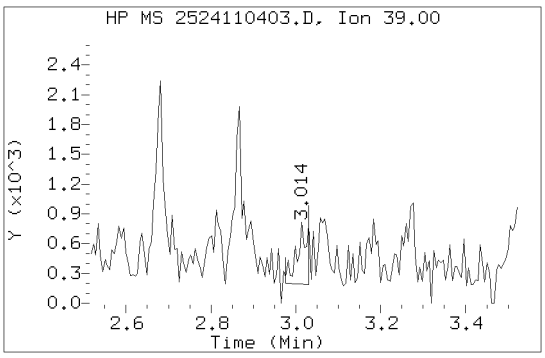
Acetonitrile (75-05-8)

Reason Code: MP

BEFORE
MASS
39
AREA
2617
HEIGHT
677
04-Nov-2024
18:35



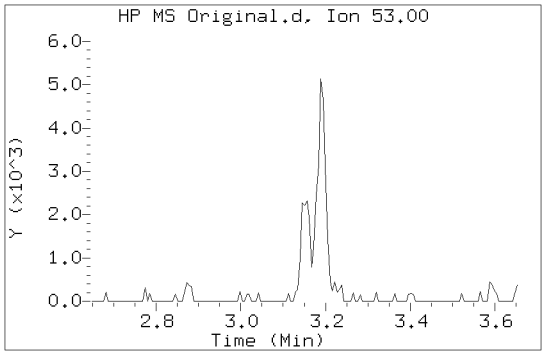
AFTER
MASS
39
AREA
1094
HEIGHT
623
04-Nov-2024
18:49



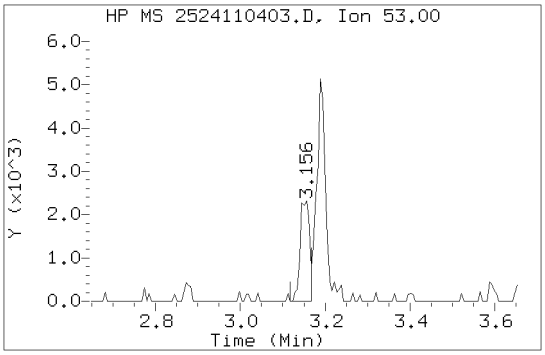
Chloroprene (126-99-8)

Reason Code: IH

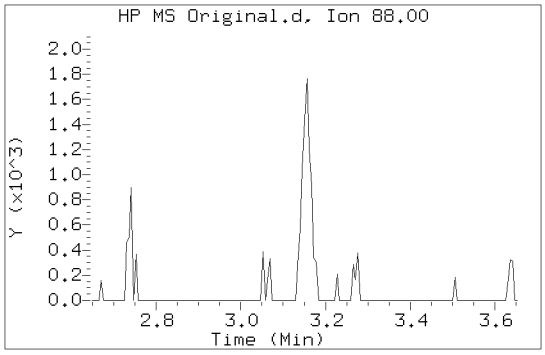
BEFORE
MASS
53
AREA
0
HEIGHT
0
04-Nov-2024
18:35



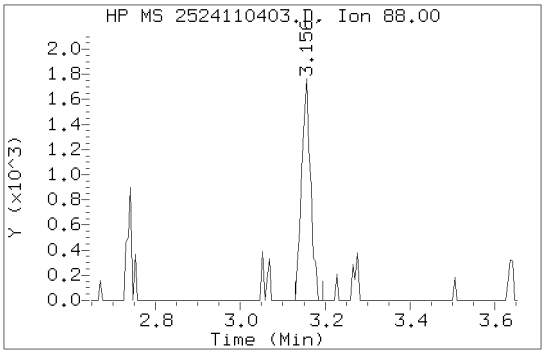
AFTER
MASS
53
AREA
3603
HEIGHT
2320
04-Nov-2024
18:49



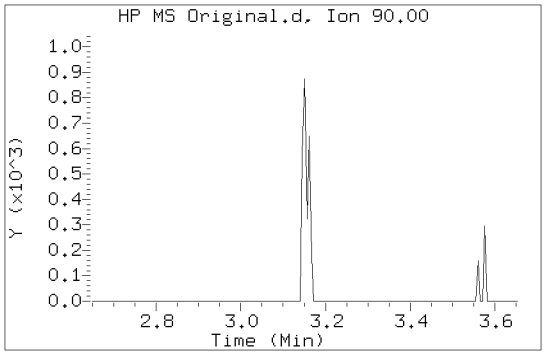
BEFORE
MASS
88
AREA
0
HEIGHT
0
04-Nov-2024
18:35



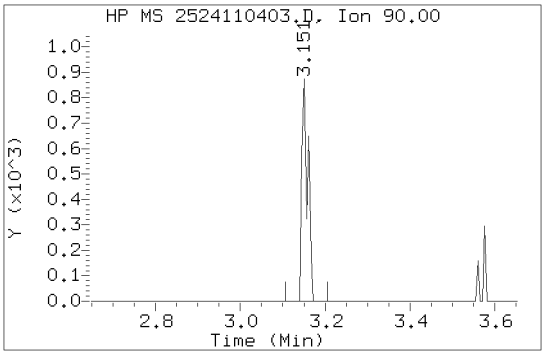
AFTER
MASS
88
AREA
2573
HEIGHT
1765
04-Nov-2024
18:49



BEFORE
MASS
90
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER
MASS
90
AREA
851
HEIGHT
874
04-Nov-2024
18:49



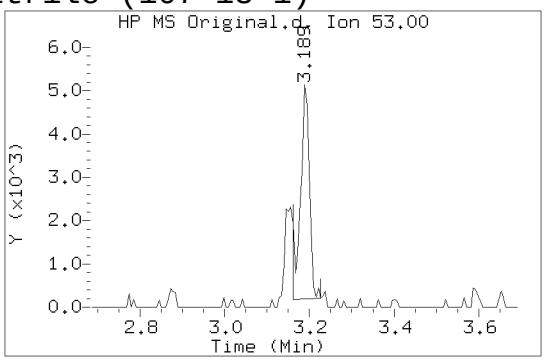
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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

Acrylonitrile (107-13-1)

Reason Code: MP

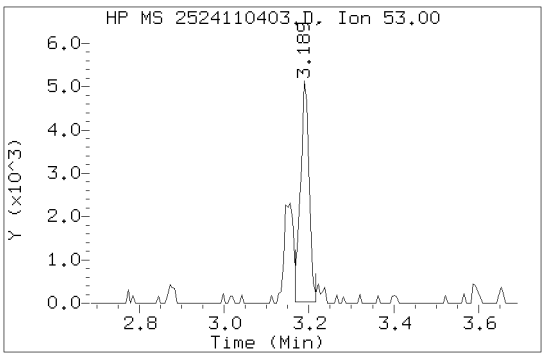
BEFORE

MASS
53
AREA
7462
HEIGHT
4942
04-Nov-2024
18:35



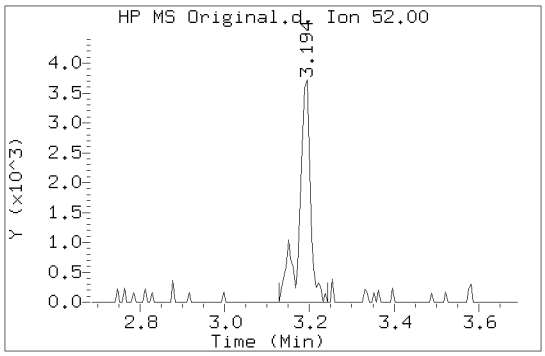
AFTER

MASS
53
AREA
7332
HEIGHT
5102
04-Nov-2024
18:49



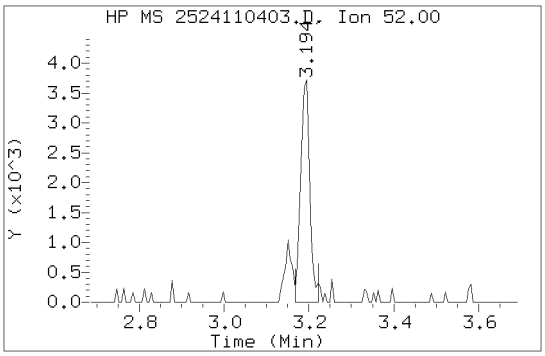
BEFORE

MASS
52
AREA
6962
HEIGHT
3719
04-Nov-2024
18:35



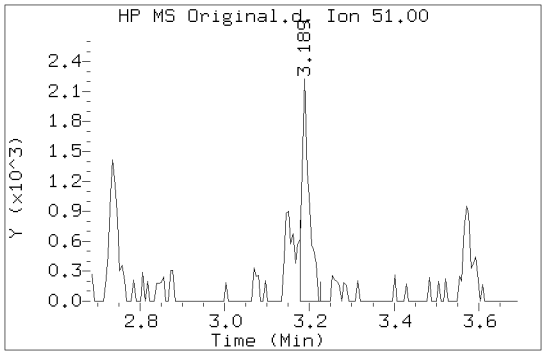
AFTER

MASS
52
AREA
5622
HEIGHT
3714
04-Nov-2024
18:49



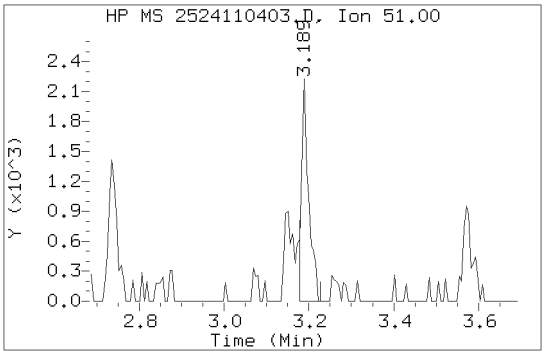
BEFORE

MASS
51
AREA
2606
HEIGHT
2227
04-Nov-2024
18:35



AFTER

MASS
51
AREA
2606
HEIGHT
2227
04-Nov-2024
18:49

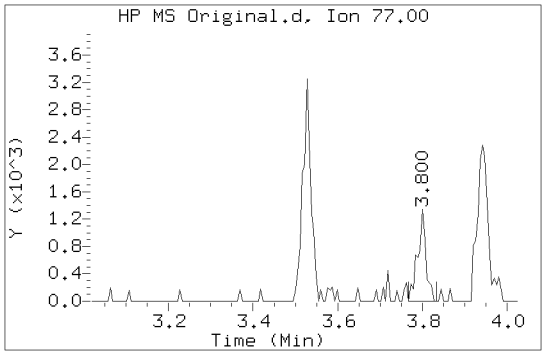


2,2-Dichloropropane (594-20-7)

Reason Code: H

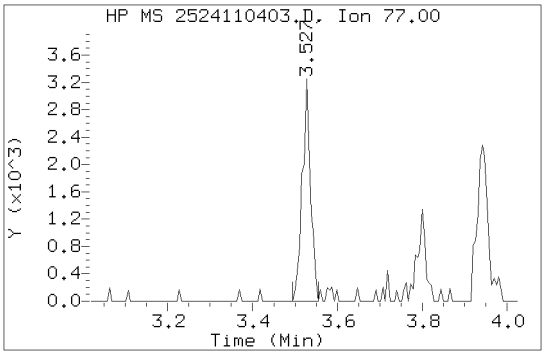
BEFORE

MASS
77
AREA
1809
HEIGHT
1342
04-Nov-2024
18:35



AFTER

MASS
77
AREA
4434
HEIGHT
3251
04-Nov-2024
18:49



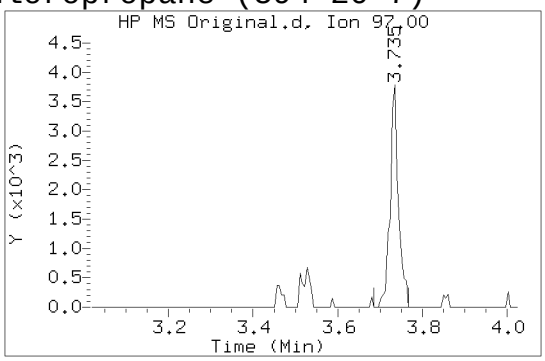
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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

2,2-Dichloropropane (594-20-7)

Reason Code: H

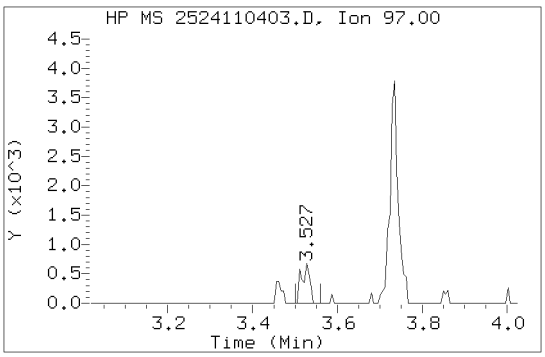
BEFORE

MASS
97
AREA
5217
HEIGHT
3785
04-Nov-2024
18:35



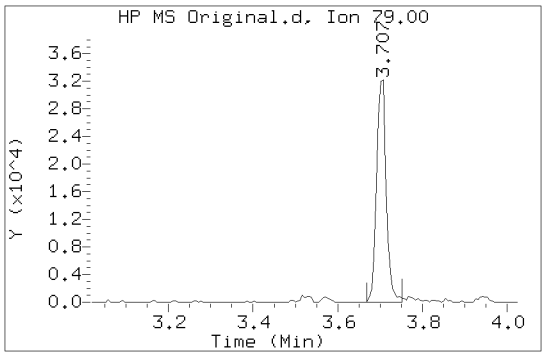
AFTER

MASS
97
AREA
914
HEIGHT
675
04-Nov-2024
18:49



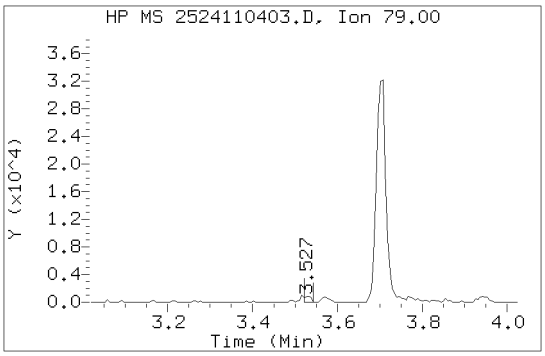
BEFORE

MASS
79
AREA
50951
HEIGHT
32192
04-Nov-2024
18:35



AFTER

MASS
79
AREA
940
HEIGHT
823
04-Nov-2024
18:49

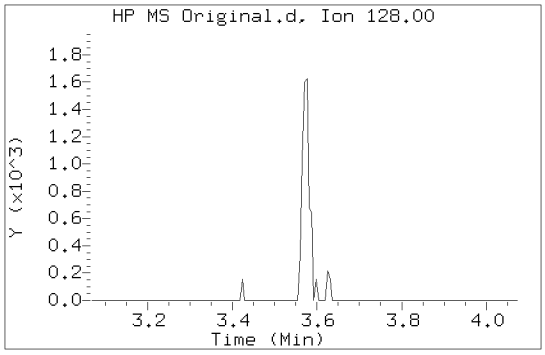


Bromochloromethane (74-97-5)

Reason Code: IH

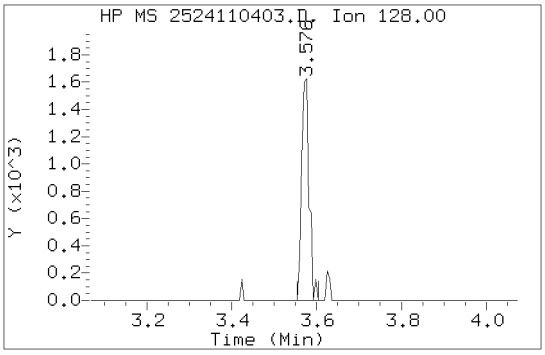
BEFORE

MASS
128
AREA
0
HEIGHT
0
04-Nov-2024
18:35



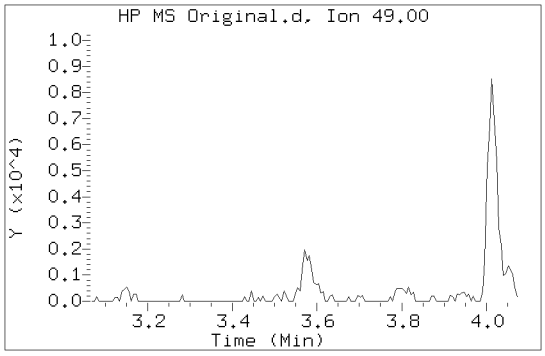
AFTER

MASS
128
AREA
1984
HEIGHT
1625
04-Nov-2024
18:49



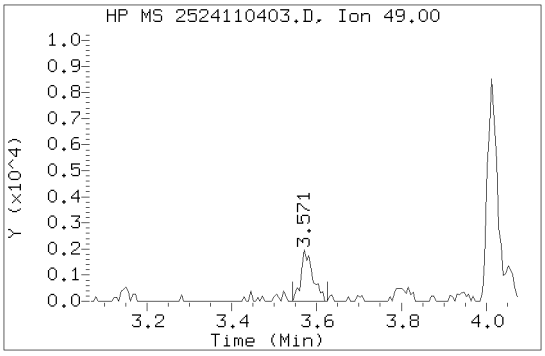
BEFORE

MASS
49
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER

MASS
49
AREA
3801
HEIGHT
1965
04-Nov-2024
18:49



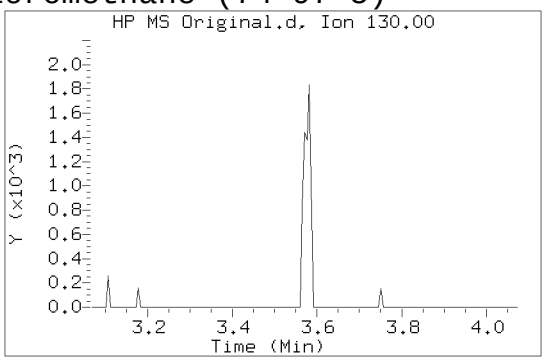
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InstruID : ms25.i
LabSampID : VSTD00.5

Bromochloromethane (74-97-5)

Reason Code: IH

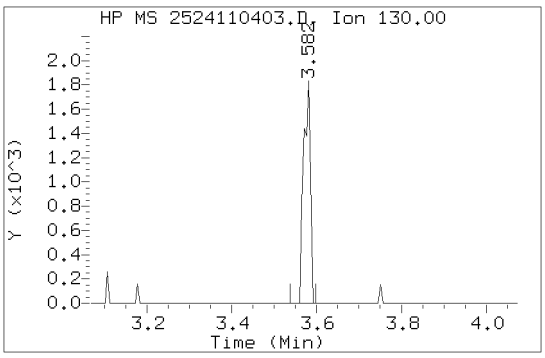
BEFORE

MASS
130
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER

MASS
130
AREA
2041
HEIGHT
1833
04-Nov-2024
18:49

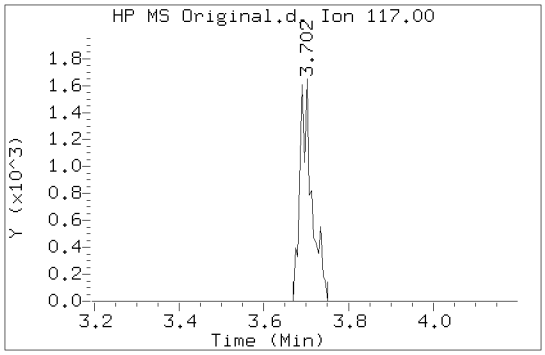


Carbon Tetrachloride (56-23-5)

Reason Code: MP

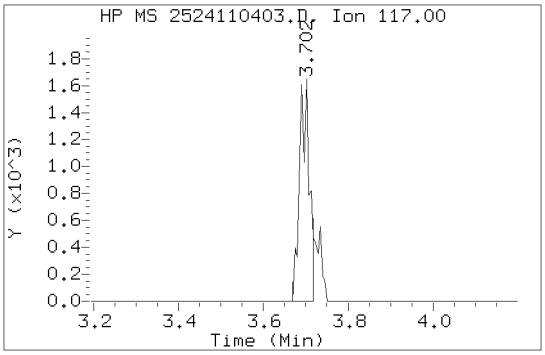
BEFORE

MASS
117
AREA
3219
HEIGHT
1650
04-Nov-2024
18:35



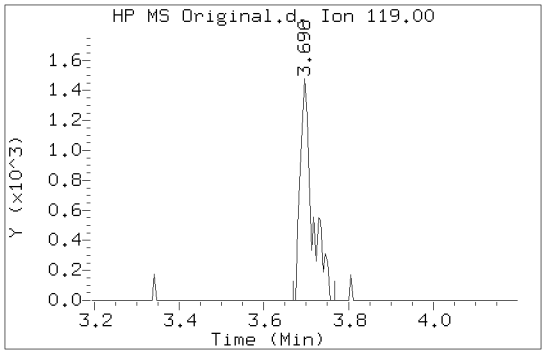
AFTER

MASS
117
AREA
2671
HEIGHT
1650
04-Nov-2024
18:49



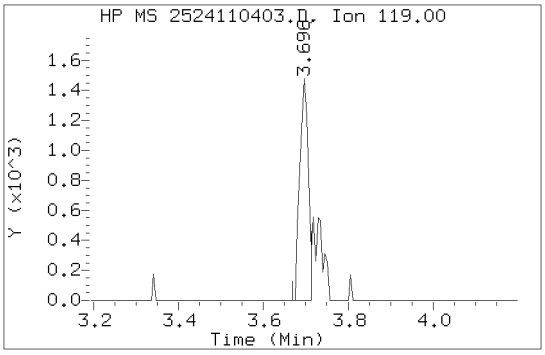
BEFORE

MASS
119
AREA
2953
HEIGHT
1478
04-Nov-2024
18:35



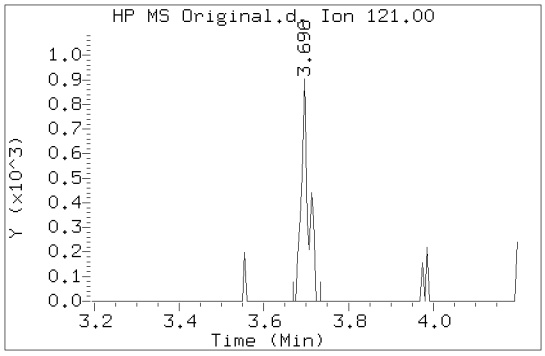
AFTER

MASS
119
AREA
2083
HEIGHT
1478
04-Nov-2024
18:49



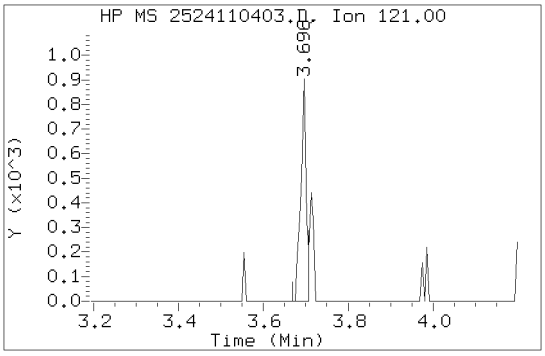
BEFORE

MASS
121
AREA
1064
HEIGHT
904
04-Nov-2024
18:35



AFTER

MASS
121
AREA
810
HEIGHT
904
04-Nov-2024
18:49

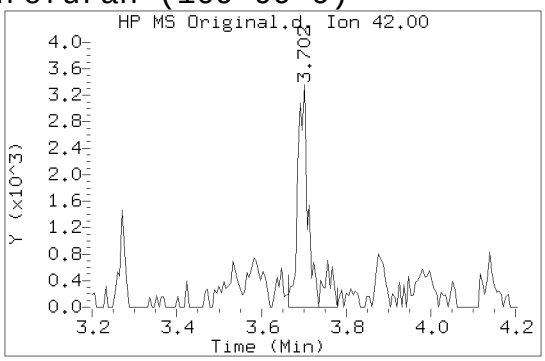


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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

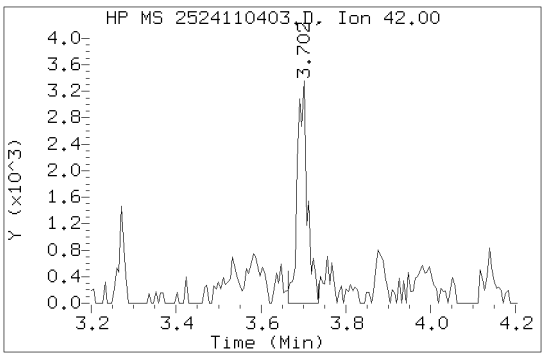
Tetrahydrofuran (109-99-9)

Reason Code: MP

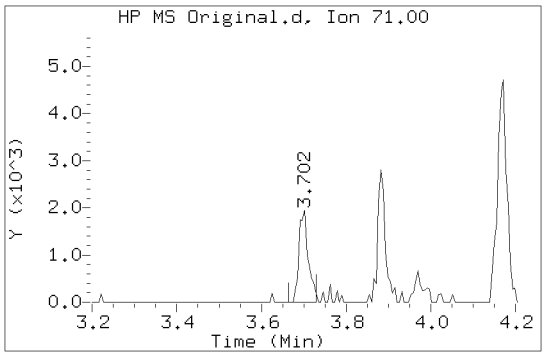
BEFORE
MASS
42
AREA
6467
HEIGHT
3356
04-Nov-2024
18:35



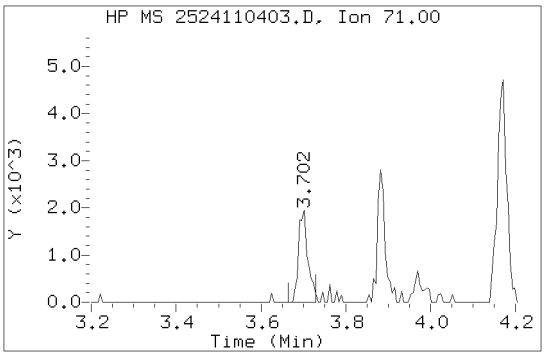
AFTER
MASS
42
AREA
5521
HEIGHT
3356
04-Nov-2024
18:49



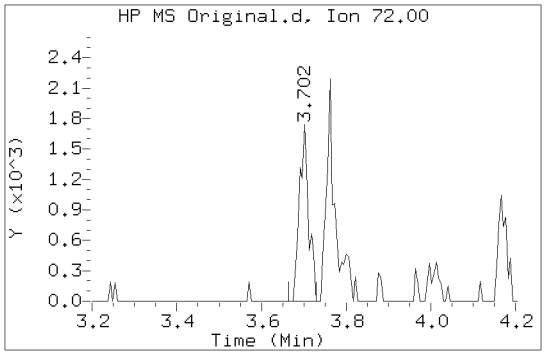
BEFORE
MASS
71
AREA
2982
HEIGHT
1943
04-Nov-2024
18:35



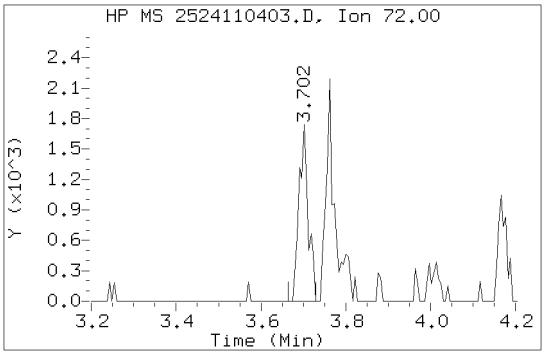
AFTER
MASS
71
AREA
2982
HEIGHT
1943
04-Nov-2024
18:49



BEFORE
MASS
72
AREA
2622
HEIGHT
1744
04-Nov-2024
18:35



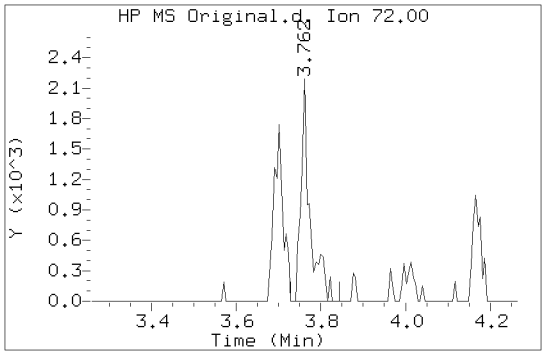
AFTER
MASS
72
AREA
2622
HEIGHT
1744
04-Nov-2024
18:49



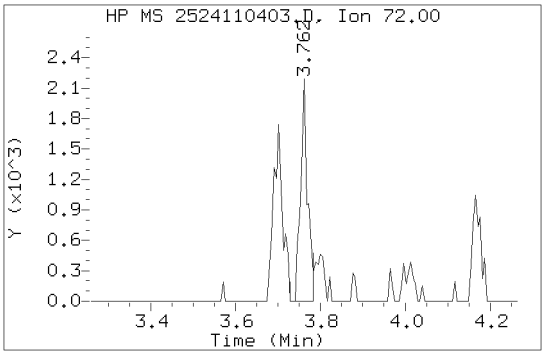
2-Butanone (78-93-3)

Reason Code: MP

BEFORE
MASS
72
AREA
3205
HEIGHT
2191
04-Nov-2024
18:35



AFTER
MASS
72
AREA
2509
HEIGHT
2191
04-Nov-2024
18:49



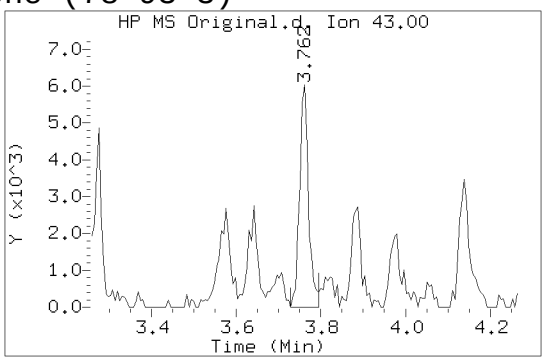
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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

2-Butanone (78-93-3)

Reason Code: MP

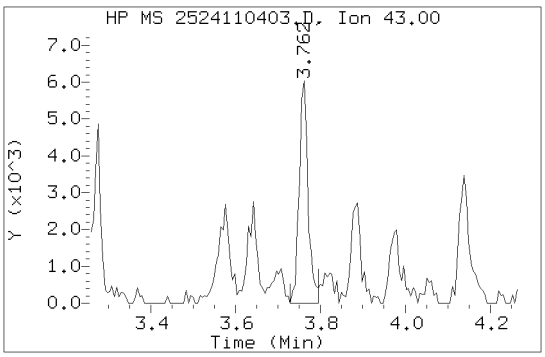
BEFORE

MASS
43
AREA
8859
HEIGHT
6035
04-Nov-2024
18:35



AFTER

MASS
43
AREA
8859
HEIGHT
6035
04-Nov-2024
18:49

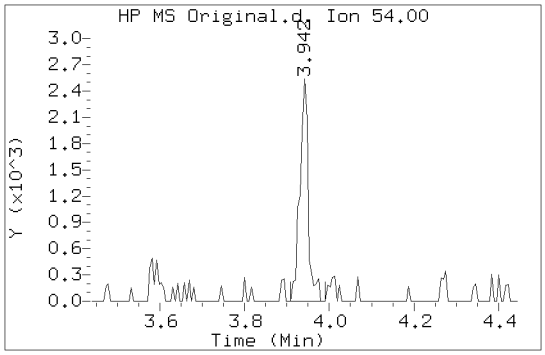


Propionitrile (107-12-0)

Reason Code: I

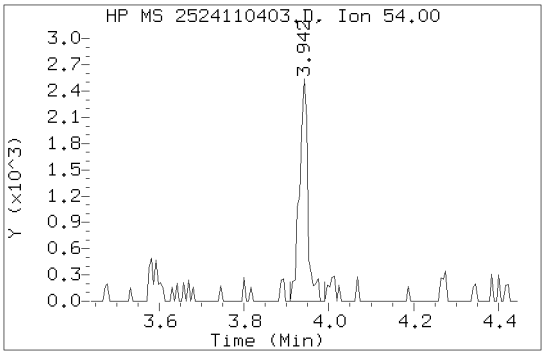
BEFORE

MASS
54
AREA
3510
HEIGHT
2539
04-Nov-2024
18:35



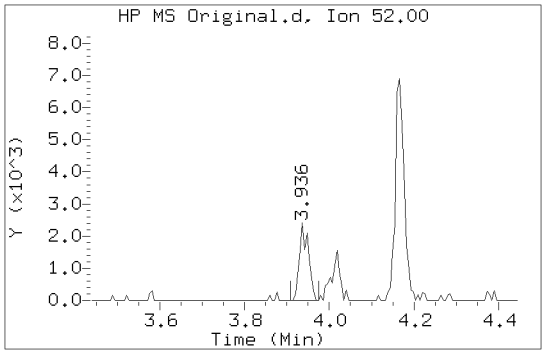
AFTER

MASS
54
AREA
3510
HEIGHT
2539
04-Nov-2024
18:49



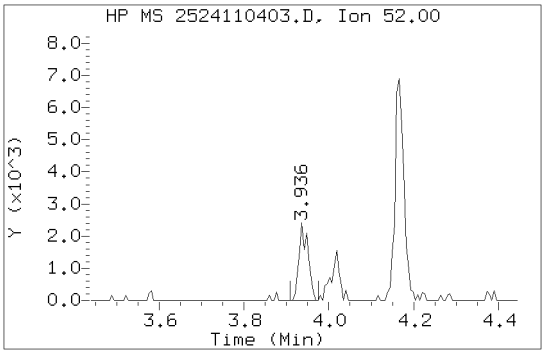
BEFORE

MASS
52
AREA
3578
HEIGHT
2419
04-Nov-2024
18:35



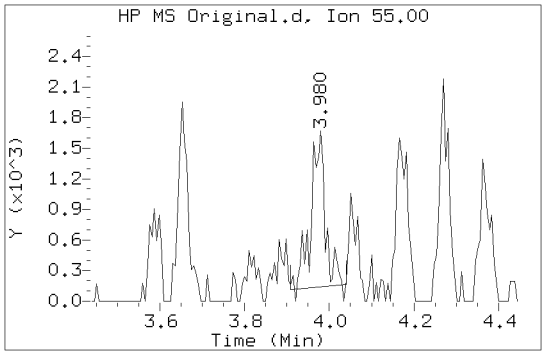
AFTER

MASS
52
AREA
3578
HEIGHT
2419
04-Nov-2024
18:49



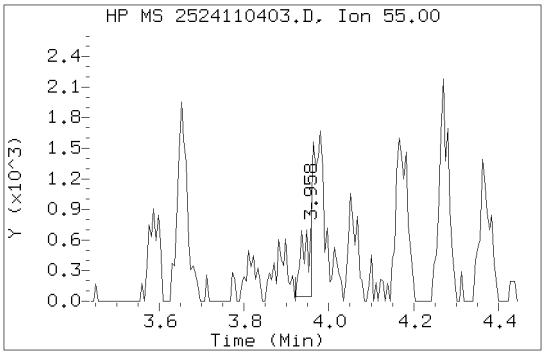
BEFORE

MASS
55
AREA
3525
HEIGHT
1531
04-Nov-2024
18:35



AFTER

MASS
55
AREA
1001
HEIGHT
737
04-Nov-2024
18:49

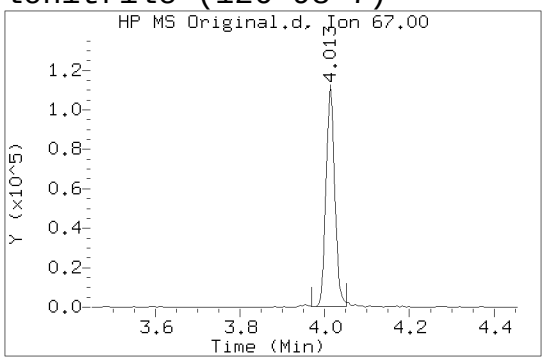


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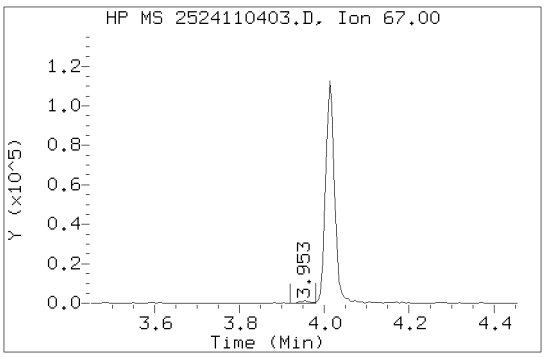
Methacrylonitrile (126-98-7)

Reason Code: H

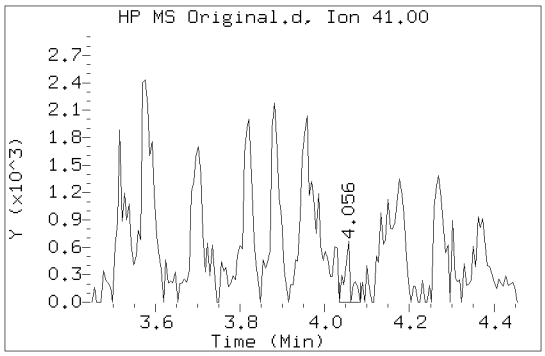
BEFORE
MASS
67
AREA
159132
HEIGHT
112349
04-Nov-2024
18:35



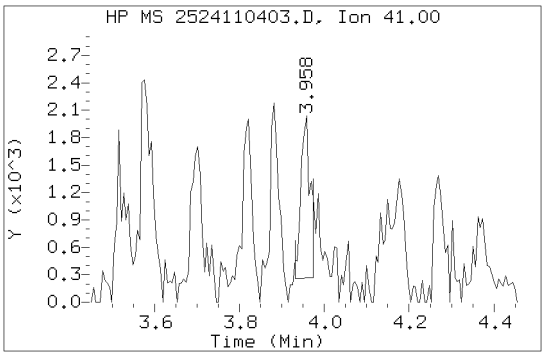
AFTER
MASS
67
AREA
1775
HEIGHT
1180
04-Nov-2024
18:49



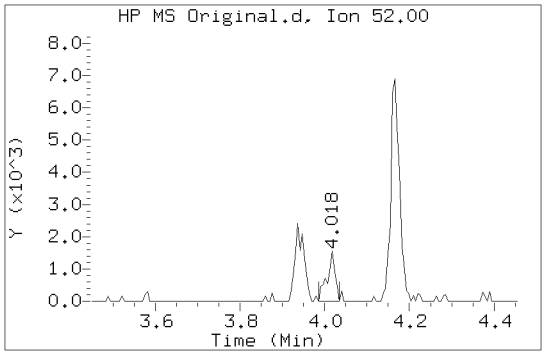
BEFORE
MASS
41
AREA
710
HEIGHT
665
04-Nov-2024
18:35



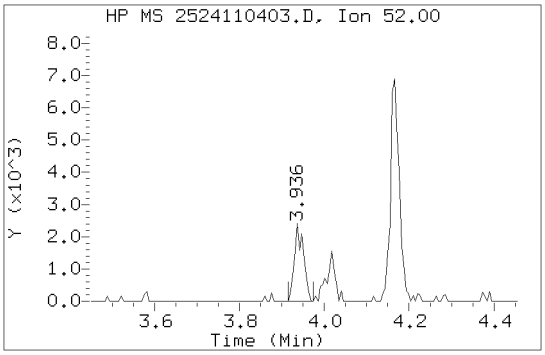
AFTER
MASS
41
AREA
2796
HEIGHT
1769
04-Nov-2024
18:49



BEFORE
MASS
52
AREA
2036
HEIGHT
1552
04-Nov-2024
18:35



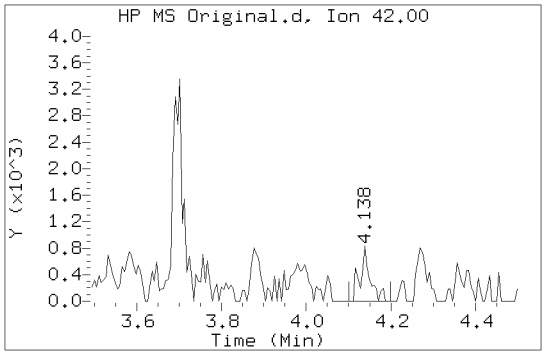
AFTER
MASS
52
AREA
3578
HEIGHT
2419
04-Nov-2024
18:49



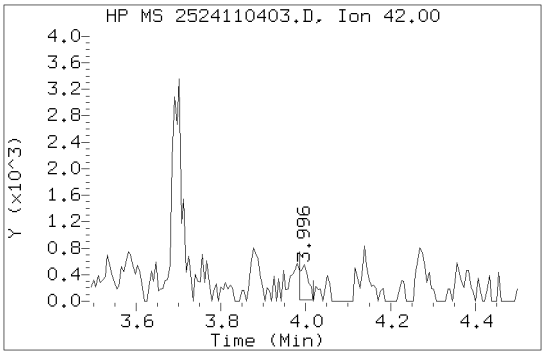
Isobutyl alcohol (78-83-1)

Reason Code: H

BEFORE
MASS
42
AREA
1364
HEIGHT
837
04-Nov-2024
18:35



AFTER
MASS
42
AREA
745
HEIGHT
535
04-Nov-2024
18:49

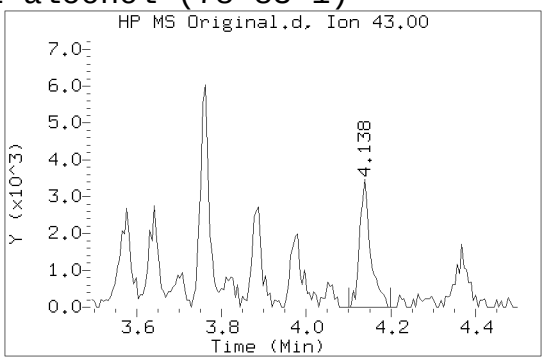


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LabSampID : VSTD00.5

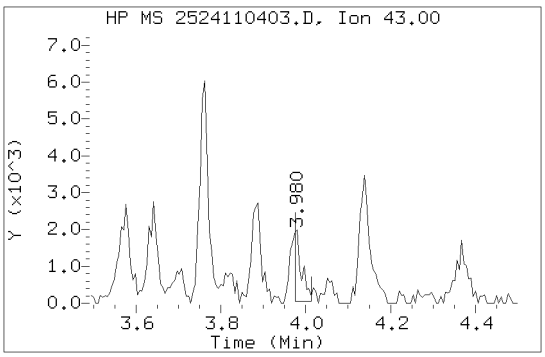
Isobutyl alcohol (78-83-1)

Reason Code: H

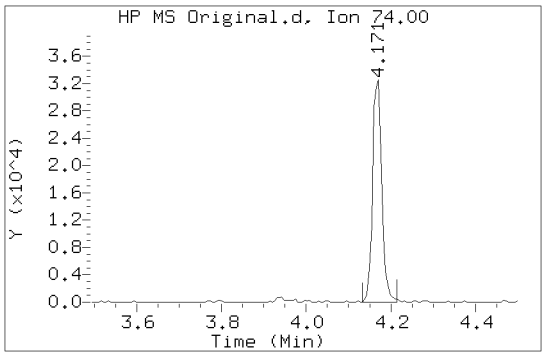
BEFORE
MASS
43
AREA
6285
HEIGHT
3481
04-Nov-2024
18:35



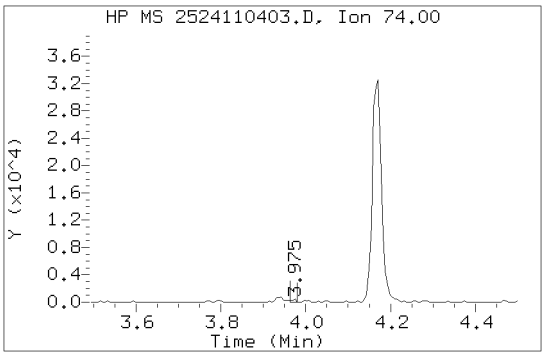
AFTER
MASS
43
AREA
2257
HEIGHT
1921
04-Nov-2024
18:49



BEFORE
MASS
74
AREA
49792
HEIGHT
32544
04-Nov-2024
18:35



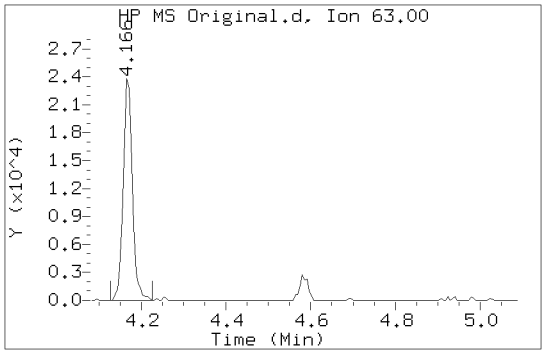
AFTER
MASS
74
AREA
303
HEIGHT
442
04-Nov-2024
18:49



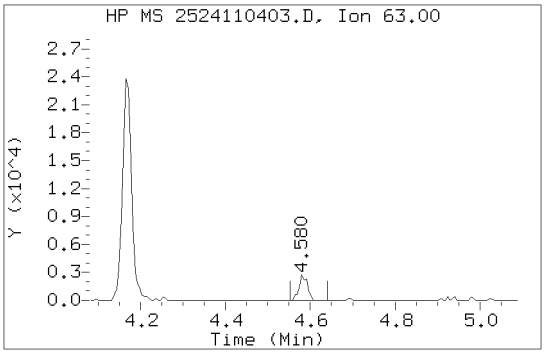
1,2-Dichloropropane (78-87-5)

Reason Code: H

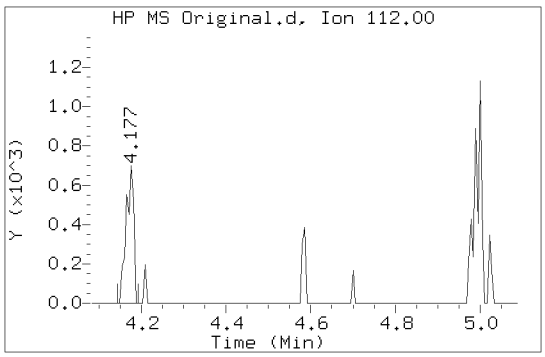
BEFORE
MASS
63
AREA
36171
HEIGHT
23792
04-Nov-2024
18:35



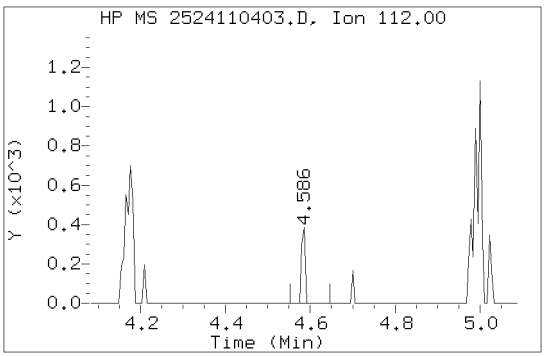
AFTER
MASS
63
AREA
3759
HEIGHT
2771
04-Nov-2024
18:49



BEFORE
MASS
112
AREA
866
HEIGHT
701
04-Nov-2024
18:35



AFTER
MASS
112
AREA
223
HEIGHT
385
04-Nov-2024
18:49

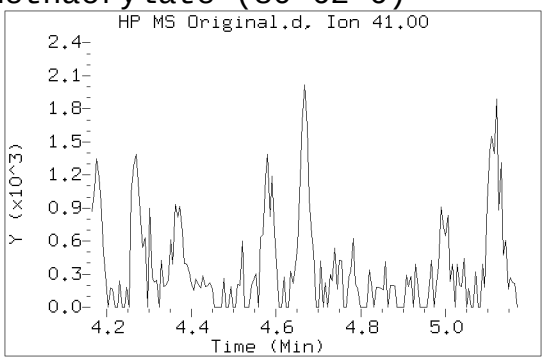


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LabSampID : VSTD00.5

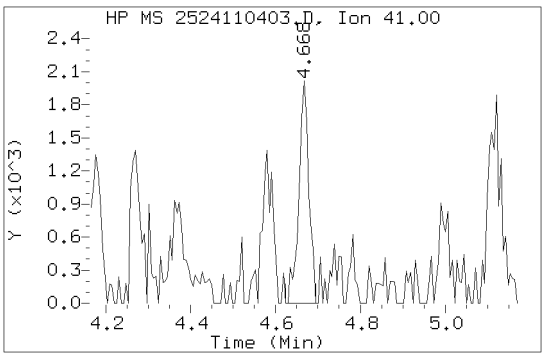
Methyl methacrylate (80-62-6)

Reason Code: IH

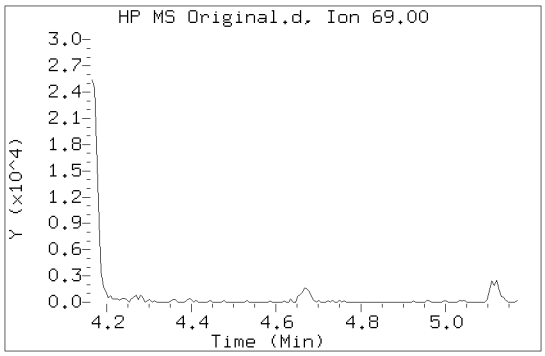
BEFORE
MASS
41
AREA
0
HEIGHT
0
04-Nov-2024
18:35



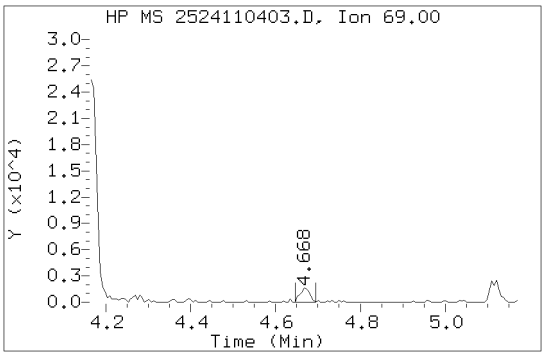
AFTER
MASS
41
AREA
3319
HEIGHT
2017
04-Nov-2024
18:49



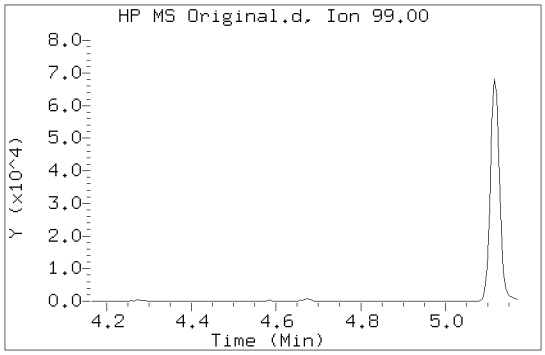
BEFORE
MASS
69
AREA
0
HEIGHT
0
04-Nov-2024
18:35



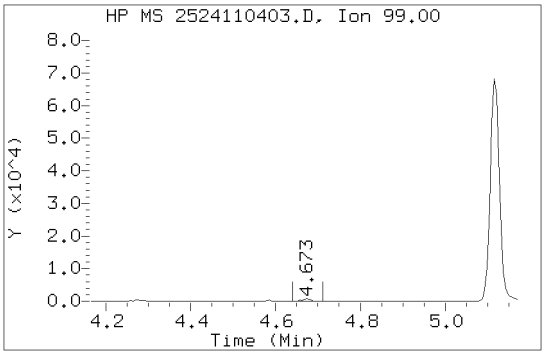
AFTER
MASS
69
AREA
2554
HEIGHT
1603
04-Nov-2024
18:49



BEFORE
MASS
99
AREA
0
HEIGHT
0
04-Nov-2024
18:35



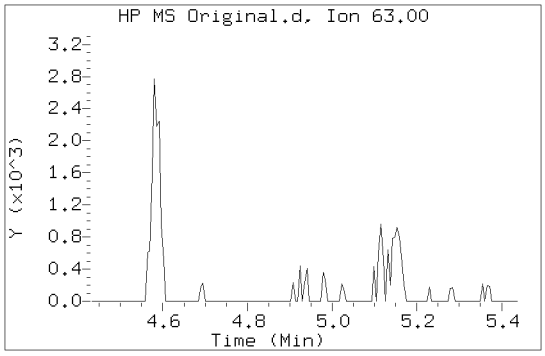
AFTER
MASS
99
AREA
949
HEIGHT
813
04-Nov-2024
18:49



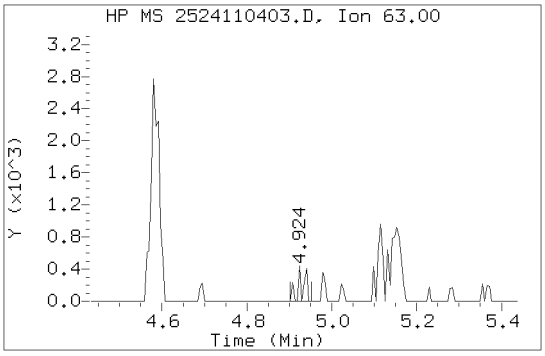
2-Chloroethylvinyl ether (110-75-8)

Reason Code: H

BEFORE
MASS
63
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER
MASS
63
AREA
429
HEIGHT
437
04-Nov-2024
18:49

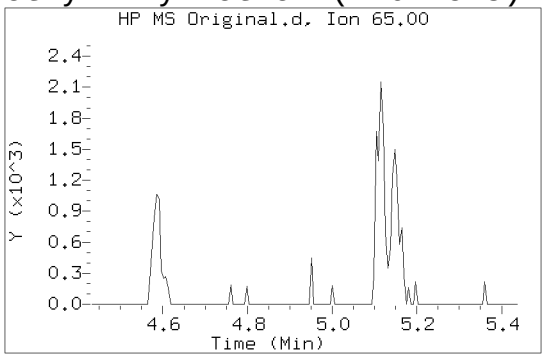


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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

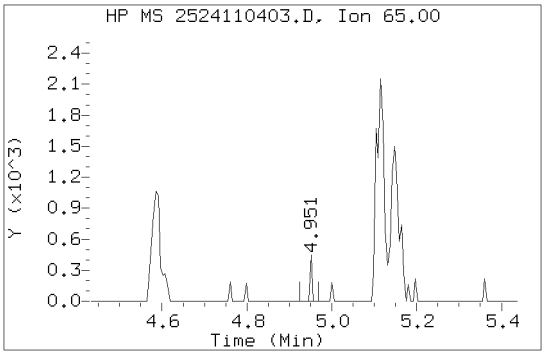
2-Chloroethylvinyl ether (110-75-8)

Reason Code: H

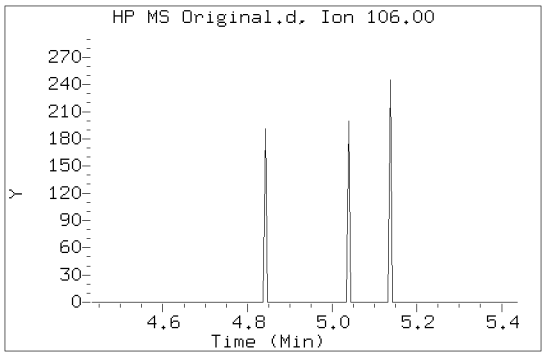
BEFORE
MASS
65
AREA
0
HEIGHT
0
04-Nov-2024
18:35



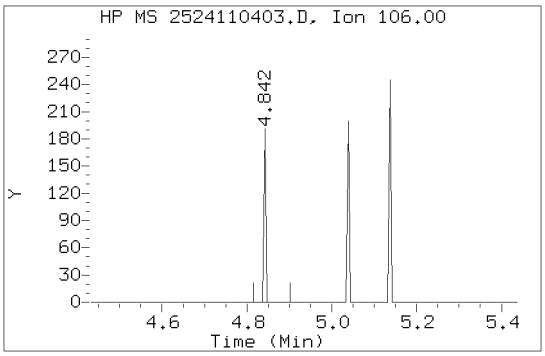
AFTER
MASS
65
AREA
146
HEIGHT
448
04-Nov-2024
18:49



BEFORE
MASS
106
AREA
0
HEIGHT
0
04-Nov-2024
18:35



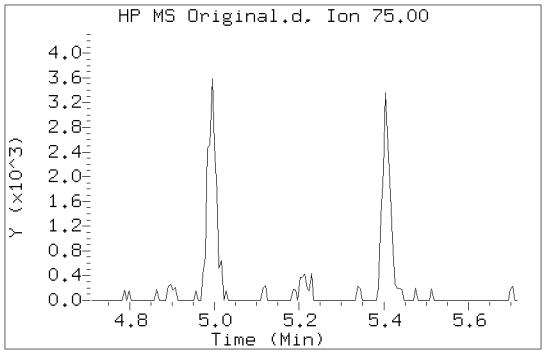
AFTER
MASS
106
AREA
62
HEIGHT
191
04-Nov-2024
18:49



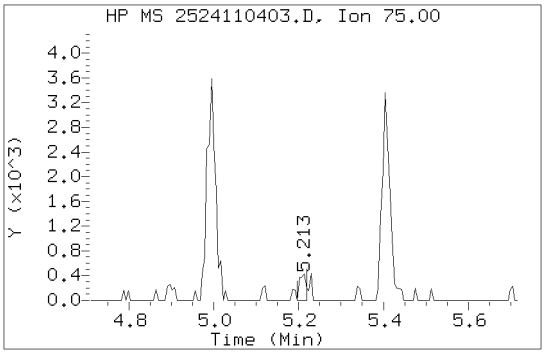
Chloroacetonitrile (107-14-2)

Reason Code: H

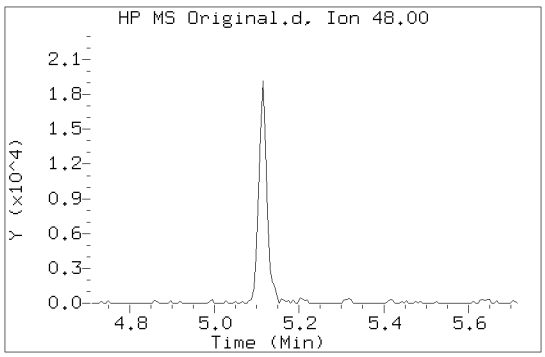
BEFORE
MASS
75
AREA
0
HEIGHT
0
04-Nov-2024
18:35



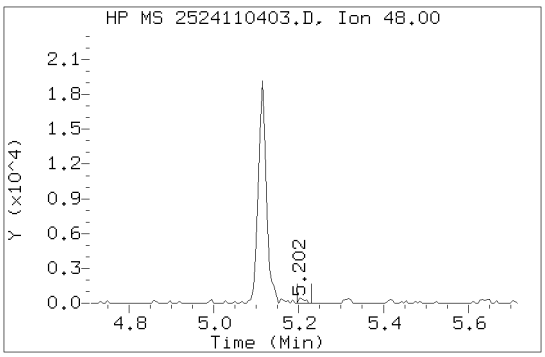
AFTER
MASS
75
AREA
449
HEIGHT
429
04-Nov-2024
18:49



BEFORE
MASS
48
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER
MASS
48
AREA
438
HEIGHT
441
04-Nov-2024
18:49

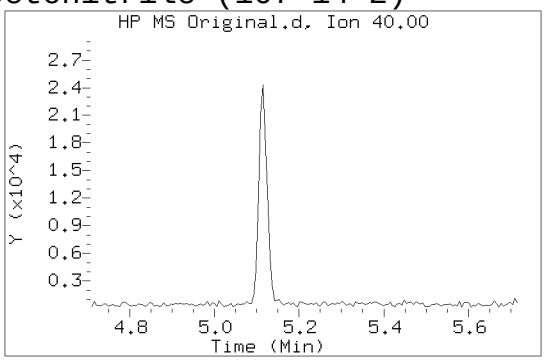


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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

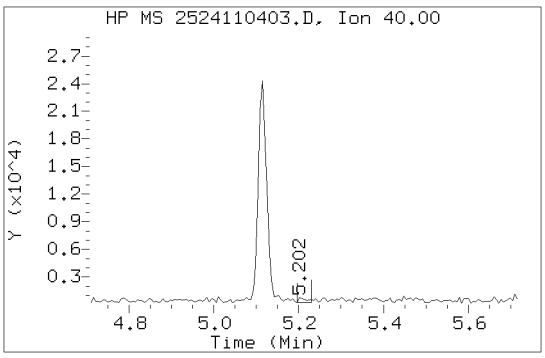
Chloroacetonitrile (107-14-2)

Reason Code: H

BEFORE
MASS
40
AREA
0
HEIGHT
0
04-Nov-2024
18:35



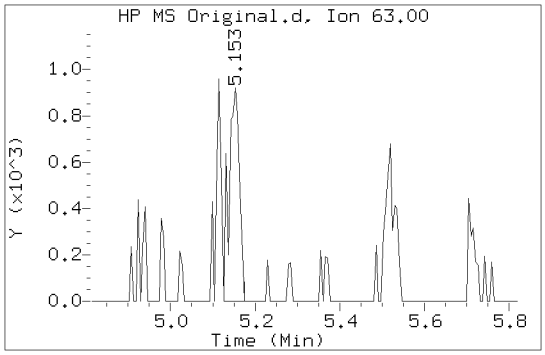
AFTER
MASS
40
AREA
767
HEIGHT
610
04-Nov-2024
18:49



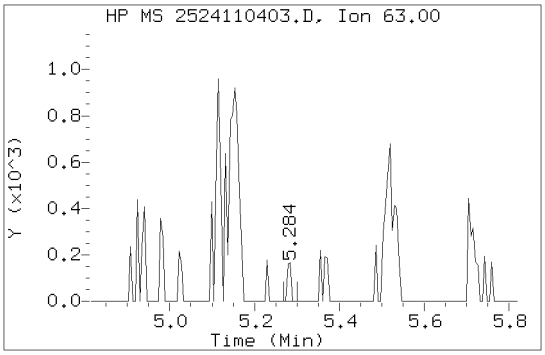
1,1-Dichloro-2-Propanone (513-88-2)

Reason Code: H

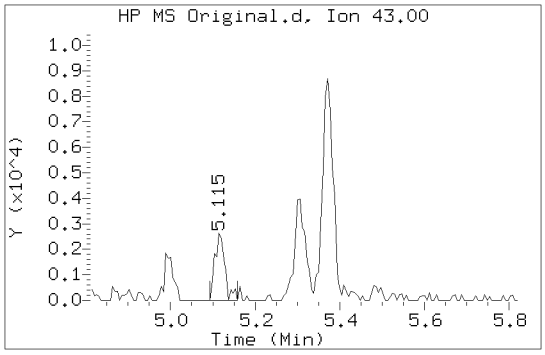
BEFORE
MASS
63
AREA
1581
HEIGHT
922
04-Nov-2024
18:35



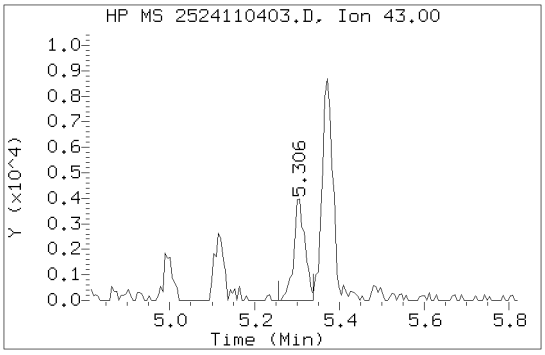
AFTER
MASS
63
AREA
107
HEIGHT
166
04-Nov-2024
18:49



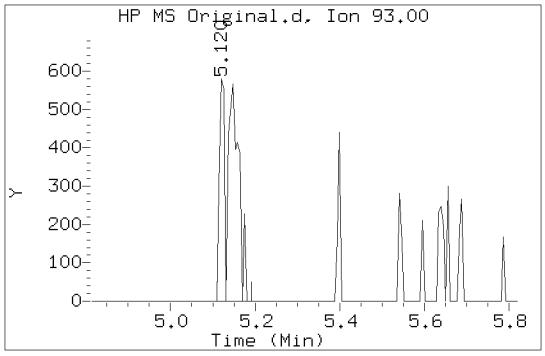
BEFORE
MASS
43
AREA
4355
HEIGHT
2630
04-Nov-2024
18:35



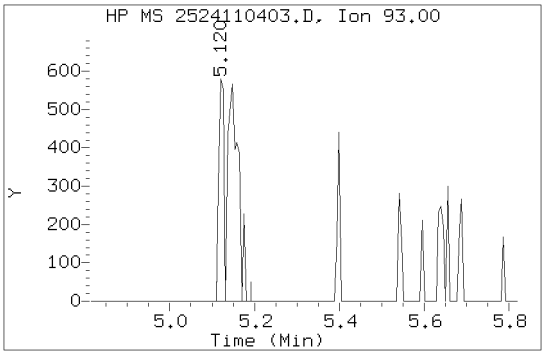
AFTER
MASS
43
AREA
7391
HEIGHT
3976
04-Nov-2024
18:49



BEFORE
MASS
93
AREA
1430
HEIGHT
580
04-Nov-2024
18:35



AFTER
MASS
93
AREA
1430
HEIGHT
580
04-Nov-2024
18:49

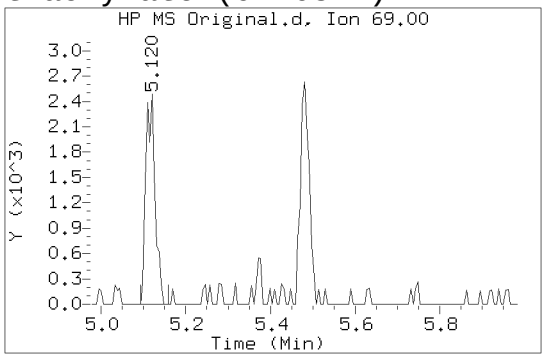


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Inj Date : 04-NOV-2024 13:55
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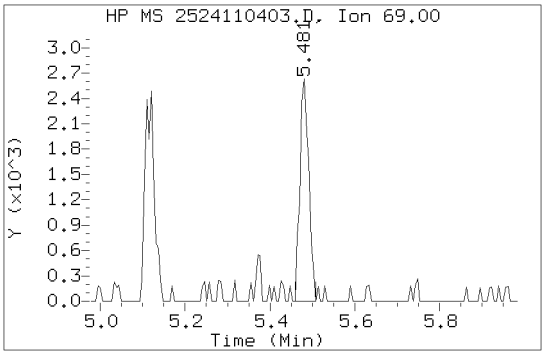
Ethyl Methacrylate (97-63-2)

Reason Code: H

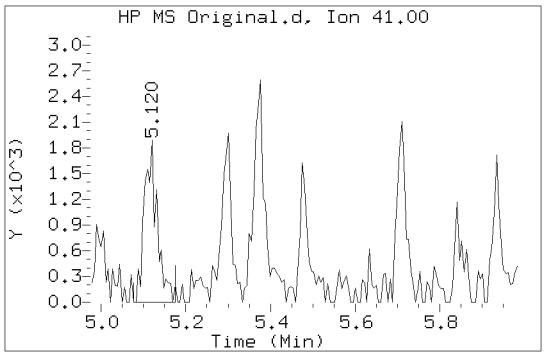
BEFORE
MASS
69
AREA
3795
HEIGHT
2486
04-Nov-2024
18:35



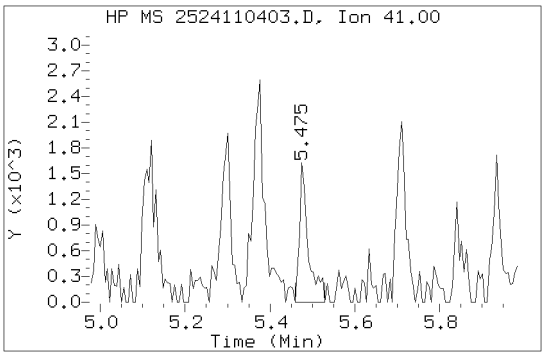
AFTER
MASS
69
AREA
3828
HEIGHT
2631
04-Nov-2024
18:49



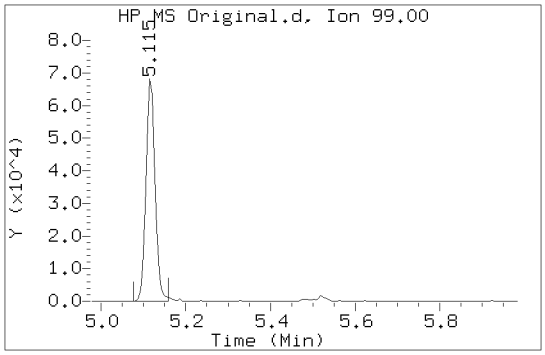
BEFORE
MASS
41
AREA
3965
HEIGHT
1892
04-Nov-2024
18:35



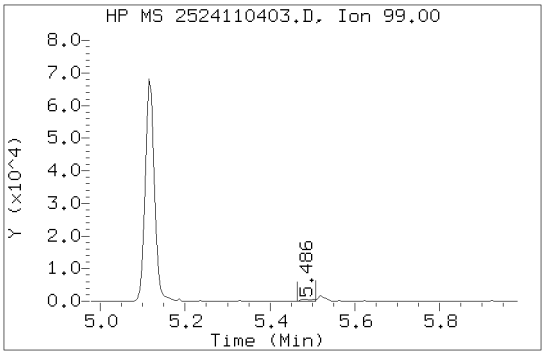
AFTER
MASS
41
AREA
2338
HEIGHT
1625
04-Nov-2024
18:49



BEFORE
MASS
99
AREA
102548
HEIGHT
68200
04-Nov-2024
18:35



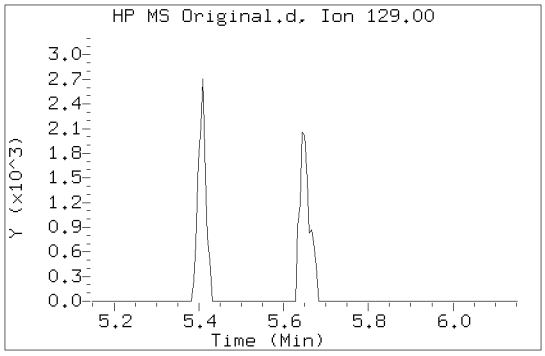
AFTER
MASS
99
AREA
1256
HEIGHT
662
04-Nov-2024
18:49



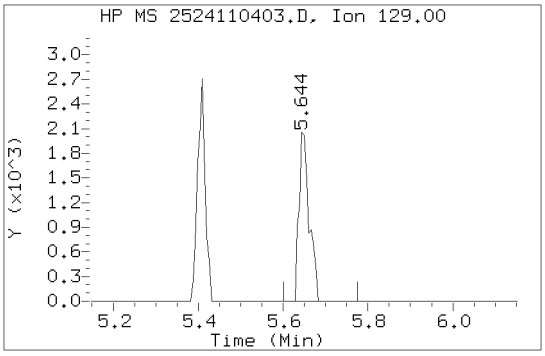
Chlorodibromomethane (124-48-1)

Reason Code: IH

BEFORE
MASS
129
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER
MASS
129
AREA
3433
HEIGHT
2056
04-Nov-2024
18:49



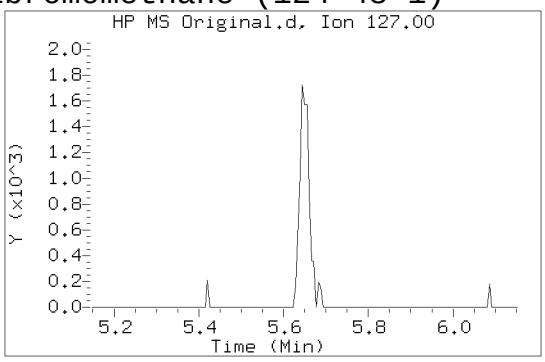
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110403.D
Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

Chlorodibromomethane (124-48-1)

Reason Code: IH

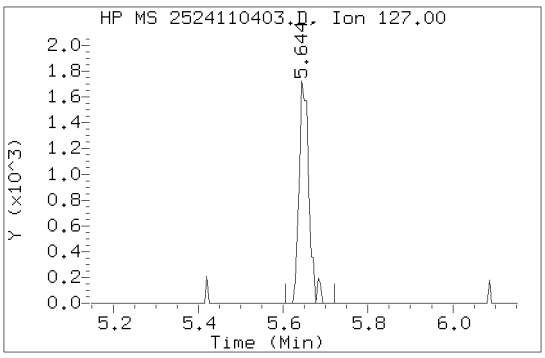
BEFORE

MASS
127
AREA
0
HEIGHT
0
04-Nov-2024
18:35



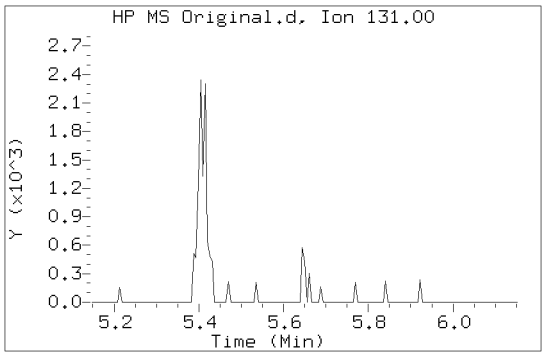
AFTER

MASS
127
AREA
2803
HEIGHT
1725
04-Nov-2024
18:49



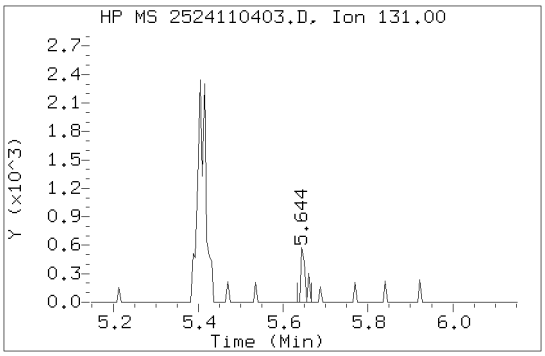
BEFORE

MASS
131
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER

MASS
131
AREA
427
HEIGHT
574
04-Nov-2024
18:49

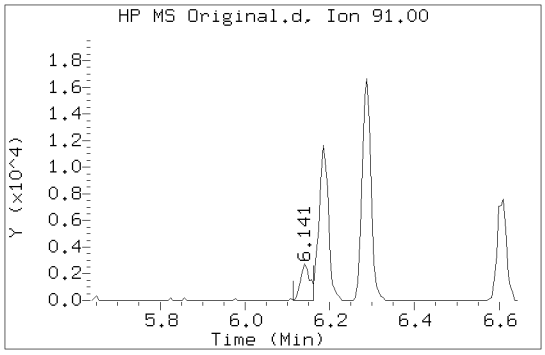


1-Chlorohexane (544-10-5)

Reason Code: MP

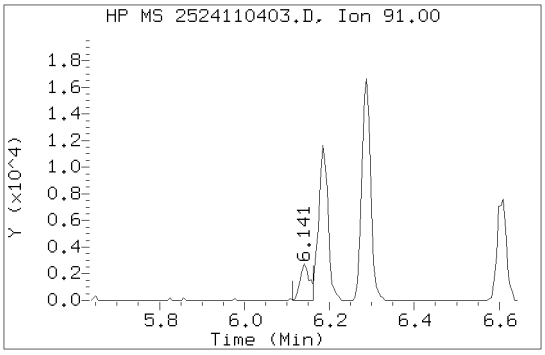
BEFORE

MASS
91
AREA
4404
HEIGHT
2756
04-Nov-2024
18:35



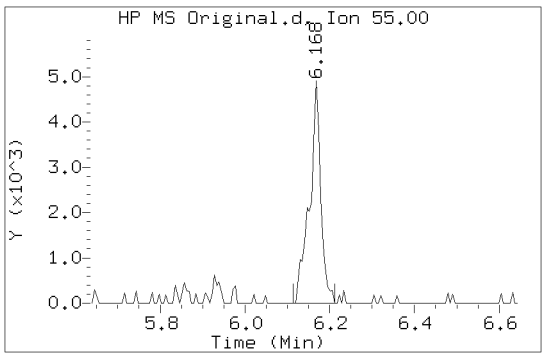
AFTER

MASS
91
AREA
4404
HEIGHT
2756
04-Nov-2024
18:49



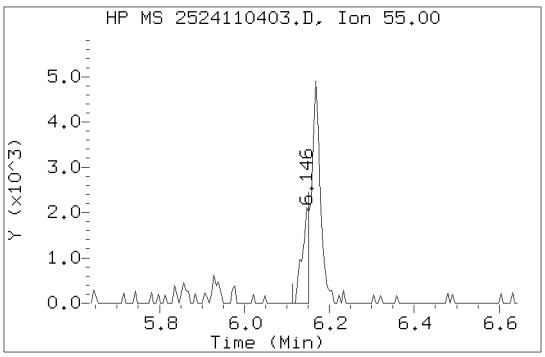
BEFORE

MASS
55
AREA
9037
HEIGHT
4907
04-Nov-2024
18:35



AFTER

MASS
55
AREA
2554
HEIGHT
2110
04-Nov-2024
18:49



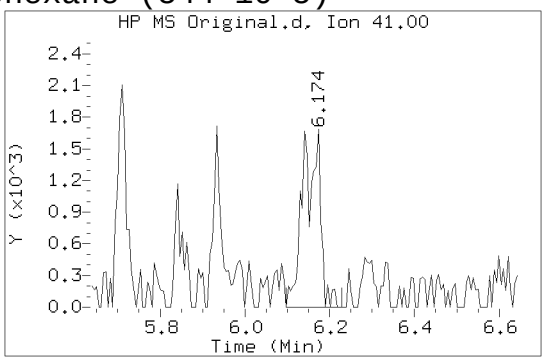
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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

1-Chlorohexane (544-10-5)

Reason Code: MP

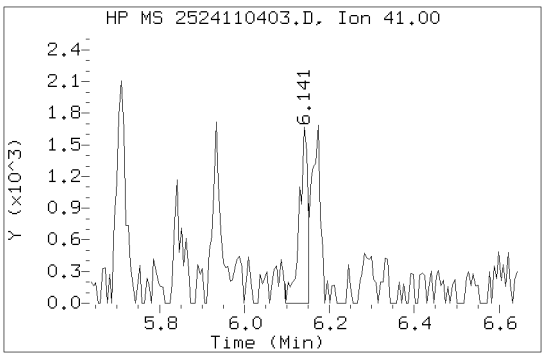
BEFORE

MASS
41
AREA
4737
HEIGHT
1689
04-Nov-2024
18:35



AFTER

MASS
41
AREA
2322
HEIGHT
1668
04-Nov-2024
18:49

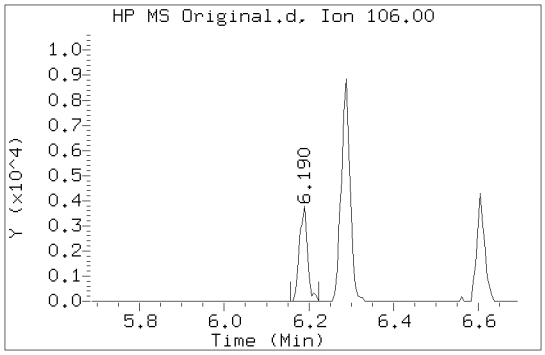


Ethylbenzene (100-41-4)

Reason Code: MP

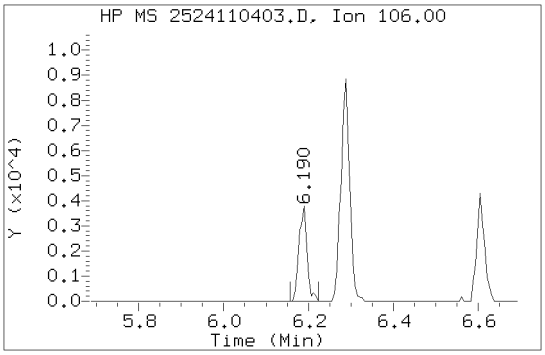
BEFORE

MASS
106
AREA
4998
HEIGHT
3780
04-Nov-2024
18:35



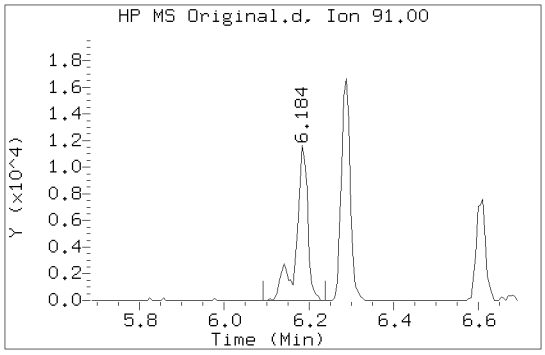
AFTER

MASS
106
AREA
4998
HEIGHT
3780
04-Nov-2024
18:49



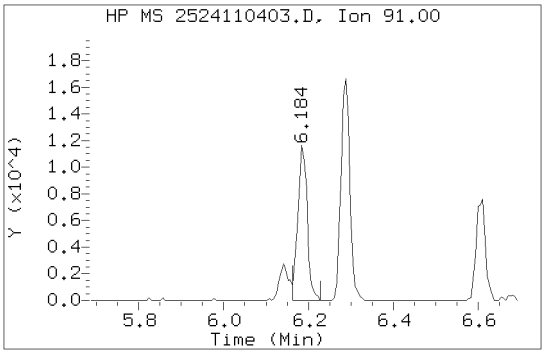
BEFORE

MASS
91
AREA
22178
HEIGHT
11665
04-Nov-2024
18:35



AFTER

MASS
91
AREA
18097
HEIGHT
11664
04-Nov-2024
18:49

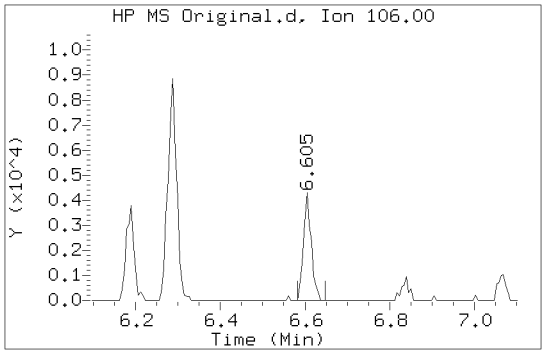


o-Xylene (95-47-6)

Reason Code: MP

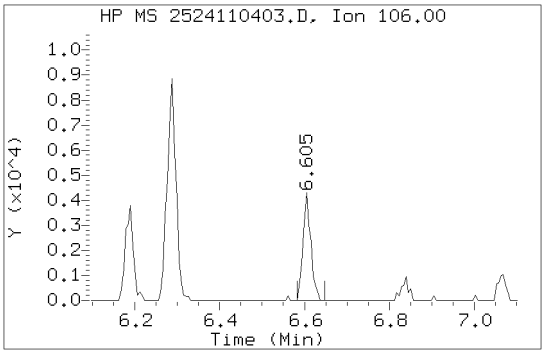
BEFORE

MASS
106
AREA
5486
HEIGHT
4307
04-Nov-2024
18:35



AFTER

MASS
106
AREA
5486
HEIGHT
4307
04-Nov-2024
18:49

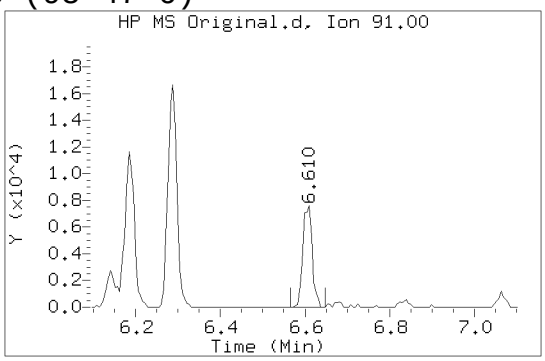


Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110403.D
Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

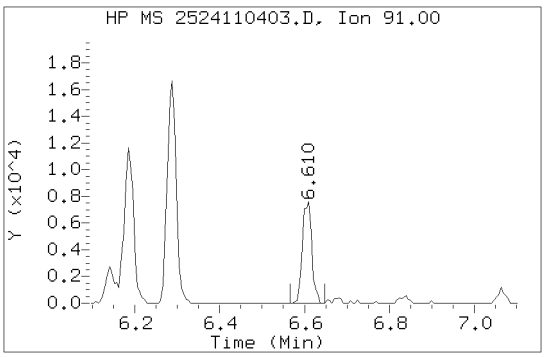
o-Xylene (95-47-6)

Reason Code: MP

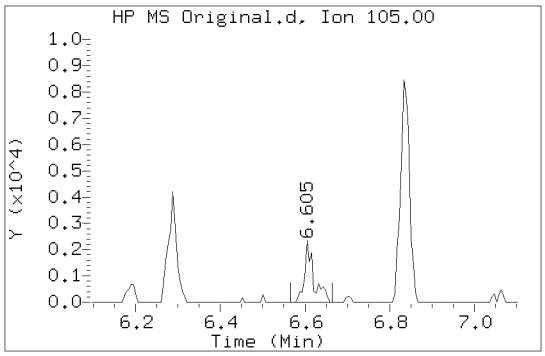
BEFORE
MASS
91
AREA
11733
HEIGHT
7592
04-Nov-2024
18:35



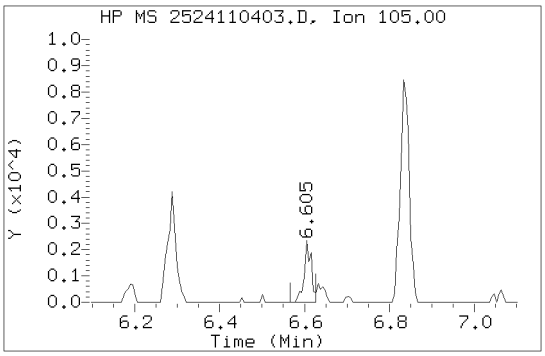
AFTER
MASS
91
AREA
11733
HEIGHT
7592
04-Nov-2024
18:49



BEFORE
MASS
105
AREA
3548
HEIGHT
2345
04-Nov-2024
18:35



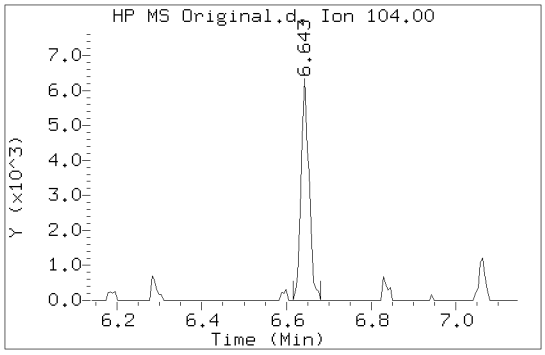
AFTER
MASS
105
AREA
2743
HEIGHT
2345
04-Nov-2024
18:49



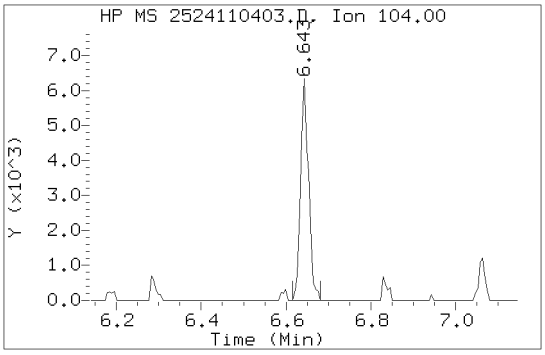
Styrene (100-42-5)

Reason Code: MP

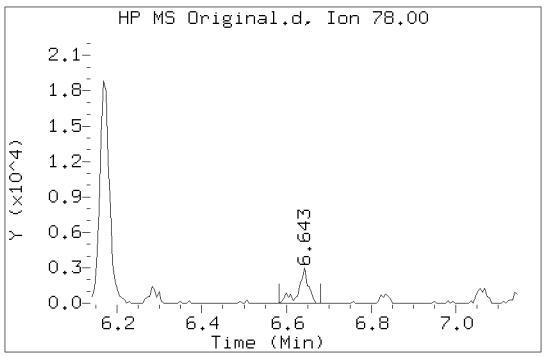
BEFORE
MASS
104
AREA
8261
HEIGHT
6338
04-Nov-2024
18:35



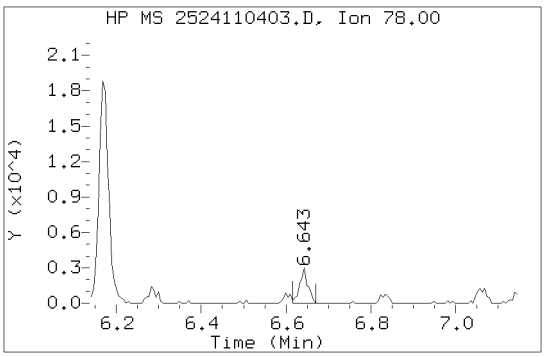
AFTER
MASS
104
AREA
8261
HEIGHT
6338
04-Nov-2024
18:49



BEFORE
MASS
78
AREA
4846
HEIGHT
3019
04-Nov-2024
18:35



AFTER
MASS
78
AREA
3955
HEIGHT
3019
04-Nov-2024
18:49



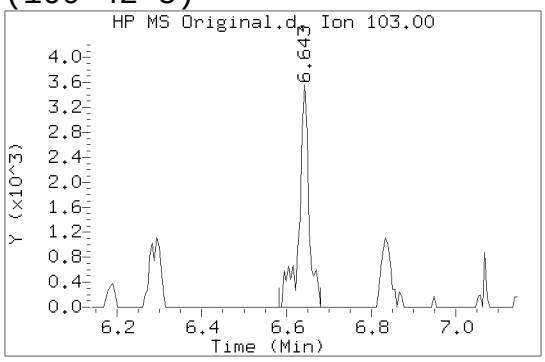
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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

Styrene (100-42-5)

Reason Code: MP

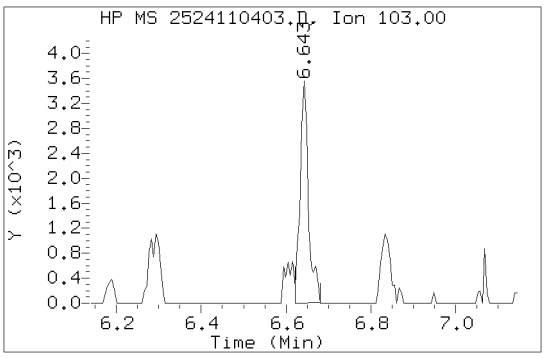
BEFORE

MASS
103
AREA
5812
HEIGHT
3559
04-Nov-2024
18:35



AFTER

MASS
103
AREA
4880
HEIGHT
3552
04-Nov-2024
18:49

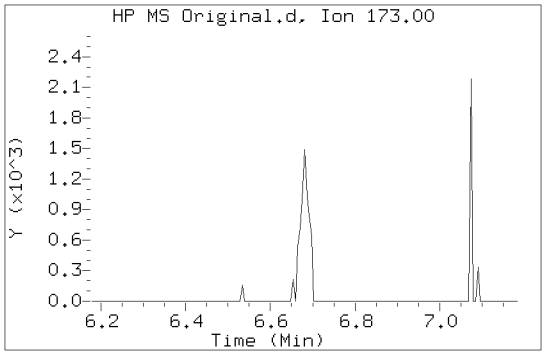


Bromoform (75-25-2)

Reason Code: IH

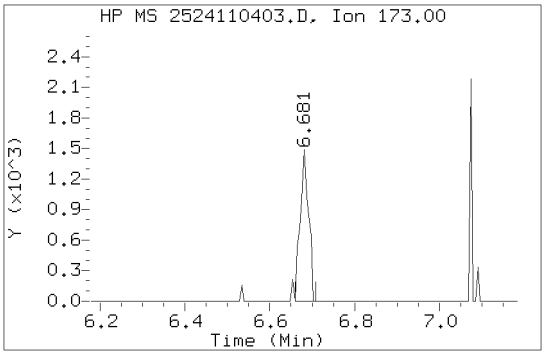
BEFORE

MASS
173
AREA
0
HEIGHT
0
04-Nov-2024
18:35



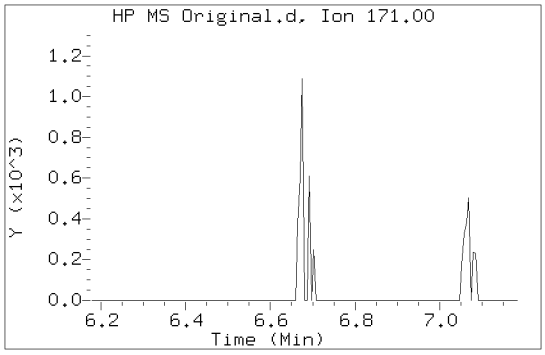
AFTER

MASS
173
AREA
2048
HEIGHT
1492
04-Nov-2024
18:49



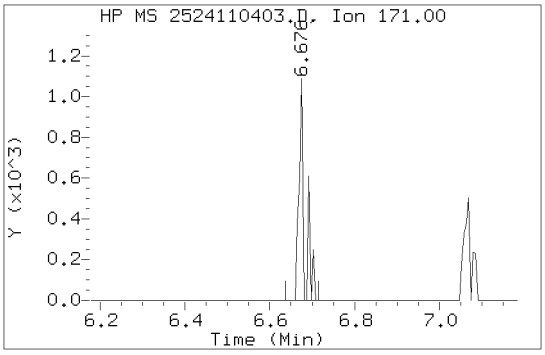
BEFORE

MASS
171
AREA
0
HEIGHT
0
04-Nov-2024
18:35



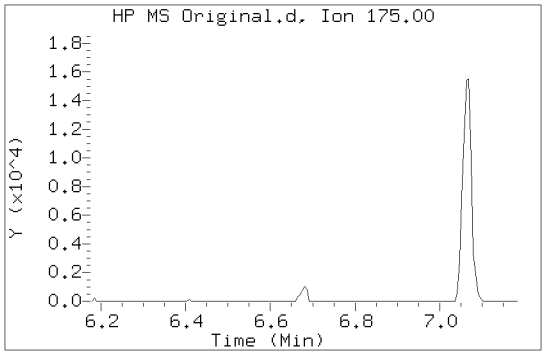
AFTER

MASS
171
AREA
956
HEIGHT
1088
04-Nov-2024
18:49



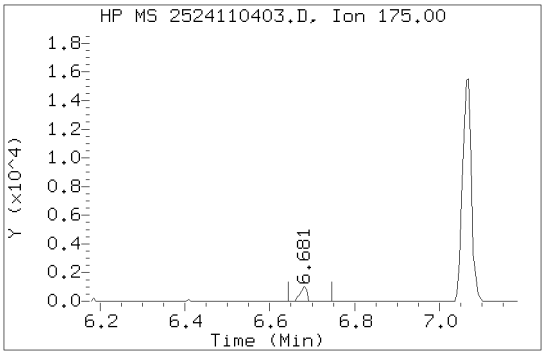
BEFORE

MASS
175
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER

MASS
175
AREA
1087
HEIGHT
1026
04-Nov-2024
18:49

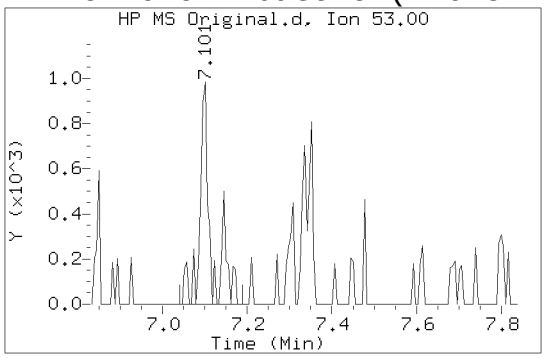


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LabSampID : VSTD00.5

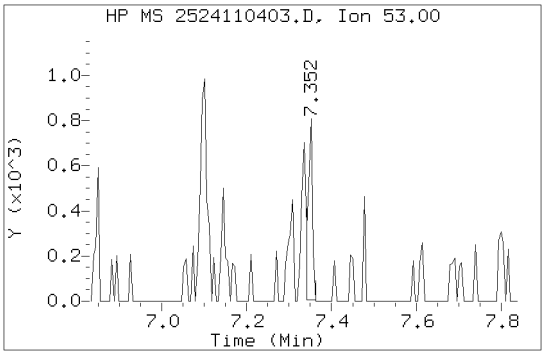
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: IH

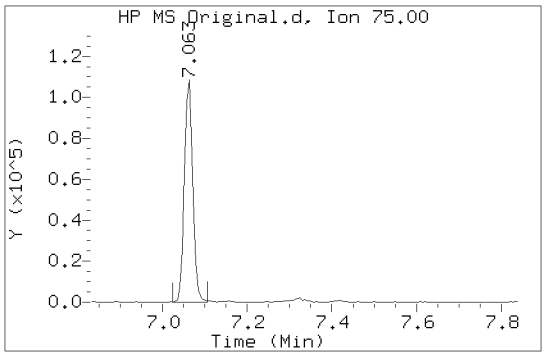
BEFORE
MASS
53
AREA
1809
HEIGHT
985
04-Nov-2024
18:35



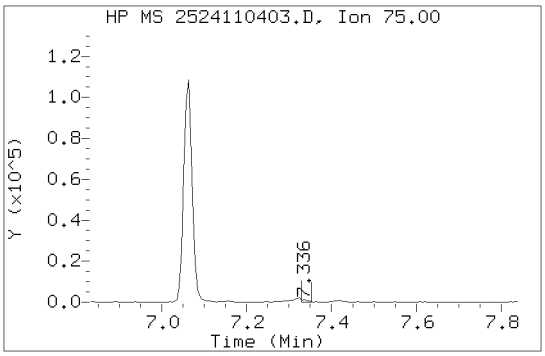
AFTER
MASS
53
AREA
603
HEIGHT
805
04-Nov-2024
18:49



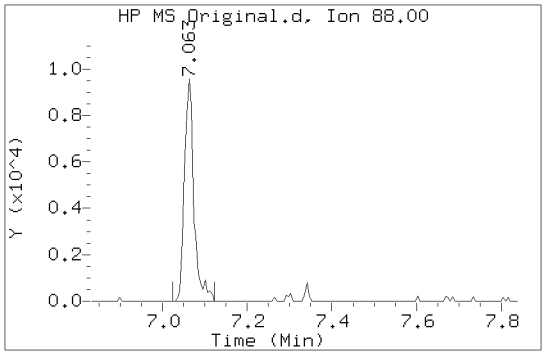
BEFORE
MASS
75
AREA
149794
HEIGHT
108528
04-Nov-2024
18:35



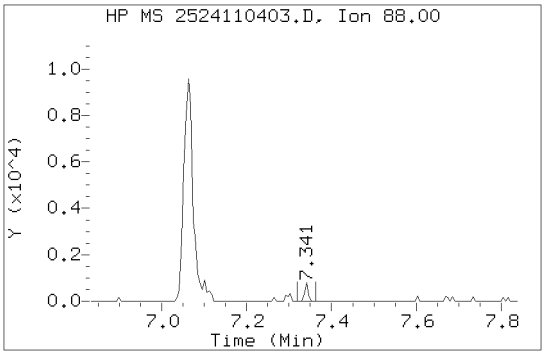
AFTER
MASS
75
AREA
1108
HEIGHT
1118
04-Nov-2024
18:49



BEFORE
MASS
88
AREA
14947
HEIGHT
9573
04-Nov-2024
18:35



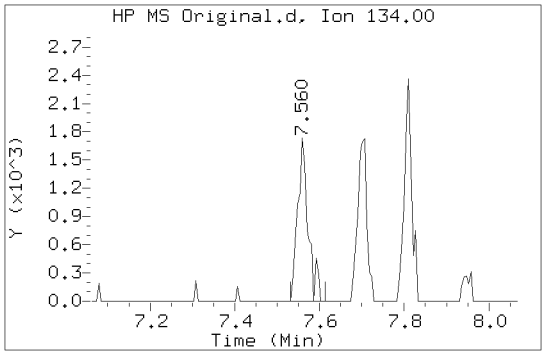
AFTER
MASS
88
AREA
451
HEIGHT
806
04-Nov-2024
18:49



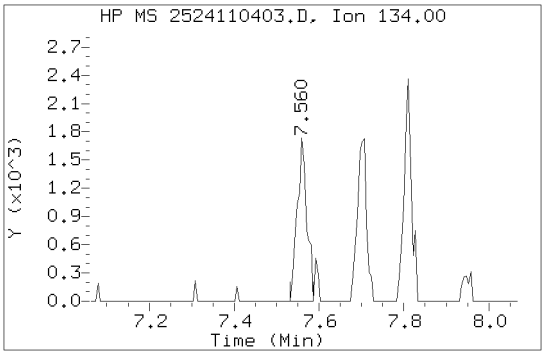
tert-Butylbenzene (98-06-6)

Reason Code: MP

BEFORE
MASS
134
AREA
2985
HEIGHT
1732
04-Nov-2024
18:35



AFTER
MASS
134
AREA
2743
HEIGHT
1732
04-Nov-2024
18:49

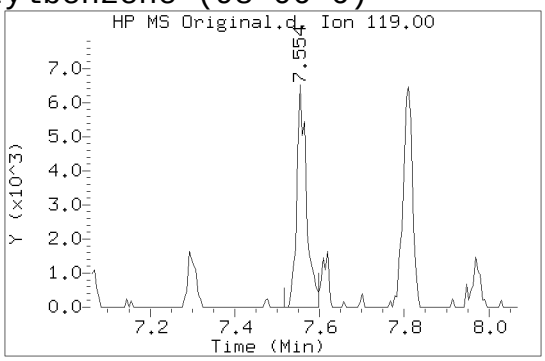


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LabSampID : VSTD00.5

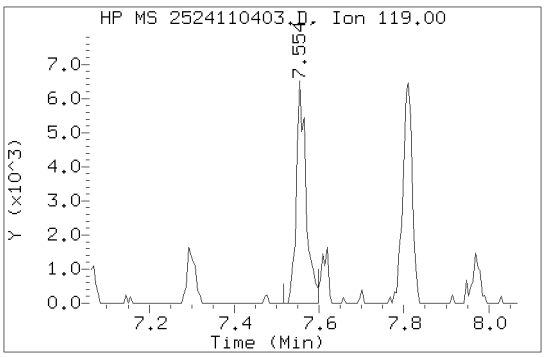
tert-Butylbenzene (98-06-6)

Reason Code: MP

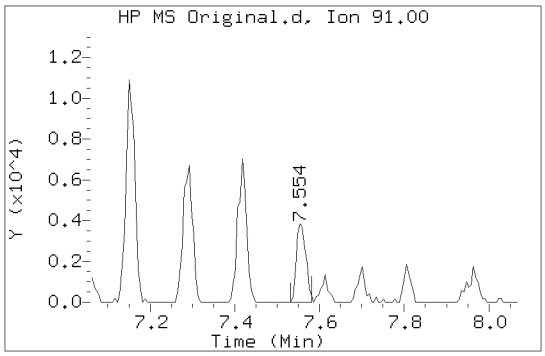
BEFORE
MASS
119
AREA
10365
HEIGHT
6519
04-Nov-2024
18:35



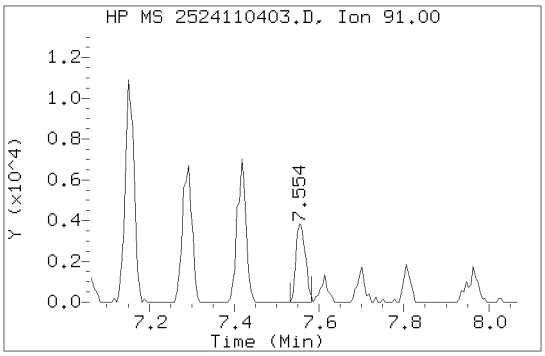
AFTER
MASS
119
AREA
10365
HEIGHT
6519
04-Nov-2024
18:49



BEFORE
MASS
91
AREA
6033
HEIGHT
3842
04-Nov-2024
18:35



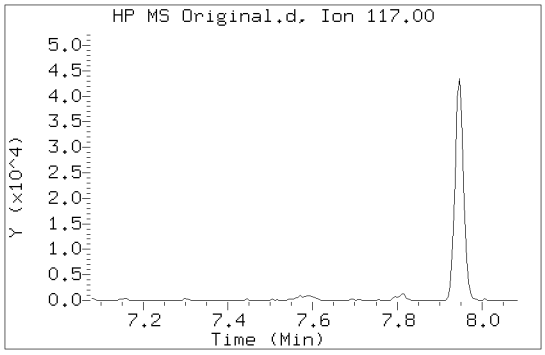
AFTER
MASS
91
AREA
6033
HEIGHT
3842
04-Nov-2024
18:49



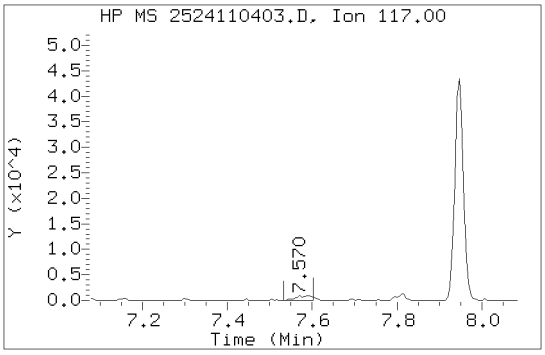
Pentachloroethane (76-01-7)

Reason Code: IH

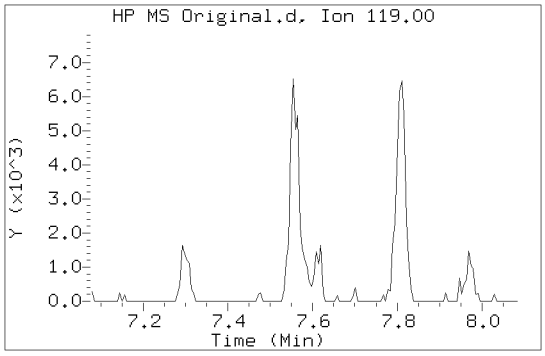
BEFORE
MASS
117
AREA
0
HEIGHT
0
04-Nov-2024
18:35



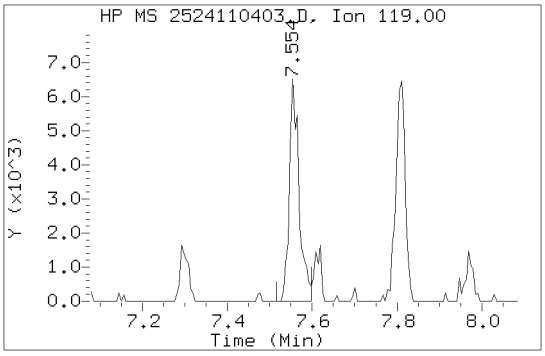
AFTER
MASS
117
AREA
2396
HEIGHT
1052
04-Nov-2024
18:49



BEFORE
MASS
119
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER
MASS
119
AREA
10365
HEIGHT
6519
04-Nov-2024
18:49



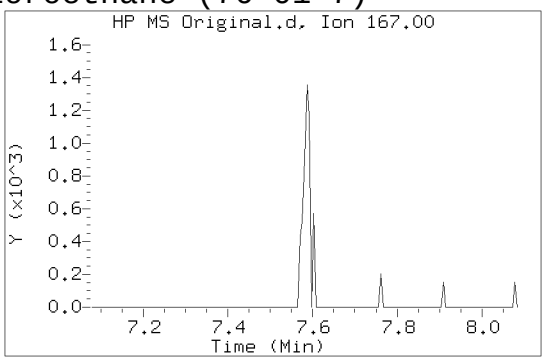
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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

Pentachloroethane (76-01-7)

Reason Code: IH

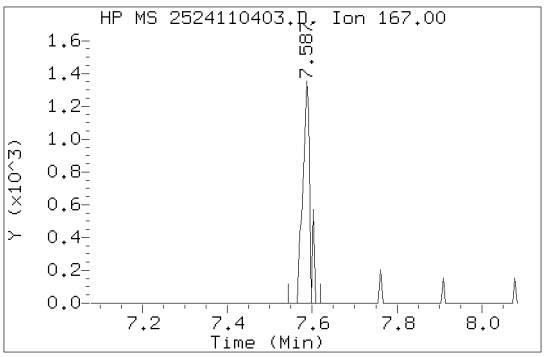
BEFORE

MASS
167
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER

MASS
167
AREA
1619
HEIGHT
1355
04-Nov-2024
18:49

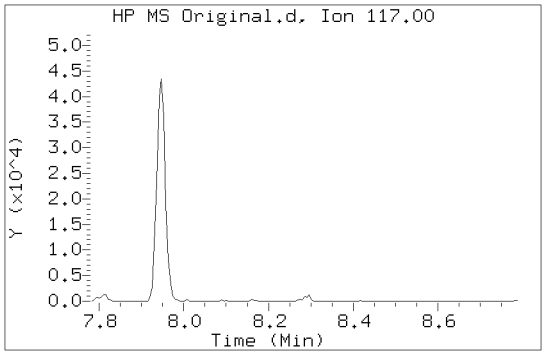


Hexachloroethane (67-72-1)

Reason Code: IH

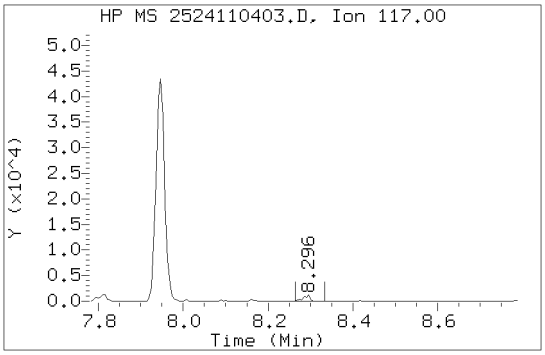
BEFORE

MASS
117
AREA
0
HEIGHT
0
04-Nov-2024
18:35



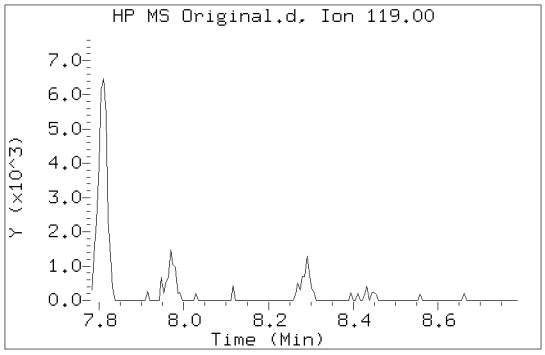
AFTER

MASS
117
AREA
1366
HEIGHT
1277
04-Nov-2024
18:49



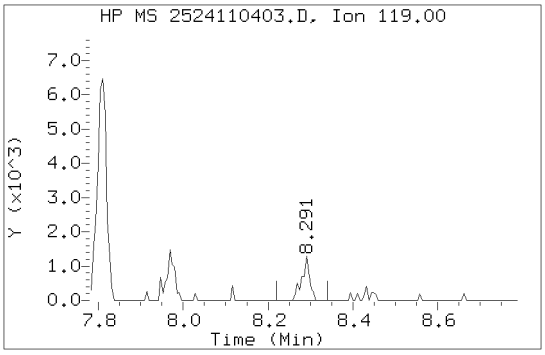
BEFORE

MASS
119
AREA
0
HEIGHT
0
04-Nov-2024
18:35



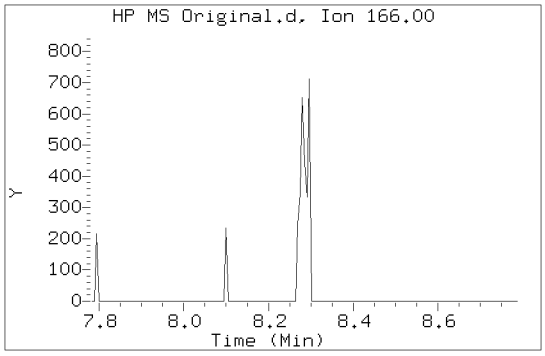
AFTER

MASS
119
AREA
1669
HEIGHT
1282
04-Nov-2024
18:49



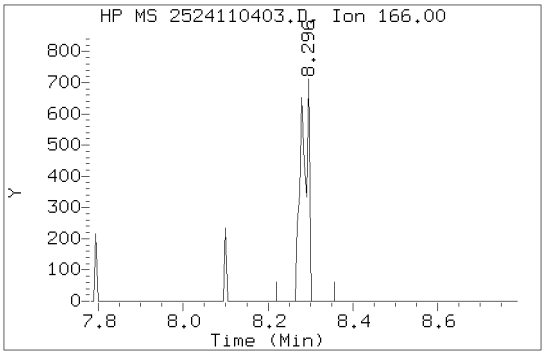
BEFORE

MASS
166
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER

MASS
166
AREA
893
HEIGHT
712
04-Nov-2024
18:49

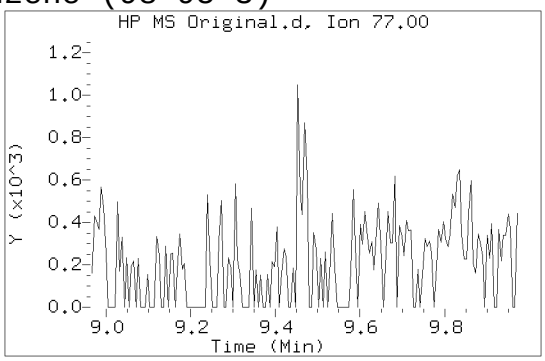


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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

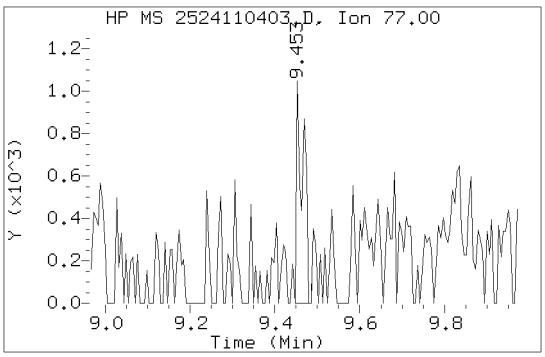
Nitrobenzene (98-95-3)

Reason Code: IH

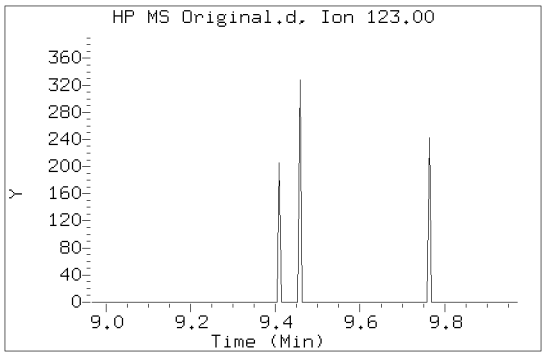
BEFORE
MASS
77
AREA
0
HEIGHT
0
04-Nov-2024
18:35



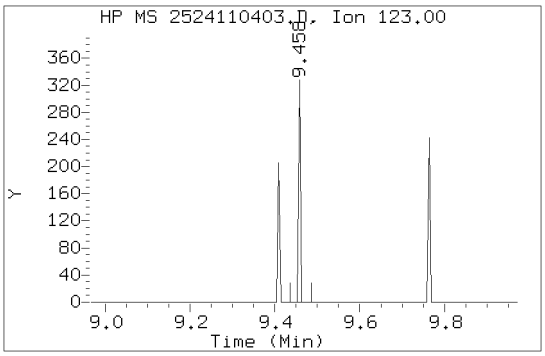
AFTER
MASS
77
AREA
1153
HEIGHT
1048
04-Nov-2024
18:49



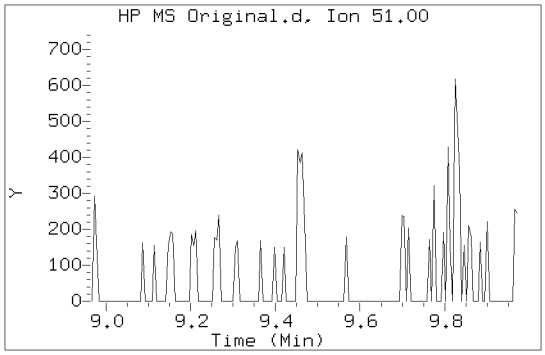
BEFORE
MASS
123
AREA
0
HEIGHT
0
04-Nov-2024
18:35



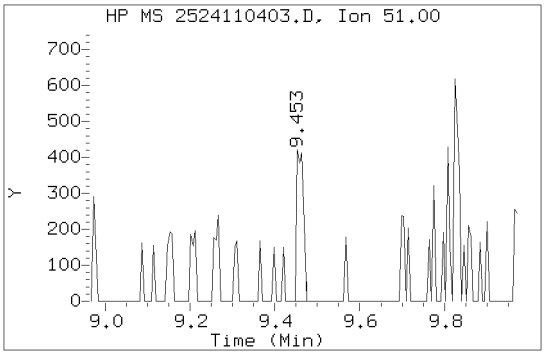
AFTER
MASS
123
AREA
107
HEIGHT
328
04-Nov-2024
18:49



BEFORE
MASS
51
AREA
0
HEIGHT
0
04-Nov-2024
18:35



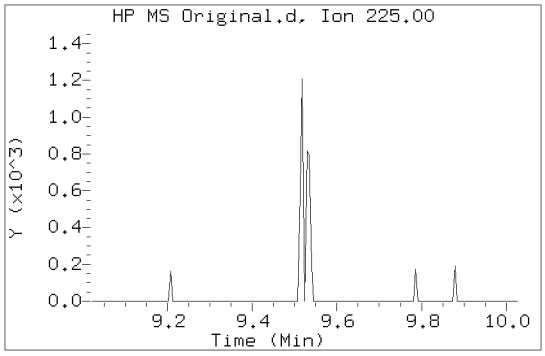
AFTER
MASS
51
AREA
469
HEIGHT
421
04-Nov-2024
18:49



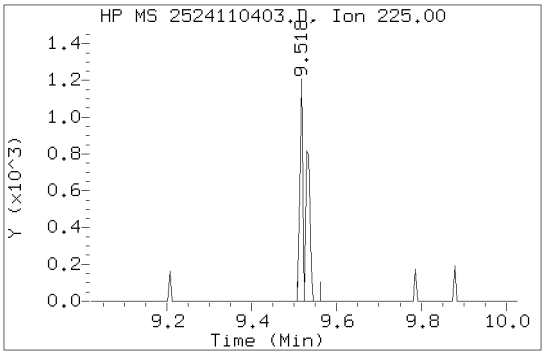
Hexachlorobutadiene (87-68-3)

Reason Code: IH

BEFORE
MASS
225
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER
MASS
225
AREA
1179
HEIGHT
1208
04-Nov-2024
18:49



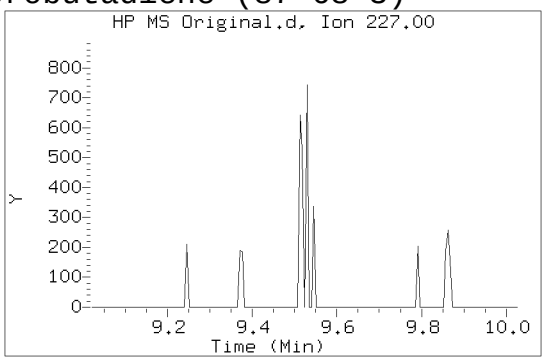
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Inj Date : 04-NOV-2024 13:55
InstruID : ms25.i
LabSampID : VSTD00.5

Hexachlorobutadiene (87-68-3)

Reason Code: IH

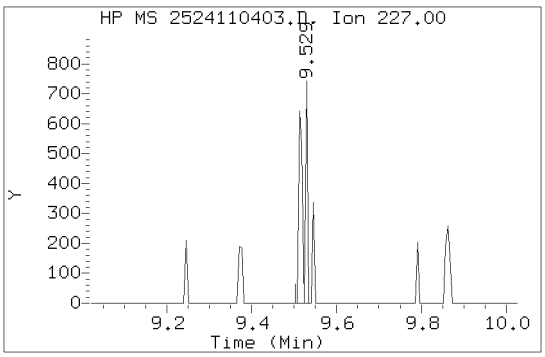
BEFORE

MASS
227
AREA
0
HEIGHT
0
04-Nov-2024
18:35



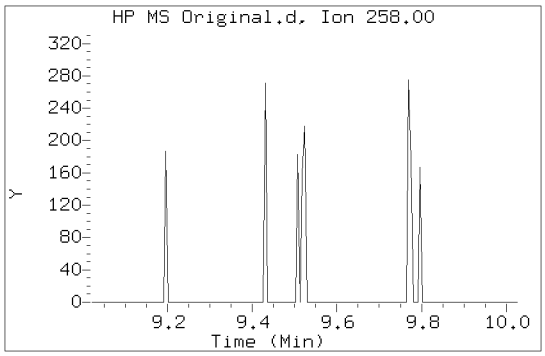
AFTER

MASS
227
AREA
626
HEIGHT
743
04-Nov-2024
18:49



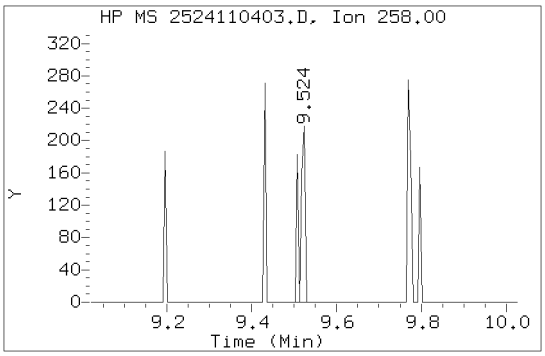
BEFORE

MASS
258
AREA
0
HEIGHT
0
04-Nov-2024
18:35



AFTER

MASS
258
AREA
183
HEIGHT
218
04-Nov-2024
18:49



UNASSIGNED PEAK REPORT

Report Date: 11/05/2024 04:10
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241104.b/252411040
Inj Date: 04-NOV-2024 13:55
Operator: TMP

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110404.D
Lab Smp Id: 1234
Inj Date : 04-NOV-2024 14:15
Operator : TMP Inst ID: ms25.i
Smp Info : 1234;;1;1;1;;;
Misc Info :
Comment :
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Meth Date : 04-Nov-2024 19:36 pdk Quant Type: ISTD
Cal Date : 04-NOV-2024 14:36 Cal File: 2524110405.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.497	1.497	(0.359)	9555	1.00000	0.943512(a)	
2	Chloromethane	50	1.644	1.645	(0.395)	9620	1.00000	1.00169	
3	Vinyl Chloride	62	1.704	1.705	(0.409)	10482	1.00000	0.918442(a)	
4	Bromomethane	94	1.922	1.923	(0.462)	12345	1.00000	1.03415	
5	Chloroethane	64	2.004	2.005	(0.481)	9238	1.00000	1.04965	
6	Pentane	41	2.097	2.097	(0.504)	10826	1.00000	1.39442(Q)	
7	Trichlorofluoromethane	101	2.097	2.097	(0.504)	13701	1.00000	0.909684(a)	
8	Dichlorofluoromethane	67	2.124	2.125	(0.510)	15764	1.00000	0.964398(a)	
9	Ethyl Ether	74	2.277	2.278	(0.547)	4631	1.00000	0.954899(aQ)	
10	1,1-Dichloroethene	61	2.408	2.409	(0.578)	8687	1.00000	0.965137(a)	
11	Freon 113	101	2.419	2.419	(0.581)	5714	1.00000	0.998782(a)	
12	Carbon Disulfide	76	2.446	2.447	(0.587)	16764	1.00000	0.901883(a)	
13	Iodomethane	127	2.506	2.507	(0.602)	1474	1.00000	0.658832(aQ)	
14	Acrolein	56	2.605	2.605	(0.625)	6193	5.00000	5.12619	
15	Isopropyl Alcohol	45	2.654	2.654	(0.637)	2210	5.00000	4.69109	
16	3-Chloro-1-propene	41	2.675	2.676	(0.642)	7228	1.00000	0.966312(a)	
17	Methylene Chloride	84	2.735	2.736	(0.657)	8494	1.00000	1.01988	
18	Acetone	58	2.752	2.752	(0.661)	4334	5.00000	4.88237(Q)	
19	Methyl acetate	74	2.817	2.818	(0.676)	1842	1.00000	1.00957	
20	trans-1,2-Dichloroethene	61	2.823	2.823	(0.678)	9340	1.00000	0.994850(a)	
21	Hexane	57	2.866	2.867	(0.688)	11784	1.00000	0.937605(a)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	2.877	2.878	(0.691)	20885	1.00000	0.939286(a)	
	23 tert.- Butyl Alcohol	59	2.899	2.900	(0.696)	3741	5.00000	4.63563	
	24 Acetonitrile	41	3.019	3.020	(0.725)	5002	5.00000	4.78324	
	25 Diisopropyl ether	45	3.063	3.063	(0.735)	19087	1.00000	0.898986(a)	
	26 Chloroprene	53	3.150	3.151	(0.756)	8753	1.00000	0.933588(a)	
	27 1,1-Dichloroethane	63	3.161	3.162	(0.759)	11797	1.00000	0.912739(a)	
	28 Acrylonitrile	53	3.188	3.189	(0.766)	14850	5.00000	4.59458(M)	MP
	29 Ethyl tert-butyl ether	59	3.265	3.265	(0.784)	21053	1.00000	0.911635(a)	
	30 n-Propanol	41	3.259	3.260	(0.783)	4712	10.0000	9.82781(Q)	
	31 Vinyl Acetate	86	3.270	3.271	(0.785)	1264	1.00000	0.736552(aQ)	
	32 cis-1,2-Dichloroethene	61	3.461	3.462	(0.831)	9691	1.00000	0.952050(a)	
	33 2,2-Dichloropropane	77	3.521	3.522	(0.845)	8112	1.00000	0.916730(aM)	H
	34 Bromochloromethane	128	3.570	3.571	(0.857)	4711	1.00000	1.05091(Q)	
	35 Cyclohexane	84	3.587	3.587	(0.861)	9265	1.00000	0.959293(a)	
	36 Chloroform	83	3.598	3.598	(0.864)	13802	1.00000	0.942766(a)	
	37 Ethyl Acetate	43	3.630	3.631	(0.872)	6275	1.00000	0.837732(a)	
	38 Methyl acrylate	55	3.658	3.658	(0.878)	6460	1.00000	0.906191(a)	
	39 Carbon Tetrachloride	117	3.696	3.696	(0.887)	6240	1.00000	0.802652(aM)	MP
$	41 Dibromofluoromethane	113	3.701	3.702	(0.889)	262420	30.0000	29.1269	
	40 Tetrahydrofuran	42	3.701	3.702	(0.889)	10251	5.00000	4.56293	
	42 1,1,1-Trichloroethane	97	3.729	3.729	(0.895)	9138	1.00000	0.874259(a)	
	43 2-Butanone	72	3.761	3.762	(0.903)	5241	5.00000	4.76546(M)	MP
	44 1,1-Dichloropropene	75	3.794	3.795	(0.911)	9175	1.00000	0.958095(a)	
	45 1-Chlorobutane	41	3.816	3.816	(0.916)	5433	1.00000	0.860560(aQ)	
	46 Heptane	71	3.876	3.876	(0.931)	4893	1.00000	1.00588	
	47 Benzene	78	3.941	3.942	(0.946)	30094	1.00000	0.961343(a)	
	48 Propionitrile	54	3.941	3.942	(0.946)	5802	5.00000	4.50633(M)	MP
	49 Methacrylonitrile	67	3.952	3.953	(0.949)	3823	1.00000	0.975510(aQM)	H
	50 tert-Amyl methyl ether	73	3.974	3.975	(0.954)	20007	1.00000	0.910659(a)	
	54 Isobutyl alcohol	42	3.996	3.996	(0.959)	2104	10.0000	10.4413(QM)	H
$	51 1,2-Dichloroethane-d4	65	4.012	4.013	(0.963)	309658	30.0000	30.4682	
	52 1,2-Dichloroethane	62	4.056	4.056	(0.974)	10343	1.00000	0.949439(a)	
	53 tert-Amyl Alcohol	59	4.061	4.062	(0.975)	3516	5.00000	4.85672	
*	55 Fluorobenzene	96	4.165	4.166	(1.000)	1026276	30.0000		
	56 Diisobutylene	57	4.171	4.171	(1.001)	45304	1.00000	1.43058(QM)	I
	57 Trichloroethene	95	4.269	4.269	(1.025)	9236	1.00000	1.10914(Q)	
	58 Methyl cyclohexane	83	4.274	4.275	(0.693)	9652	1.00000	0.970504(a)	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.048)	15483	1.00000	0.923674(a)	
	60 Dibromomethane	93	4.525	4.526	(1.086)	5744	1.00000	1.02210	
	61 1,2-Dichloropropane	63	4.585	4.586	(1.101)	7057	1.00000	0.895161(aM)	H
	62 Bromodichloromethane	83	4.602	4.602	(1.105)	8684	1.00000	0.881679(a)	
	63 Methyl methacrylate	41	4.667	4.668	(1.121)	6056	1.00000	0.959220(aM)	IH
	64 1,4-Dioxane	88	4.716	4.717	(1.132)	2764	25.0000	23.6102	
	65 2-Chloroethylvinyl ether	63	4.934	4.935	(1.185)	752	1.00000	0.376129(aM)	IH
	66 cis-1,3-Dichloropropene	75	4.994	4.995	(0.810)	10072	1.00000	0.861798(a)	
	67 Octane	85	5.000	5.000	(0.811)	3027	1.00000	0.897243(a)	
$	68 Toluene-d8	98	5.114	5.115	(0.829)	1027381	30.0000	30.7760	
	69 Toluene	92	5.153	5.153	(0.835)	18968	1.00000	0.998497(a)	
	70 Chloroacetonitrile	75	5.213	5.213	(0.845)	1203	5.00000	3.17233(QM)	H
	71 2-Nitropropane	41	5.295	5.295	(0.858)	6345	5.00000	3.78402(Q)	
	72 1,1-Dichloro-2-Propanone	63	5.316	5.317	(0.862)	871	5.00000	5.61884(QM)	IH
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.871)	32594	5.00000	4.44905	
	75 trans-1,3-Dichloropropene	75	5.404	5.404	(0.876)	7855	1.00000	0.735191(a)	
	74 Tetrachloroethene	164	5.404	5.404	(0.876)	6487	1.00000	0.959874(a)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	76 Ethyl Methacrylate	69	5.480	5.481	(0.889)	8590	1.00000	0.849636(aM)	H
	77 1,1,2-Trichloroethane	83	5.524	5.524	(0.896)	5796	1.00000	0.919740(a)	
	78 Chlorodibromomethane	129	5.649	5.650	(0.916)	6137	1.00000	0.793022(a)	
	79 1,3-Dichloropropane	76	5.709	5.710	(0.926)	12084	1.00000	0.966397(a)	
	80 1,2-Dibromoethane	107	5.829	5.830	(0.945)	6573	1.00000	0.896120(a)	
	81 2-Hexanone	43	5.933	5.933	(0.962)	22303	5.00000	4.48362	
	82 1-Chlorohexane	91	6.140	6.141	(0.996)	7971	1.00000	0.913642(aM)	MP
*	83 Chlorobenzene-d5	82	6.168	6.168	(1.000)	404041	30.0000		
	84 Chlorobenzene	112	6.184	6.184	(1.003)	20724	1.00000	1.00343	
	85 Ethylbenzene	106	6.189	6.190	(1.004)	10245	1.00000	0.971241(a)	
	86 1,1,1,2-Tetrachloroethane	131	6.222	6.223	(1.009)	5885	1.00000	0.851220(a)	
	87 mp-Xylene	106	6.288	6.288	(1.019)	24652	2.00000	1.93573	
	88 o-Xylene	106	6.599	6.599	(1.070)	12092	1.00000	0.985247(aM)	MP
	89 Styrene	104	6.642	6.643	(0.836)	18463	1.00000	0.959346(aM)	H
	90 Bromoform	173	6.680	6.681	(0.841)	3591	1.00000	0.741031(a)	
	91 Isopropylbenzene	105	6.839	6.839	(0.861)	24600	1.00000	0.956413(a)	
M	100 1,2-Dichloroethene, Total	61				19031	2.00000	1.94690	
$	92 4-Bromofluorobenzene	174	7.062	7.063	(0.889)	277662	30.0000	30.5202	
	93 Bromobenzene	156	7.150	7.150	(0.900)	7418	1.00000	0.893075(a)	
	94 n-Propylbenzene	120	7.150	7.150	(0.900)	7308	1.00000	0.923009(a)	
	95 1,1,2,2-Tetrachloroethane	83	7.204	7.205	(0.907)	8136	1.00000	0.911770(a)	
	96 o-Chlorotoluene	91	7.286	7.287	(0.917)	21299	1.00000	0.946433(a)	
	97 1,3,5-Trimethylbenzene	105	7.297	7.298	(0.918)	21077	1.00000	0.937692(a)	
	98 1,2,3-Trichloropropane	110	7.319	7.319	(0.921)	2793	1.00000	1.01233	
	99 trans-1,4-Dichloro-2-butene	53	7.335	7.336	(0.923)	1605	1.00000	0.761420(aM)	H
	101 p-Chlorotoluene	91	7.417	7.418	(0.933)	21274	1.00000	1.02442	
	102 tert-Butylbenzene	134	7.564	7.565	(0.952)	5009	1.00000	0.929244(a)	
	103 Pentachloroethane	117	7.581	7.581	(0.954)	3502	1.00000	0.782685(aQM)	MP
	104 1,2,4-Trimethylbenzene	105	7.614	7.614	(0.958)	22188	1.00000	0.960407(a)	
	105 sec-Butylbenzene	105	7.701	7.701	(0.969)	25148	1.00000	0.937520(a)	
	106 p-Isopropyltoluene	134	7.805	7.805	(0.982)	5604	1.00000	0.927490(a)	
	107 1,3-Dichlorobenzene	146	7.886	7.887	(0.992)	13573	1.00000	0.990337(a)	
*	108 1,4-Dichlorobenzene-d4	152	7.946	7.947	(1.000)	345756	30.0000		
	109 1,4-Dichlorobenzene	146	7.963	7.963	(1.002)	15135	1.00000	1.03523(Q)	
	110 Benzyl Chloride	126	8.148	8.148	(1.025)	1719	1.00000	0.765227(aQ)	
	111 n-Butylbenzene	134	8.154	8.154	(1.026)	5012	1.00000	0.957782(aQ)	
	112 Hexachloroethane	117	8.285	8.285	(1.043)	4471	1.00000	1.12622(Q)	
	113 1,2-Dichlorobenzene	146	8.307	8.307	(1.045)	12257	1.00000	0.914144(a)	
	114 1,2-Dibromo-3-chloropropane	75	8.972	8.973	(1.129)	1562	1.00000	1.05996(Q)	
	115 Nitrobenzene	77	9.469	9.469	(1.192)	3609	10.0000	11.0118(Q)	
	116 Hexachlorobutadiene	225	9.523	9.524	(1.198)	2993	1.00000	0.942759(aM)	IH
M	120 1,3-Dichloropropene, Total	75				17927	2.00000	1.59699	
	117 1,2,4-Trichlorobenzene	180	9.551	9.551	(1.202)	6825	1.00000	0.882046(a)	
M	121 Total Xylenes	106				36744	3.00000	2.92098	
	118 Naphthalene	128	9.823	9.824	(1.236)	15275	1.00000	0.763276(a)	
	119 1,2,3-Trichlorobenzene	180	9.982	9.982	(1.256)	6300	1.00000	0.800478(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110404.D

Page 1

Date : 04-NOV-2024 14:15

Client ID:

Instrument: ms25.i

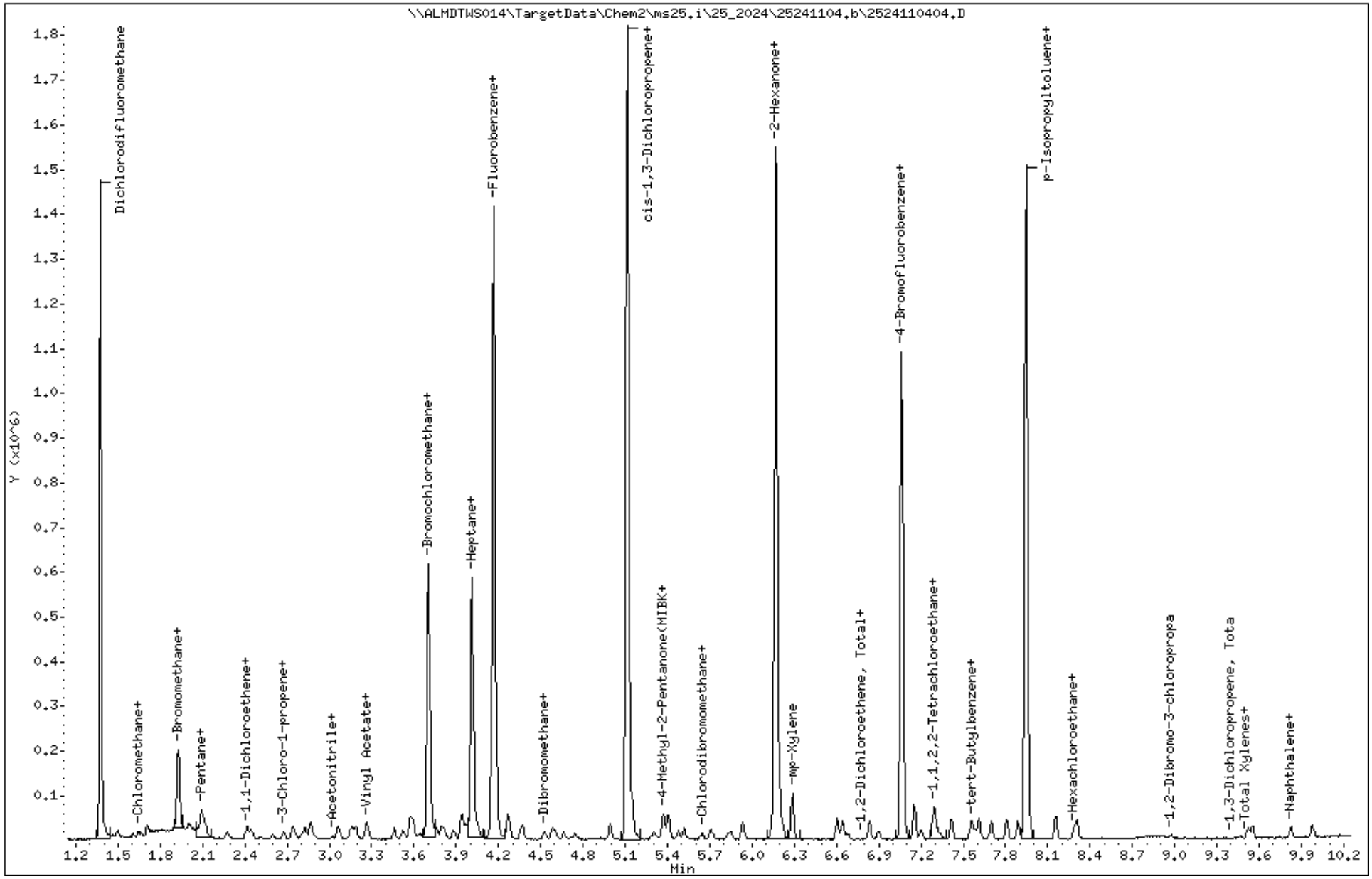
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Purge Volume: 5.0

Operator: TMP

Column phase: DB-VRX

Column diameter: 0.25



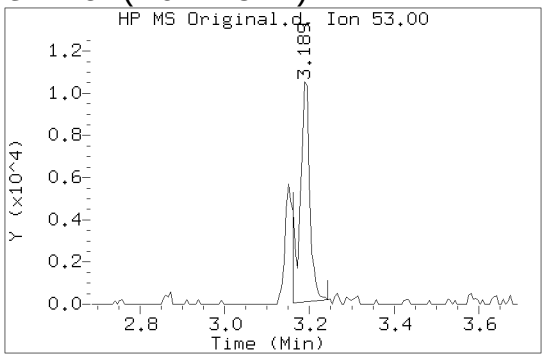
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InstruID : ms25.i
LabSampID : 1234

Acrylonitrile (107-13-1)

Reason Code: MP

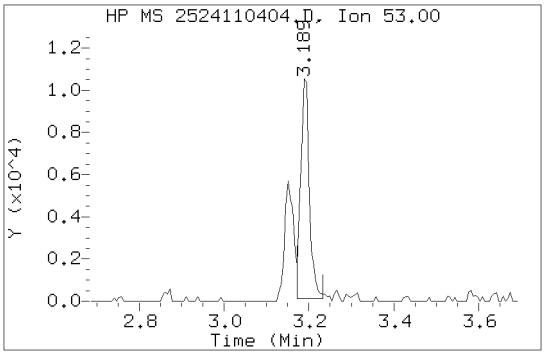
BEFORE

MASS
53
AREA
17035
HEIGHT
10422
04-Nov-2024
18:25



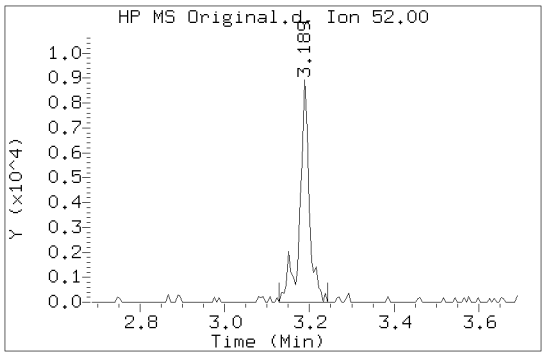
AFTER

MASS
53
AREA
14850
HEIGHT
10406
04-Nov-2024
18:49



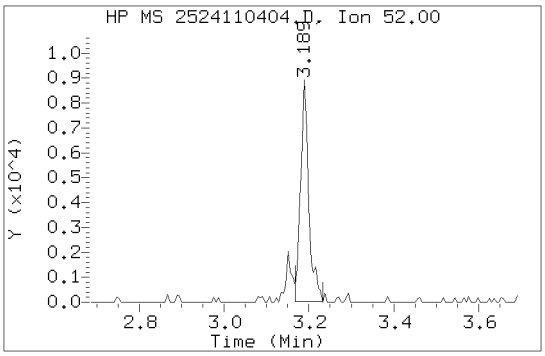
BEFORE

MASS
52
AREA
14057
HEIGHT
8926
04-Nov-2024
18:25



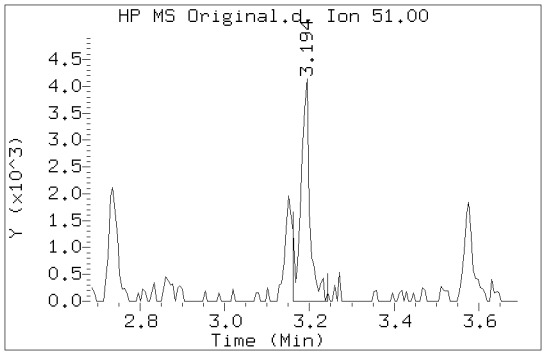
AFTER

MASS
52
AREA
11989
HEIGHT
8910
04-Nov-2024
18:49



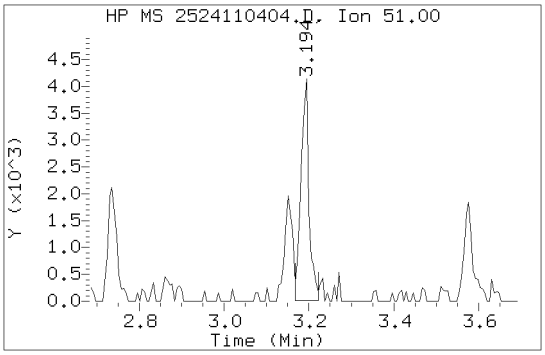
BEFORE

MASS
51
AREA
6262
HEIGHT
4141
04-Nov-2024
18:25



AFTER

MASS
51
AREA
5492
HEIGHT
4129
04-Nov-2024
18:49

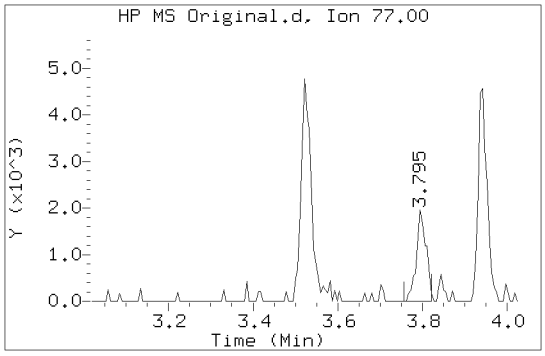


2,2-Dichloropropane (594-20-7)

Reason Code: H

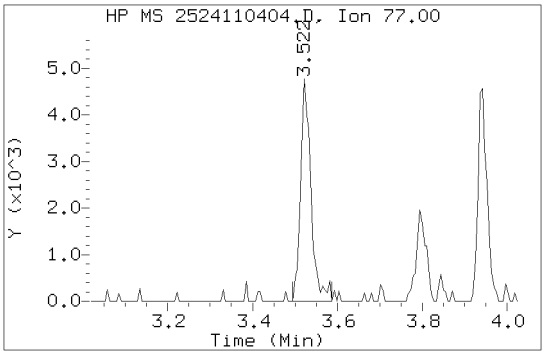
BEFORE

MASS
77
AREA
3156
HEIGHT
1954
04-Nov-2024
18:25



AFTER

MASS
77
AREA
8112
HEIGHT
4771
04-Nov-2024
18:49

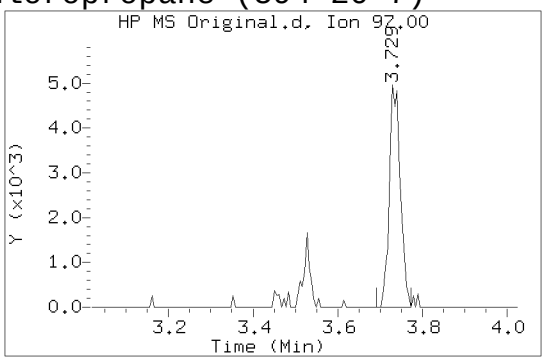


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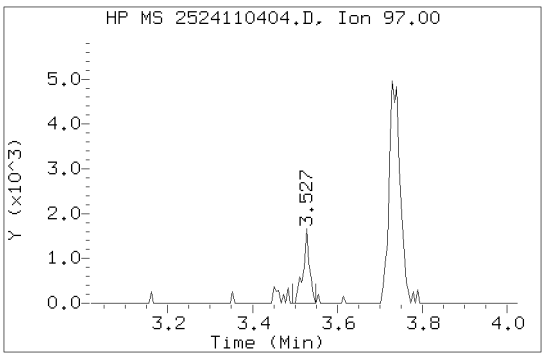
2,2-Dichloropropane (594-20-7)

Reason Code: H

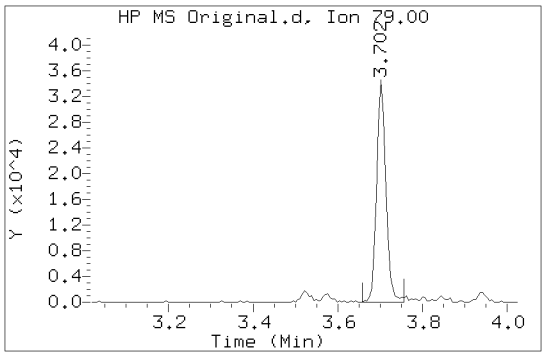
BEFORE
MASS
97
AREA
9049
HEIGHT
4963
04-Nov-2024
18:25



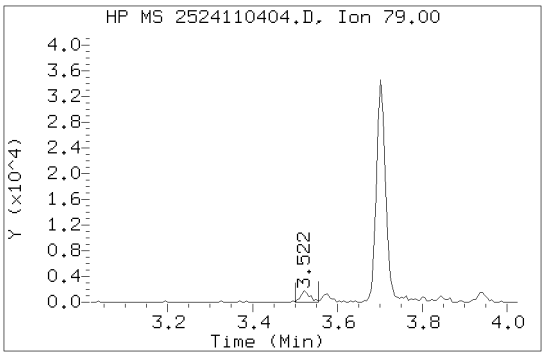
AFTER
MASS
97
AREA
1773
HEIGHT
1666
04-Nov-2024
18:49



BEFORE
MASS
79
AREA
52152
HEIGHT
34568
04-Nov-2024
18:25



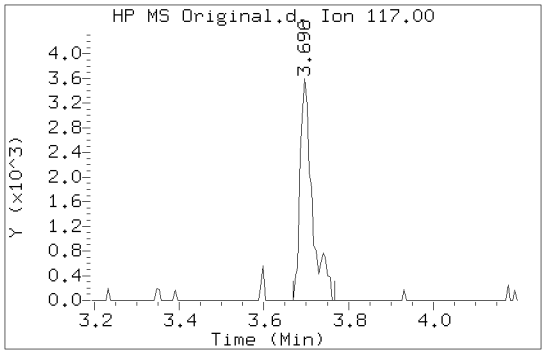
AFTER
MASS
79
AREA
2638
HEIGHT
1758
04-Nov-2024
18:49



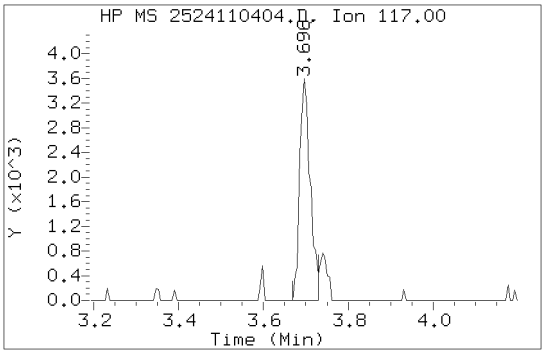
Carbon Tetrachloride (56-23-5)

Reason Code: MP

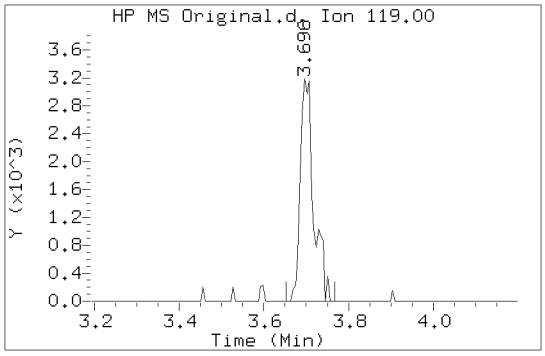
BEFORE
MASS
117
AREA
7162
HEIGHT
3596
04-Nov-2024
18:25



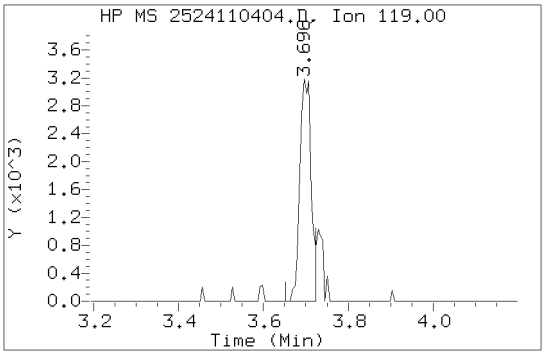
AFTER
MASS
117
AREA
6240
HEIGHT
3596
04-Nov-2024
18:49



BEFORE
MASS
119
AREA
7006
HEIGHT
3185
04-Nov-2024
18:25



AFTER
MASS
119
AREA
5954
HEIGHT
3185
04-Nov-2024
18:49



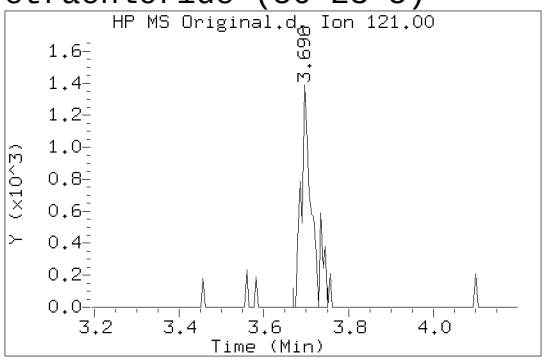
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InstruID : ms25.i
LabSampID : 1234

Carbon Tetrachloride (56-23-5)

Reason Code: MP

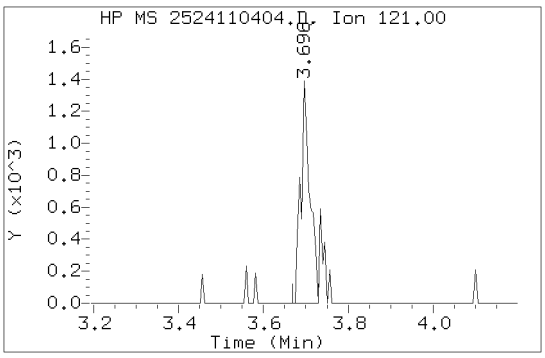
BEFORE

MASS
121
AREA
2473
HEIGHT
1390
04-Nov-2024
18:25



AFTER

MASS
121
AREA
2074
HEIGHT
1390
04-Nov-2024
18:49

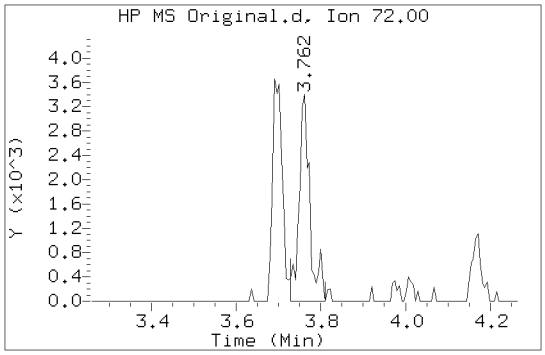


2-Butanone (78-93-3)

Reason Code: MP

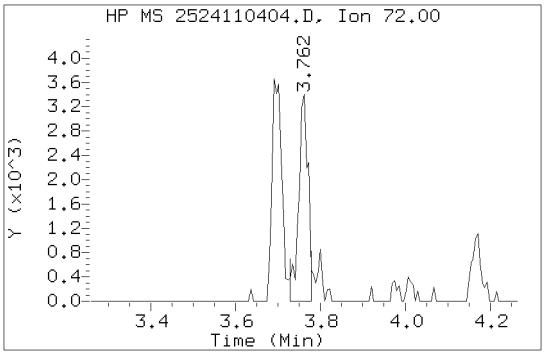
BEFORE

MASS
72
AREA
6028
HEIGHT
3403
04-Nov-2024
18:25



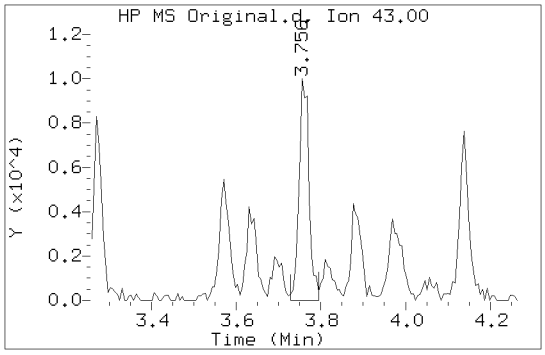
AFTER

MASS
72
AREA
5241
HEIGHT
3403
04-Nov-2024
18:49



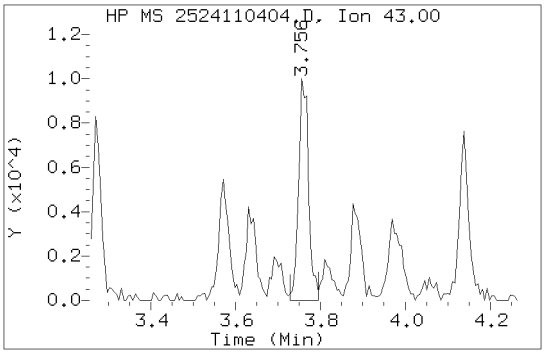
BEFORE

MASS
43
AREA
16375
HEIGHT
10002
04-Nov-2024
18:25



AFTER

MASS
43
AREA
16375
HEIGHT
10002
04-Nov-2024
18:49

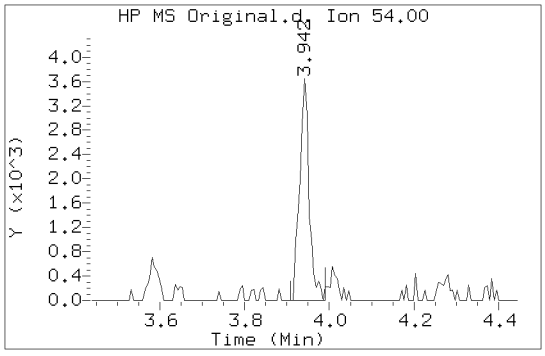


Propionitrile (107-12-0)

Reason Code: MP

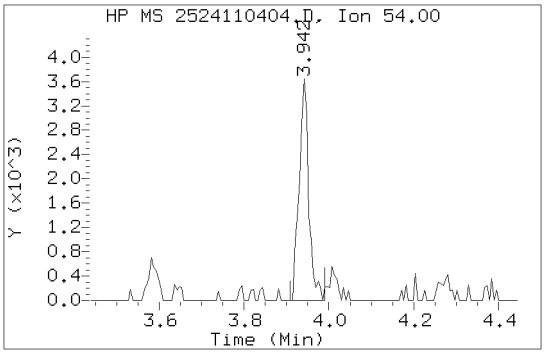
BEFORE

MASS
54
AREA
5802
HEIGHT
3647
04-Nov-2024
18:25



AFTER

MASS
54
AREA
5802
HEIGHT
3647
04-Nov-2024
18:49



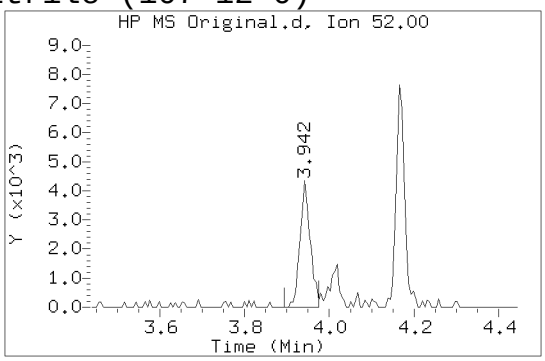
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InstruID : ms25.i
LabSampID : 1234

Propionitrile (107-12-0)

Reason Code: MP

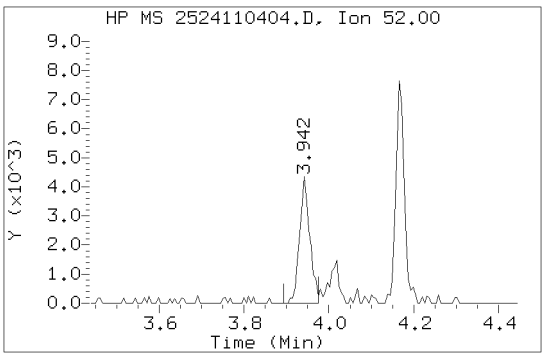
BEFORE

MASS
52
AREA
7270
HEIGHT
4358
04-Nov-2024
18:25



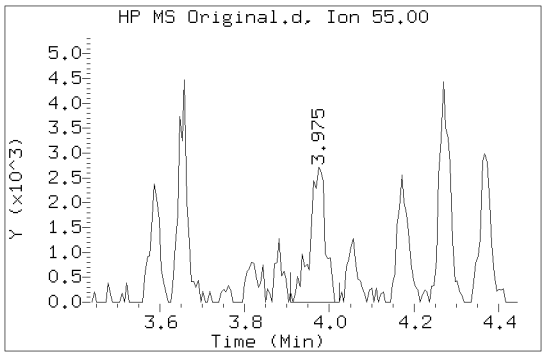
AFTER

MASS
52
AREA
7270
HEIGHT
4358
04-Nov-2024
18:49



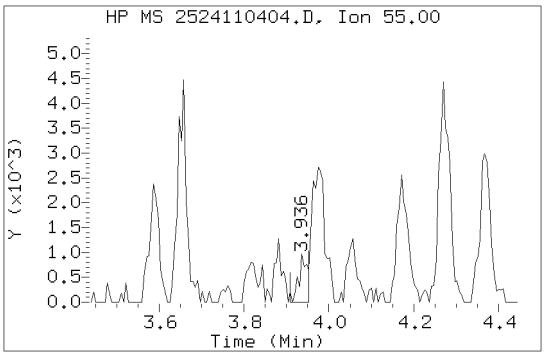
BEFORE

MASS
55
AREA
7131
HEIGHT
2717
04-Nov-2024
18:25



AFTER

MASS
55
AREA
1427
HEIGHT
973
04-Nov-2024
18:49

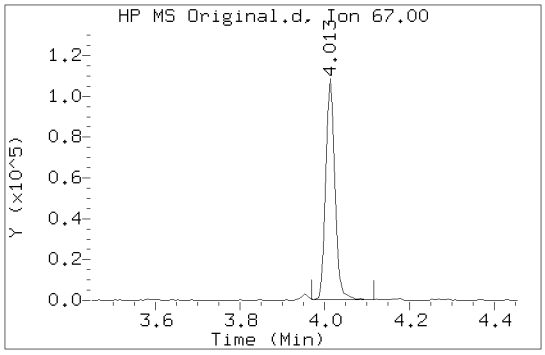


Methacrylonitrile (126-98-7)

Reason Code: H

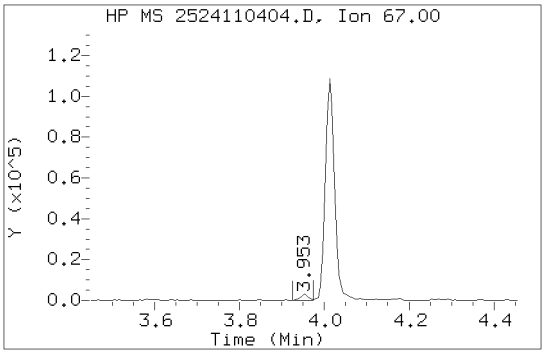
BEFORE

MASS
67
AREA
161365
HEIGHT
108346
04-Nov-2024
18:25



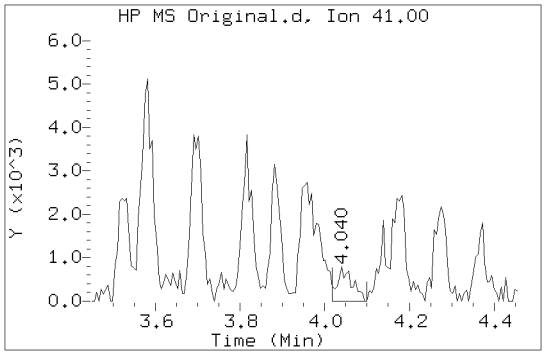
AFTER

MASS
67
AREA
3823
HEIGHT
3138
04-Nov-2024
18:49



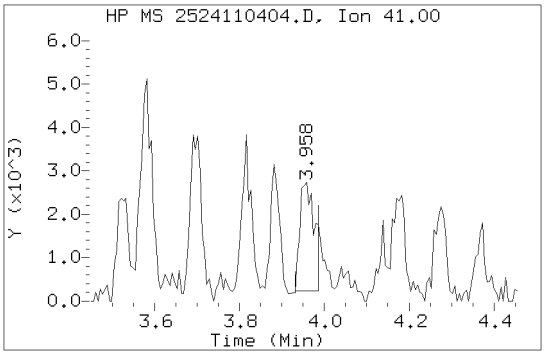
BEFORE

MASS
41
AREA
1935
HEIGHT
794
04-Nov-2024
18:25



AFTER

MASS
41
AREA
5885
HEIGHT
2502
04-Nov-2024
18:49



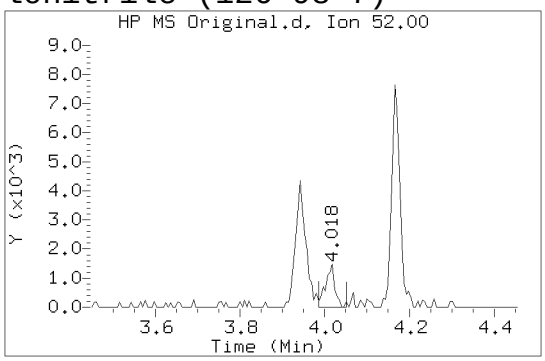
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Inj Date : 04-NOV-2024 14:15
InstruID : ms25.i
LabSampID : 1234

Methacrylonitrile (126-98-7)

Reason Code: H

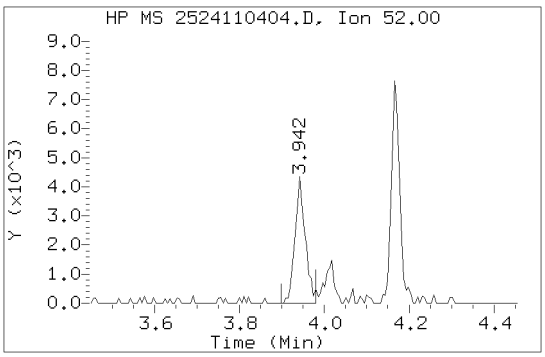
BEFORE

MASS
52
AREA
2299
HEIGHT
1481
04-Nov-2024
18:25



AFTER

MASS
52
AREA
7427
HEIGHT
4358
04-Nov-2024
18:49

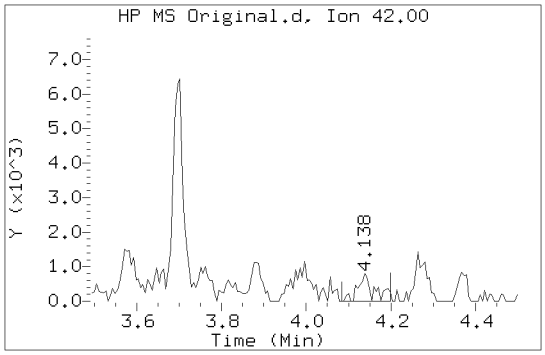


Isobutyl alcohol (78-83-1)

Reason Code: H

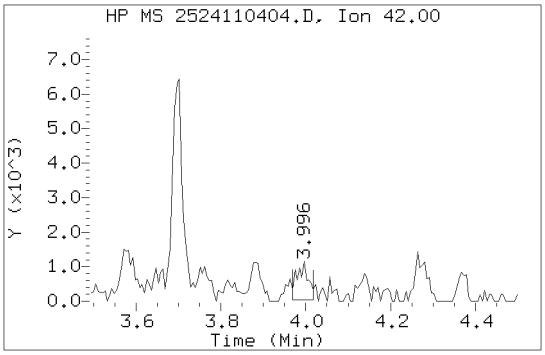
BEFORE

MASS
42
AREA
2138
HEIGHT
804
04-Nov-2024
18:25



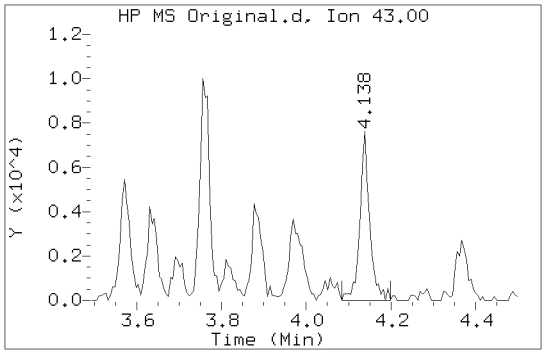
AFTER

MASS
42
AREA
2104
HEIGHT
1117
04-Nov-2024
18:49



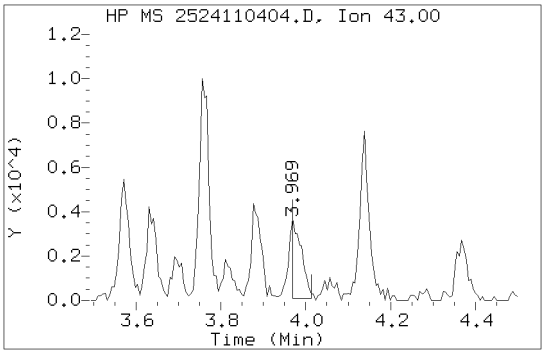
BEFORE

MASS
43
AREA
12426
HEIGHT
7641
04-Nov-2024
18:25



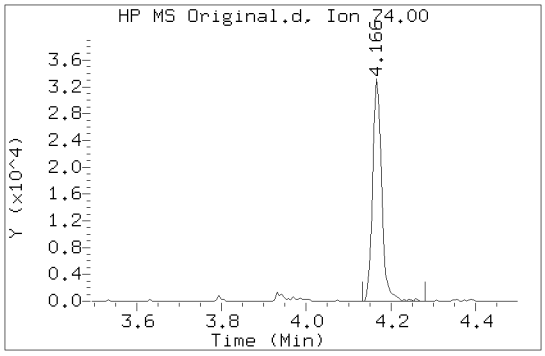
AFTER

MASS
43
AREA
5665
HEIGHT
3597
04-Nov-2024
18:49



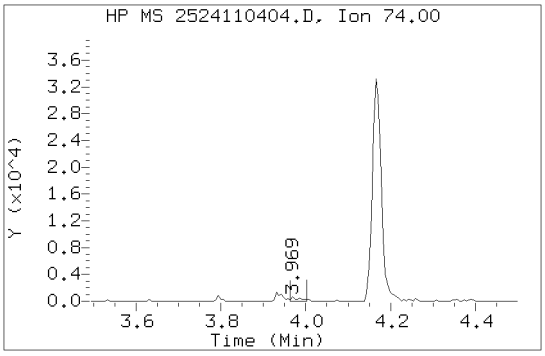
BEFORE

MASS
74
AREA
49813
HEIGHT
33184
04-Nov-2024
18:25



AFTER

MASS
74
AREA
834
HEIGHT
619
04-Nov-2024
18:49



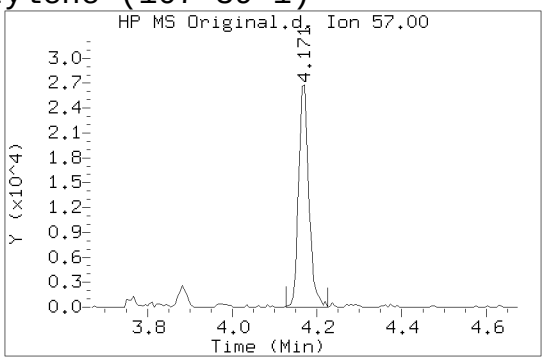
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110404.D
Inj Date : 04-NOV-2024 14:15
InstruID : ms25.i
LabSampID : 1234

Diisobutylene (107-39-1)

Reason Code: I

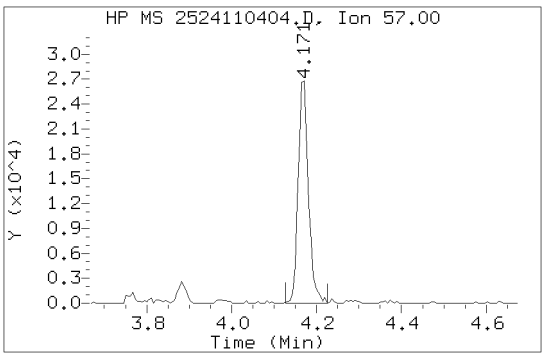
BEFORE

MASS
57
AREA
45304
HEIGHT
26792
04-Nov-2024
18:25



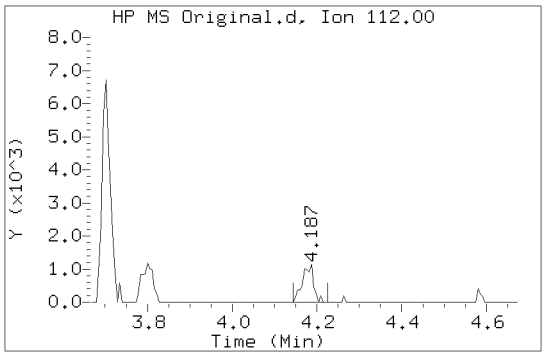
AFTER

MASS
57
AREA
45304
HEIGHT
26792
04-Nov-2024
18:49



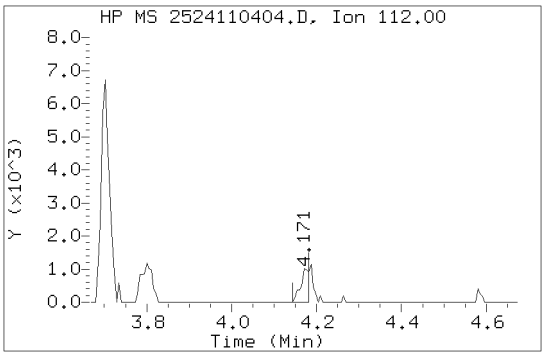
BEFORE

MASS
112
AREA
2077
HEIGHT
1150
04-Nov-2024
18:25



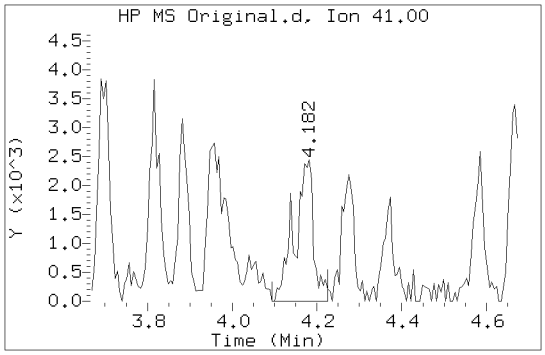
AFTER

MASS
112
AREA
1407
HEIGHT
1011
04-Nov-2024
18:49



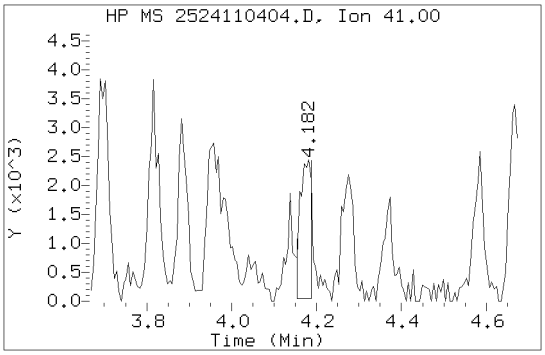
BEFORE

MASS
41
AREA
7535
HEIGHT
2442
04-Nov-2024
18:25



AFTER

MASS
41
AREA
4380
HEIGHT
2399
04-Nov-2024
18:49

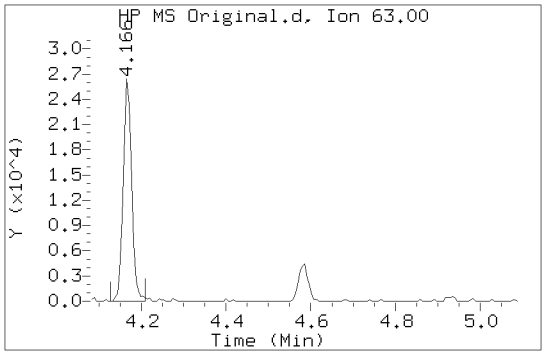


1,2-Dichloropropane (78-87-5)

Reason Code: H

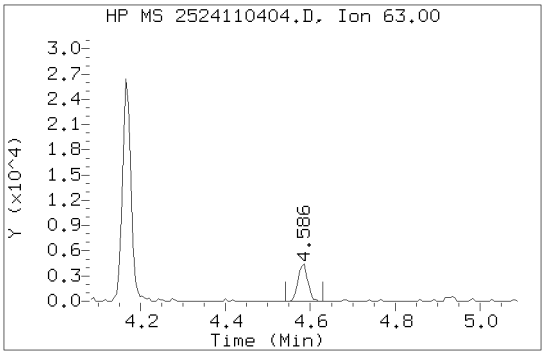
BEFORE

MASS
63
AREA
37180
HEIGHT
26432
04-Nov-2024
18:25



AFTER

MASS
63
AREA
7057
HEIGHT
4435
04-Nov-2024
18:49



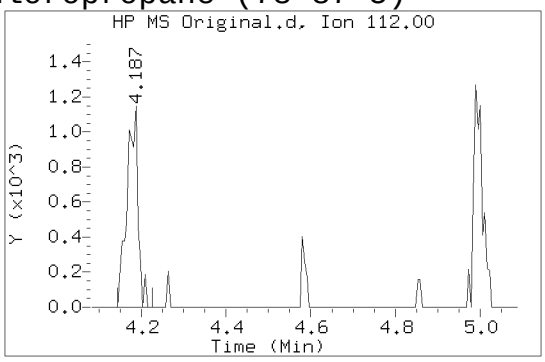
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Inj Date : 04-NOV-2024 14:15
InstruID : ms25.i
LabSampID : 1234

1,2-Dichloropropane (78-87-5)

Reason Code: H

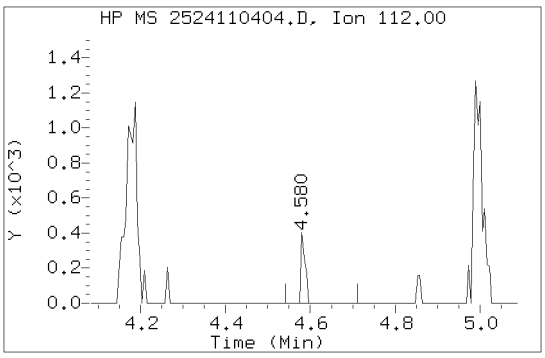
BEFORE

MASS
112
AREA
2077
HEIGHT
1150
04-Nov-2024
18:25



AFTER

MASS
112
AREA
273
HEIGHT
405
04-Nov-2024
18:49

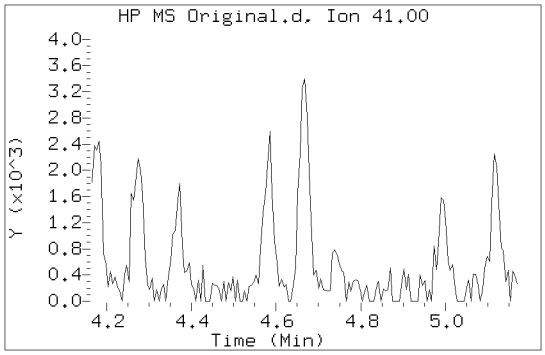


Methyl methacrylate (80-62-6)

Reason Code: IH

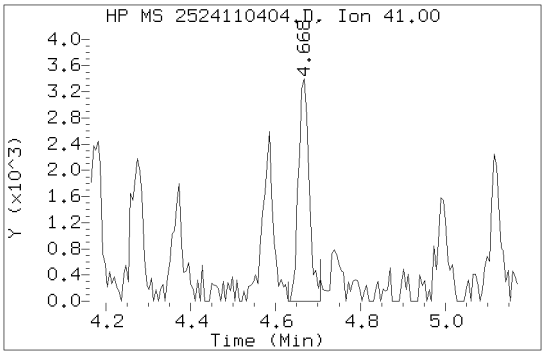
BEFORE

MASS
41
AREA
0
HEIGHT
0
04-Nov-2024
18:25



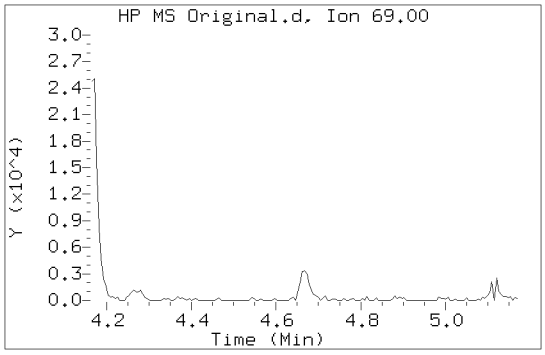
AFTER

MASS
41
AREA
6056
HEIGHT
3396
04-Nov-2024
18:49



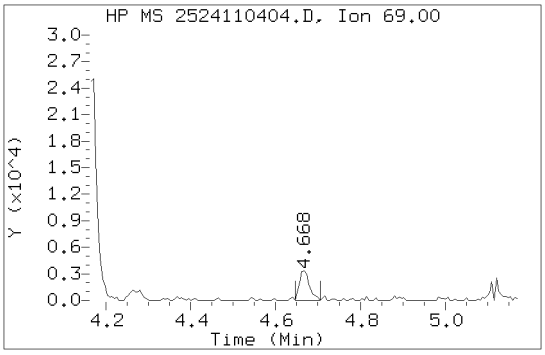
BEFORE

MASS
69
AREA
0
HEIGHT
0
04-Nov-2024
18:25



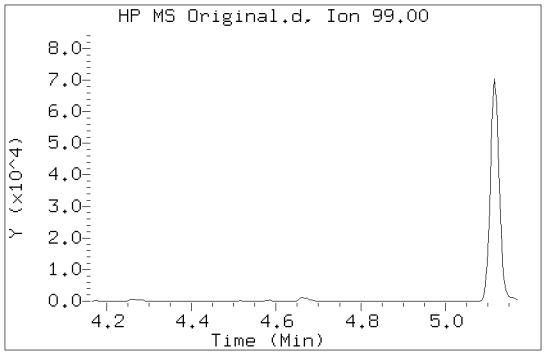
AFTER

MASS
69
AREA
5547
HEIGHT
3370
04-Nov-2024
18:49



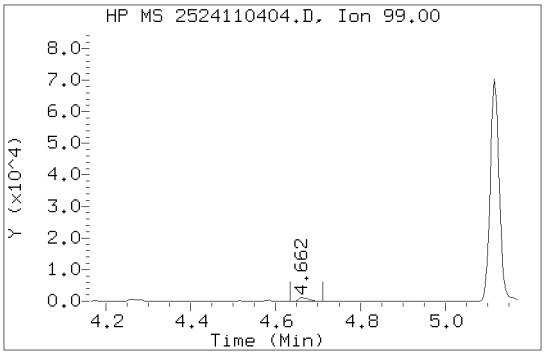
BEFORE

MASS
99
AREA
0
HEIGHT
0
04-Nov-2024
18:25



AFTER

MASS
99
AREA
1696
HEIGHT
1269
04-Nov-2024
18:49



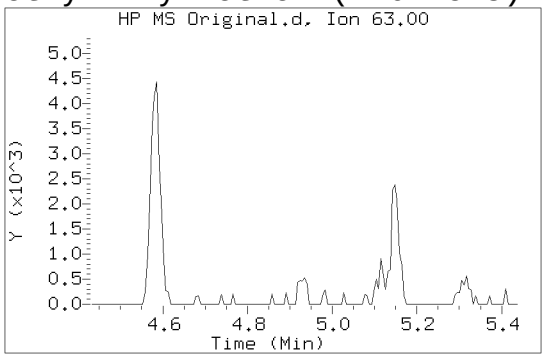
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Inj Date : 04-NOV-2024 14:15
InstruID : ms25.i
LabSampID : 1234

2-Chloroethylvinyl ether (110-75-8)

Reason Code: IH

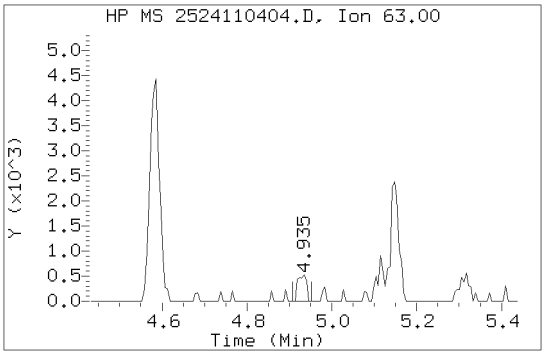
BEFORE

MASS
63
AREA
0
HEIGHT
0
04-Nov-2024
18:25



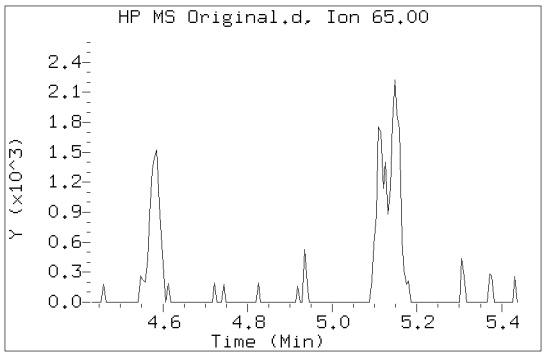
AFTER

MASS
63
AREA
752
HEIGHT
528
04-Nov-2024
18:49



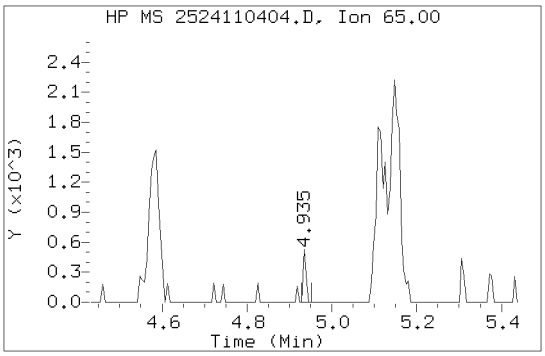
BEFORE

MASS
65
AREA
0
HEIGHT
0
04-Nov-2024
18:25



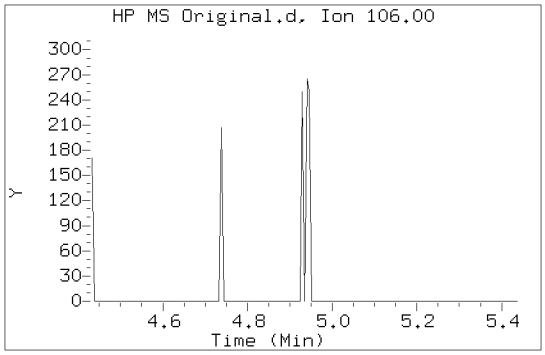
AFTER

MASS
65
AREA
236
HEIGHT
528
04-Nov-2024
18:49



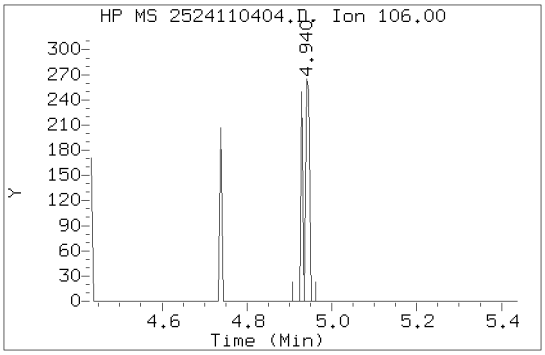
BEFORE

MASS
106
AREA
0
HEIGHT
0
04-Nov-2024
18:25



AFTER

MASS
106
AREA
250
HEIGHT
265
04-Nov-2024
18:49

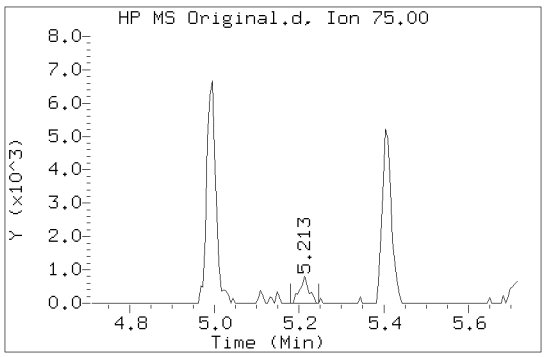


Chloroacetonitrile (107-14-2)

Reason Code: H

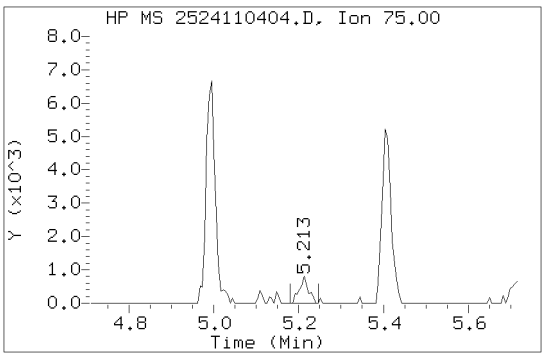
BEFORE

MASS
75
AREA
1203
HEIGHT
803
04-Nov-2024
18:25



AFTER

MASS
75
AREA
1203
HEIGHT
803
04-Nov-2024
18:49



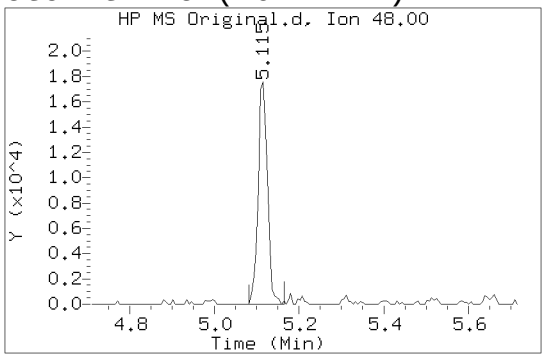
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Inj Date : 04-NOV-2024 14:15
InstruID : ms25.i
LabSampID : 1234

Chloroacetonitrile (107-14-2)

Reason Code: H

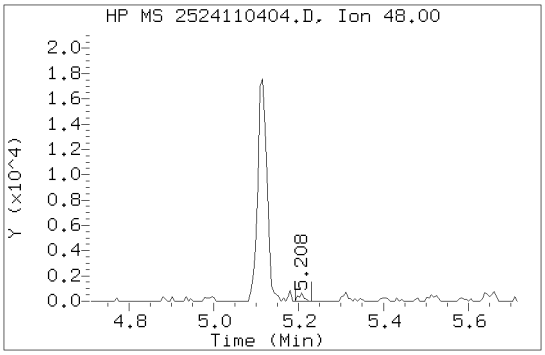
BEFORE

MASS
48
AREA
26919
HEIGHT
17576
04-Nov-2024
18:25



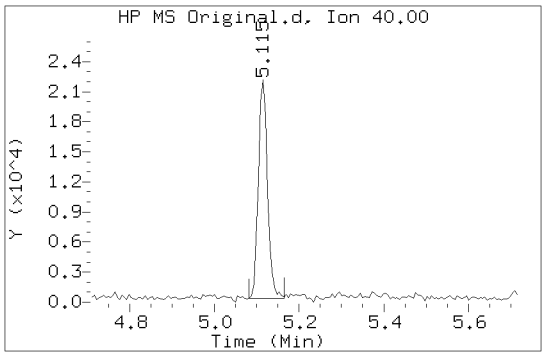
AFTER

MASS
48
AREA
568
HEIGHT
660
04-Nov-2024
18:49



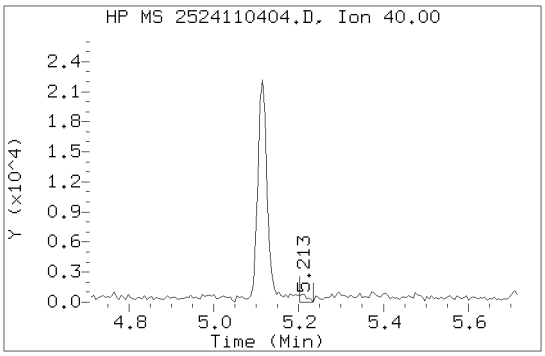
BEFORE

MASS
40
AREA
32725
HEIGHT
21784
04-Nov-2024
18:25



AFTER

MASS
40
AREA
993
HEIGHT
740
04-Nov-2024
18:49

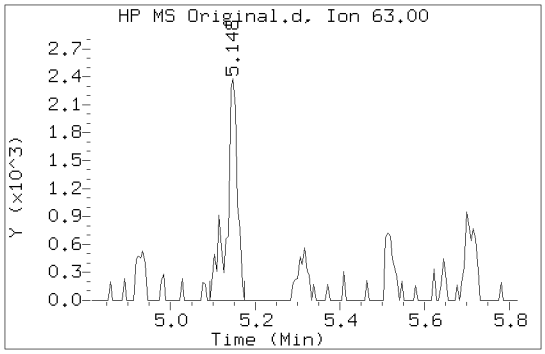


1,1-Dichloro-2-Propanone (513-88-2)

Reason Code: IH

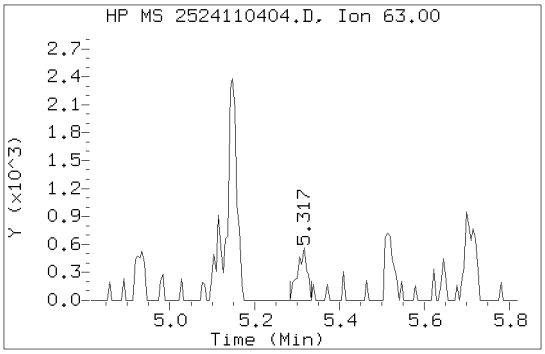
BEFORE

MASS
63
AREA
4212
HEIGHT
2379
04-Nov-2024
18:25



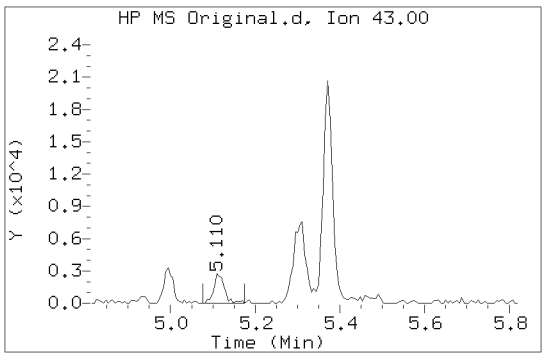
AFTER

MASS
63
AREA
871
HEIGHT
566
04-Nov-2024
18:49



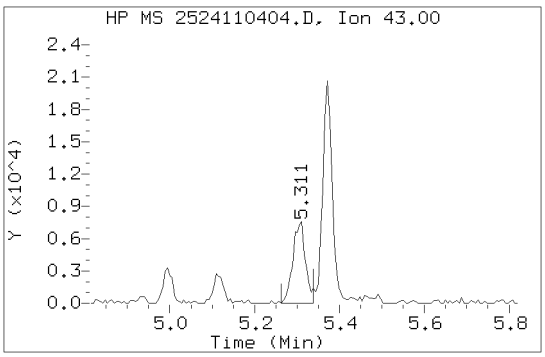
BEFORE

MASS
43
AREA
4799
HEIGHT
2753
04-Nov-2024
18:25



AFTER

MASS
43
AREA
15880
HEIGHT
7557
04-Nov-2024
18:49



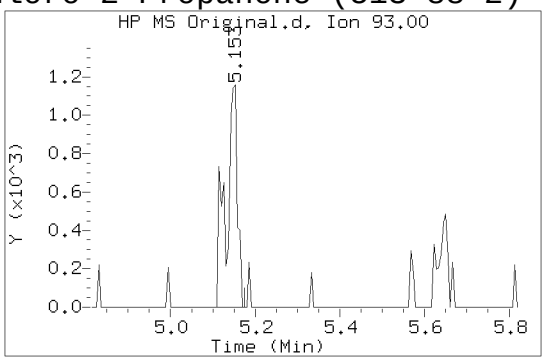
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Inj Date : 04-NOV-2024 14:15
InstruID : ms25.i
LabSampID : 1234

1,1-Dichloro-2-Propanone (513-88-2)

Reason Code: IH

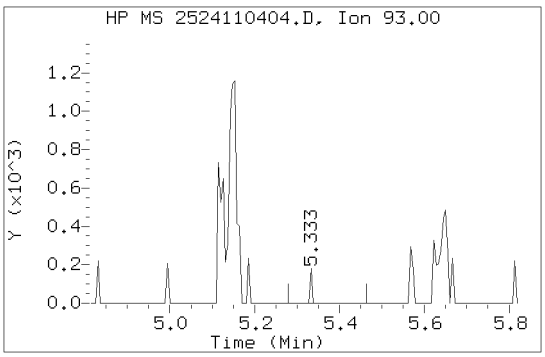
BEFORE

MASS
93
AREA
2141
HEIGHT
1158
04-Nov-2024
18:25



AFTER

MASS
93
AREA
58
HEIGHT
180
04-Nov-2024
18:49

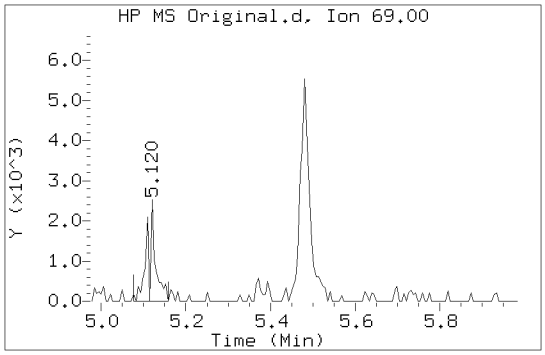


Ethyl Methacrylate (97-63-2)

Reason Code: H

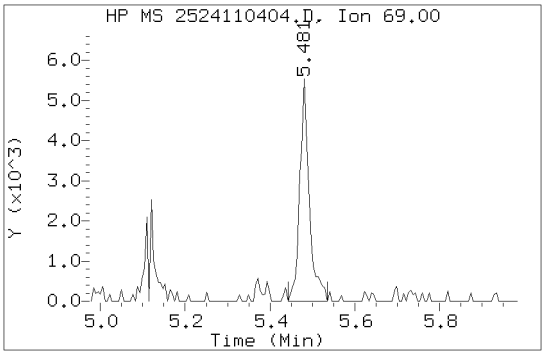
BEFORE

MASS
69
AREA
3320
HEIGHT
2535
04-Nov-2024
18:25



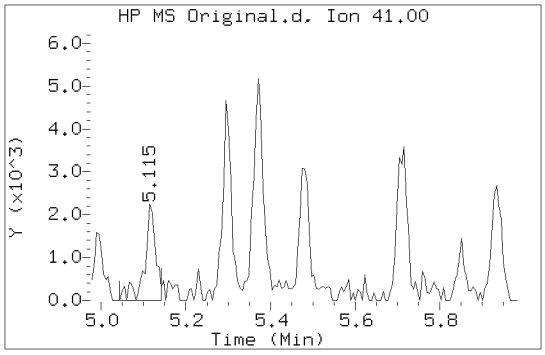
AFTER

MASS
69
AREA
8590
HEIGHT
5539
04-Nov-2024
18:49



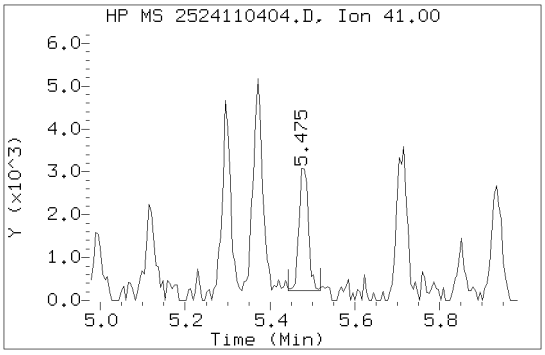
BEFORE

MASS
41
AREA
4170
HEIGHT
2248
04-Nov-2024
18:25



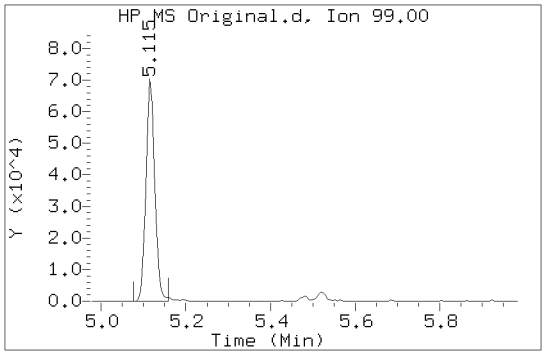
AFTER

MASS
41
AREA
4434
HEIGHT
2856
04-Nov-2024
18:49



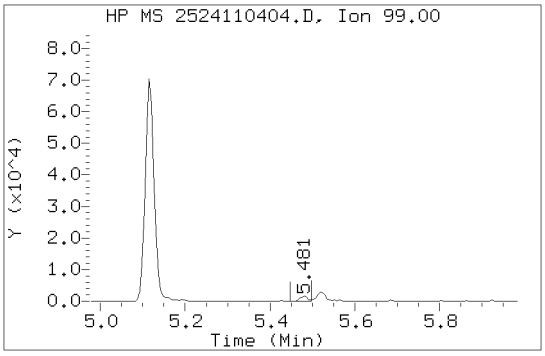
BEFORE

MASS
99
AREA
102566
HEIGHT
70392
04-Nov-2024
18:25



AFTER

MASS
99
AREA
1986
HEIGHT
1533
04-Nov-2024
18:49

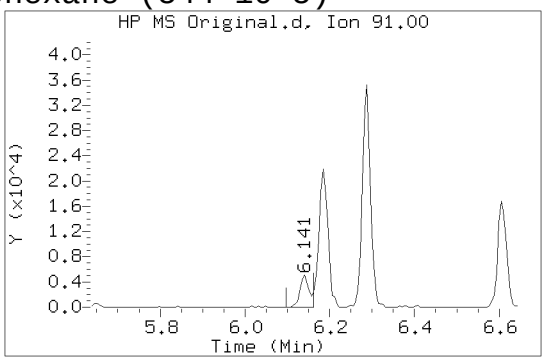


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InstruID : ms25.i
LabSampID : 1234

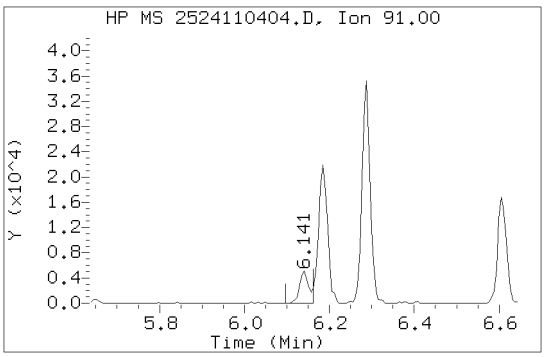
1-Chlorohexane (544-10-5)

Reason Code: MP

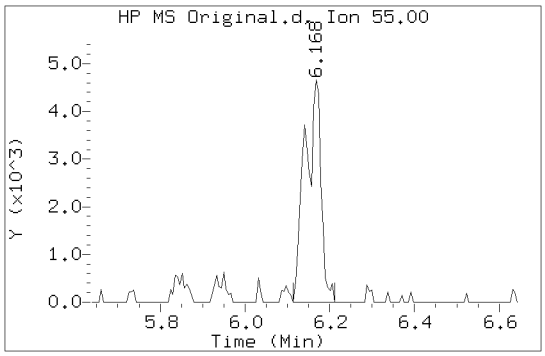
BEFORE
MASS
91
AREA
7971
HEIGHT
5103
04-Nov-2024
18:25



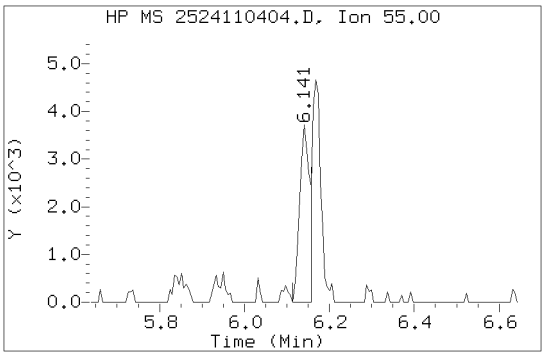
AFTER
MASS
91
AREA
7971
HEIGHT
5103
04-Nov-2024
18:49



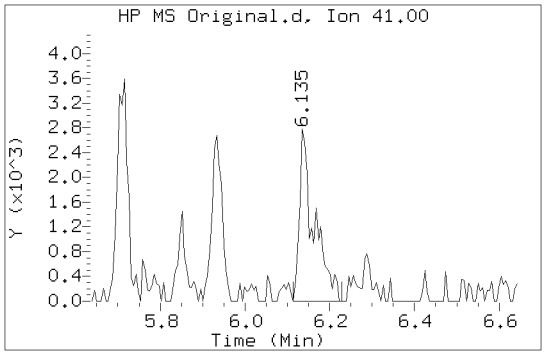
BEFORE
MASS
55
AREA
12216
HEIGHT
4660
04-Nov-2024
18:25



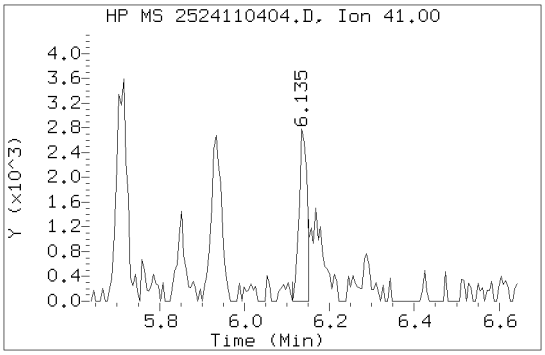
AFTER
MASS
55
AREA
6114
HEIGHT
3715
04-Nov-2024
18:49



BEFORE
MASS
41
AREA
6622
HEIGHT
2784
04-Nov-2024
18:25



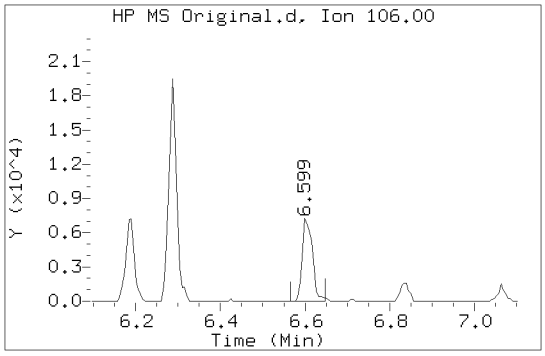
AFTER
MASS
41
AREA
3677
HEIGHT
2784
04-Nov-2024
18:49



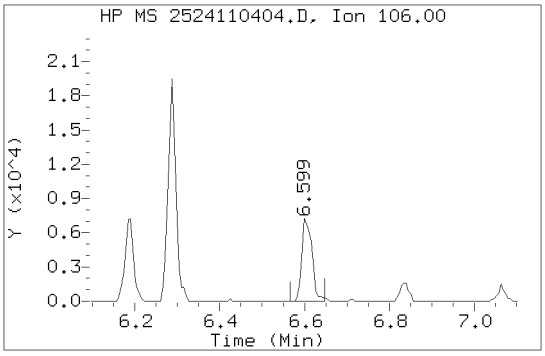
o-Xylene (95-47-6)

Reason Code: MP

BEFORE
MASS
106
AREA
12092
HEIGHT
7288
04-Nov-2024
18:25



AFTER
MASS
106
AREA
12092
HEIGHT
7288
04-Nov-2024
18:49



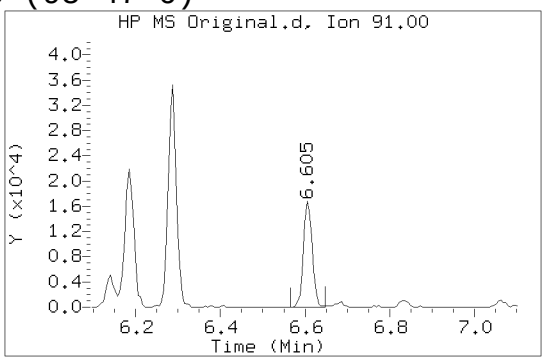
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110404.D
Inj Date : 04-NOV-2024 14:15
InstruID : ms25.i
LabSampID : 1234

o-Xylene (95-47-6)

Reason Code: MP

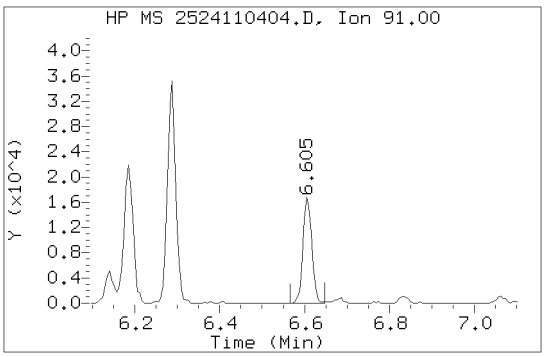
BEFORE

MASS
91
AREA
24355
HEIGHT
16824
04-Nov-2024
18:25



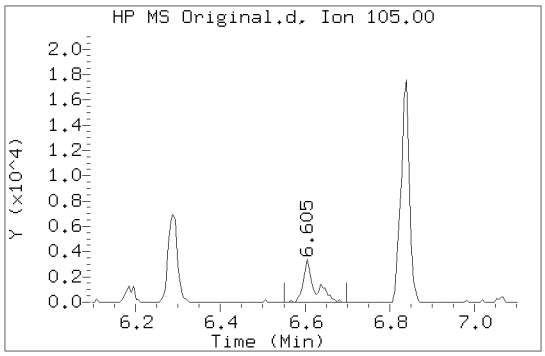
AFTER

MASS
91
AREA
24355
HEIGHT
16824
04-Nov-2024
18:49



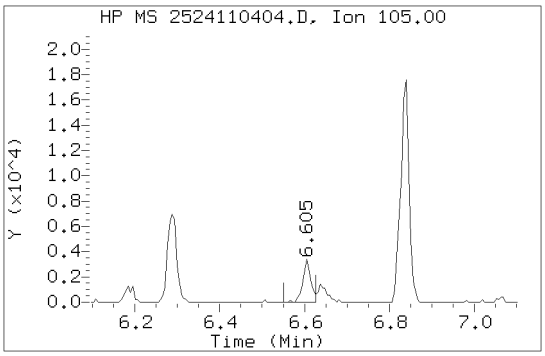
BEFORE

MASS
105
AREA
6540
HEIGHT
3404
04-Nov-2024
18:25



AFTER

MASS
105
AREA
4510
HEIGHT
3404
04-Nov-2024
18:49

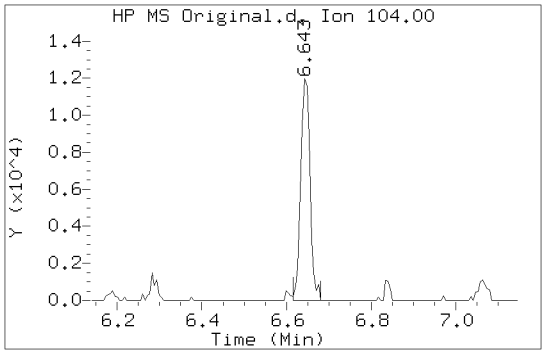


Styrene (100-42-5)

Reason Code: H

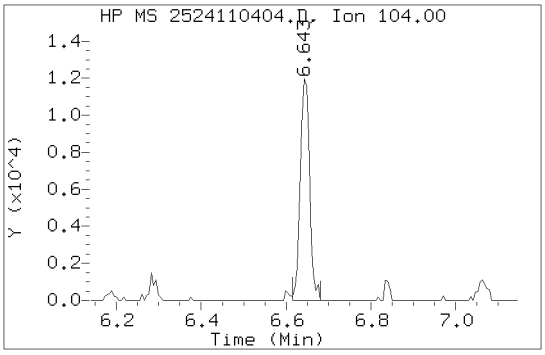
BEFORE

MASS
104
AREA
18463
HEIGHT
11973
04-Nov-2024
18:25



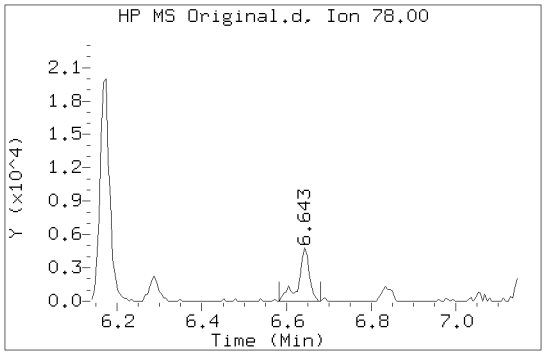
AFTER

MASS
104
AREA
18463
HEIGHT
11973
04-Nov-2024
18:49



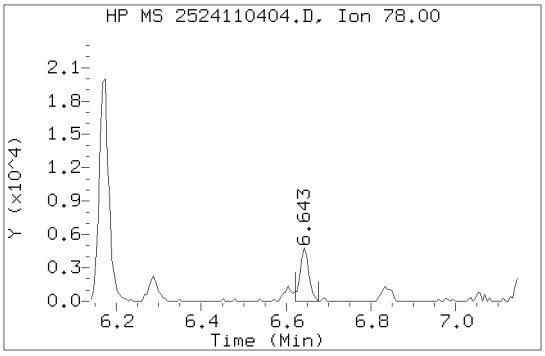
BEFORE

MASS
78
AREA
8596
HEIGHT
4797
04-Nov-2024
18:25



AFTER

MASS
78
AREA
6940
HEIGHT
4794
04-Nov-2024
18:49



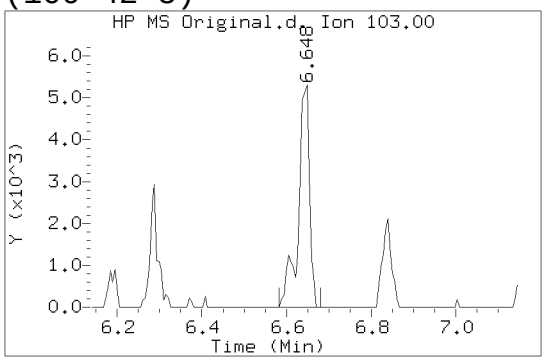
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110404.D
Inj Date : 04-NOV-2024 14:15
InstruID : ms25.i
LabSampID : 1234

Styrene (100-42-5)

Reason Code: H

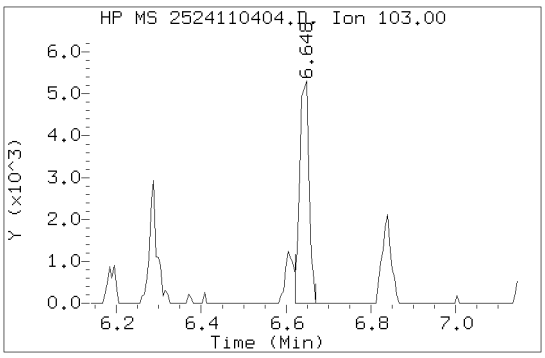
BEFORE

MASS
103
AREA
9850
HEIGHT
5310
04-Nov-2024
18:25



AFTER

MASS
103
AREA
8325
HEIGHT
5308
04-Nov-2024
18:49

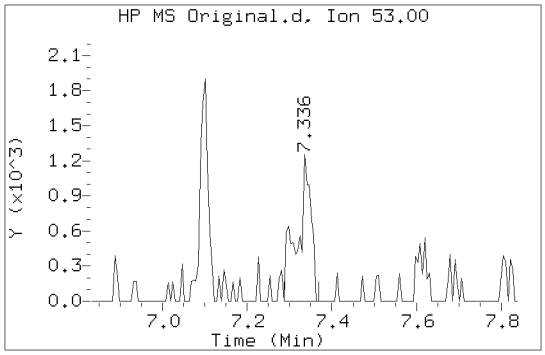


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: H

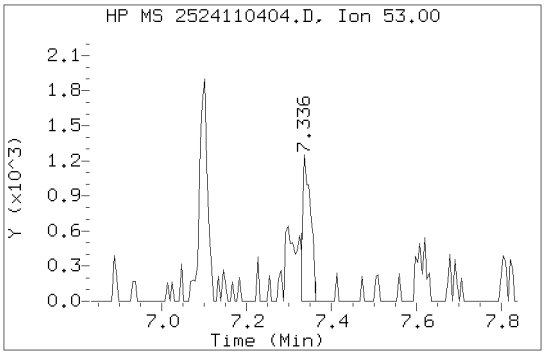
BEFORE

MASS
53
AREA
2788
HEIGHT
1250
04-Nov-2024
18:25



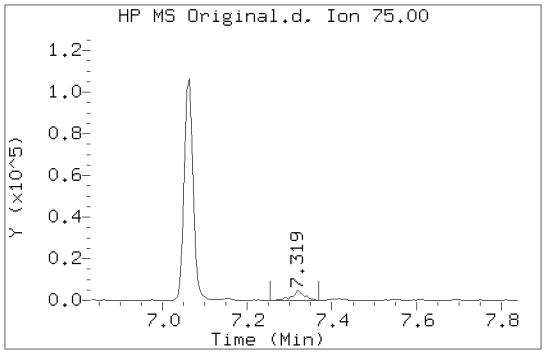
AFTER

MASS
53
AREA
1605
HEIGHT
1250
04-Nov-2024
18:49



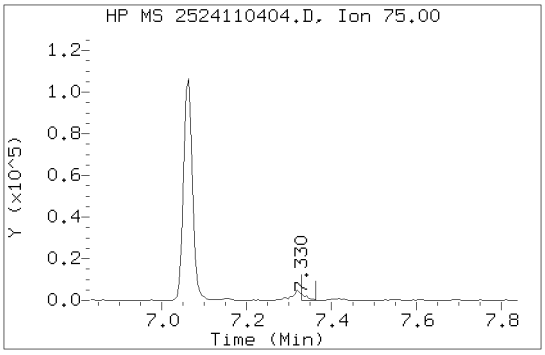
BEFORE

MASS
75
AREA
9467
HEIGHT
4809
04-Nov-2024
18:25



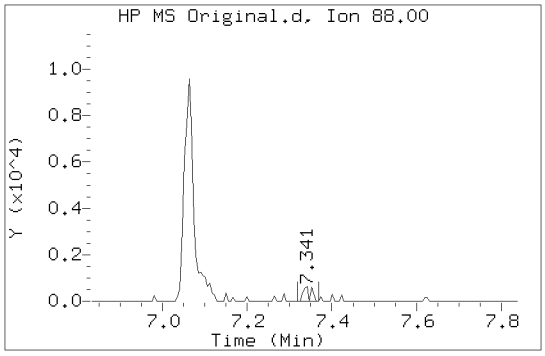
AFTER

MASS
75
AREA
3065
HEIGHT
3141
04-Nov-2024
18:49



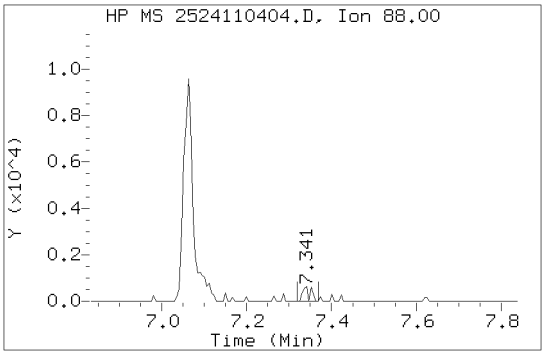
BEFORE

MASS
88
AREA
794
HEIGHT
640
04-Nov-2024
18:25



AFTER

MASS
88
AREA
794
HEIGHT
640
04-Nov-2024
18:49

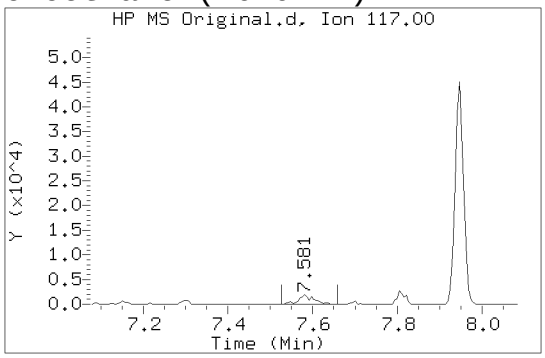


Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110404.D
Inj Date : 04-NOV-2024 14:15
InstruID : ms25.i
LabSampID : 1234

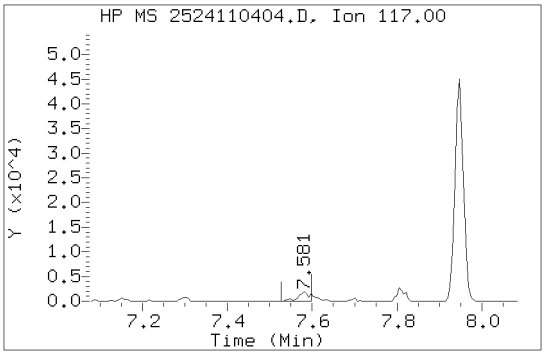
Pentachloroethane (76-01-7)

Reason Code: MP

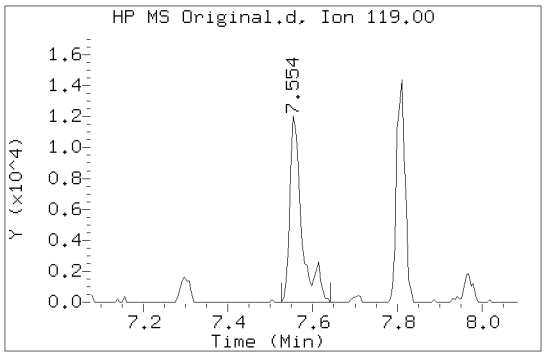
BEFORE
MASS
117
AREA
4647
HEIGHT
1890
04-Nov-2024
18:25



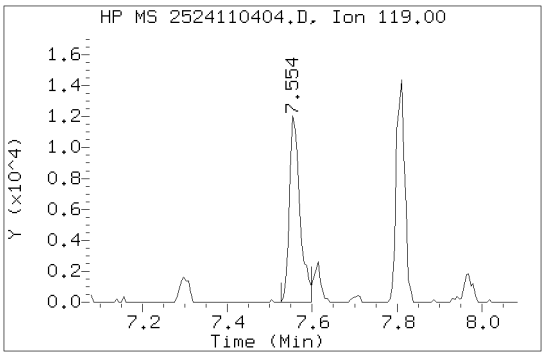
AFTER
MASS
117
AREA
3502
HEIGHT
1890
04-Nov-2024
18:49



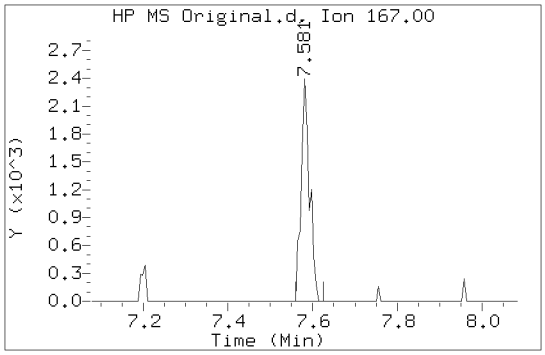
BEFORE
MASS
119
AREA
23800
HEIGHT
12075
04-Nov-2024
18:25



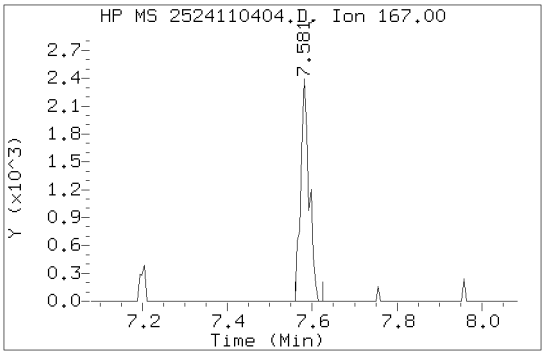
AFTER
MASS
119
AREA
20925
HEIGHT
12075
04-Nov-2024
18:49



BEFORE
MASS
167
AREA
3299
HEIGHT
2393
04-Nov-2024
18:25



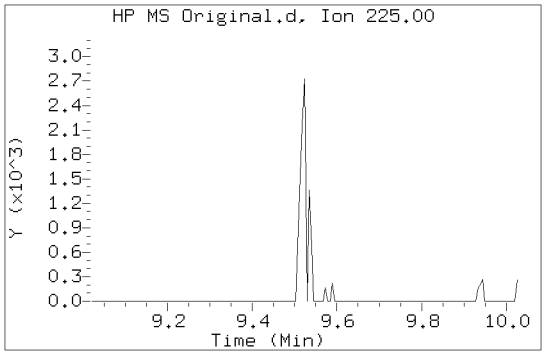
AFTER
MASS
167
AREA
3299
HEIGHT
2393
04-Nov-2024
18:49



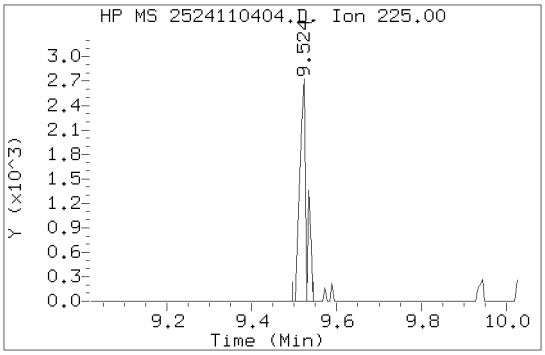
Hexachlorobutadiene (87-68-3)

Reason Code: IH

BEFORE
MASS
225
AREA
0
HEIGHT
0
04-Nov-2024
18:25



AFTER
MASS
225
AREA
2993
HEIGHT
2726
04-Nov-2024
18:49



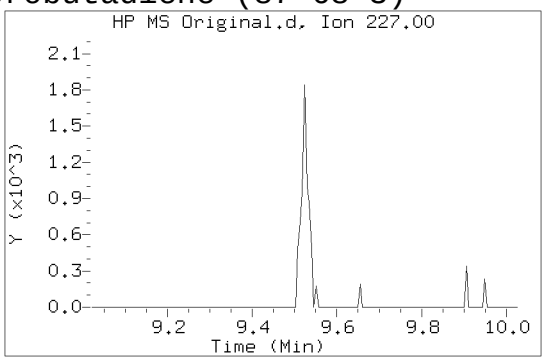
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110404.D
Inj Date : 04-NOV-2024 14:15
InstruID : ms25.i
LabSampID : 1234

Hexachlorobutadiene (87-68-3)

Reason Code: IH

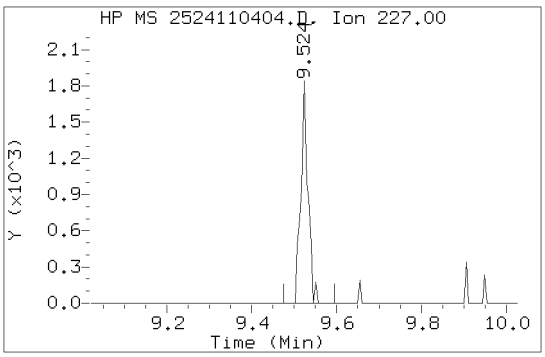
BEFORE

MASS
227
AREA
0
HEIGHT
0
04-Nov-2024
18:25



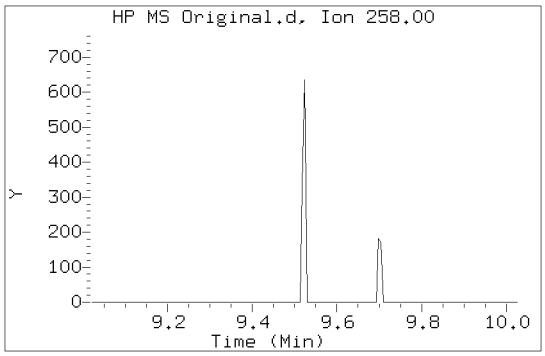
AFTER

MASS
227
AREA
2132
HEIGHT
1841
04-Nov-2024
18:49



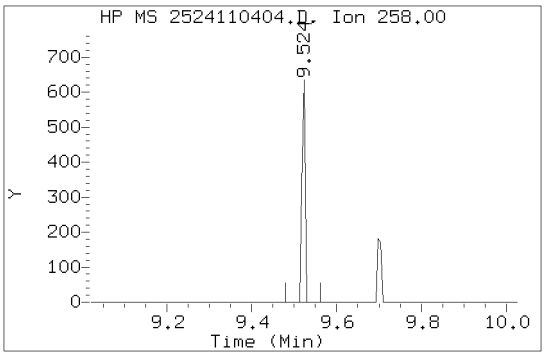
BEFORE

MASS
258
AREA
0
HEIGHT
0
04-Nov-2024
18:25



AFTER

MASS
258
AREA
316
HEIGHT
635
04-Nov-2024
18:49



UNASSIGNED PEAK REPORT

Report Date: 11/05/2024 04:10
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241104.b/252411040
Inj Date: 04-NOV-2024 14:15
Operator: TMP

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110405.D
Lab Smp Id: 1235
Inj Date : 04-NOV-2024 14:36
Operator : TMP Inst ID: ms25.i
Smp Info : 1235;;1;1;2;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\25-8260b09.m
Meth Date : 04-Nov-2024 19:36 pdk Quant Type: ISTD
Cal Date : 04-NOV-2024 14:36 Cal File: 2524110405.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.497	1.497	(0.359)	41003	5.00000	4.01975	
2	Chloromethane	50	1.644	1.645	(0.394)	40986	5.00000	4.37504	
3	Vinyl Chloride	62	1.704	1.705	(0.409)	49831	5.00000	4.27371	
4	Bromomethane	94	1.922	1.923	(0.461)	44784	5.00000	4.00285	
5	Chloroethane	64	2.004	2.005	(0.481)	38055	5.00000	4.49755	
6	Pentane	41	2.091	2.097	(0.502)	30547	5.00000	4.96536	
7	Trichlorofluoromethane	101	2.097	2.097	(0.503)	67188	5.00000	4.31978	
8	Dichlorofluoromethane	67	2.124	2.125	(0.509)	71096	5.00000	4.49410	
9	Ethyl Ether	74	2.277	2.278	(0.546)	20499	5.00000	4.27197	
10	1,1-Dichloroethene	61	2.413	2.409	(0.579)	39278	5.00000	4.38486	
11	Freon 113	101	2.424	2.419	(0.581)	24627	5.00000	4.41007	
12	Carbon Disulfide	76	2.446	2.447	(0.587)	79897	5.00000	4.21853	
13	Iodomethane	127	2.506	2.507	(0.601)	6538	5.00000	2.56635	
14	Acrolein	56	2.599	2.605	(0.623)	24842	25.0000	20.7062	
15	Isopropyl Alcohol	45	2.648	2.654	(0.635)	11319	25.0000	25.1353	
16	3-Chloro-1-propene	41	2.675	2.676	(0.642)	30912	5.00000	4.04421	
17	Methylene Chloride	84	2.741	2.736	(0.657)	36335	5.00000	4.42558	
18	Acetone	58	2.757	2.752	(0.661)	18053	25.0000	21.5502	
19	Methyl acetate	74	2.817	2.818	(0.676)	6986	5.00000	4.45693(Q)	
20	trans-1,2-Dichloroethene	61	2.828	2.823	(0.678)	41967	5.00000	4.48891	
21	Hexane	57	2.866	2.867	(0.687)	55236	5.00000	4.45891	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	2.872	2.878	(0.689)	99058	5.00000	4.33734	
	23 tert.- Butyl Alcohol	59	2.893	2.900	(0.694)	20438	25.0000	24.8628	
	24 Acetonitrile	41	3.019	3.020	(0.724)	24427	25.0000	25.1766(M)	MP
	25 Diisopropyl ether	45	3.062	3.063	(0.734)	97151	5.00000	4.46985	
	26 Chloroprene	53	3.150	3.151	(0.755)	43069	5.00000	4.36092(M)	MP
	27 1,1-Dichloroethane	63	3.166	3.162	(0.759)	58142	5.00000	4.35516	
	28 Acrylonitrile	53	3.188	3.189	(0.765)	71628	25.0000	21.5458(M)	MP
	29 Ethyl tert-butyl ether	59	3.264	3.265	(0.783)	100176	5.00000	4.21269	
	30 n-Propanol	41	3.259	3.260	(0.782)	20665	50.0000	46.9220(Q)	
	31 Vinyl Acetate	86	3.281	3.271	(0.787)	7136	5.00000	3.81690	
	32 cis-1,2-Dichloroethene	61	3.461	3.462	(0.830)	46379	5.00000	4.52188(M)	I
	33 2,2-Dichloropropane	77	3.521	3.522	(0.844)	37238	5.00000	4.16613	
	34 Bromochloromethane	128	3.575	3.571	(0.857)	20987	5.00000	4.65021	
	35 Cyclohexane	84	3.586	3.587	(0.860)	41908	5.00000	4.28245	
	36 Chloroform	83	3.597	3.598	(0.863)	66754	5.00000	4.49507	
	37 Ethyl Acetate	43	3.635	3.631	(0.872)	31000	5.00000	4.17357	
	38 Methyl acrylate	55	3.652	3.658	(0.876)	29246	5.00000	3.96574(Q)	
	39 Carbon Tetrachloride	117	3.701	3.696	(0.887)	33090	5.00000	3.88467(M)	MP
$	41 Dibromofluoromethane	113	3.701	3.702	(0.887)	264029	30.0000	29.0474	
	40 Tetrahydrofuran	42	3.695	3.702	(0.886)	50506	25.0000	22.1544	
	42 1,1,1-Trichloroethane	97	3.734	3.729	(0.895)	45835	5.00000	4.30198	
	43 2-Butanone	72	3.761	3.762	(0.902)	25412	25.0000	22.6362(QM)	MP
	44 1,1-Dichloropropene	75	3.794	3.795	(0.910)	40759	5.00000	4.25030	
	45 1-Chlorobutane	41	3.815	3.816	(0.915)	27683	5.00000	4.50683	
	46 Heptane	71	3.886	3.876	(0.932)	20141	5.00000	4.72315	
	47 Benzene	78	3.941	3.942	(0.945)	142494	5.00000	4.56593	
	48 Propionitrile	54	3.941	3.942	(0.945)	26491	25.0000	20.6670(M)	MP
	49 Methacrylonitrile	67	3.952	3.953	(0.948)	17122	5.00000	4.29327	
	50 tert-Amyl methyl ether	73	3.974	3.975	(0.953)	96322	5.00000	4.28111	
	54 Isobutyl alcohol	42	3.985	3.996	(0.956)	9374	50.0000	44.8506(QM)	MP
$	51 1,2-Dichloroethane-d4	65	4.012	4.013	(0.962)	301017	30.0000	29.8372(M)	MP
	52 1,2-Dichloroethane	62	4.050	4.056	(0.971)	48060	5.00000	4.43510	
	53 tert-Amyl Alcohol	59	4.056	4.062	(0.973)	12939	25.0000	21.4758	
*	55 Fluorobenzene	96	4.170	4.166	(1.000)	1020795	30.0000		
	56 Diisobutylene	57	4.170	4.171	(1.000)	95407	5.00000	5.83998	
	57 Trichloroethene	95	4.268	4.269	(1.024)	33031	5.00000	4.23722	
	58 Methyl cyclohexane	83	4.274	4.275	(0.693)	46816	5.00000	4.59798	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.047)	69763	5.00000	4.02399	
	60 Dibromomethane	93	4.525	4.526	(1.085)	24317	5.00000	4.34395	
	61 1,2-Dichloropropane	63	4.585	4.586	(1.099)	35799	5.00000	4.43421	
	62 Bromodichloromethane	83	4.601	4.602	(1.103)	44007	5.00000	4.26608	
	63 Methyl methacrylate	41	4.667	4.668	(1.119)	24181	5.00000	3.86164	
	64 1,4-Dioxane	88	4.716	4.717	(1.131)	13816	125.000	119.365	
	65 2-Chloroethylvinyl ether	63	4.929	4.935	(1.182)	6322	5.00000	2.56656	
	66 cis-1,3-Dichloropropene	75	4.989	4.995	(0.809)	50279	5.00000	4.01848	
	67 Octane	85	5.000	5.000	(0.811)	16666	5.00000	4.70513	
$	68 Toluene-d8	98	5.114	5.115	(0.829)	1039757	30.0000	30.9514	
	69 Toluene	92	5.147	5.153	(0.835)	84585	5.00000	4.53950	
	70 Chloroacetonitrile	75	5.207	5.213	(0.844)	8342	25.0000	18.3822(M)	H
	71 2-Nitropropane	41	5.294	5.295	(0.858)	32342	25.0000	17.4595	
	72 1,1-Dichloro-2-Propanone	63	5.316	5.317	(0.862)	3332	25.0000	18.8848(QM)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.871)	167206	25.0000	21.4249	
	75 trans-1,3-Dichloropropene	75	5.403	5.404	(0.876)	46122	5.00000	3.89605	
	74 Tetrachloroethene	164	5.409	5.404	(0.877)	32038	5.00000	4.58860	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	76 Ethyl Methacrylate	69	5.480	5.481	(0.889)	43245	5.00000	3.90998	
	77 1,1,2-Trichloroethane	83	5.518	5.524	(0.895)	30946	5.00000	4.68917	
	78 Chlorodibromomethane	129	5.649	5.650	(0.916)	32923	5.00000	3.94480	
	79 1,3-Dichloropropane	76	5.709	5.710	(0.926)	57102	5.00000	4.40031	
	80 1,2-Dibromoethane	107	5.829	5.830	(0.945)	33777	5.00000	4.32959	
	81 2-Hexanone	43	5.933	5.933	(0.962)	111301	25.0000	21.0918	
	82 1-Chlorohexane	91	6.140	6.141	(0.996)	40115	5.00000	4.47067	
*	83 Chlorobenzene-d5	82	6.167	6.168	(1.000)	411038	30.0000		
	84 Chlorobenzene	112	6.184	6.184	(1.003)	95596	5.00000	4.53685	
	85 Ethylbenzene	106	6.184	6.190	(1.003)	47069	5.00000	4.33376	
	86 1,1,1,2-Tetrachloroethane	131	6.216	6.223	(1.008)	30704	5.00000	4.23488	
	87 mp-Xylene	106	6.287	6.288	(1.019)	110832	10.0000	8.53349	
	88 o-Xylene	106	6.609	6.599	(1.072)	56009	5.00000	4.39675(M)	MP
	89 Styrene	104	6.642	6.643	(0.836)	87901	5.00000	4.35437(M)	MP
	90 Bromoform	173	6.680	6.681	(0.841)	20647	5.00000	3.88739	
	91 Isopropylbenzene	105	6.833	6.839	(0.860)	121739	5.00000	4.62354	
M	100 1,2-Dichloroethene, Total	61				88346	10.0000	9.01079	
$	92 4-Bromofluorobenzene	174	7.062	7.063	(0.889)	284111	30.0000	30.8983	
	93 Bromobenzene	156	7.155	7.150	(0.900)	37804	5.00000	4.49632	
	94 n-Propylbenzene	120	7.155	7.150	(0.900)	34802	5.00000	4.35631	
	95 1,1,2,2-Tetrachloroethane	83	7.204	7.205	(0.907)	42005	5.00000	4.63533	
	96 o-Chlorotoluene	91	7.286	7.287	(0.917)	107667	5.00000	4.62361	
	97 1,3,5-Trimethylbenzene	105	7.297	7.298	(0.918)	105439	5.00000	4.49344	
	98 1,2,3-Trichloropropane	110	7.324	7.319	(0.922)	12910	5.00000	4.54334	
	99 trans-1,4-Dichloro-2-butene	53	7.346	7.336	(0.924)	10016	5.00000	4.13687(M)	MP
	101 p-Chlorotoluene	91	7.417	7.418	(0.933)	93532	5.00000	4.44970	
	102 tert-Butylbenzene	134	7.559	7.565	(0.951)	25774	5.00000	4.67873(M)	MP
	103 Pentachloroethane	117	7.586	7.581	(0.955)	21327	5.00000	4.58024(M)	MP
	104 1,2,4-Trimethylbenzene	105	7.608	7.614	(0.957)	103943	5.00000	4.40731	
	105 sec-Butylbenzene	105	7.695	7.701	(0.968)	128068	5.00000	4.56735	
	106 p-Isopropyltoluene	134	7.810	7.805	(0.983)	27000	5.00000	4.31864	
	107 1,3-Dichlorobenzene	146	7.886	7.887	(0.992)	63317	5.00000	4.51526	
*	108 1,4-Dichlorobenzene-d4	152	7.946	7.947	(1.000)	351224	30.0000		
	109 1,4-Dichlorobenzene	146	7.962	7.963	(1.002)	63871	5.00000	4.41359	
	110 Benzyl Chloride	126	8.153	8.148	(1.026)	8890	5.00000	3.50673(Q)	
	111 n-Butylbenzene	134	8.159	8.154	(1.027)	22917	5.00000	4.20981	
	112 Hexachloroethane	117	8.284	8.285	(1.043)	17656	5.00000	4.23407	
	113 1,2-Dichlorobenzene	146	8.312	8.307	(1.046)	63609	5.00000	4.65101	
	114 1,2-Dibromo-3-chloropropane	75	8.977	8.973	(1.130)	6413	5.00000	4.46563	
	115 Nitrobenzene	77	9.457	9.469	(1.190)	11537	50.0000	33.1659	
	116 Hexachlorobutadiene	225	9.523	9.524	(1.198)	16307	5.00000	4.70609(M)	IH
M	120 1,3-Dichloropropene, Total	75				96401	10.0000	7.91452	
	117 1,2,4-Trichlorobenzene	180	9.556	9.551	(1.203)	35042	5.00000	4.18850	
M	121 Total Xylenes	106				166841	15.0000	12.9302	
	118 Naphthalene	128	9.828	9.824	(1.237)	86709	5.00000	3.87464	
	119 1,2,3-Trichlorobenzene	180	9.981	9.982	(1.256)	35901	5.00000	4.28167	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

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Date : 04-NOV-2024 14:36

Client ID:

Instrument: ms25.i

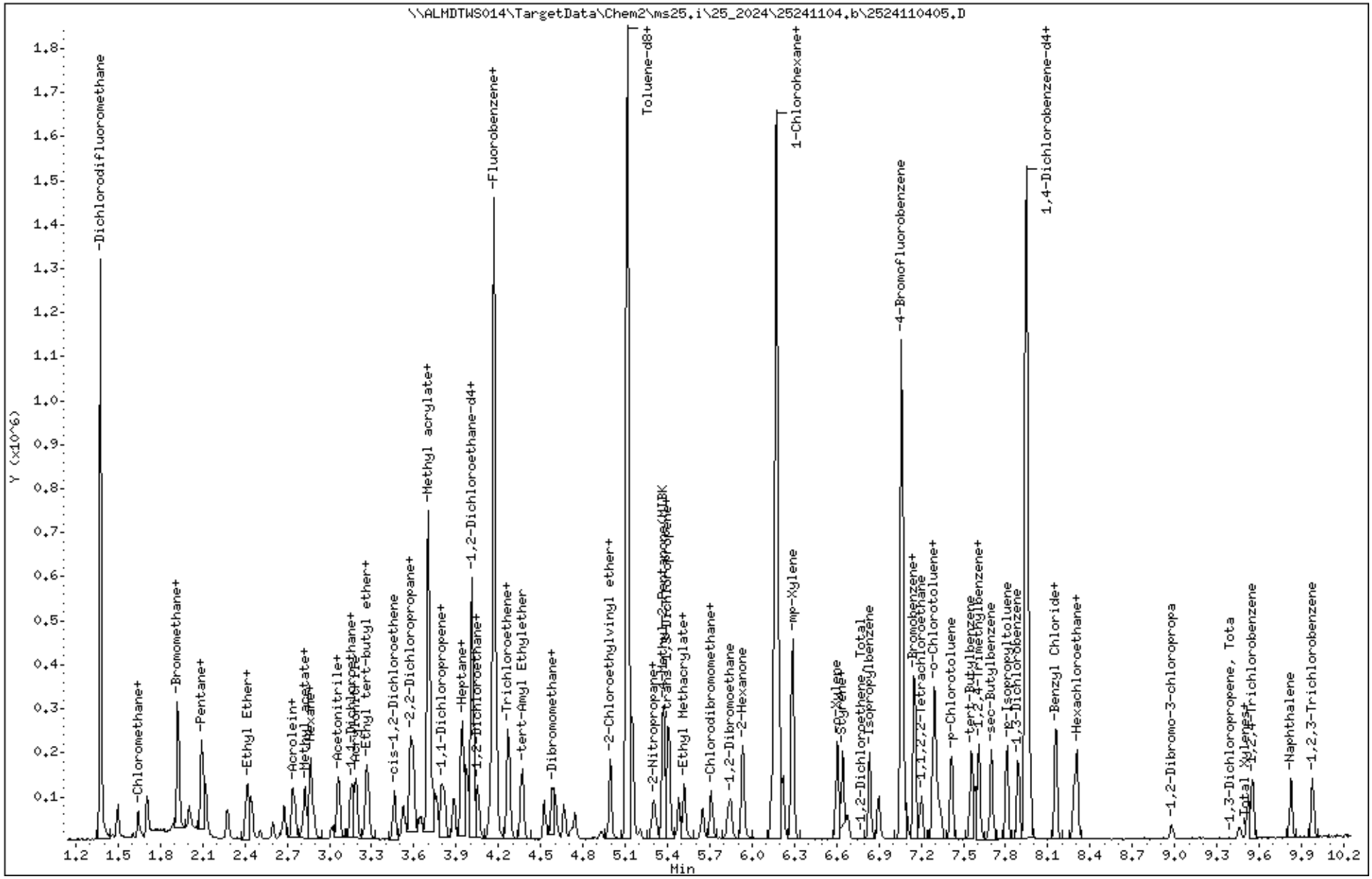
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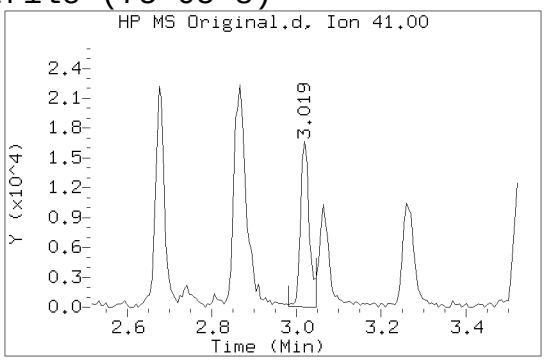


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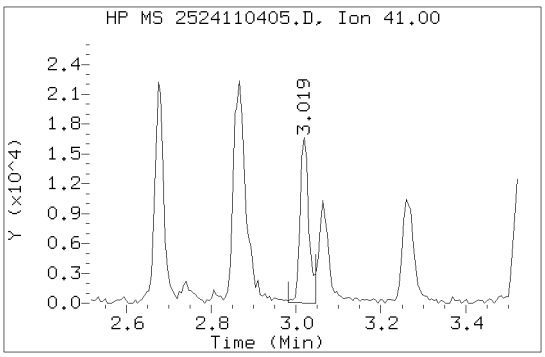
Acetonitrile (75-05-8)

Reason Code: MP

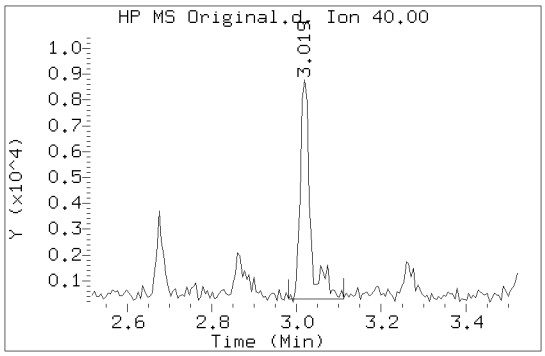
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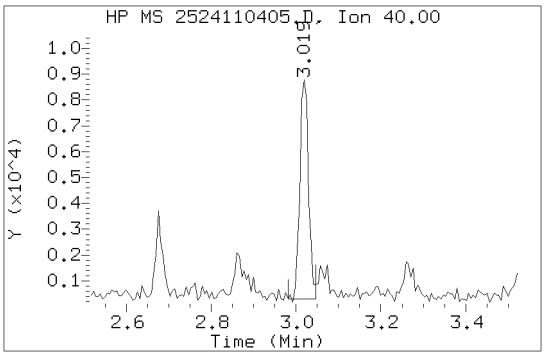
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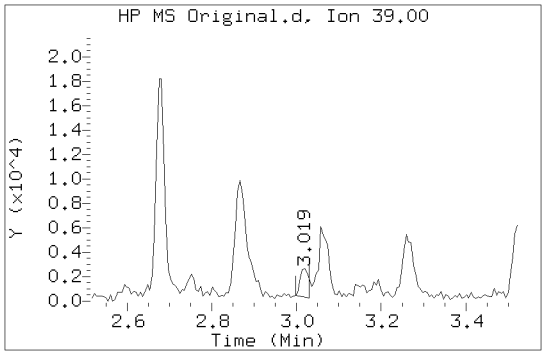
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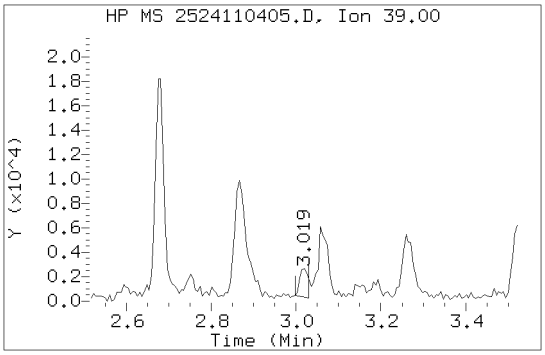
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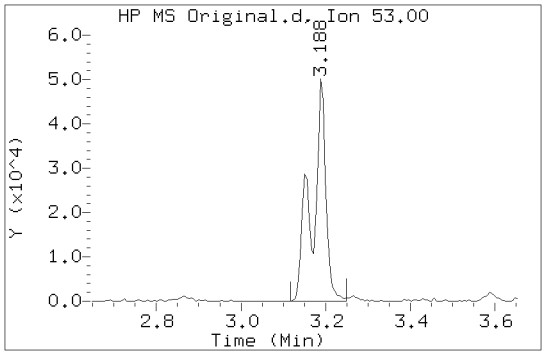
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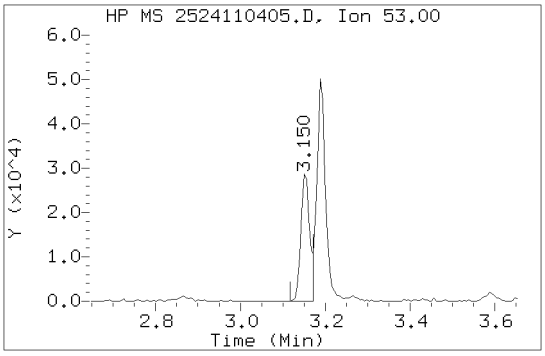
Chloroprene (126-99-8)

Reason Code: MP

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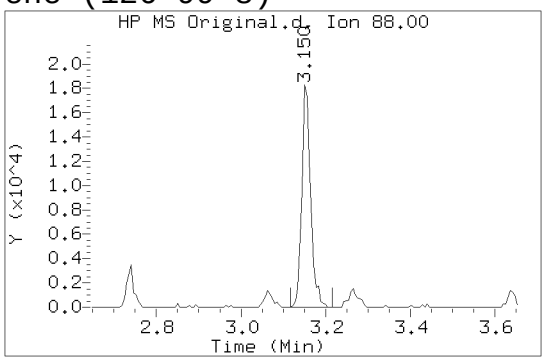


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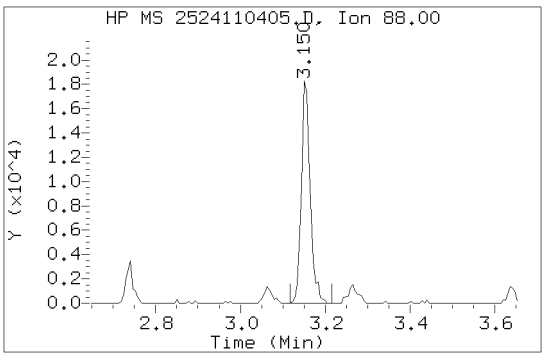
Chloroprene (126-99-8)

Reason Code: MP

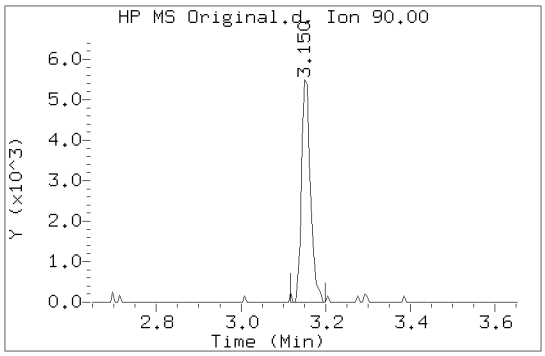
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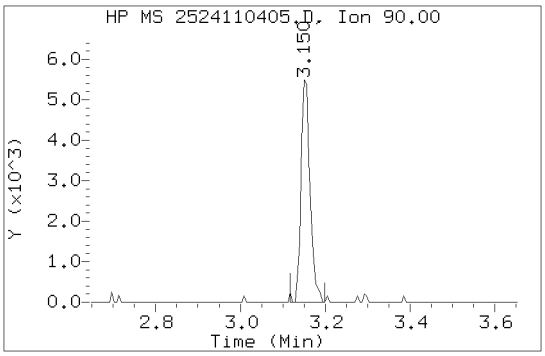
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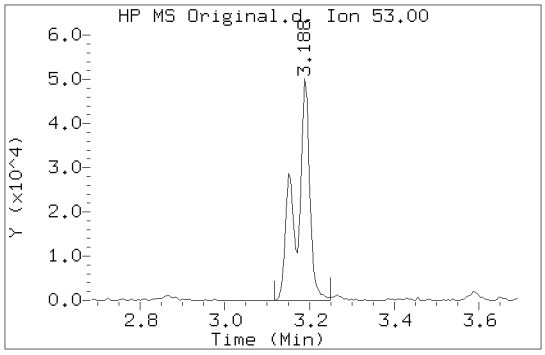
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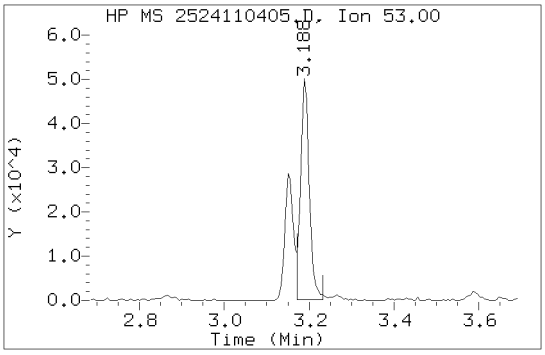
Acrylonitrile (107-13-1)

Reason Code: MP

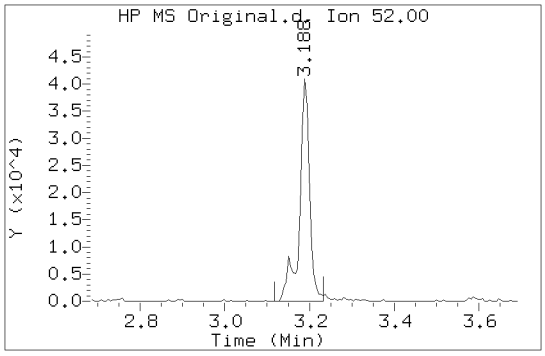
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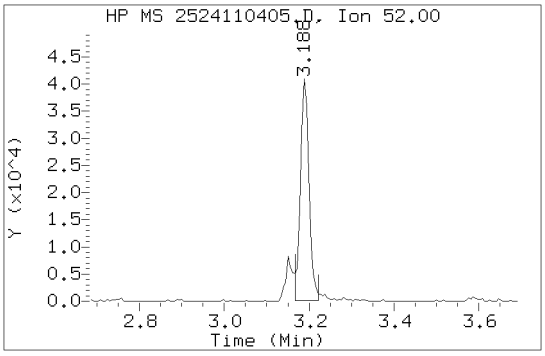
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18:25



BEFORE
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18:15



AFTER
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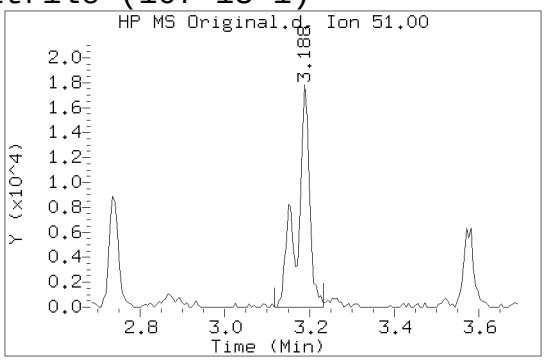
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Acrylonitrile (107-13-1)

Reason Code: MP

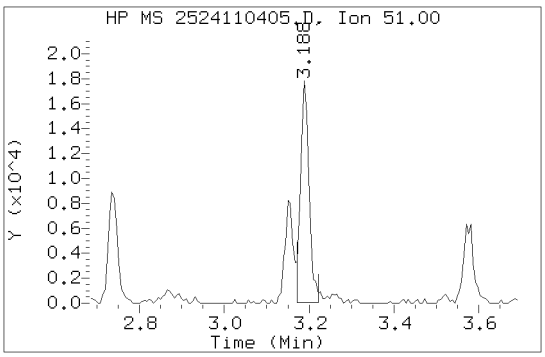
BEFORE

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AFTER

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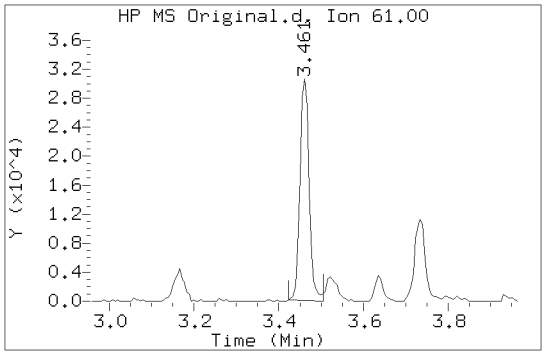


cis-1,2-Dichloroethene (156-59-2)

Reason Code: I

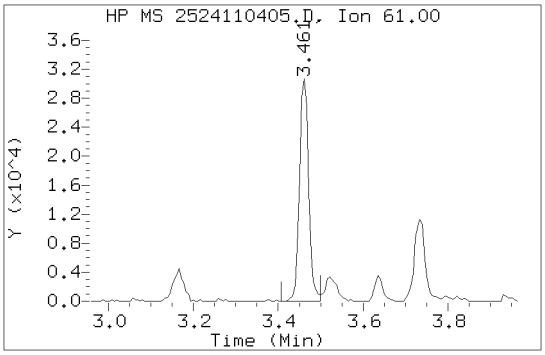
BEFORE

MASS
61
AREA
46188
HEIGHT
30544
04-Nov-2024
18:15



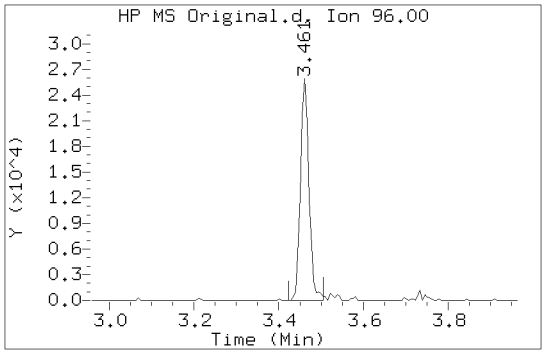
AFTER

MASS
61
AREA
46379
HEIGHT
30656
04-Nov-2024
18:25



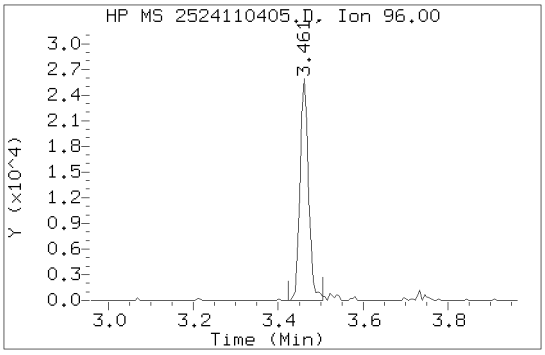
BEFORE

MASS
96
AREA
36251
HEIGHT
25912
04-Nov-2024
18:15



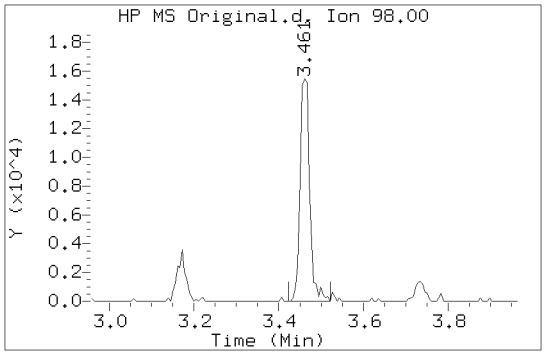
AFTER

MASS
96
AREA
36251
HEIGHT
25912
04-Nov-2024
18:25



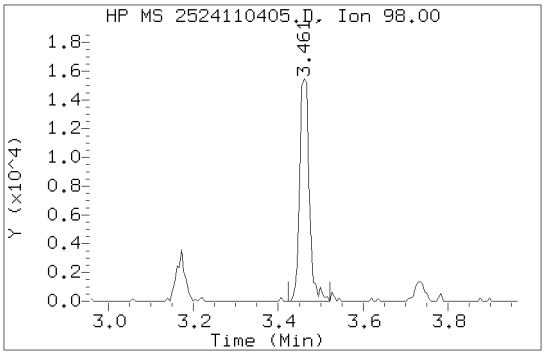
BEFORE

MASS
98
AREA
24574
HEIGHT
15455
04-Nov-2024
18:15



AFTER

MASS
98
AREA
24574
HEIGHT
15455
04-Nov-2024
18:25

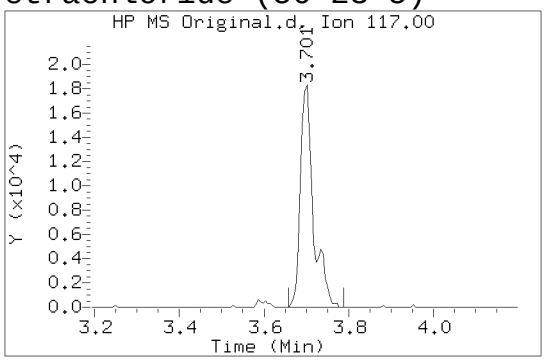


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Inj Date : 04-NOV-2024 14:36
InstruID : ms25.i
LabSampID : 1235

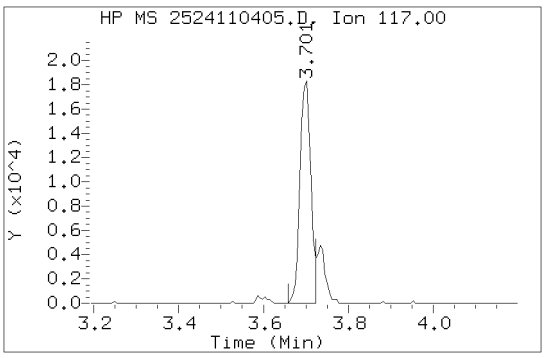
Carbon Tetrachloride (56-23-5)

Reason Code: MP

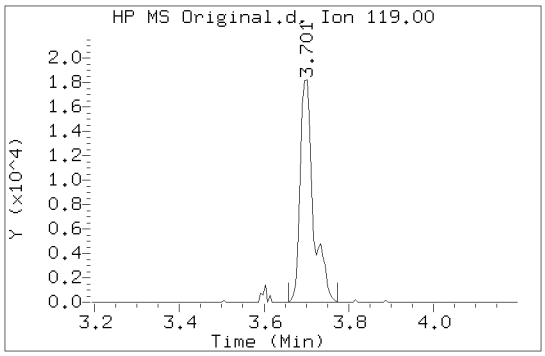
BEFORE
MASS
117
AREA
39301
HEIGHT
18320
04-Nov-2024
18:15



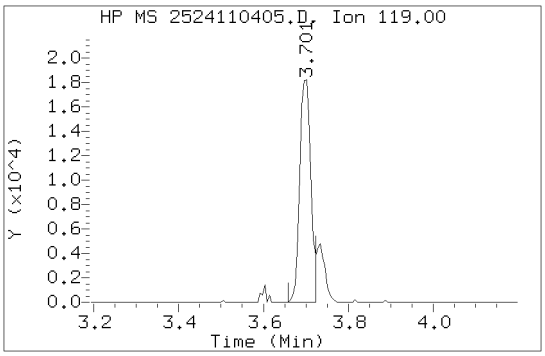
AFTER
MASS
117
AREA
33090
HEIGHT
18320
04-Nov-2024
18:25



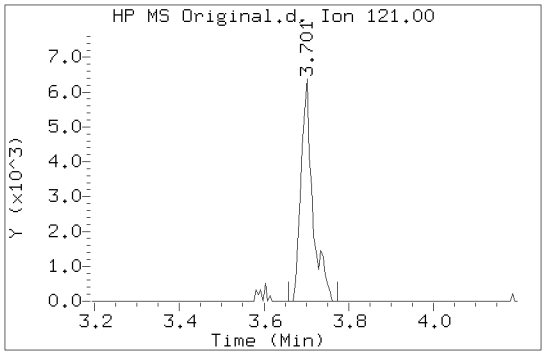
BEFORE
MASS
119
AREA
39653
HEIGHT
18216
04-Nov-2024
18:15



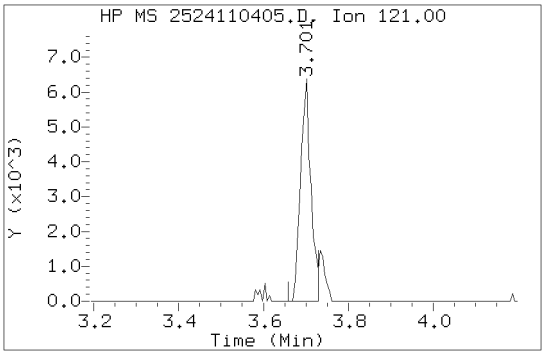
AFTER
MASS
119
AREA
33619
HEIGHT
18216
04-Nov-2024
18:25



BEFORE
MASS
121
AREA
12204
HEIGHT
6377
04-Nov-2024
18:15



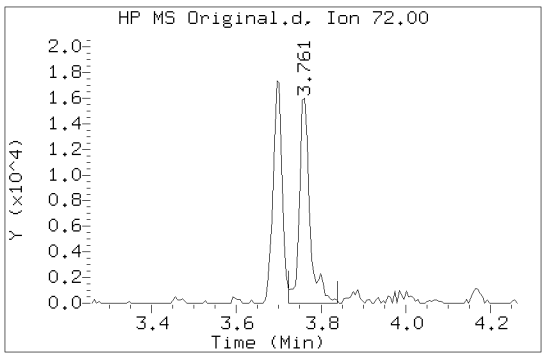
AFTER
MASS
121
AREA
10823
HEIGHT
6377
04-Nov-2024
18:25



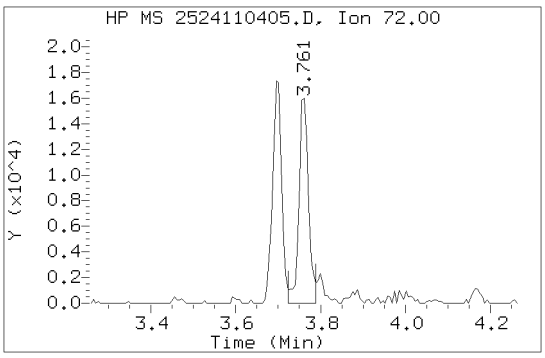
2-Butanone (78-93-3)

Reason Code: MP

BEFORE
MASS
72
AREA
28026
HEIGHT
16016
04-Nov-2024
18:15



AFTER
MASS
72
AREA
25412
HEIGHT
16016
04-Nov-2024
18:25



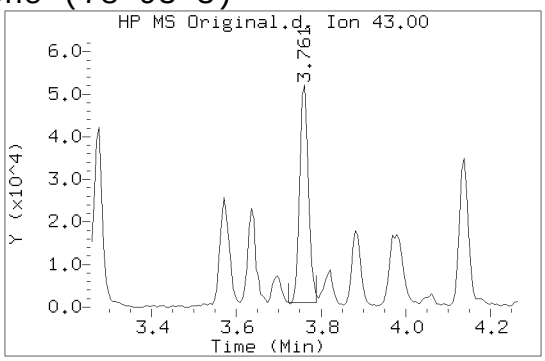
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Inj Date : 04-NOV-2024 14:36
InstruID : ms25.i
LabSampID : 1235

2-Butanone (78-93-3)

Reason Code: MP

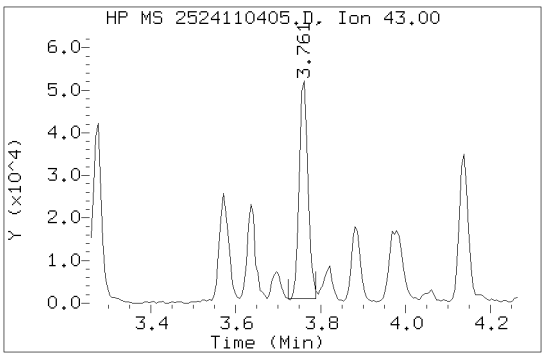
BEFORE

MASS
43
AREA
73720
HEIGHT
51162
04-Nov-2024
18:15



AFTER

MASS
43
AREA
73720
HEIGHT
51162
04-Nov-2024
18:25

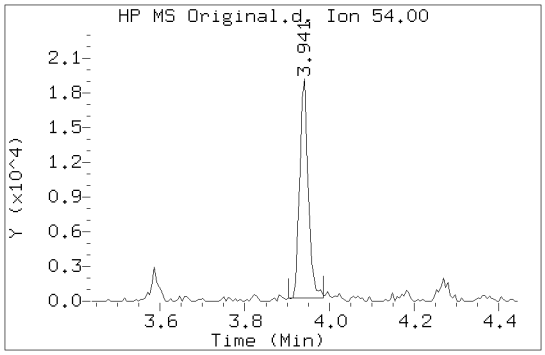


Propionitrile (107-12-0)

Reason Code: MP

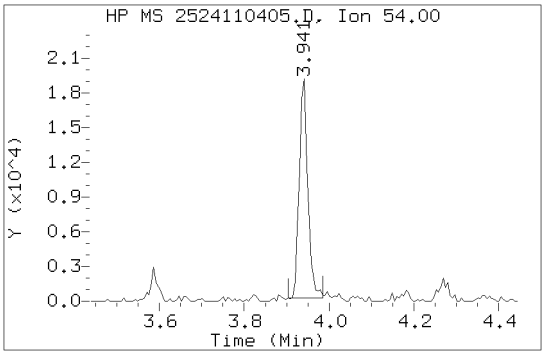
BEFORE

MASS
54
AREA
26491
HEIGHT
18917
04-Nov-2024
18:15



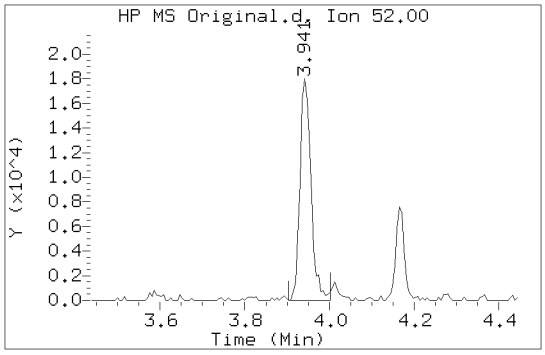
AFTER

MASS
54
AREA
26491
HEIGHT
18917
04-Nov-2024
18:25



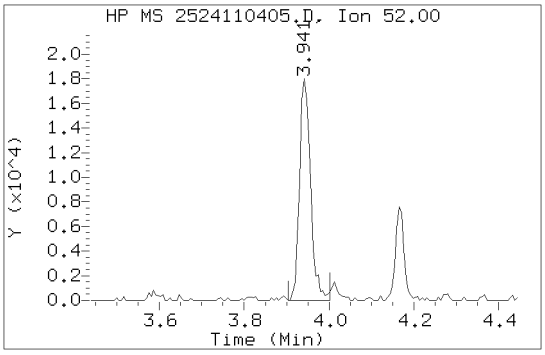
BEFORE

MASS
52
AREA
32885
HEIGHT
18008
04-Nov-2024
18:15



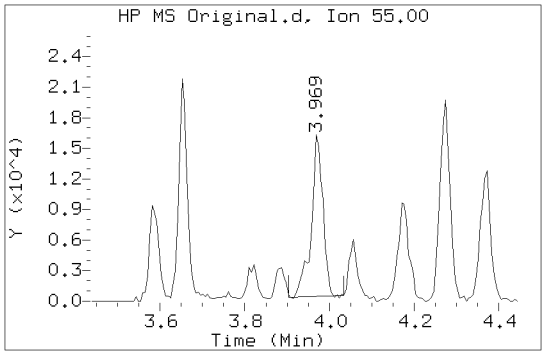
AFTER

MASS
52
AREA
32885
HEIGHT
18008
04-Nov-2024
18:25



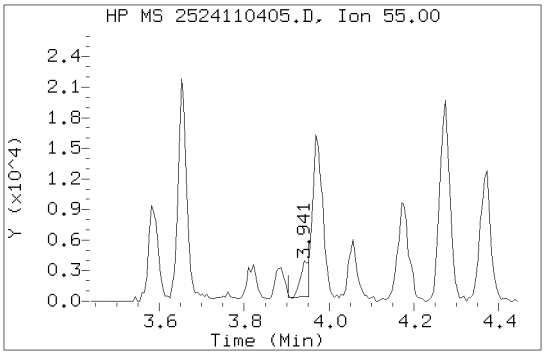
BEFORE

MASS
55
AREA
29826
HEIGHT
15817
04-Nov-2024
18:15



AFTER

MASS
55
AREA
4943
HEIGHT
3494
04-Nov-2024
18:25

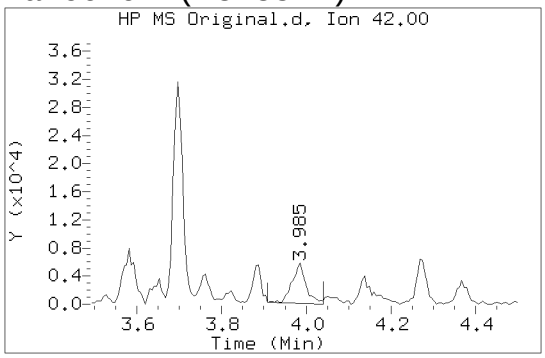


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LabSampID : 1235

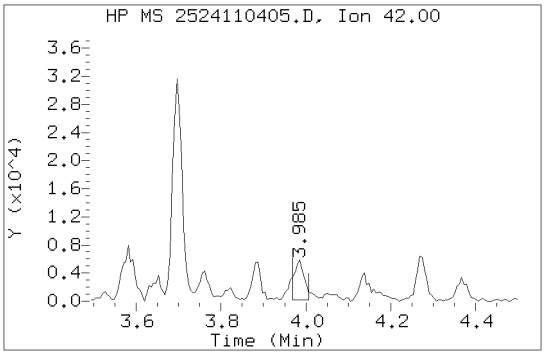
Isobutyl alcohol (78-83-1)

Reason Code: MP

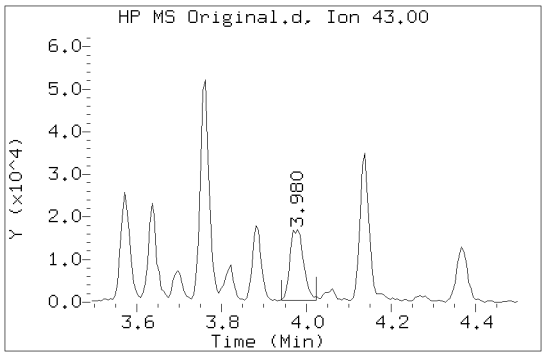
BEFORE
MASS
42
AREA
13202
HEIGHT
5728
04-Nov-2024
18:15



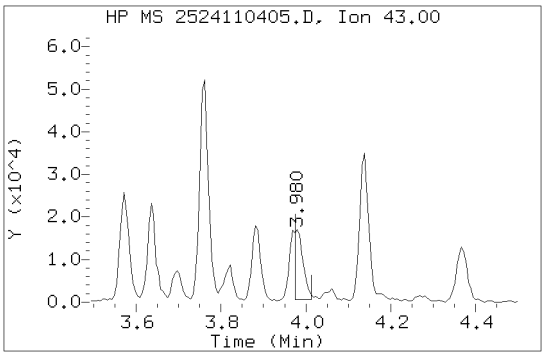
AFTER
MASS
42
AREA
9374
HEIGHT
5687
04-Nov-2024
18:25



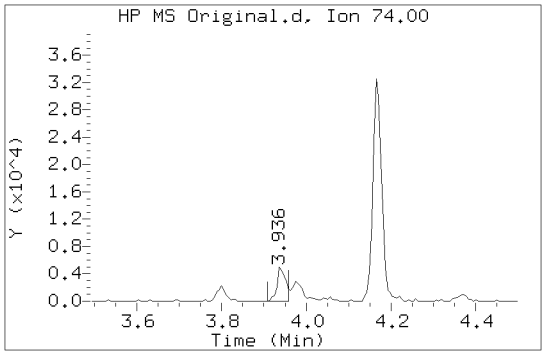
BEFORE
MASS
43
AREA
37056
HEIGHT
16568
04-Nov-2024
18:15



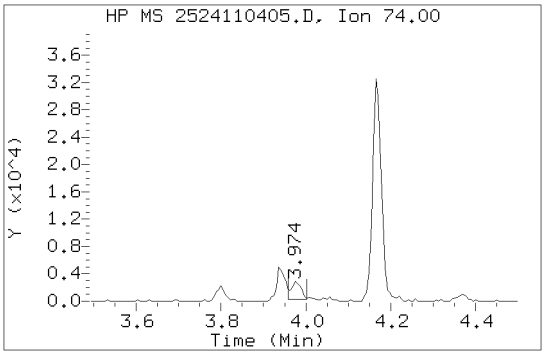
AFTER
MASS
43
AREA
23651
HEIGHT
16364
04-Nov-2024
18:25



BEFORE
MASS
74
AREA
7150
HEIGHT
5001
04-Nov-2024
18:15



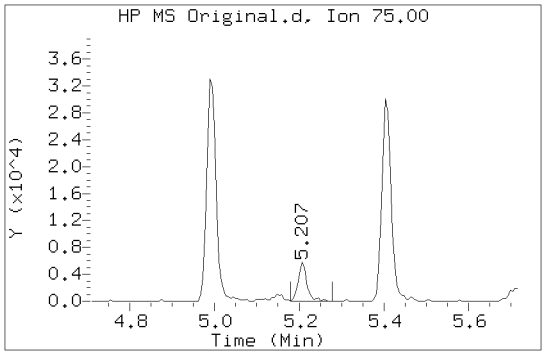
AFTER
MASS
74
AREA
4382
HEIGHT
2649
04-Nov-2024
18:25



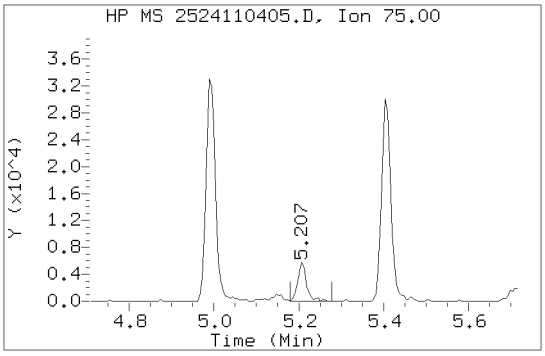
Chloroacetonitrile (107-14-2)

Reason Code: H

BEFORE
MASS
75
AREA
8342
HEIGHT
5819
04-Nov-2024
18:15



AFTER
MASS
75
AREA
8342
HEIGHT
5819
04-Nov-2024
18:25

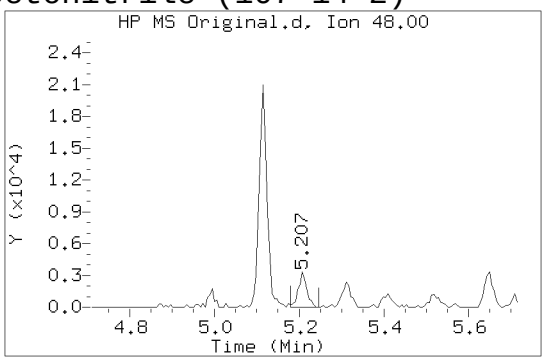


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InstruID : ms25.i
LabSampID : 1235

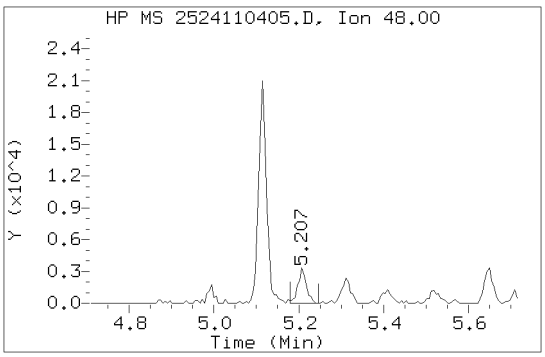
Chloroacetonitrile (107-14-2)

Reason Code: H

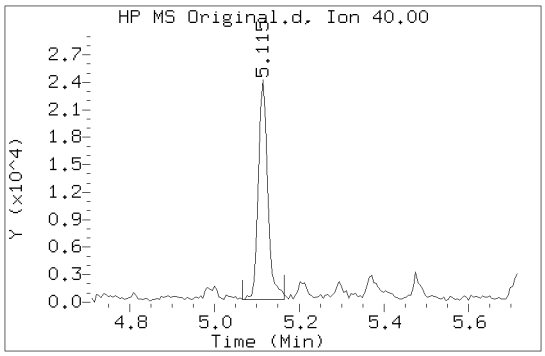
BEFORE
MASS
48
AREA
4560
HEIGHT
3366
04-Nov-2024
18:15



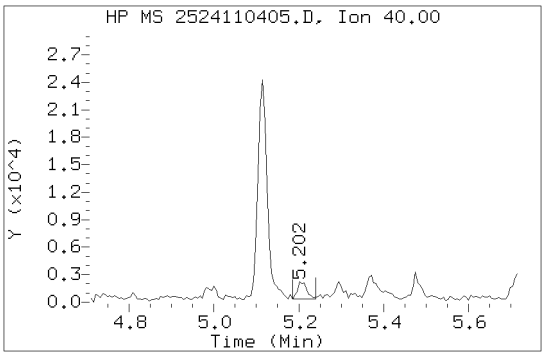
AFTER
MASS
48
AREA
4560
HEIGHT
3366
04-Nov-2024
18:25



BEFORE
MASS
40
AREA
37031
HEIGHT
23960
04-Nov-2024
18:15



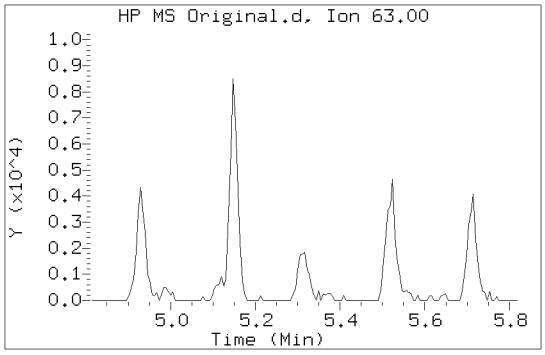
AFTER
MASS
40
AREA
2984
HEIGHT
1931
04-Nov-2024
18:25



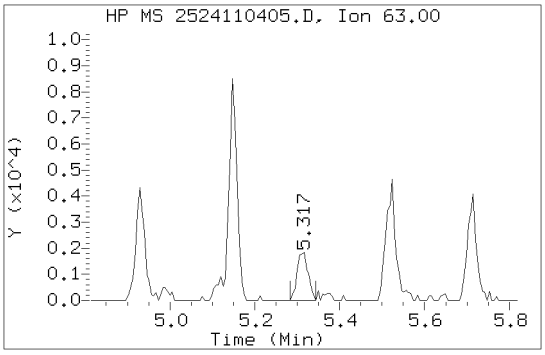
1,1-Dichloro-2-Propanone (513-88-2)

Reason Code:

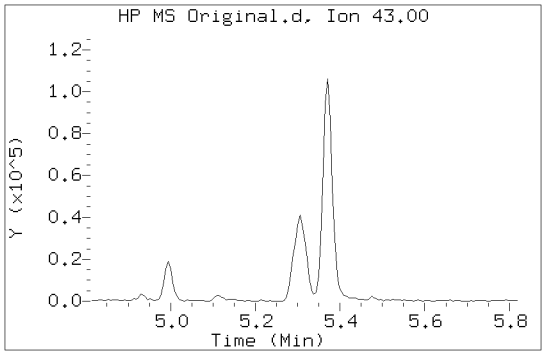
BEFORE
MASS
63
AREA
0
HEIGHT
0
04-Nov-2024
18:15



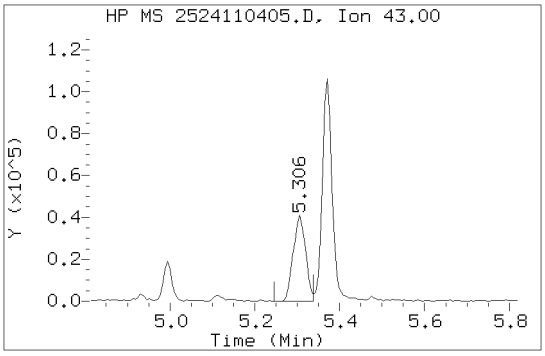
AFTER
MASS
63
AREA
3332
HEIGHT
1850
04-Nov-2024
18:25



BEFORE
MASS
43
AREA
0
HEIGHT
0
04-Nov-2024
18:15



AFTER
MASS
43
AREA
83772
HEIGHT
41152
04-Nov-2024
18:25



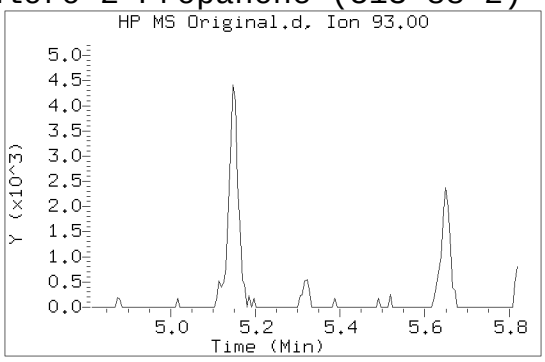
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Inj Date : 04-NOV-2024 14:36
InstruID : ms25.i
LabSampID : 1235

1,1-Dichloro-2-Propanone (513-88-2)

Reason Code:

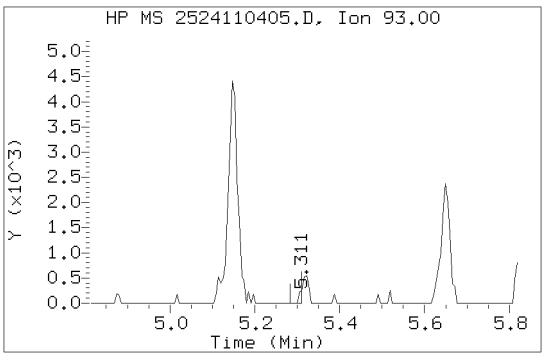
BEFORE

MASS
93
AREA
0
HEIGHT
0
04-Nov-2024
18:15



AFTER

MASS
93
AREA
155
HEIGHT
242
04-Nov-2024
18:25

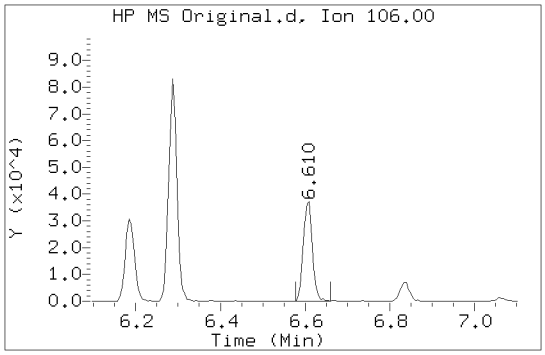


o-Xylene (95-47-6)

Reason Code: MP

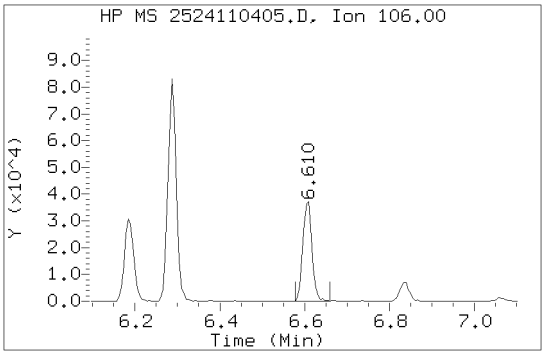
BEFORE

MASS
106
AREA
56009
HEIGHT
37240
04-Nov-2024
18:15



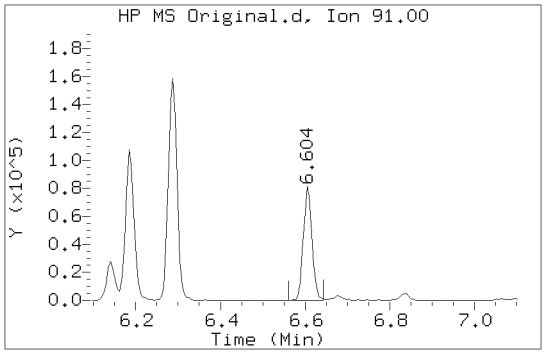
AFTER

MASS
106
AREA
56009
HEIGHT
37240
04-Nov-2024
18:25



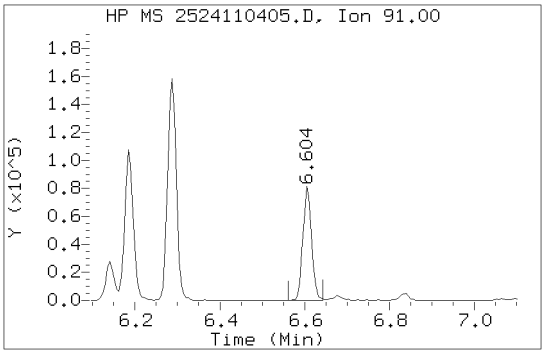
BEFORE

MASS
91
AREA
115532
HEIGHT
81512
04-Nov-2024
18:15



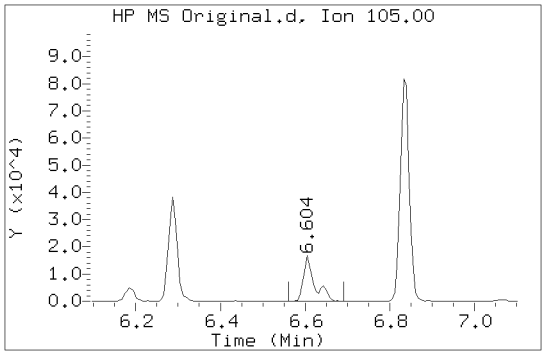
AFTER

MASS
91
AREA
115532
HEIGHT
81512
04-Nov-2024
18:25



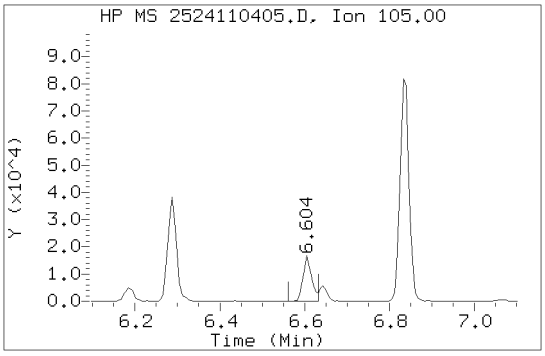
BEFORE

MASS
105
AREA
30480
HEIGHT
16752
04-Nov-2024
18:15



AFTER

MASS
105
AREA
23933
HEIGHT
16752
04-Nov-2024
18:25

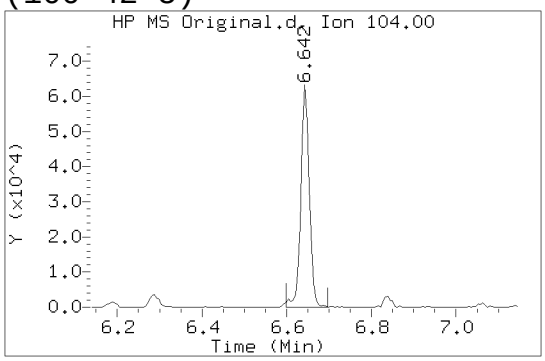


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Inj Date : 04-NOV-2024 14:36
InstruID : ms25.i
LabSampID : 1235

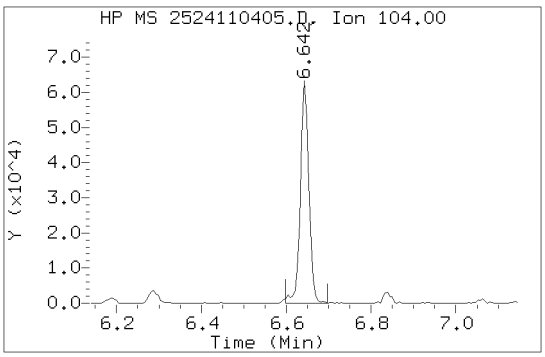
Styrene (100-42-5)

Reason Code: MP

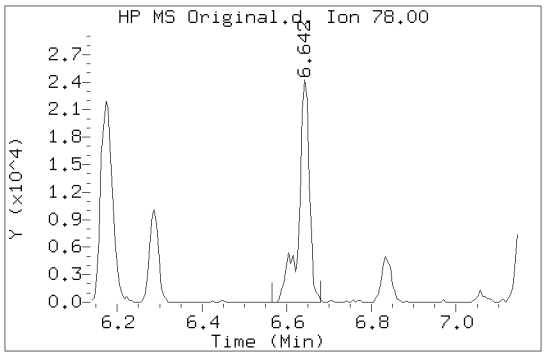
BEFORE
MASS
104
AREA
87901
HEIGHT
63264
04-Nov-2024
18:15



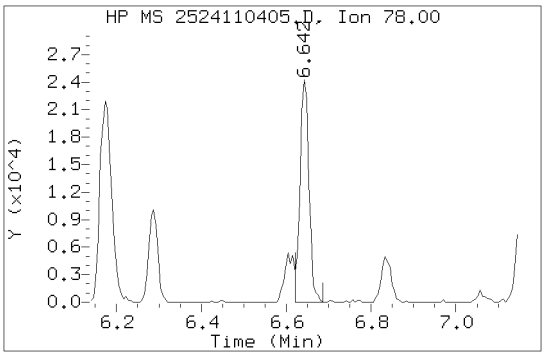
AFTER
MASS
104
AREA
87901
HEIGHT
63264
04-Nov-2024
18:25



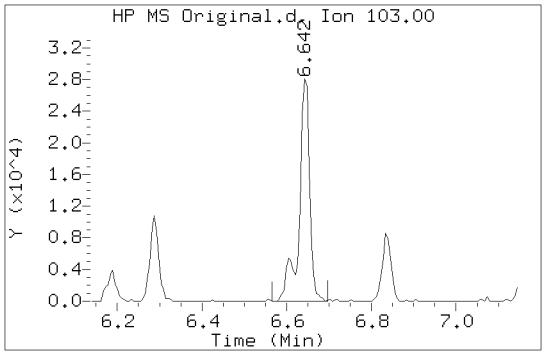
BEFORE
MASS
78
AREA
43531
HEIGHT
24240
04-Nov-2024
18:15



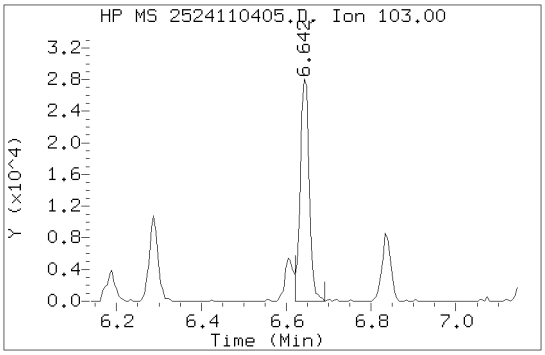
AFTER
MASS
78
AREA
36177
HEIGHT
24238
04-Nov-2024
18:25



BEFORE
MASS
103
AREA
48896
HEIGHT
28080
04-Nov-2024
18:15



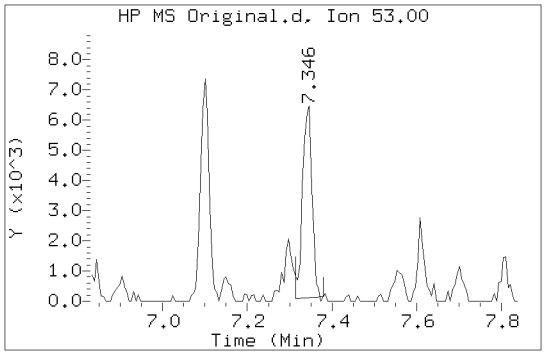
AFTER
MASS
103
AREA
41889
HEIGHT
28067
04-Nov-2024
18:25



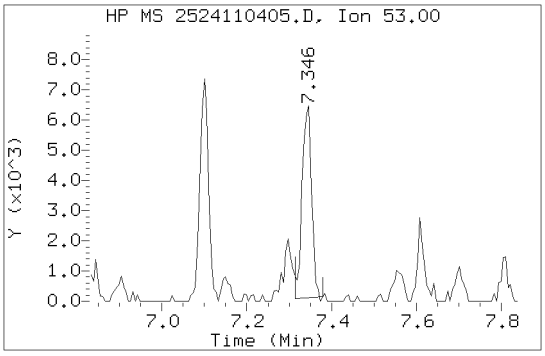
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

BEFORE
MASS
53
AREA
10016
HEIGHT
6370
04-Nov-2024
18:15



AFTER
MASS
53
AREA
10016
HEIGHT
6370
04-Nov-2024
18:25



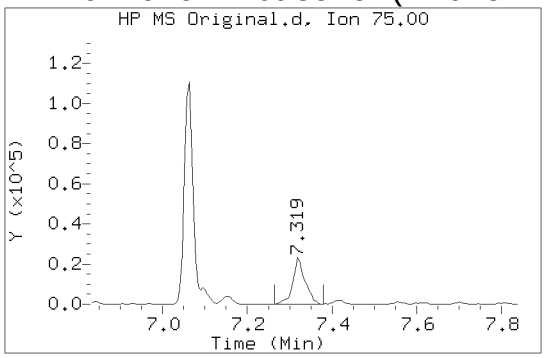
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110405.D
Inj Date : 04-NOV-2024 14:36
InstruID : ms25.i
LabSampID : 1235

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

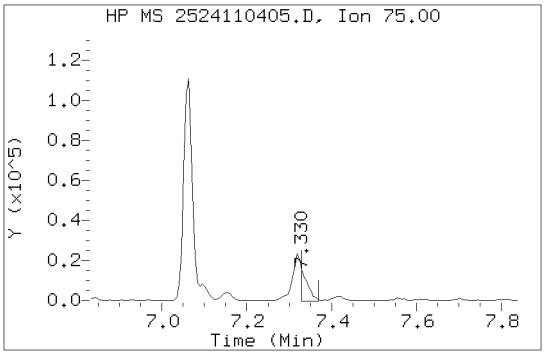
BEFORE

MASS
75
AREA
46693
HEIGHT
23480
04-Nov-2024
18:15



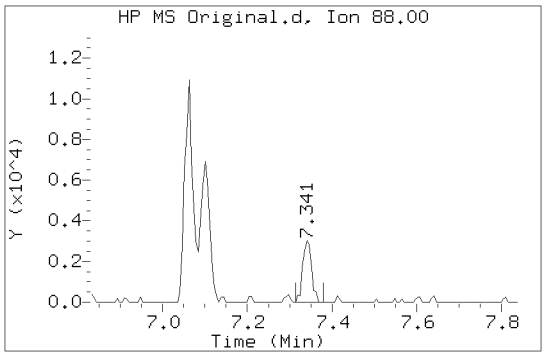
AFTER

MASS
75
AREA
17816
HEIGHT
15728
04-Nov-2024
18:25



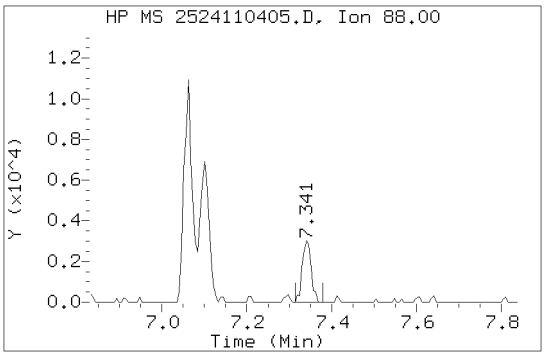
BEFORE

MASS
88
AREA
4436
HEIGHT
3024
04-Nov-2024
18:15



AFTER

MASS
88
AREA
4436
HEIGHT
3024
04-Nov-2024
18:25

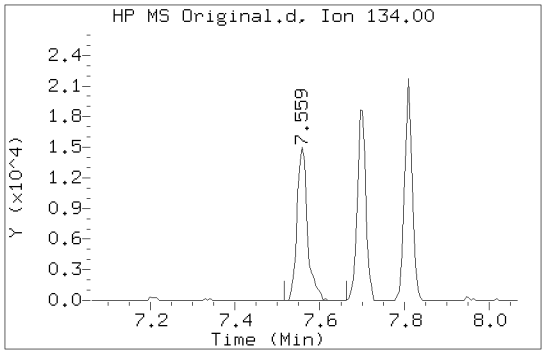


tert-Butylbenzene (98-06-6)

Reason Code: MP

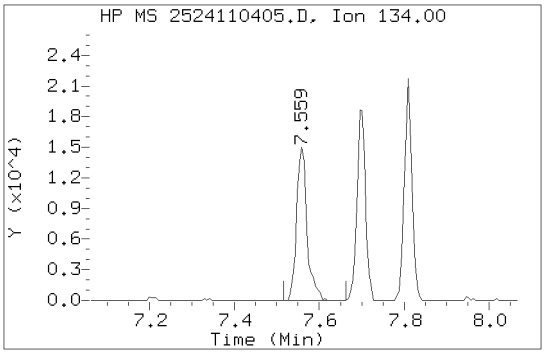
BEFORE

MASS
134
AREA
25774
HEIGHT
15027
04-Nov-2024
18:15



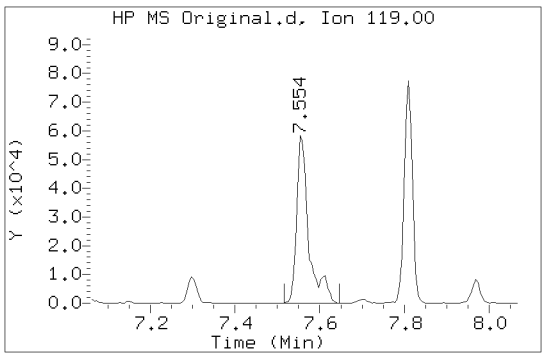
AFTER

MASS
134
AREA
25774
HEIGHT
15027
04-Nov-2024
18:25



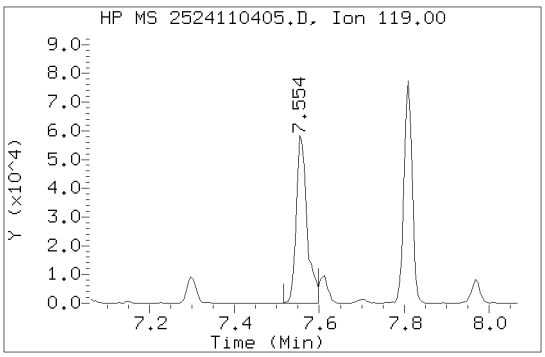
BEFORE

MASS
119
AREA
116274
HEIGHT
58312
04-Nov-2024
18:15



AFTER

MASS
119
AREA
104005
HEIGHT
58312
04-Nov-2024
18:25

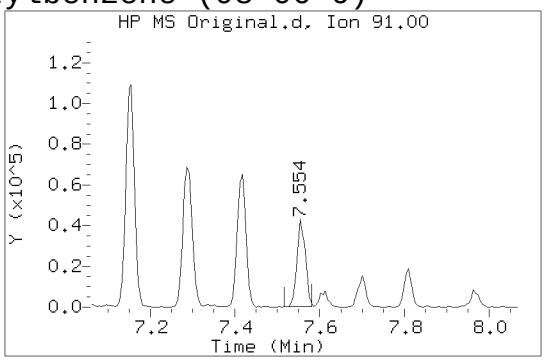


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Inj Date : 04-NOV-2024 14:36
InstruID : ms25.i
LabSampID : 1235

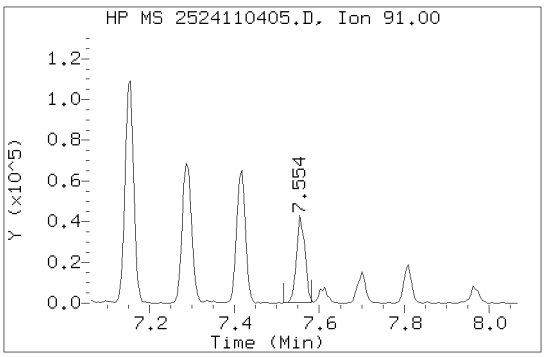
tert-Butylbenzene (98-06-6)

Reason Code: MP

BEFORE
MASS
91
AREA
59074
HEIGHT
42858
04-Nov-2024
18:15



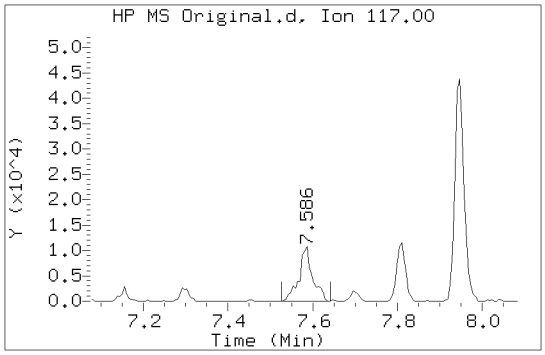
AFTER
MASS
91
AREA
59074
HEIGHT
42858
04-Nov-2024
18:25



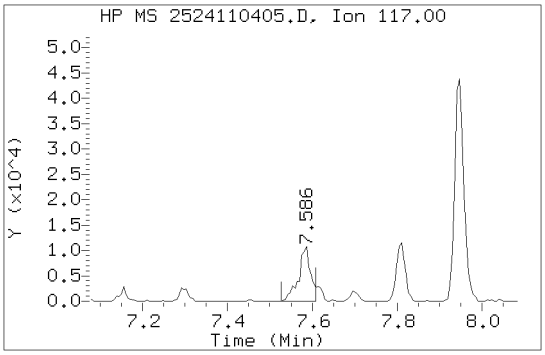
Pentachloroethane (76-01-7)

Reason Code: MP

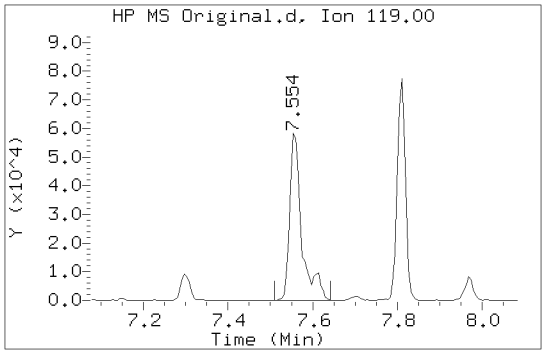
BEFORE
MASS
117
AREA
23862
HEIGHT
10777
04-Nov-2024
18:15



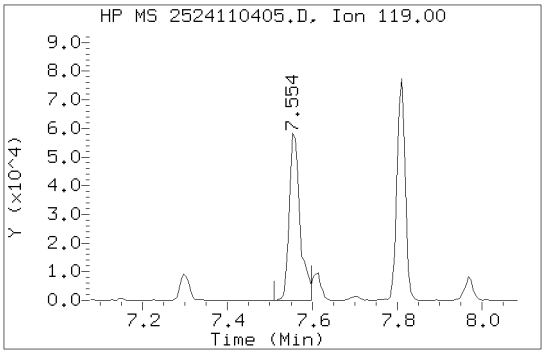
AFTER
MASS
117
AREA
21327
HEIGHT
10777
04-Nov-2024
18:25



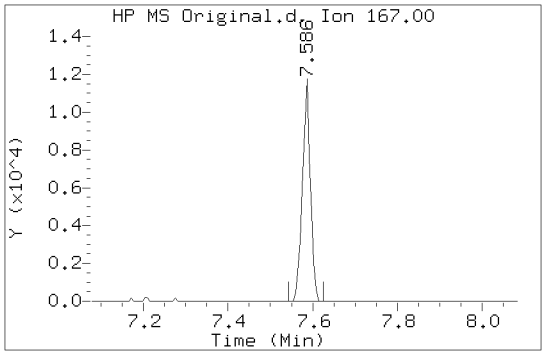
BEFORE
MASS
119
AREA
116274
HEIGHT
58312
04-Nov-2024
18:15



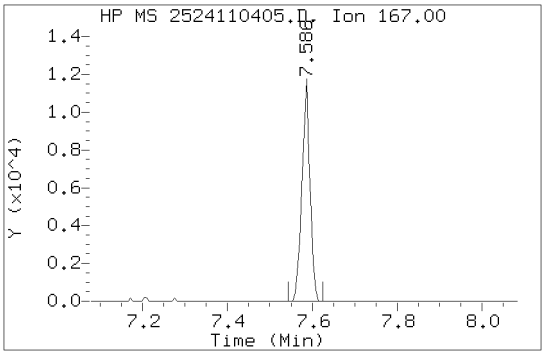
AFTER
MASS
119
AREA
103997
HEIGHT
58312
04-Nov-2024
18:25



BEFORE
MASS
167
AREA
15340
HEIGHT
11758
04-Nov-2024
18:15



AFTER
MASS
167
AREA
15340
HEIGHT
11758
04-Nov-2024
18:25

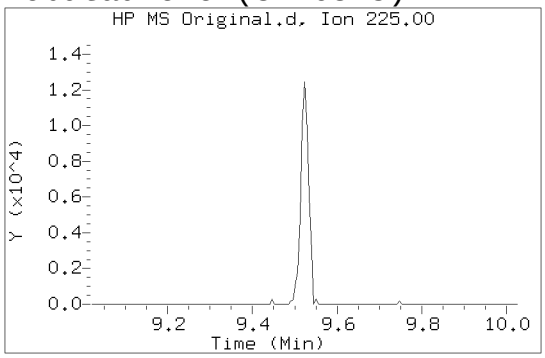


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Inj Date : 04-NOV-2024 14:36
InstruID : ms25.i
LabSampID : 1235

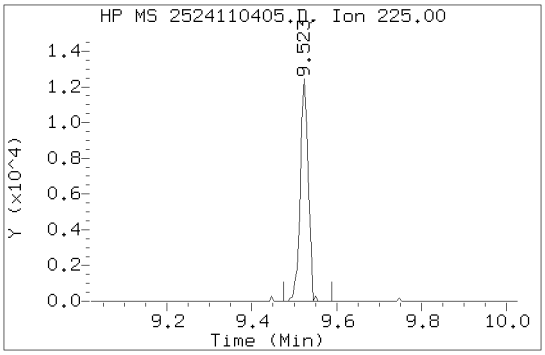
Hexachlorobutadiene (87-68-3)

Reason Code: IH

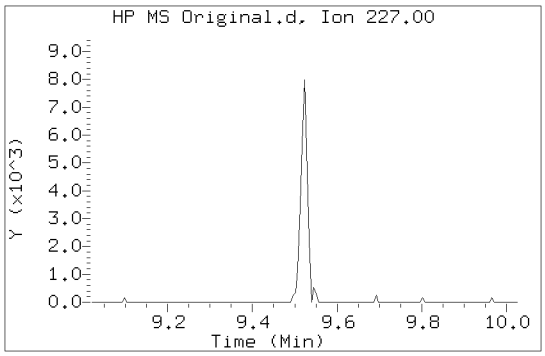
BEFORE
MASS
225
AREA
0
HEIGHT
0
04-Nov-2024
18:15



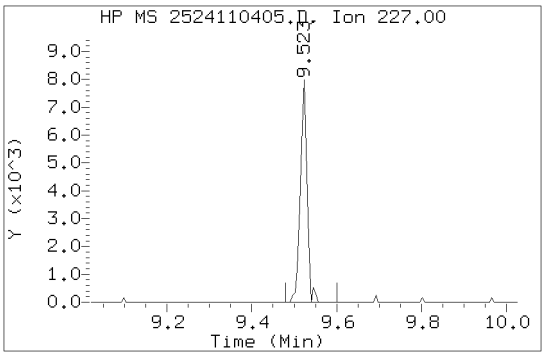
AFTER
MASS
225
AREA
16307
HEIGHT
12444
04-Nov-2024
18:25



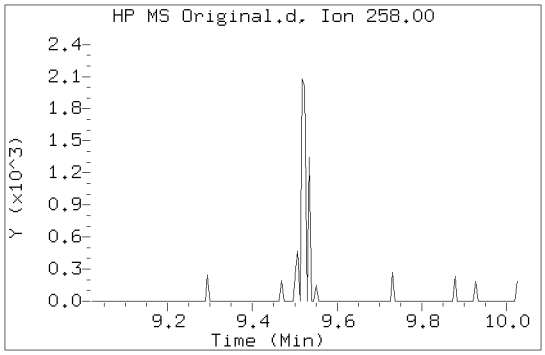
BEFORE
MASS
227
AREA
0
HEIGHT
0
04-Nov-2024
18:15



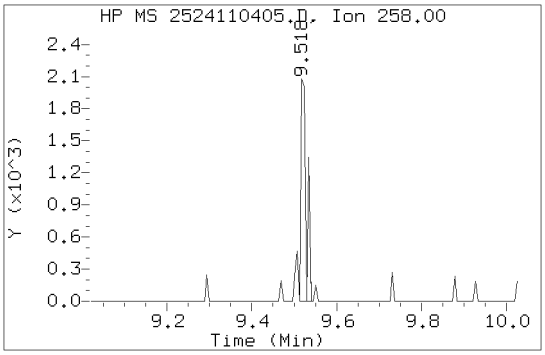
AFTER
MASS
227
AREA
8706
HEIGHT
7979
04-Nov-2024
18:25



BEFORE
MASS
258
AREA
0
HEIGHT
0
04-Nov-2024
18:15



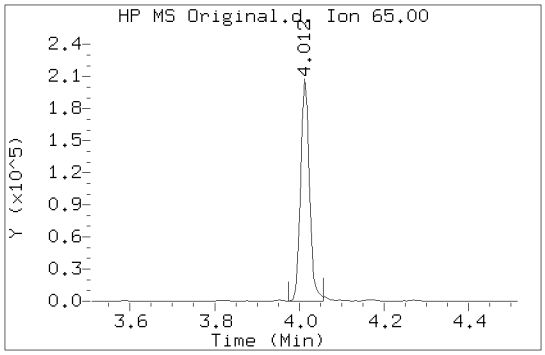
AFTER
MASS
258
AREA
1779
HEIGHT
2078
04-Nov-2024
18:25



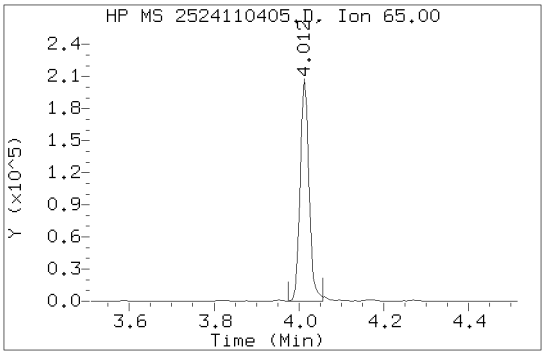
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

BEFORE
MASS
65
AREA
301017
HEIGHT
207544
04-Nov-2024
18:15



AFTER
MASS
65
AREA
301017
HEIGHT
207544
04-Nov-2024
18:25



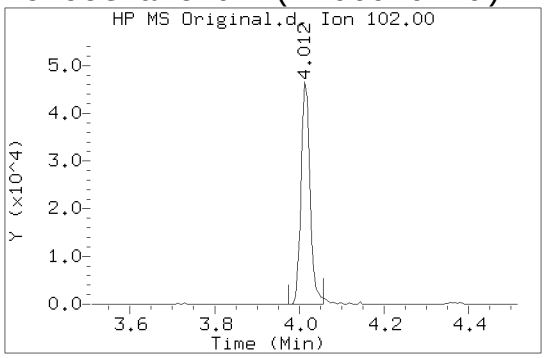
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110405.D
Inj Date : 04-NOV-2024 14:36
InstruID : ms25.i
LabSampID : 1235

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

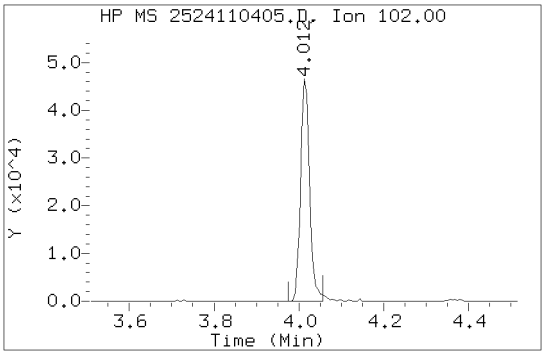
BEFORE

MASS
102
AREA
69095
HEIGHT
46568
04-Nov-2024
18:15



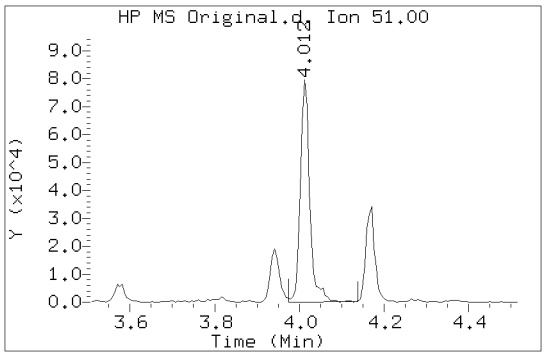
AFTER

MASS
102
AREA
69095
HEIGHT
46568
04-Nov-2024
18:25



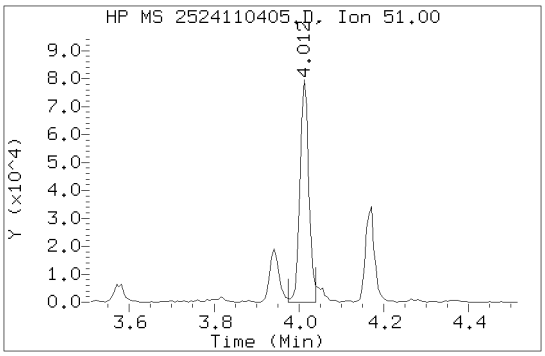
BEFORE

MASS
51
AREA
123373
HEIGHT
79480
04-Nov-2024
18:15



AFTER

MASS
51
AREA
116255
HEIGHT
79480
04-Nov-2024
18:25



UNASSIGNED PEAK REPORT

Report Date: 11/05/2024 04:11
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241104.b/252411040
Inj Date: 04-NOV-2024 14:36
Operator: TMP

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110406.D
Lab Smp Id: 1236
Inj Date : 04-NOV-2024 14:56
Operator : TMP Inst ID: ms25.i
Smp Info : 1236;;1;1;3;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\25-8260b09.m
Meth Date : 04-Nov-2024 19:36 pdk Quant Type: ISTD
Cal Date : 04-NOV-2024 14:56 Cal File: 2524110406.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.497	1.497	(0.359)	201551	20.0000	18.7807	
2	Chloromethane	50	1.644	1.645	(0.395)	187468	20.0000	19.3479	
3	Vinyl Chloride	62	1.704	1.705	(0.409)	226669	20.0000	18.7038	
4	Bromomethane	94	1.922	1.923	(0.462)	208859	20.0000	17.7293	
5	Chloroethane	64	2.004	2.005	(0.481)	164713	20.0000	18.9339	
6	Pentane	41	2.091	2.097	(0.502)	115218	20.0000	18.6412	
7	Trichlorofluoromethane	101	2.097	2.097	(0.504)	304772	20.0000	18.8949	
8	Dichlorofluoromethane	67	2.124	2.125	(0.510)	316319	20.0000	19.4446	
9	Ethyl Ether	74	2.277	2.278	(0.547)	93033	20.0000	18.6521	
10	1,1-Dichloroethene	61	2.413	2.409	(0.580)	171004	20.0000	18.4663	
11	Freon 113	101	2.424	2.419	(0.582)	109595	20.0000	19.0074	
12	Carbon Disulfide	76	2.446	2.447	(0.587)	352898	20.0000	17.8796	
13	Iodomethane	127	2.506	2.507	(0.602)	40004	20.0000	13.9582	
14	Acrolein	56	2.599	2.605	(0.624)	113697	100.000	90.6001	
15	Isopropyl Alcohol	45	2.648	2.654	(0.636)	44449	100.000	98.5483	
16	3-Chloro-1-propene	41	2.675	2.676	(0.642)	148171	20.0000	18.4467	
17	Methylene Chloride	84	2.735	2.736	(0.657)	157466	20.0000	18.5891	
18	Acetone	58	2.752	2.752	(0.661)	84231	100.000	96.9099	
19	Methyl acetate	74	2.812	2.818	(0.675)	30089	20.0000	18.6339	
20	trans-1,2-Dichloroethene	61	2.828	2.823	(0.679)	181469	20.0000	18.8712	
21	Hexane	57	2.861	2.867	(0.687)	240082	20.0000	18.8147	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	2.872	2.878	(0.690)	434379	20.0000	18.3557	
	23 tert.- Butyl Alcohol	59	2.894	2.900	(0.695)	78948	100.000	95.6272	
	24 Acetonitrile	41	3.019	3.020	(0.725)	93463	100.000	96.2183	
	25 Diisopropyl ether	45	3.063	3.063	(0.735)	411411	20.0000	18.3858	
	26 Chloroprene	53	3.155	3.151	(0.758)	185575	20.0000	18.1550	
	27 1,1-Dichloroethane	63	3.166	3.162	(0.760)	253708	20.0000	18.3565	
	28 Acrylonitrile	53	3.188	3.189	(0.766)	315744	100.000	91.5355(M)	MP
	29 Ethyl tert-butyl ether	59	3.265	3.265	(0.784)	449554	20.0000	18.1357	
	30 n-Propanol	41	3.259	3.260	(0.783)	84341	200.000	188.049	
	31 Vinyl Acetate	86	3.276	3.271	(0.786)	35635	20.0000	17.9431(Q)	
	32 cis-1,2-Dichloroethene	61	3.461	3.462	(0.831)	198032	20.0000	18.8017	
	33 2,2-Dichloropropane	77	3.527	3.522	(0.847)	170828	20.0000	18.2932	
	34 Bromochloromethane	128	3.576	3.571	(0.859)	86643	20.0000	18.8126	
	35 Cyclohexane	84	3.587	3.587	(0.861)	188630	20.0000	18.5533	
	36 Chloroform	83	3.597	3.598	(0.864)	281216	20.0000	18.4160	
	37 Ethyl Acetate	43	3.636	3.631	(0.873)	142400	20.0000	18.3567	
	38 Methyl acrylate	55	3.652	3.658	(0.877)	145416	20.0000	18.6938	
	39 Carbon Tetrachloride	117	3.696	3.696	(0.887)	158626	20.0000	17.5868(M)	MP
$	41 Dibromofluoromethane	113	3.701	3.702	(0.889)	273409	30.0000	29.7549	
	40 Tetrahydrofuran	42	3.696	3.702	(0.887)	217707	100.000	92.5820	
	42 1,1,1-Trichloroethane	97	3.734	3.729	(0.897)	201388	20.0000	18.2108	
	43 2-Butanone	72	3.761	3.762	(0.903)	112477	100.000	97.5902(M)	I
	44 1,1-Dichloropropene	75	3.799	3.795	(0.912)	185790	20.0000	18.6192	
	45 1-Chlorobutane	41	3.816	3.816	(0.916)	119631	20.0000	18.9516	
	46 Heptane	71	3.881	3.876	(0.932)	87460	20.0000	20.0790	
	47 Benzene	78	3.941	3.942	(0.946)	599512	20.0000	18.7469	
	48 Propionitrile	54	3.941	3.942	(0.946)	129499	100.000	96.5492(M)	MP
	49 Methacrylonitrile	67	3.952	3.953	(0.949)	78394	20.0000	18.9304	
	50 tert-Amyl methyl ether	73	3.968	3.975	(0.953)	413632	20.0000	17.6943	
	54 Isobutyl alcohol	42	3.979	3.996	(0.955)	40968	200.000	190.534(QM)	MP
$	51 1,2-Dichloroethane-d4	65	4.012	4.013	(0.963)	306780	30.0000	30.2781(M)	MP
	52 1,2-Dichloroethane	62	4.050	4.056	(0.972)	209245	20.0000	18.7242	
	53 tert-Amyl Alcohol	59	4.056	4.062	(0.974)	59303	100.000	94.8000	
*	55 Fluorobenzene	96	4.165	4.166	(1.000)	1023799	30.0000		
	56 Diisobutylene	57	4.176	4.171	(1.003)	312729	20.0000	20.2186	
	57 Trichloroethene	95	4.269	4.269	(1.025)	151819	20.0000	18.7048	
	58 Methyl cyclohexane	83	4.274	4.275	(0.693)	202263	20.0000	19.4395	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.048)	321261	20.0000	17.6165	
	60 Dibromomethane	93	4.525	4.526	(1.086)	106239	20.0000	18.3217	
	61 1,2-Dichloropropane	63	4.585	4.586	(1.101)	154652	20.0000	18.5742	
	62 Bromodichloromethane	83	4.607	4.602	(1.106)	193365	20.0000	18.0284	
	63 Methyl methacrylate	41	4.667	4.668	(1.121)	116117	20.0000	17.4935	
	64 1,4-Dioxane	88	4.716	4.717	(1.132)	60789	500.000	517.816(A)	
	65 2-Chloroethylvinyl ether	63	4.929	4.935	(1.183)	42845	20.0000	15.4616	
	66 cis-1,3-Dichloropropene	75	4.994	4.995	(0.810)	235711	20.0000	17.9262	
	67 Octane	85	4.994	5.000	(0.810)	70268	20.0000	19.4215	
$	68 Toluene-d8	98	5.114	5.115	(0.829)	1032330	30.0000	30.9218	
	69 Toluene	92	5.147	5.153	(0.835)	364113	20.0000	19.0680	
	70 Chloroacetonitrile	75	5.207	5.213	(0.844)	45989	100.000	94.8836	
	71 2-Nitropropane	41	5.294	5.295	(0.858)	168446	100.000	84.4100	
	72 1,1-Dichloro-2-Propanone	63	5.311	5.317	(0.861)	17607	100.000	93.8764(Q)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.871)	795879	100.000	98.2875	
	75 trans-1,3-Dichloropropene	75	5.404	5.404	(0.876)	217003	20.0000	17.3415	
	74 Tetrachloroethene	164	5.409	5.404	(0.877)	136118	20.0000	19.0690	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.480	5.481	(0.889)	212724	20.0000	18.2074	
77	1,1,2-Trichloroethane	83	5.518	5.524	(0.895)	128574	20.0000	19.1508	
78	Chlorodibromomethane	129	5.649	5.650	(0.916)	160873	20.0000	18.2776	
79	1,3-Dichloropropane	76	5.709	5.710	(0.926)	256733	20.0000	19.1745	
80	1,2-Dibromoethane	107	5.829	5.830	(0.945)	148926	20.0000	18.4381	
81	2-Hexanone	43	5.933	5.933	(0.962)	540225	100.000	98.3513	
82	1-Chlorohexane	91	6.140	6.141	(0.996)	165373	20.0000	17.9236	
* 83	Chlorobenzene-d5	82	6.167	6.168	(1.000)	411758	30.0000	(M)	I
84	Chlorobenzene	112	6.184	6.184	(1.003)	407028	20.0000	18.8468	
85	Ethylbenzene	106	6.184	6.190	(1.003)	209964	20.0000	18.6760	
86	1,1,1,2-Tetrachloroethane	131	6.222	6.223	(1.009)	140113	20.0000	18.5806	
87	mp-Xylene	106	6.287	6.288	(1.019)	504694	40.0000	37.4190	
88	o-Xylene	106	6.604	6.599	(1.071)	241163	20.0000	18.3450(M)	MP
89	Styrene	104	6.642	6.643	(0.836)	408581	20.0000	18.8950(M)	MP
90	Bromoform	173	6.680	6.681	(0.841)	104824	20.0000	18.0171	
91	Isopropylbenzene	105	6.833	6.839	(0.860)	536614	20.0000	19.2772	
M 100	1,2-Dichloroethene, Total	61				379501	40.0000	37.6729	
$ 92	4-Bromofluorobenzene	174	7.062	7.063	(0.889)	288330	30.0000	30.4464	
93	Bromobenzene	156	7.155	7.150	(0.900)	170442	20.0000	19.0559	
94	n-Propylbenzene	120	7.155	7.150	(0.900)	165569	20.0000	19.3496	
95	1,1,2,2-Tetrachloroethane	83	7.199	7.205	(0.906)	188462	20.0000	19.6830	
96	o-Chlorotoluene	91	7.286	7.287	(0.917)	466416	20.0000	18.9457	
97	1,3,5-Trimethylbenzene	105	7.297	7.298	(0.918)	473953	20.0000	18.9839	
98	1,2,3-Trichloropropane	110	7.319	7.319	(0.921)	60794	20.0000	20.1577	
99	trans-1,4-Dichloro-2-butene	53	7.341	7.336	(0.924)	48173	20.0000	18.3809(M)	MP
101	p-Chlorotoluene	91	7.417	7.418	(0.933)	430890	20.0000	19.2258	
102	tert-Butylbenzene	134	7.559	7.565	(0.951)	113141	20.0000	19.4796	
103	Pentachloroethane	117	7.586	7.581	(0.955)	89620	20.0000	18.1668(QM)	MP
104	1,2,4-Trimethylbenzene	105	7.608	7.614	(0.957)	483735	20.0000	19.1972	
105	sec-Butylbenzene	105	7.701	7.701	(0.969)	579856	20.0000	19.5067	
106	p-Isopropyltoluene	134	7.810	7.805	(0.983)	128816	20.0000	19.2017	
107	1,3-Dichlorobenzene	146	7.892	7.887	(0.993)	284297	20.0000	19.0752	
* 108	1,4-Dichlorobenzene-d4	152	7.946	7.947	(1.000)	364459	30.0000		
109	1,4-Dichlorobenzene	146	7.957	7.963	(1.001)	296240	20.0000	19.1654	
110	Benzyl Chloride	126	8.159	8.148	(1.027)	46063	20.0000	16.2935(Q)	
111	n-Butylbenzene	134	8.159	8.154	(1.027)	111627	20.0000	19.0100	
112	Hexachloroethane	117	8.285	8.285	(1.043)	78649	20.0000	17.5055	
113	1,2-Dichlorobenzene	146	8.306	8.307	(1.045)	276123	20.0000	19.1229	
114	1,2-Dibromo-3-chloropropane	75	8.978	8.973	(1.130)	28312	20.0000	18.5045	
115	Nitrobenzene	77	9.458	9.469	(1.190)	63756	200.000	158.804	
116	Hexachlorobutadiene	225	9.523	9.524	(1.198)	72119	20.0000	19.6718	
M 120	1,3-Dichloropropene, Total	75				452714	40.0000	35.2677	
117	1,2,4-Trichlorobenzene	180	9.550	9.551	(1.202)	170191	20.0000	18.8395	
M 121	Total Xylenes	106				745857	60.0000	55.7641	
118	Naphthalene	128	9.823	9.824	(1.236)	444817	20.0000	18.1347	
119	1,2,3-Trichlorobenzene	180	9.981	9.982	(1.256)	163325	20.0000	18.1205	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

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Date : 04-NOV-2024 14:56

Client ID:

Instrument: ms25.i

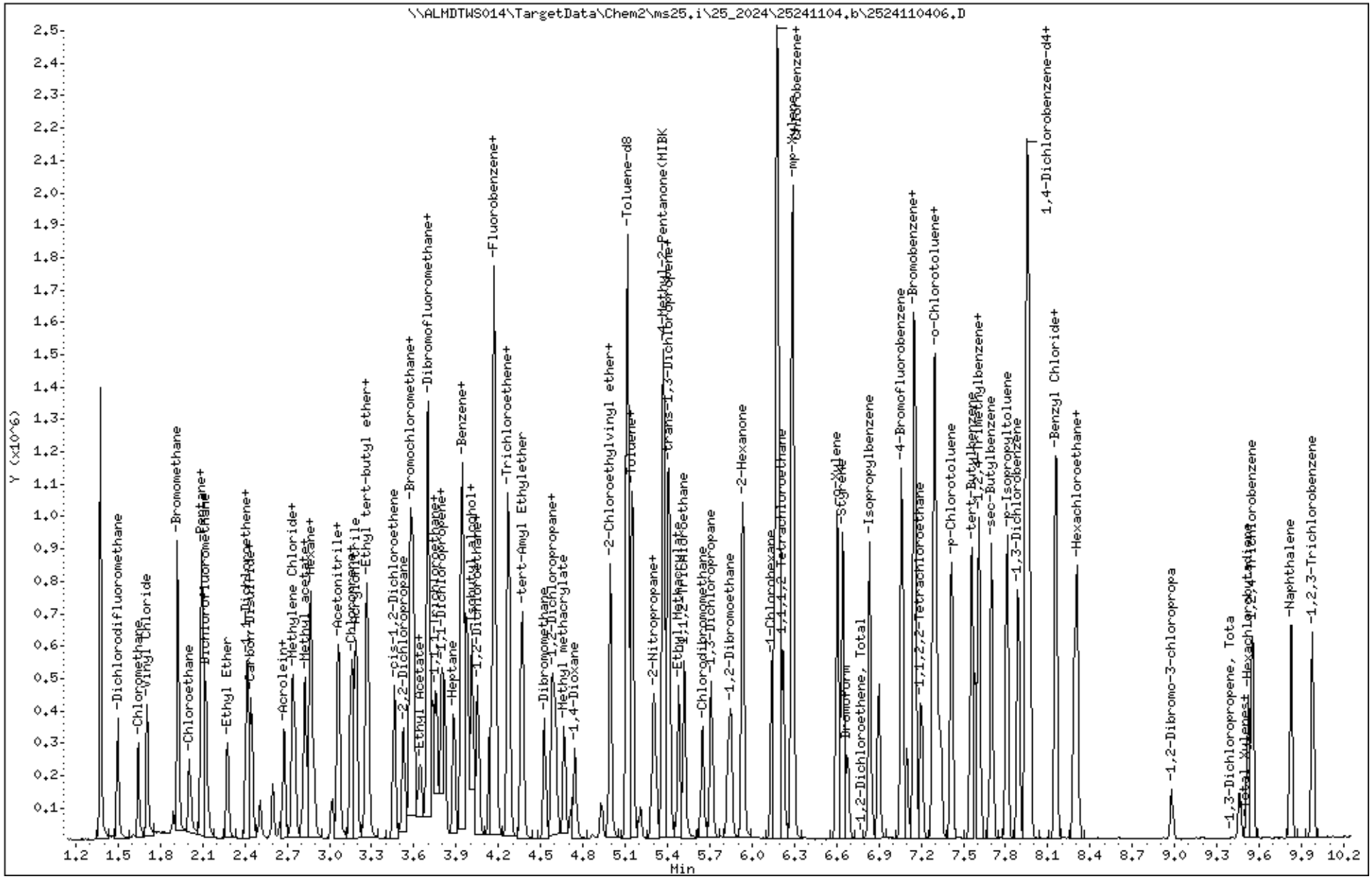
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Operator: TMP

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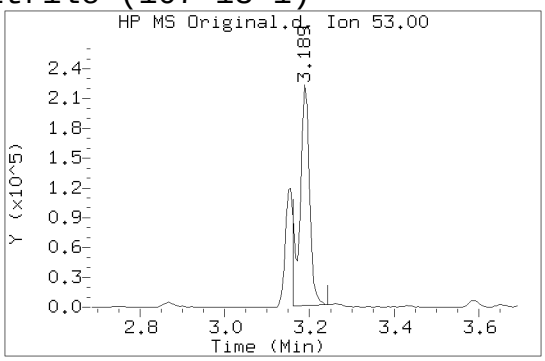
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LabSampID : 1236

Acrylonitrile (107-13-1)

Reason Code: MP

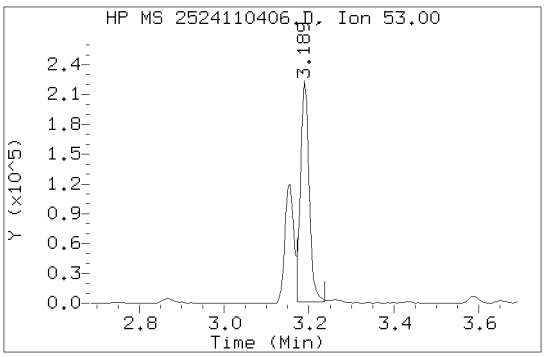
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04-Nov-2024
18:10



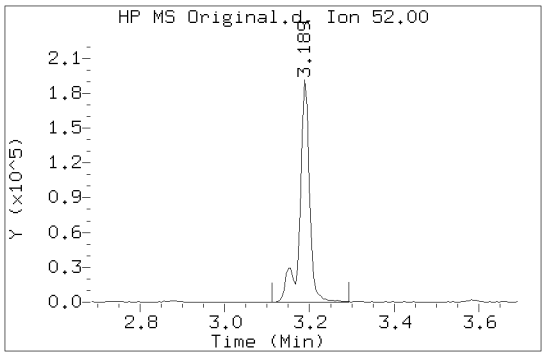
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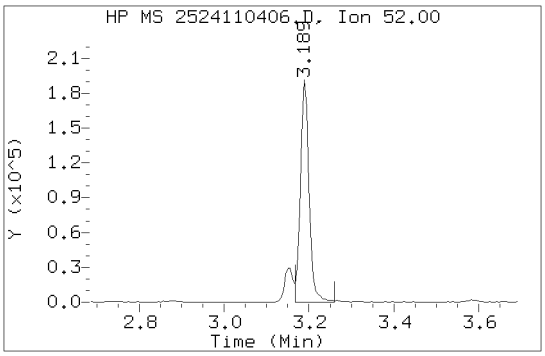
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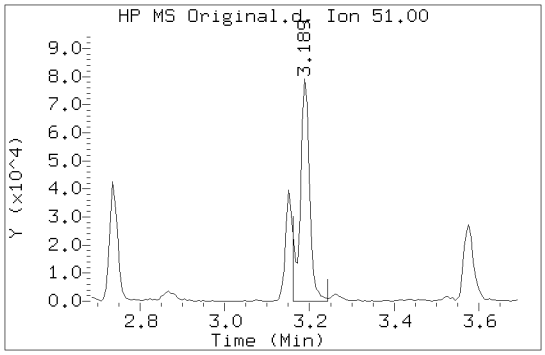
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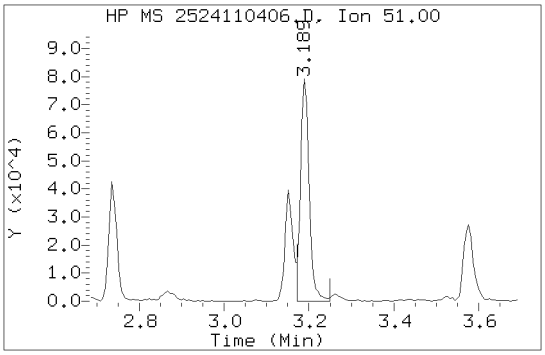
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AFTER

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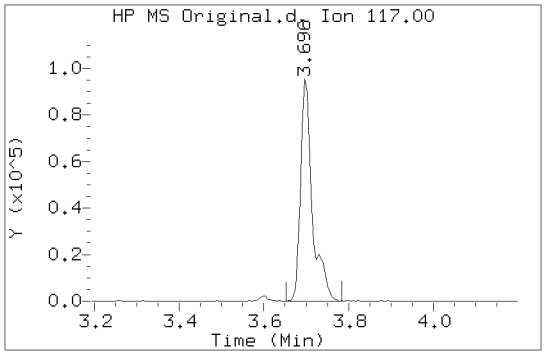


Carbon Tetrachloride (56-23-5)

Reason Code: MP

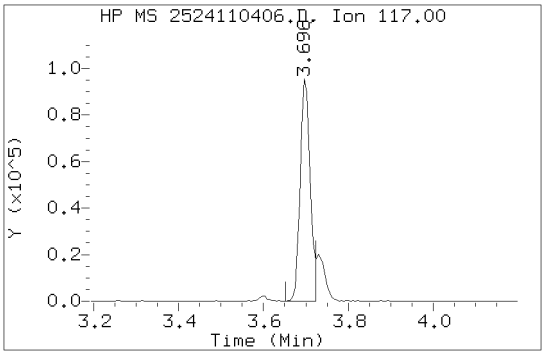
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AFTER

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04-Nov-2024
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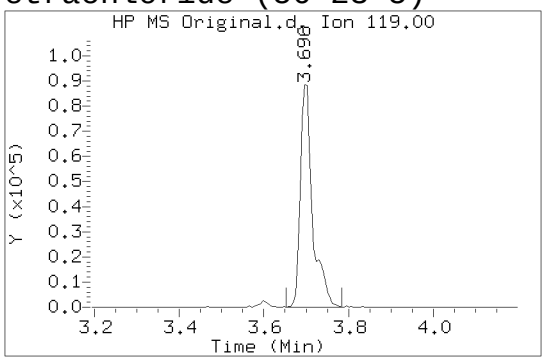
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Carbon Tetrachloride (56-23-5)

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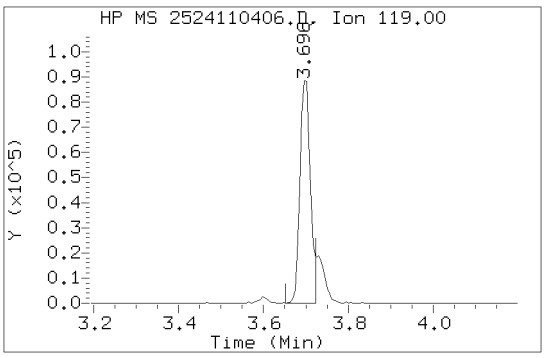
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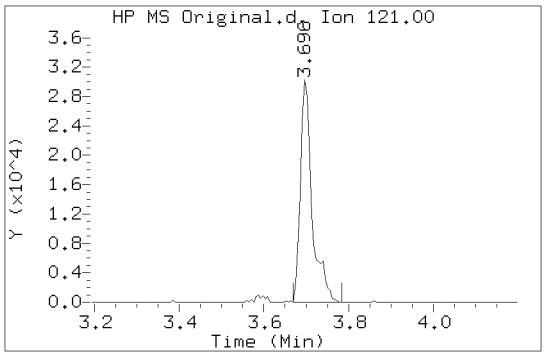
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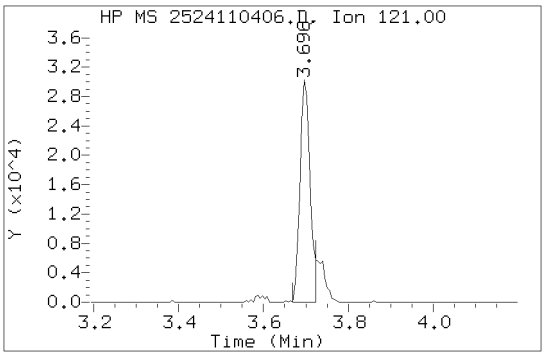
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AFTER

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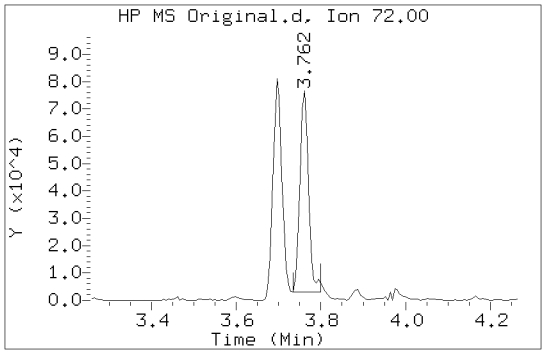


2-Butanone (78-93-3)

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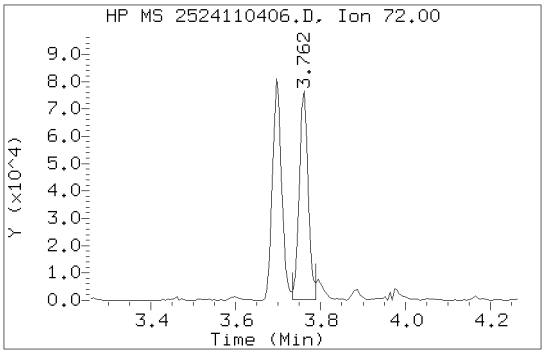
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04-Nov-2024
18:10



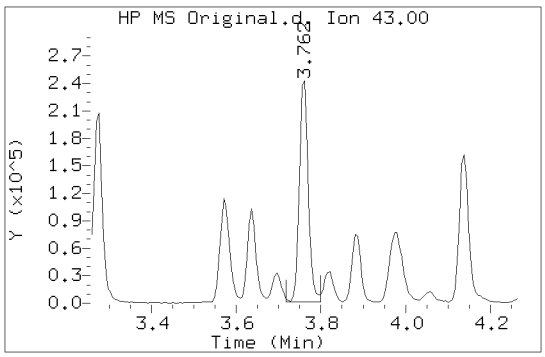
AFTER

MASS
72
AREA
112477
HEIGHT
76345
04-Nov-2024
18:15



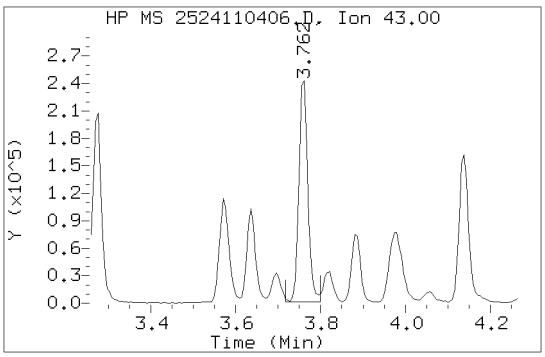
BEFORE

MASS
43
AREA
356303
HEIGHT
241481
04-Nov-2024
18:10



AFTER

MASS
43
AREA
356303
HEIGHT
241481
04-Nov-2024
18:15



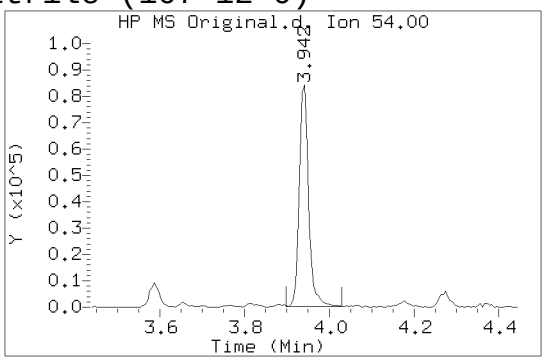
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110406.D
Inj Date : 04-NOV-2024 14:56
InstruID : ms25.i
LabSampID : 1236

Propionitrile (107-12-0)

Reason Code: MP

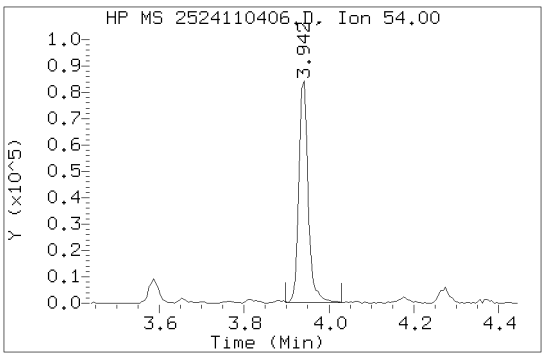
BEFORE

MASS
54
AREA
129499
HEIGHT
84146
04-Nov-2024
18:10



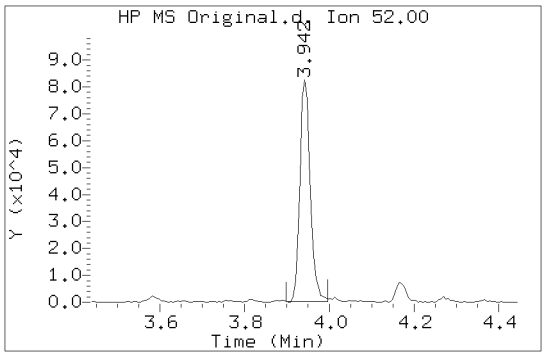
AFTER

MASS
54
AREA
129499
HEIGHT
84146
04-Nov-2024
18:15



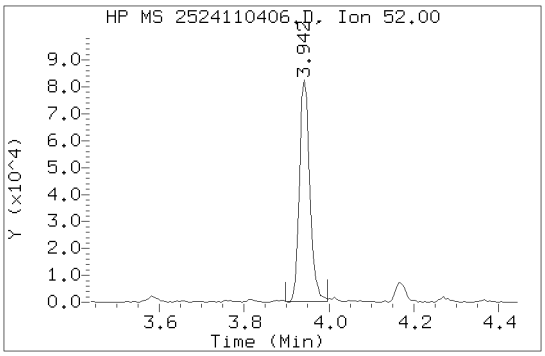
BEFORE

MASS
52
AREA
140042
HEIGHT
82347
04-Nov-2024
18:10



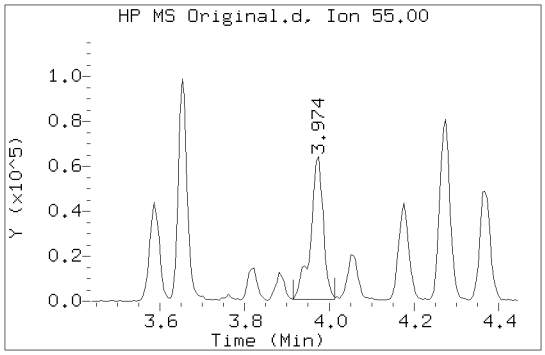
AFTER

MASS
52
AREA
140042
HEIGHT
82347
04-Nov-2024
18:15



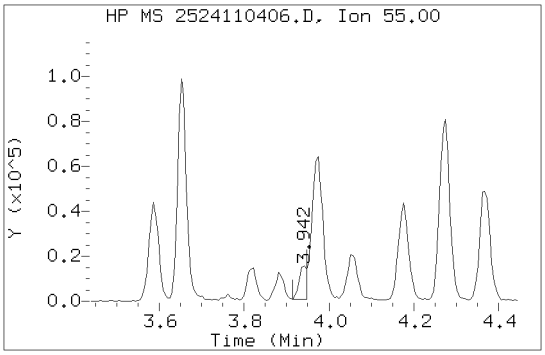
BEFORE

MASS
55
AREA
131763
HEIGHT
63539
04-Nov-2024
18:10



AFTER

MASS
55
AREA
19105
HEIGHT
14831
04-Nov-2024
18:15

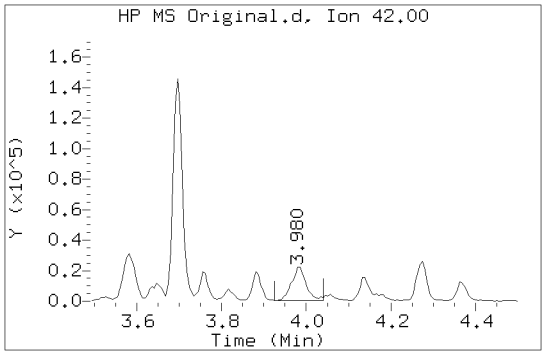


Isobutyl alcohol (78-83-1)

Reason Code: MP

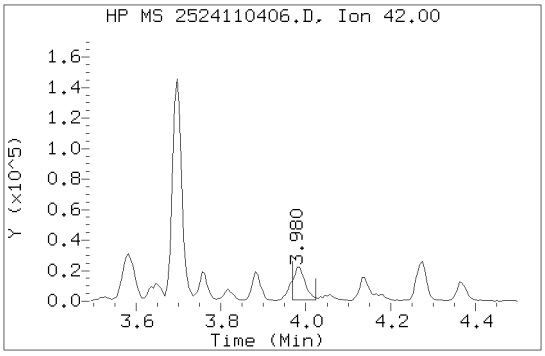
BEFORE

MASS
42
AREA
51690
HEIGHT
21895
04-Nov-2024
18:10



AFTER

MASS
42
AREA
40968
HEIGHT
21700
04-Nov-2024
18:15

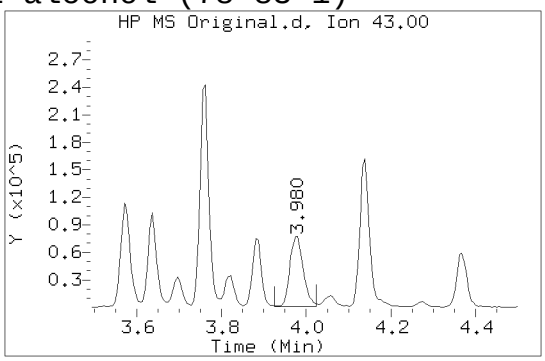


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Inj Date : 04-NOV-2024 14:56
InstruID : ms25.i
LabSampID : 1236

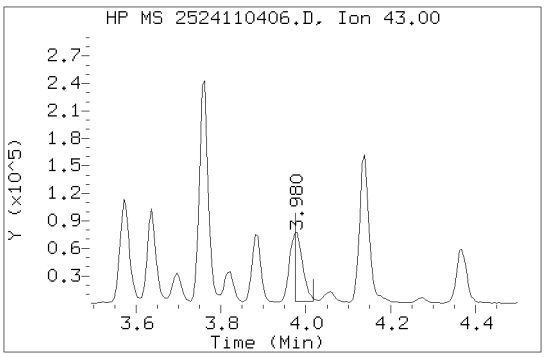
Isobutyl alcohol (78-83-1)

Reason Code: MP

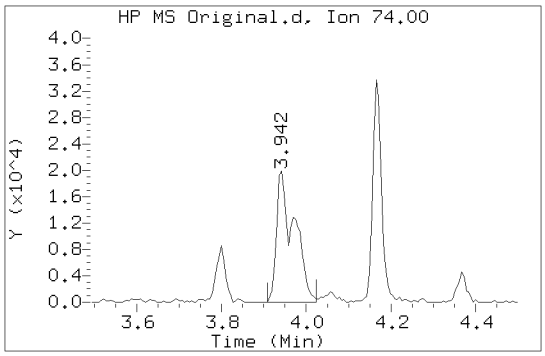
BEFORE
MASS
43
AREA
166959
HEIGHT
76501
04-Nov-2024
18:10



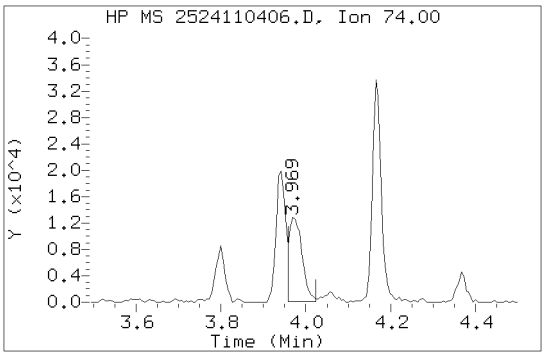
AFTER
MASS
43
AREA
105915
HEIGHT
75269
04-Nov-2024
18:15



BEFORE
MASS
74
AREA
57401
HEIGHT
19920
04-Nov-2024
18:10



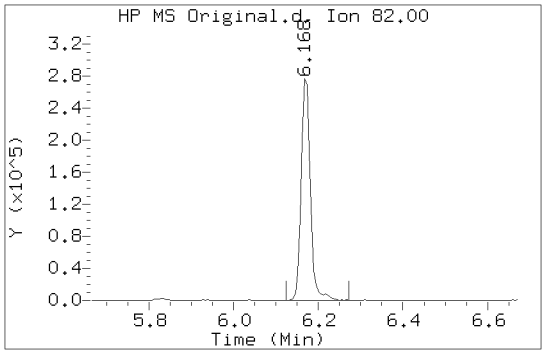
AFTER
MASS
74
AREA
28052
HEIGHT
12748
04-Nov-2024
18:15



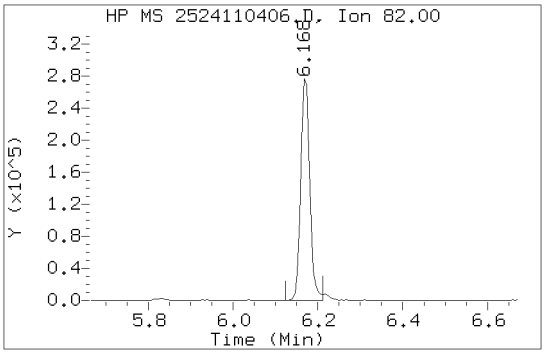
Chlorobenzene-d5 (3114-55-4)

Reason Code: I

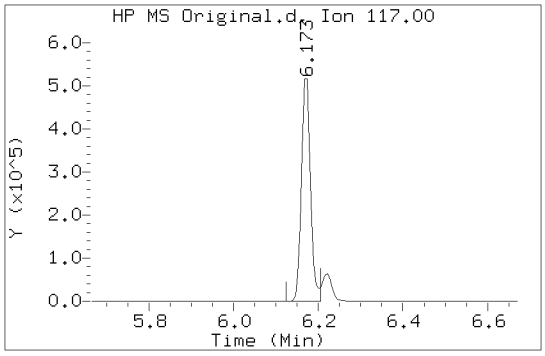
BEFORE
MASS
82
AREA
419732
HEIGHT
276864
04-Nov-2024
18:10



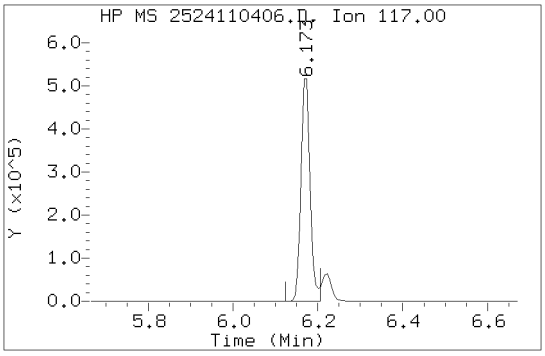
AFTER
MASS
82
AREA
411758
HEIGHT
276864
04-Nov-2024
18:15



BEFORE
MASS
117
AREA
778010
HEIGHT
516288
04-Nov-2024
18:10



AFTER
MASS
117
AREA
778010
HEIGHT
516288
04-Nov-2024
18:15



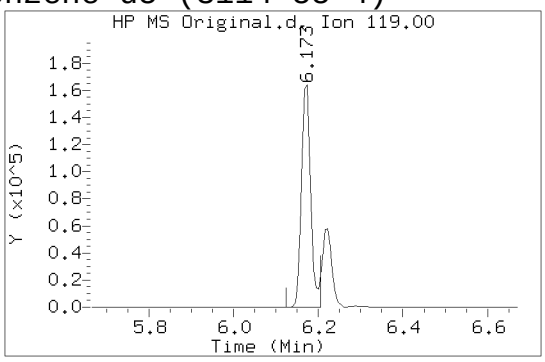
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110406.D
Inj Date : 04-NOV-2024 14:56
InstruID : ms25.i
LabSampID : 1236

Chlorobenzene-d5 (3114-55-4)

Reason Code: I

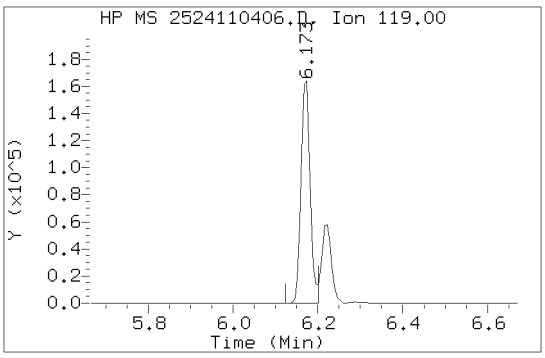
BEFORE

MASS
119
AREA
253946
HEIGHT
163918
04-Nov-2024
18:10



AFTER

MASS
119
AREA
246203
HEIGHT
163918
04-Nov-2024
18:15

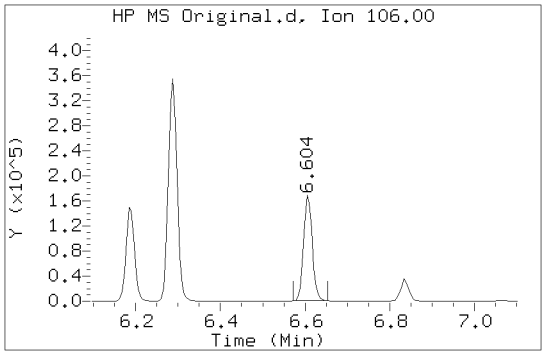


o-Xylene (95-47-6)

Reason Code: MP

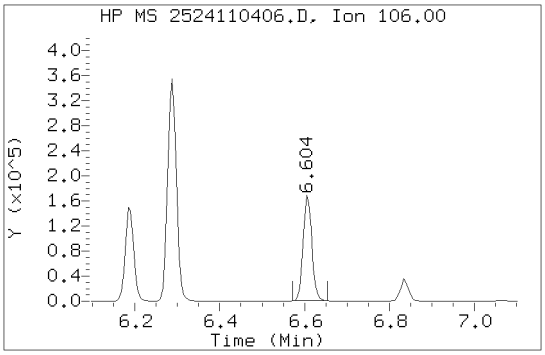
BEFORE

MASS
106
AREA
241163
HEIGHT
169033
04-Nov-2024
18:10



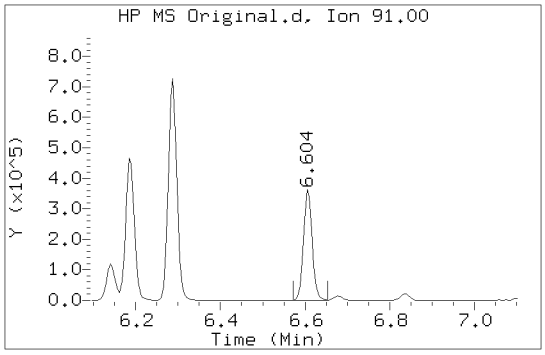
AFTER

MASS
106
AREA
241163
HEIGHT
169033
04-Nov-2024
18:15



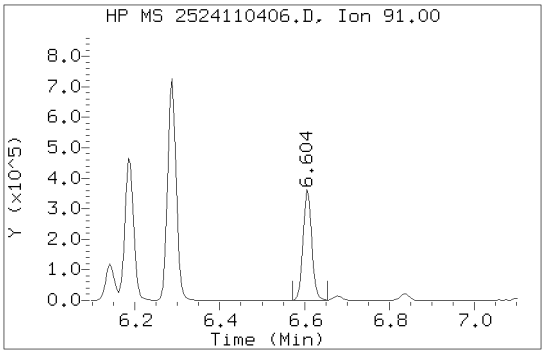
BEFORE

MASS
91
AREA
517222
HEIGHT
364032
04-Nov-2024
18:10



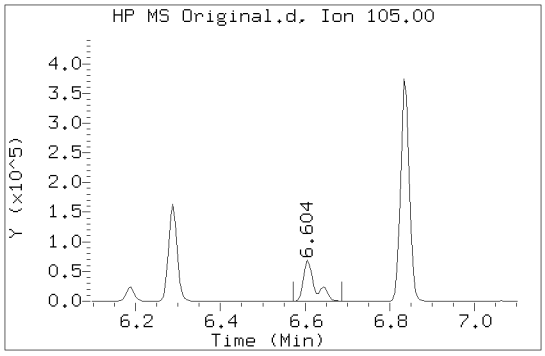
AFTER

MASS
91
AREA
517222
HEIGHT
364032
04-Nov-2024
18:15



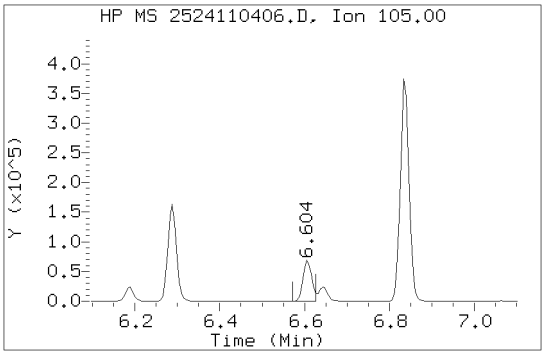
BEFORE

MASS
105
AREA
133229
HEIGHT
69640
04-Nov-2024
18:10



AFTER

MASS
105
AREA
99615
HEIGHT
69640
04-Nov-2024
18:15



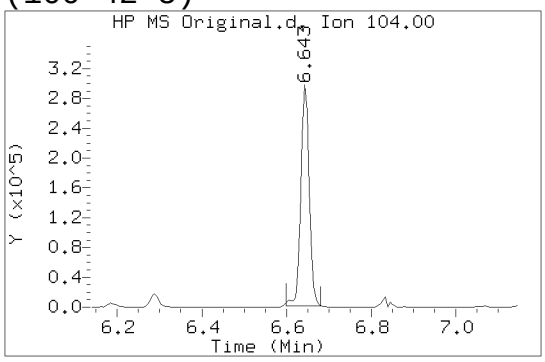
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Inj Date : 04-NOV-2024 14:56
InstruID : ms25.i
LabSampID : 1236

Styrene (100-42-5)

Reason Code: MP

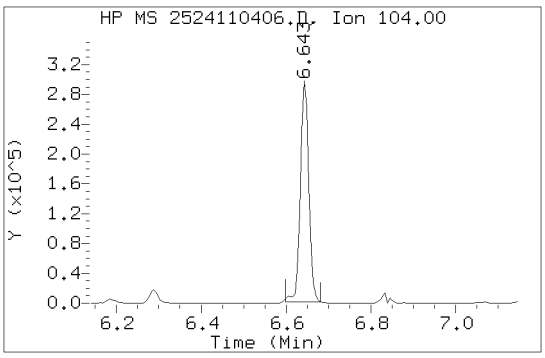
BEFORE

MASS
104
AREA
408581
HEIGHT
296394
04-Nov-2024
18:10



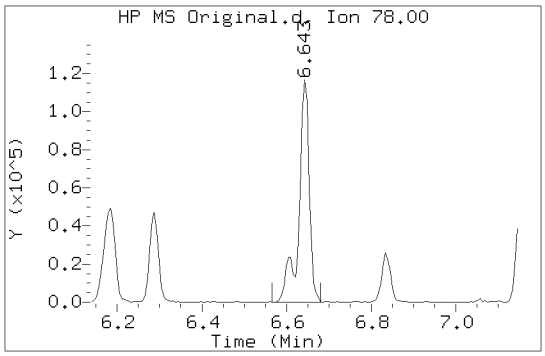
AFTER

MASS
104
AREA
408581
HEIGHT
296394
04-Nov-2024
18:15



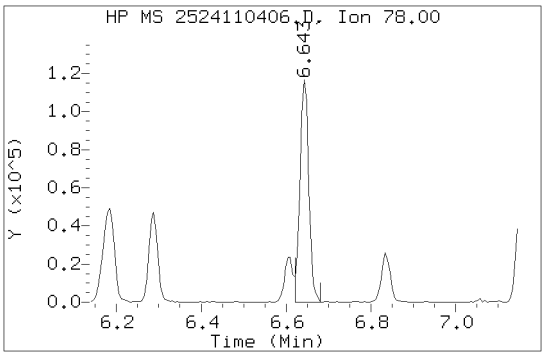
BEFORE

MASS
78
AREA
201750
HEIGHT
116608
04-Nov-2024
18:10



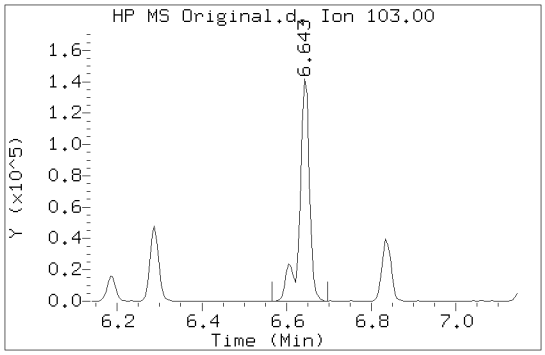
AFTER

MASS
78
AREA
170590
HEIGHT
116561
04-Nov-2024
18:15



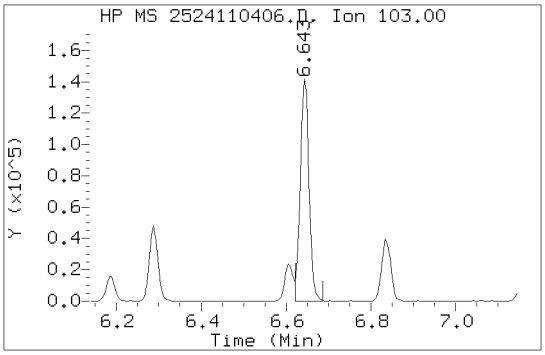
BEFORE

MASS
103
AREA
234652
HEIGHT
141824
04-Nov-2024
18:10



AFTER

MASS
103
AREA
203998
HEIGHT
141742
04-Nov-2024
18:15

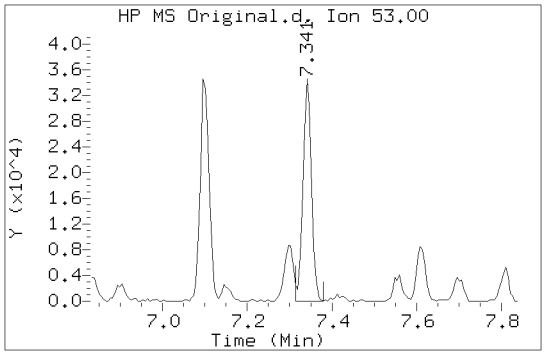


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

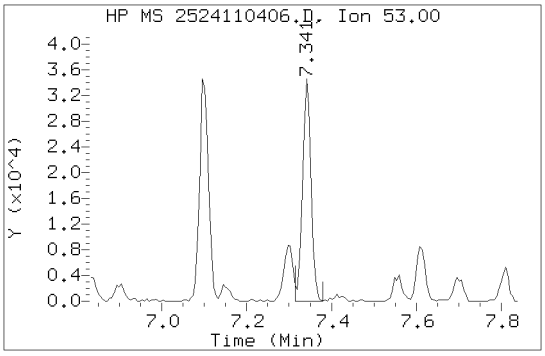
BEFORE

MASS
53
AREA
48173
HEIGHT
34552
04-Nov-2024
18:10



AFTER

MASS
53
AREA
48173
HEIGHT
34552
04-Nov-2024
18:15

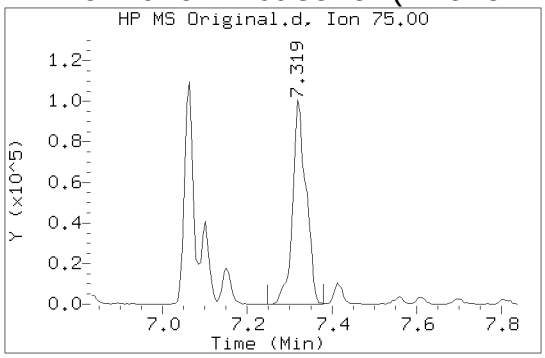


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Inj Date : 04-NOV-2024 14:56
InstruID : ms25.i
LabSampID : 1236

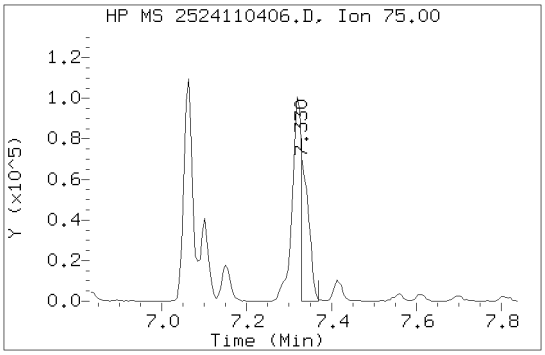
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

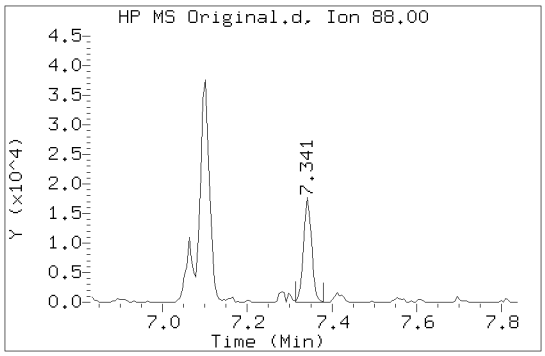
BEFORE
MASS
75
AREA
222964
HEIGHT
100824
04-Nov-2024
18:10



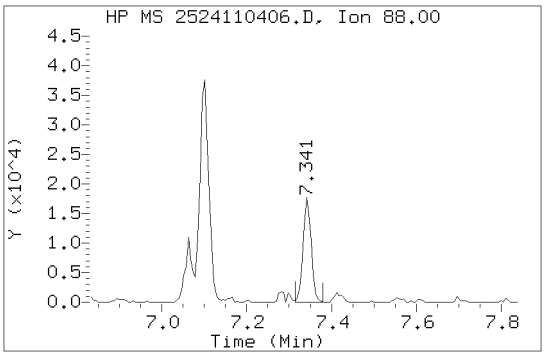
AFTER
MASS
75
AREA
88322
HEIGHT
70502
04-Nov-2024
18:15



BEFORE
MASS
88
AREA
23482
HEIGHT
17728
04-Nov-2024
18:10



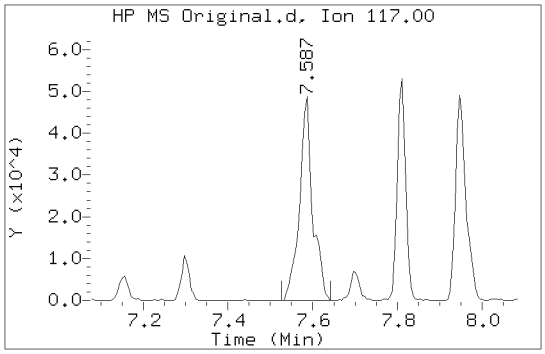
AFTER
MASS
88
AREA
23482
HEIGHT
17728
04-Nov-2024
18:15



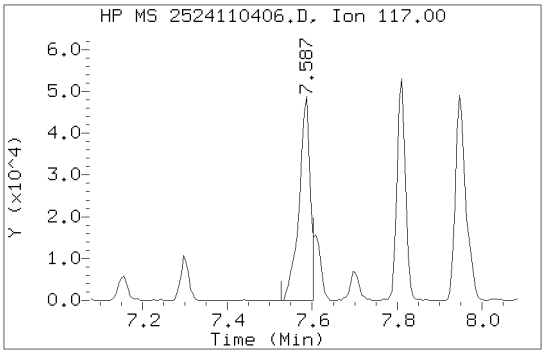
Pentachloroethane (76-01-7)

Reason Code: MP

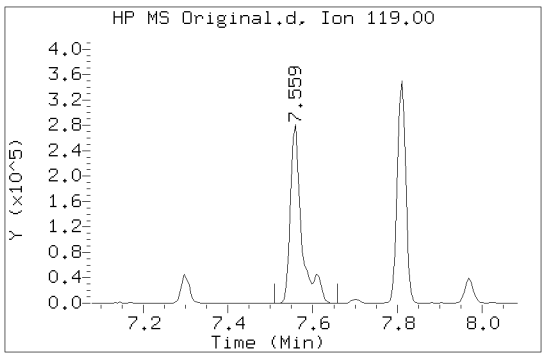
BEFORE
MASS
117
AREA
105017
HEIGHT
48696
04-Nov-2024
18:10



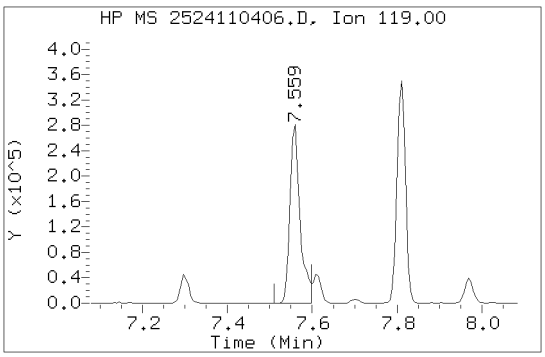
AFTER
MASS
117
AREA
89620
HEIGHT
48696
04-Nov-2024
18:15



BEFORE
MASS
119
AREA
529579
HEIGHT
281664
04-Nov-2024
18:10



AFTER
MASS
119
AREA
472428
HEIGHT
281664
04-Nov-2024
18:15



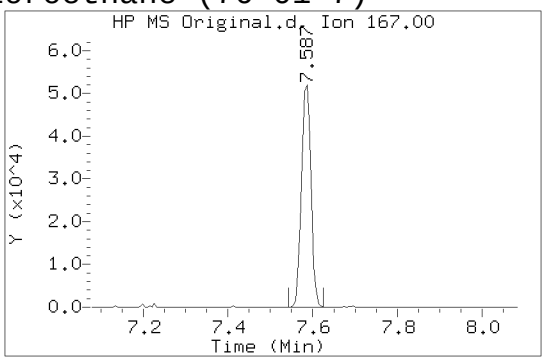
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Inj Date : 04-NOV-2024 14:56
InstruID : ms25.i
LabSampID : 1236

Pentachloroethane (76-01-7)

Reason Code: MP

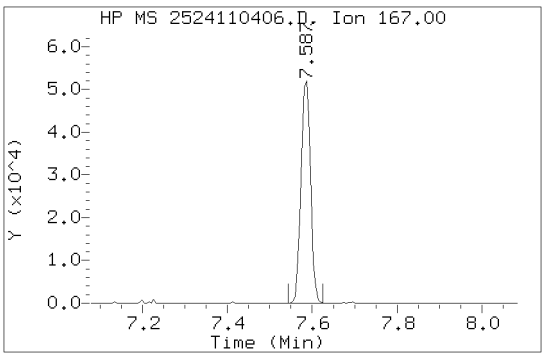
BEFORE

MASS
167
AREA
81667
HEIGHT
51992
04-Nov-2024
18:10



AFTER

MASS
167
AREA
81667
HEIGHT
51992
04-Nov-2024
18:15

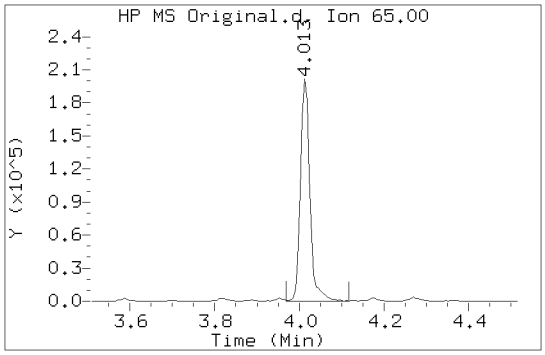


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

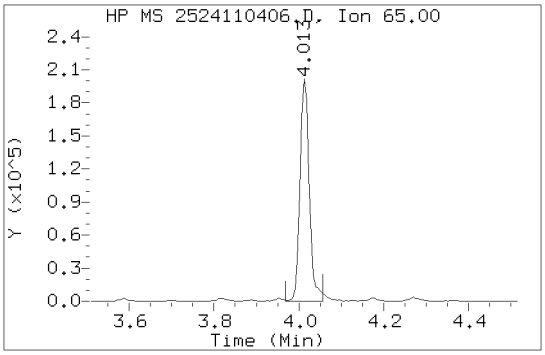
BEFORE

MASS
65
AREA
312047
HEIGHT
201529
04-Nov-2024
18:10



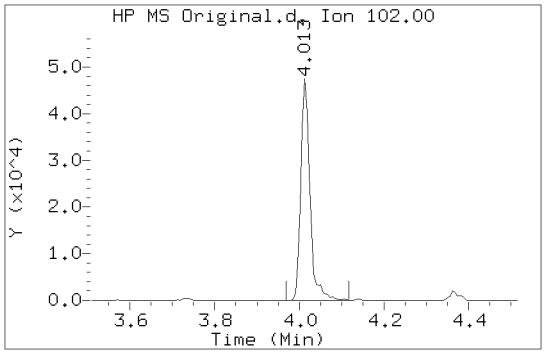
AFTER

MASS
65
AREA
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HEIGHT
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04-Nov-2024
18:15



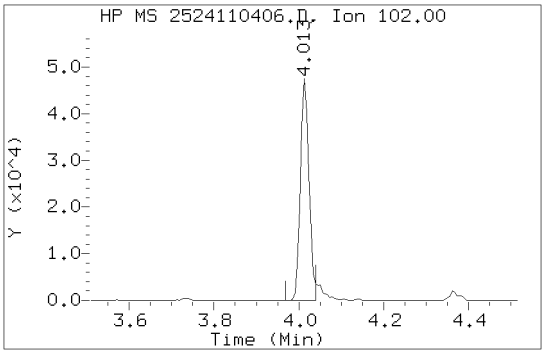
BEFORE

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102
AREA
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HEIGHT
47504
04-Nov-2024
18:10



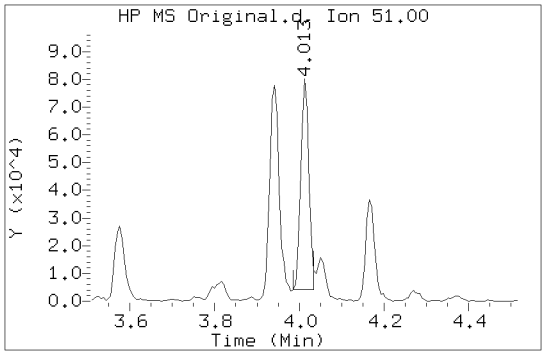
AFTER

MASS
102
AREA
67356
HEIGHT
47504
04-Nov-2024
18:15



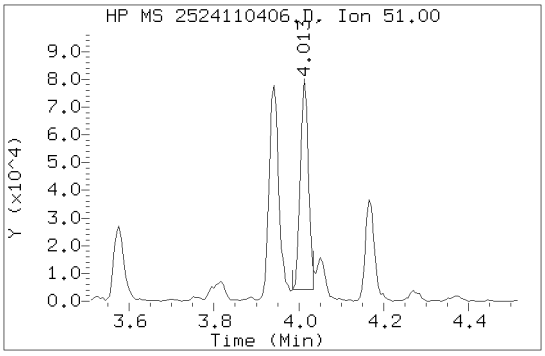
BEFORE

MASS
51
AREA
100899
HEIGHT
75880
04-Nov-2024
18:10



AFTER

MASS
51
AREA
100899
HEIGHT
75880
04-Nov-2024
18:15



UNASSIGNED PEAK REPORT

Report Date: 11/05/2024 04:11
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241104.b/252411040
Inj Date: 04-NOV-2024 14:56
Operator: TMP

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110407.D
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Inj Date : 04-NOV-2024 15:17
Operator : TMP Inst ID: ms25.i
Smp Info : 1237;;1;1;4;;;
Misc Info :
Comment :
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Meth Date : 04-Nov-2024 19:36 pdk Quant Type: ISTD
Cal Date : 04-NOV-2024 15:17 Cal File: 2524110407.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
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Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

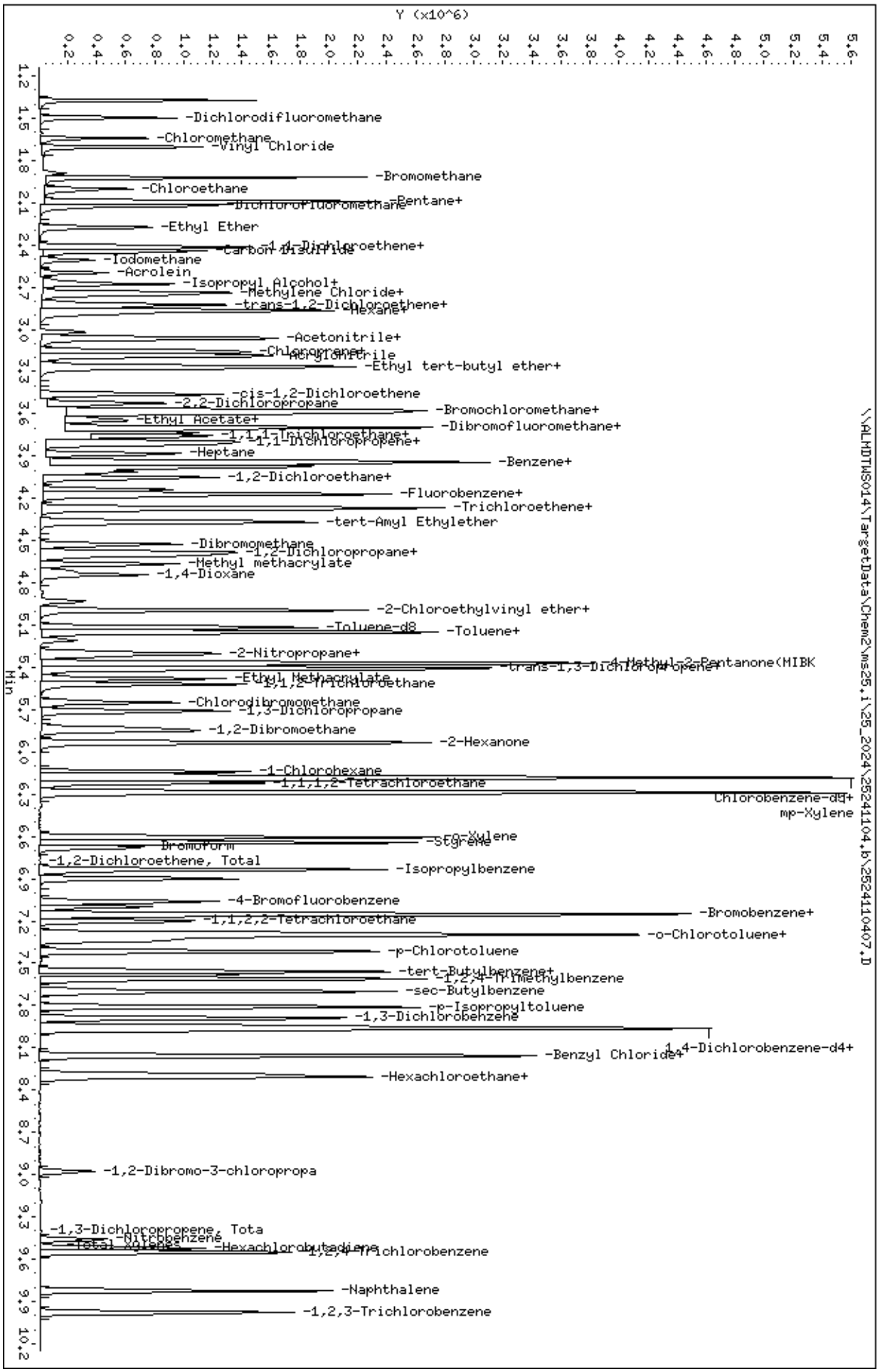
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.497	1.497	(0.359)	533454	50.0000	50.0000	
2	Chloromethane	50	1.644	1.645	(0.395)	483323	50.0000	50.0000	
3	Vinyl Chloride	62	1.704	1.705	(0.409)	625861	50.0000	50.0000	
4	Bromomethane	94	1.922	1.923	(0.462)	552515	50.0000	50.0000	
5	Chloroethane	64	2.004	2.005	(0.481)	442452	50.0000	50.0000	
6	Pentane	41	2.092	2.097	(0.502)	307343	50.0000	50.0000	
7	Trichlorofluoromethane	101	2.097	2.097	(0.504)	823998	50.0000	50.0000	
8	Dichlorofluoromethane	67	2.124	2.125	(0.510)	816417	50.0000	50.0000	
9	Ethyl Ether	74	2.277	2.278	(0.547)	245055	50.0000	50.0000	
10	1,1-Dichloroethene	61	2.408	2.409	(0.578)	447871	50.0000	50.0000	
11	Freon 113	101	2.424	2.419	(0.582)	281784	50.0000	50.0000	
12	Carbon Disulfide	76	2.446	2.447	(0.587)	964571	50.0000	50.0000	
13	Iodomethane	127	2.506	2.507	(0.602)	132371	50.0000	50.0000	
14	Acrolein	56	2.599	2.605	(0.624)	312904	250.000	250.000(A)	
15	Isopropyl Alcohol	45	2.654	2.654	(0.637)	109050	250.000	250.000(A)	
16	3-Chloro-1-propene	41	2.675	2.676	(0.642)	396655	50.0000	50.0000	
17	Methylene Chloride	84	2.735	2.736	(0.657)	428689	50.0000	50.0000	
18	Acetone	58	2.752	2.752	(0.661)	215468	250.000	250.000(A)	
19	Methyl acetate	74	2.812	2.818	(0.675)	80276	50.0000	50.0000(M)	MP
20	trans-1,2-Dichloroethene	61	2.828	2.823	(0.679)	470910	50.0000	50.0000	
21	Hexane	57	2.861	2.867	(0.687)	630178	50.0000	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	2.872	2.878	(0.690)	1179271	50.0000	50.0000	
	23 tert.- Butyl Alcohol	59	2.894	2.900	(0.695)	198631	250.000	250.000(A)	
	24 Acetonitrile	41	3.019	3.020	(0.725)	237916	250.000	250.000(A)	
	25 Diisopropyl ether	45	3.063	3.063	(0.735)	1105461	50.0000	50.0000	
	26 Chloroprene	53	3.150	3.151	(0.756)	500603	50.0000	50.0000	
	27 1,1-Dichloroethane	63	3.167	3.162	(0.760)	682131	50.0000	50.0000	
	28 Acrylonitrile	53	3.188	3.189	(0.766)	890643	250.000	250.000(AM)	MP
	29 Ethyl tert-butyl ether	59	3.265	3.265	(0.784)	1214199	50.0000	50.0000	
	30 n-Propanol	41	3.259	3.260	(0.783)	221020	500.000	500.000(A)	
	31 Vinyl Acetate	86	3.276	3.271	(0.786)	97565	50.0000	50.0000	
	32 cis-1,2-Dichloroethene	61	3.461	3.462	(0.831)	516241	50.0000	50.0000	
	33 2,2-Dichloropropane	77	3.527	3.522	(0.847)	452666	50.0000	50.0000	
	34 Bromochloromethane	128	3.576	3.571	(0.859)	232817	50.0000	50.0000	
	35 Cyclohexane	84	3.587	3.587	(0.861)	496000	50.0000	50.0000	
	36 Chloroform	83	3.598	3.598	(0.864)	751580	50.0000	50.0000	
	37 Ethyl Acetate	43	3.636	3.631	(0.873)	371364	50.0000	50.0000	
	38 Methyl acrylate	55	3.652	3.658	(0.877)	368436	50.0000	50.0000(M)	I
	39 Carbon Tetrachloride	117	3.696	3.696	(0.887)	433902	50.0000	50.0000(M)	MP
$	41 Dibromofluoromethane	113	3.701	3.702	(0.889)	280823	30.0000	30.0000	
	40 Tetrahydrofuran	42	3.696	3.702	(0.887)	570906	250.000	250.000(A)	
	42 1,1,1-Trichloroethane	97	3.734	3.729	(0.897)	539368	50.0000	50.0000	
	43 2-Butanone	72	3.761	3.762	(0.903)	285584	250.000	250.000(AM)	MP
	44 1,1-Dichloropropene	75	3.794	3.795	(0.911)	485151	50.0000	50.0000	
	45 1-Chlorobutane	41	3.816	3.816	(0.916)	304159	50.0000	50.0000	
	46 Heptane	71	3.881	3.876	(0.932)	214595	50.0000	50.0000	
	47 Benzene	78	3.941	3.942	(0.946)	1572384	50.0000	50.0000	
	48 Propionitrile	54	3.941	3.942	(0.946)	330482	250.000	250.000(AM)	MP
	49 Methacrylonitrile	67	3.952	3.953	(0.949)	200043	50.0000	50.0000	
	50 tert-Amyl methyl ether	73	3.974	3.975	(0.954)	1156271	50.0000	50.0000	
	54 Isobutyl alcohol	42	3.985	3.996	(0.957)	95240	500.000	500.000(AM)	MP
$	51 1,2-Dichloroethane-d4	65	4.012	4.013	(0.963)	308312	30.0000	30.0000(M)	MP
	52 1,2-Dichloroethane	62	4.050	4.056	(0.972)	552011	50.0000	50.0000	
	53 tert-Amyl Alcohol	59	4.056	4.062	(0.974)	144839	250.000	250.000(A)	
*	55 Fluorobenzene	96	4.165	4.166	(1.000)	1039060	30.0000		
	56 Diisobutylene	57	4.176	4.171	(1.003)	761465	50.0000	50.0000	
	57 Trichloroethene	95	4.263	4.269	(1.024)	394603	50.0000	50.0000	
	58 Methyl cyclohexane	83	4.274	4.275	(0.693)	526165	50.0000	50.0000	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.048)	889796	50.0000	50.0000	
	60 Dibromomethane	93	4.525	4.526	(1.086)	286641	50.0000	50.0000	
	61 1,2-Dichloropropane	63	4.580	4.586	(1.100)	412746	50.0000	50.0000	
	62 Bromodichloromethane	83	4.607	4.602	(1.106)	527607	50.0000	50.0000	
	63 Methyl methacrylate	41	4.667	4.668	(1.121)	324330	50.0000	50.0000	
	64 1,4-Dioxane	88	4.716	4.717	(1.132)	146343	1250.00	1250.00(A)	
	65 2-Chloroethylvinyl ether	63	4.929	4.935	(1.183)	120137	50.0000	50.0000	
	66 cis-1,3-Dichloropropene	75	4.994	4.995	(0.810)	665271	50.0000	50.0000	
	67 Octane	85	4.994	5.000	(0.810)	187121	50.0000	50.0000	
$	68 Toluene-d8	98	5.115	5.115	(0.829)	1055513	30.0000	30.0000	
	69 Toluene	92	5.147	5.153	(0.835)	968689	50.0000	50.0000	
	70 Chloroacetonitrile	75	5.207	5.213	(0.844)	114978	250.000	250.000(A)	
	71 2-Nitropropane	41	5.295	5.295	(0.858)	485480	250.000	250.000(A)	
	72 1,1-Dichloro-2-Propanone	63	5.311	5.317	(0.861)	44195	250.000	250.000(A)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.871)	2024832	250.000	250.000(A)	
	75 trans-1,3-Dichloropropene	75	5.404	5.404	(0.876)	628974	50.0000	50.0000	
	74 Tetrachloroethene	164	5.409	5.404	(0.877)	361736	50.0000	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.480	5.481	(0.889)	581924	50.0000	50.0000	
77	1,1,2-Trichloroethane	83	5.518	5.524	(0.895)	343819	50.0000	50.0000	
78	Chlorodibromomethane	129	5.649	5.650	(0.916)	446123	50.0000	50.0000	
79	1,3-Dichloropropane	76	5.709	5.710	(0.926)	694574	50.0000	50.0000	
80	1,2-Dibromoethane	107	5.829	5.830	(0.945)	412117	50.0000	50.0000	
81	2-Hexanone	43	5.933	5.933	(0.962)	1383812	250.000	250.000(A)	
82	1-Chlorohexane	91	6.140	6.141	(0.996)	468880	50.0000	50.0000	
* 83	Chlorobenzene-d5	82	6.168	6.168	(1.000)	427631	30.0000		
84	Chlorobenzene	112	6.184	6.184	(1.003)	1086354	50.0000	50.0000	
85	Ethylbenzene	106	6.184	6.190	(1.003)	563787	50.0000	50.0000	
86	1,1,1,2-Tetrachloroethane	131	6.222	6.223	(1.009)	380528	50.0000	50.0000	
87	mp-Xylene	106	6.288	6.288	(1.019)	1351787	100.000	100.000	
88	o-Xylene	106	6.604	6.599	(1.071)	671602	50.0000	50.0000(M)	MP
89	Styrene	104	6.642	6.643	(0.836)	1105801	50.0000	50.0000(M)	MP
90	Bromoform	173	6.675	6.681	(0.840)	293070	50.0000	50.0000	
91	Isopropylbenzene	105	6.833	6.839	(0.860)	1457065	50.0000	50.0000	
M 100	1,2-Dichloroethene, Total	61				987151	100.000	100.000	
$ 92	4-Bromofluorobenzene	174	7.062	7.063	(0.889)	310913	30.0000	30.0000	
93	Bromobenzene	156	7.155	7.150	(0.900)	467483	50.0000	50.0000	
94	n-Propylbenzene	120	7.155	7.150	(0.900)	439714	50.0000	50.0000	
95	1,1,2,2-Tetrachloroethane	83	7.199	7.205	(0.906)	487583	50.0000	50.0000	
96	o-Chlorotoluene	91	7.286	7.287	(0.917)	1271985	50.0000	50.0000	
97	1,3,5-Trimethylbenzene	105	7.297	7.298	(0.918)	1302045	50.0000	50.0000	
98	1,2,3-Trichloropropane	110	7.319	7.319	(0.921)	156226	50.0000	50.0000	
99	trans-1,4-Dichloro-2-butene	53	7.341	7.336	(0.924)	129910	50.0000	50.0000(M)	MP
101	p-Chlorotoluene	91	7.417	7.418	(0.933)	1167822	50.0000	50.0000	
102	tert-Butylbenzene	134	7.559	7.565	(0.951)	307431	50.0000	50.0000	
103	Pentachloroethane	117	7.581	7.581	(0.954)	257102	50.0000	50.0000(M)	MP
104	1,2,4-Trimethylbenzene	105	7.614	7.614	(0.958)	1329753	50.0000	50.0000	
105	sec-Butylbenzene	105	7.701	7.701	(0.969)	1592880	50.0000	50.0000	
106	p-Isopropyltoluene	134	7.810	7.805	(0.983)	356267	50.0000	50.0000	
107	1,3-Dichlorobenzene	146	7.892	7.887	(0.993)	785646	50.0000	50.0000	
* 108	1,4-Dichlorobenzene-d4	152	7.946	7.947	(1.000)	396264	30.0000		
109	1,4-Dichlorobenzene	146	7.957	7.963	(1.001)	800855	50.0000	50.0000	
110	Benzyl Chloride	126	8.159	8.148	(1.027)	140330	50.0000	50.0000	
111	n-Butylbenzene	134	8.159	8.154	(1.027)	312301	50.0000	50.0000	
112	Hexachloroethane	117	8.285	8.285	(1.043)	231428	50.0000	50.0000	
113	1,2-Dichlorobenzene	146	8.307	8.307	(1.045)	756046	50.0000	50.0000	
114	1,2-Dibromo-3-chloropropane	75	8.978	8.973	(1.130)	74605	50.0000	50.0000	
115	Nitrobenzene	77	9.458	9.469	(1.190)	201408	500.000	500.000(A)	
116	Hexachlorobutadiene	225	9.523	9.524	(1.198)	193488	50.0000	50.0000	
M 120	1,3-Dichloropropene, Total	75				1294245	100.000	100.000	
117	1,2,4-Trichlorobenzene	180	9.551	9.551	(1.202)	471805	50.0000	50.0000	
M 121	Total Xylenes	106				2023389	150.000	150.000	
118	Naphthalene	128	9.823	9.824	(1.236)	1276594	50.0000	50.0000	
119	1,2,3-Trichlorobenzene	180	9.982	9.982	(1.256)	477353	50.0000	50.0000	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

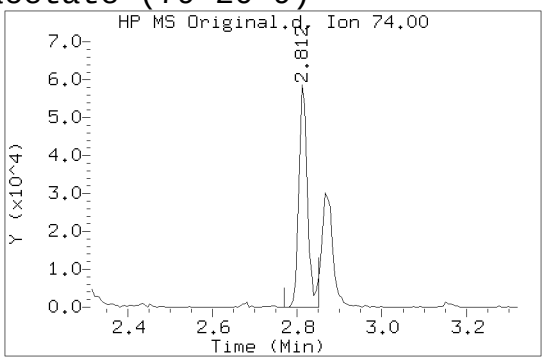

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Date : 04-NOV-2024 15:17
Client ID:
Sample Info: 1237;;1;1;4;;;
Purge Volume: 5.0
Column phase: DB-VRX
Instrument: ms25.i
Operator: THP
Column diameter: 0.25
Page 1
Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Pentane+
-Ethyl Ether
-Carbon Disulfide
-Iodomethane
-Acrolein
-Isopropyl Alcohol+
-Methylene Chloride+
-trans-1,2-Dichloroethene+
-Hexane+
-Acetonitrile+
-Acrylonitrile
-Ethyl tert-butyl ether+
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Bromochloromethane+
-Ethyl Acetate+
-Dibromofluoromethane+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene+
-Heptane
-Benzene+
-1,2-Dichloroethane+
-Fluorobenzene+
-Trichloroethene+
-tert-Amyl Ethylether
-Dibromomethane
-1,2-Dichloropropane+
-Methyl methacrylate
-1,4-Dioxane
-2-Chloroethylvinyl ether+
-Toluene-d8
-Toluene+
-2-Nitropropane+
-trans-1,3-Dichloropropene+
-4-Methyl-2-Pentanone(MIBK
-Ethyl Methacrylate
-1,1,2-Trichloroethane
-Chlorodibromomethane
-1,3-Dichloropropane
-1,2-Dibromoethane
-2-Hexanone
-1-Chlorohexane
-1,1,1,2-Tetrachloroethane
Chlorobenzene-d5+
mp-Xylene
-o-Xylene
-Styrene
Bromoform
-1,2-Dichloroethene, Total
-Isopropylbenzene
-4-Bromofluorobenzene
-Bromobenzene+
-1,1,2,2-Tetrachloroethane
-o-Chlorotoluene+
-p-Chlorotoluene
-tert-Butylbenzene+
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-p-Isopropyltoluene
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
-Benzyl Chloride+
-Hexachloroethane+
-1,2-Dibromo-3-chloropropa
-1,3-Dichloropropene, Tota
-Nitrobenzene
-Total Xylenes
-Hexachlorobutadiene
-1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene
\\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110407.D

Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110407.D
Inj Date : 04-NOV-2024 15:17
InstruID : ms25.i
LabSampID : 1237

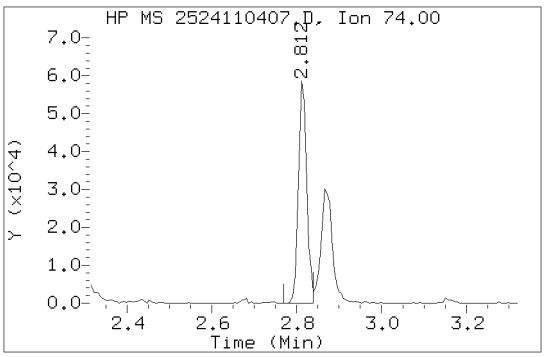
Methyl acetate (79-20-9)

Reason Code: MP

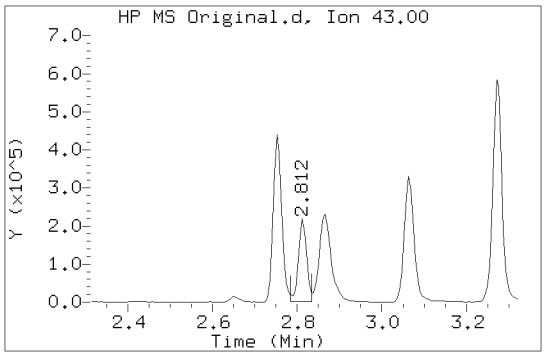
BEFORE
MASS
74
AREA
84290
HEIGHT
58664
04-Nov-2024
17:51



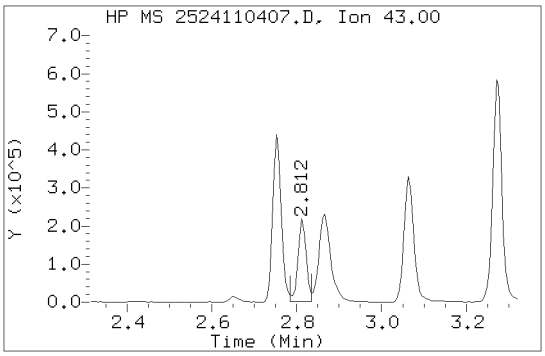
AFTER
MASS
74
AREA
80276
HEIGHT
58664
04-Nov-2024
17:58



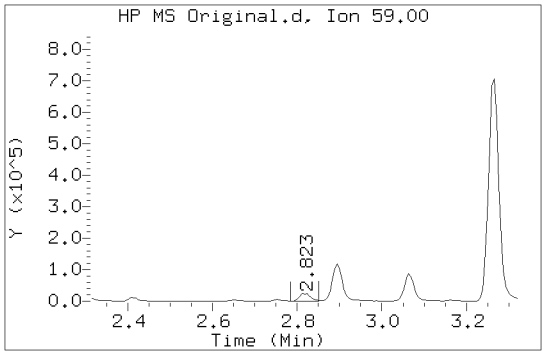
BEFORE
MASS
43
AREA
297294
HEIGHT
218721
04-Nov-2024
17:51



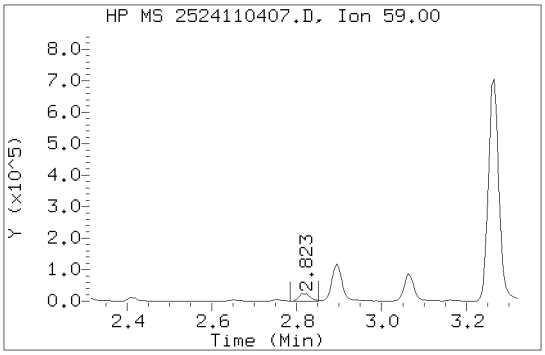
AFTER
MASS
43
AREA
297294
HEIGHT
218721
04-Nov-2024
17:58



BEFORE
MASS
59
AREA
43151
HEIGHT
23480
04-Nov-2024
17:51



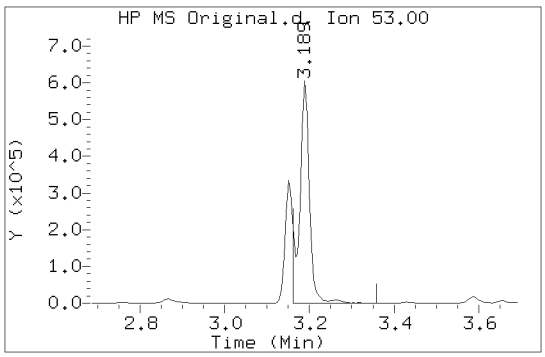
AFTER
MASS
59
AREA
43151
HEIGHT
23480
04-Nov-2024
17:58



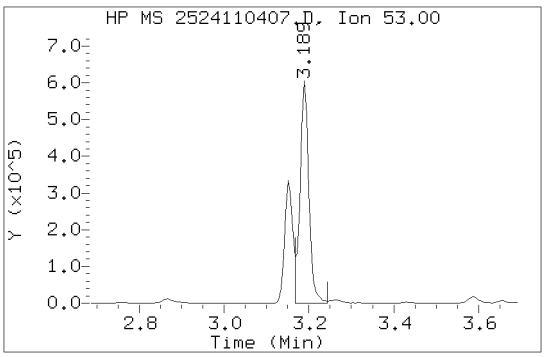
Acrylonitrile (107-13-1)

Reason Code: MP

BEFORE
MASS
53
AREA
974968
HEIGHT
604877
04-Nov-2024
17:51



AFTER
MASS
53
AREA
890643
HEIGHT
604879
04-Nov-2024
17:58



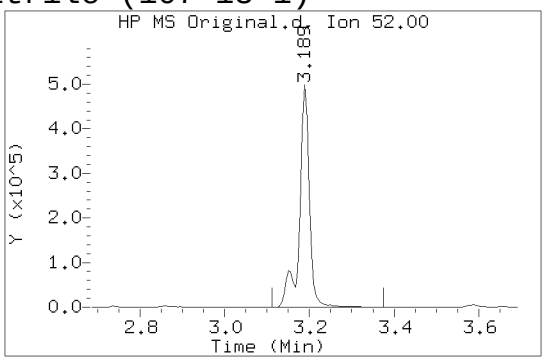
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Inj Date : 04-NOV-2024 15:17
InstruID : ms25.i
LabSampID : 1237

Acrylonitrile (107-13-1)

Reason Code: MP

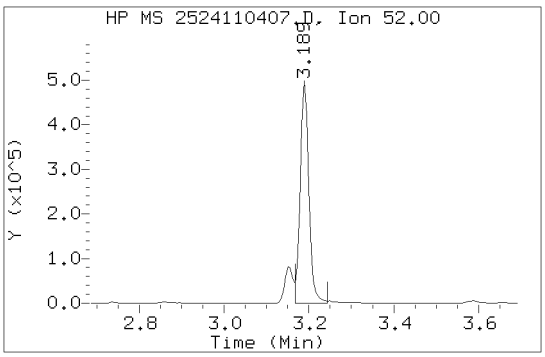
BEFORE

MASS
52
AREA
822926
HEIGHT
498496
04-Nov-2024
17:51



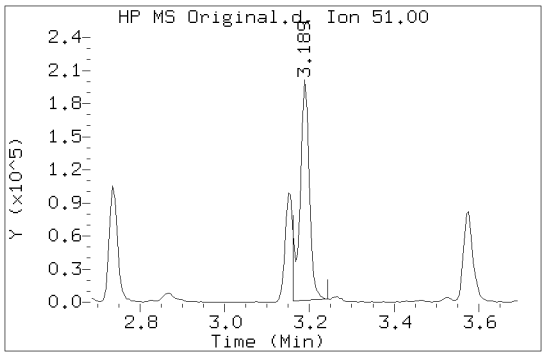
AFTER

MASS
52
AREA
706845
HEIGHT
498159
04-Nov-2024
17:58



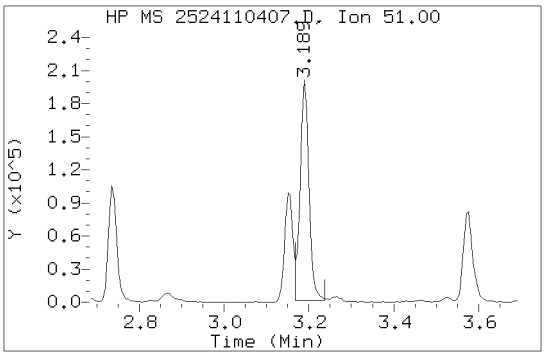
BEFORE

MASS
51
AREA
312224
HEIGHT
199934
04-Nov-2024
17:51



AFTER

MASS
51
AREA
292343
HEIGHT
199614
04-Nov-2024
17:58

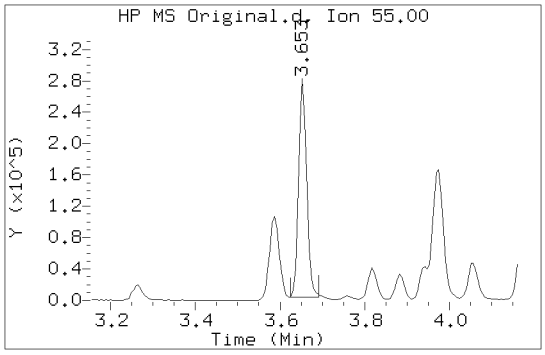


Methyl acrylate (96-33-3)

Reason Code: I

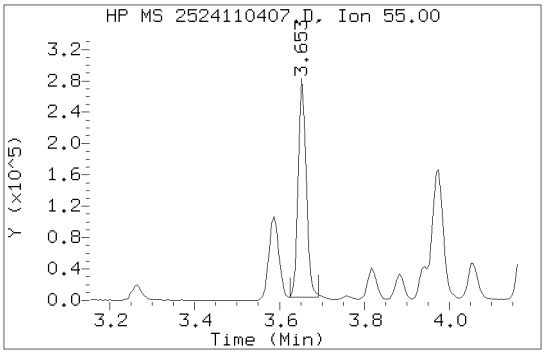
BEFORE

MASS
55
AREA
368436
HEIGHT
278684
04-Nov-2024
17:51



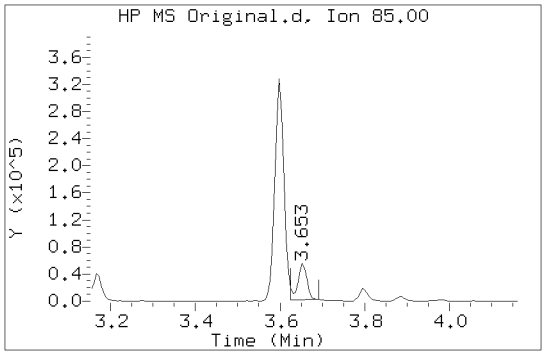
AFTER

MASS
55
AREA
368436
HEIGHT
278684
04-Nov-2024
17:58



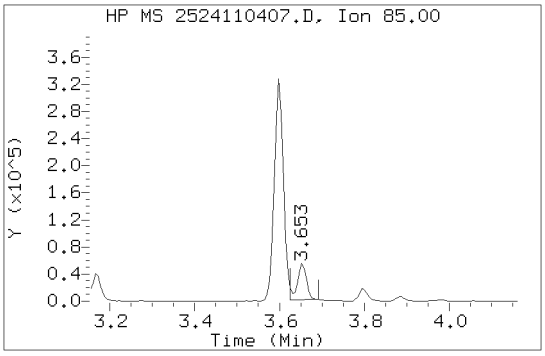
BEFORE

MASS
85
AREA
82260
HEIGHT
53928
04-Nov-2024
17:51



AFTER

MASS
85
AREA
82260
HEIGHT
53928
04-Nov-2024
17:58



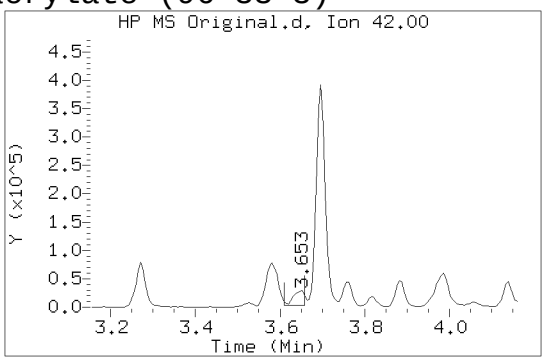
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Inj Date : 04-NOV-2024 15:17
InstruID : ms25.i
LabSampID : 1237

Methyl acrylate (96-33-3)

Reason Code: I

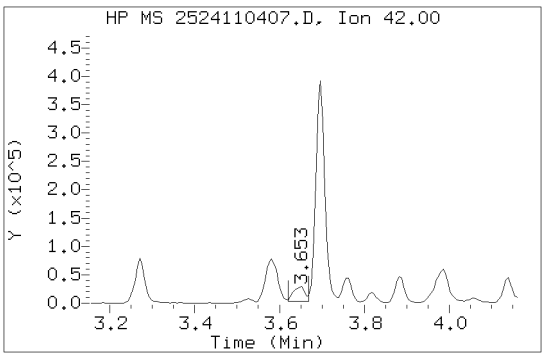
BEFORE

MASS
42
AREA
48392
HEIGHT
26298
04-Nov-2024
17:51



AFTER

MASS
42
AREA
50470
HEIGHT
26190
04-Nov-2024
17:58

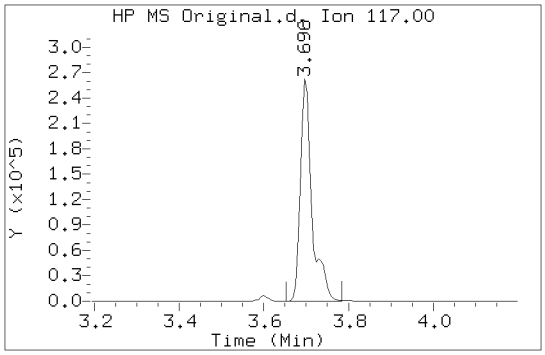


Carbon Tetrachloride (56-23-5)

Reason Code: MP

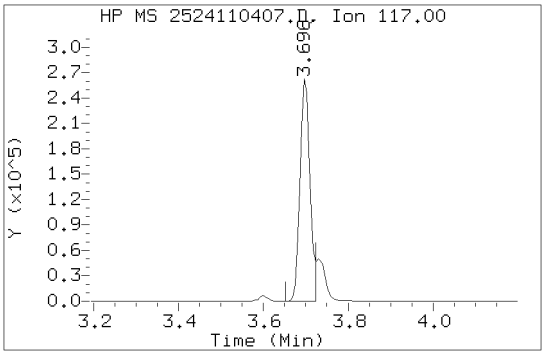
BEFORE

MASS
117
AREA
500912
HEIGHT
262656
04-Nov-2024
17:51



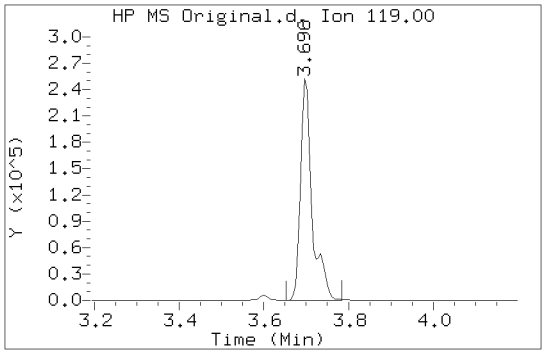
AFTER

MASS
117
AREA
433902
HEIGHT
262656
04-Nov-2024
17:58



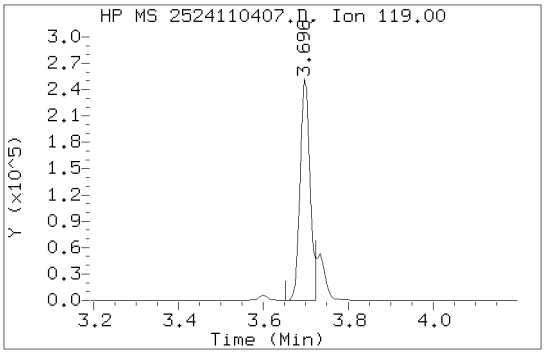
BEFORE

MASS
119
AREA
481509
HEIGHT
252198
04-Nov-2024
17:51



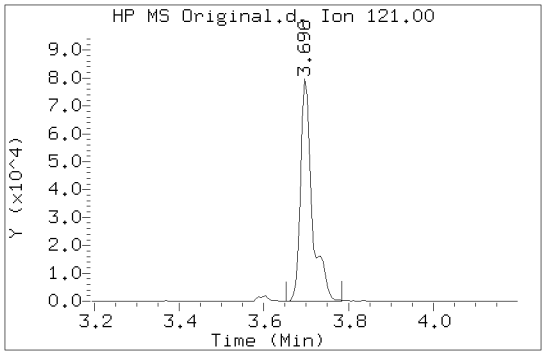
AFTER

MASS
119
AREA
414562
HEIGHT
252198
04-Nov-2024
17:58



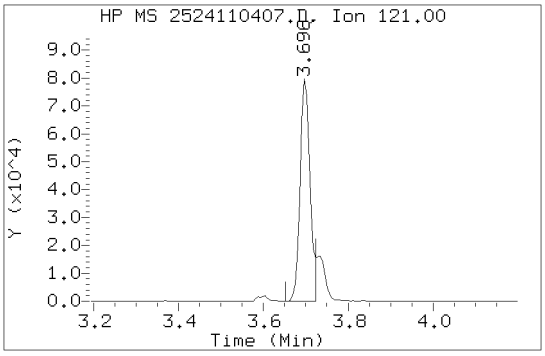
BEFORE

MASS
121
AREA
152437
HEIGHT
79696
04-Nov-2024
17:51



AFTER

MASS
121
AREA
130774
HEIGHT
79696
04-Nov-2024
17:58

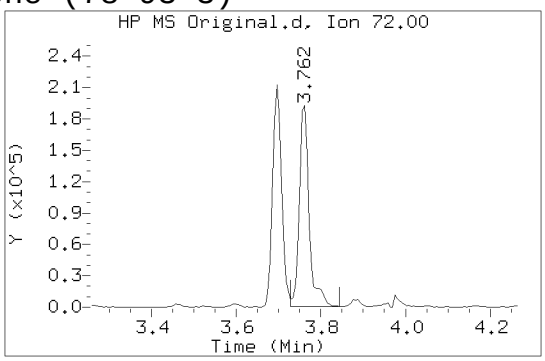


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LabSampID : 1237

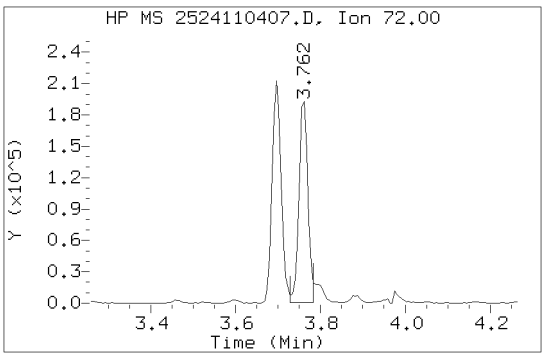
2-Butanone (78-93-3)

Reason Code: MP

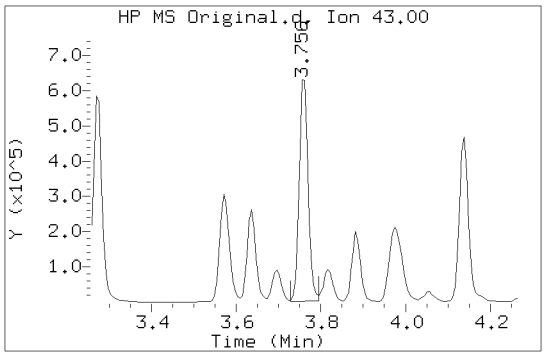
BEFORE
MASS
72
AREA
310278
HEIGHT
192323
04-Nov-2024
17:51



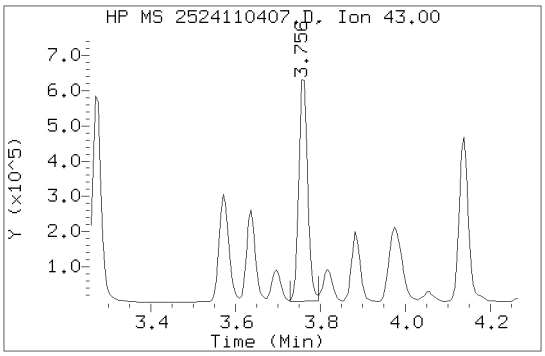
AFTER
MASS
72
AREA
285584
HEIGHT
192323
04-Nov-2024
17:58



BEFORE
MASS
43
AREA
921712
HEIGHT
626855
04-Nov-2024
17:51



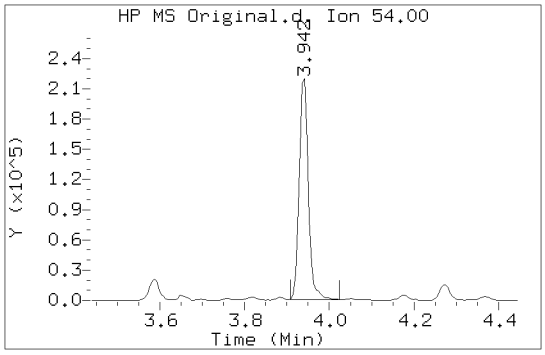
AFTER
MASS
43
AREA
921712
HEIGHT
626855
04-Nov-2024
17:58



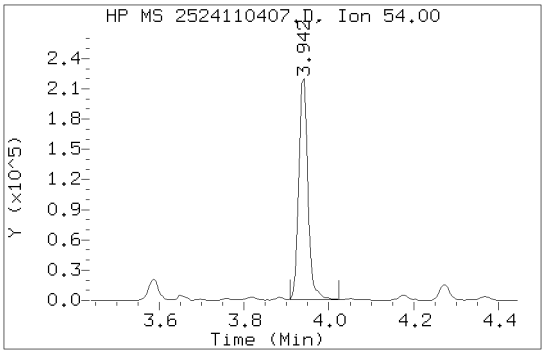
Propionitrile (107-12-0)

Reason Code: MP

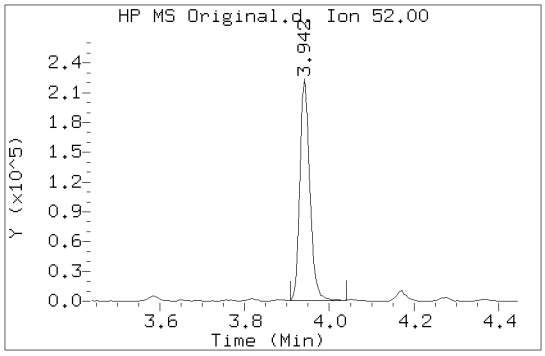
BEFORE
MASS
54
AREA
330482
HEIGHT
219500
04-Nov-2024
17:51



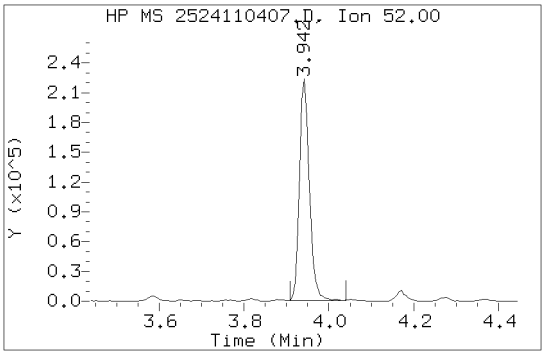
AFTER
MASS
54
AREA
330482
HEIGHT
219500
04-Nov-2024
17:58



BEFORE
MASS
52
AREA
361137
HEIGHT
222986
04-Nov-2024
17:51



AFTER
MASS
52
AREA
361137
HEIGHT
222986
04-Nov-2024
17:58



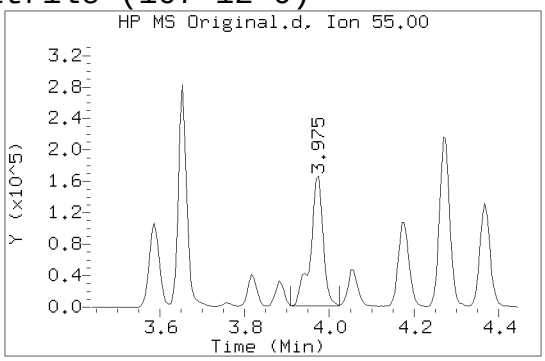
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InstruID : ms25.i
LabSampID : 1237

Propionitrile (107-12-0)

Reason Code: MP

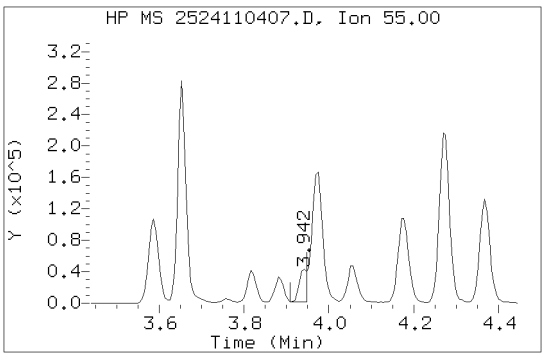
BEFORE

MASS
55
AREA
342424
HEIGHT
164867
04-Nov-2024
17:51



AFTER

MASS
55
AREA
52489
HEIGHT
41083
04-Nov-2024
17:58

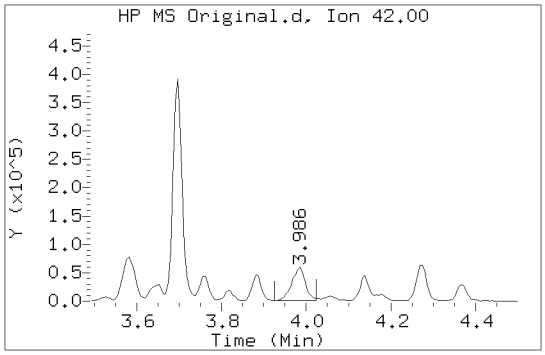


Isobutyl alcohol (78-83-1)

Reason Code: MP

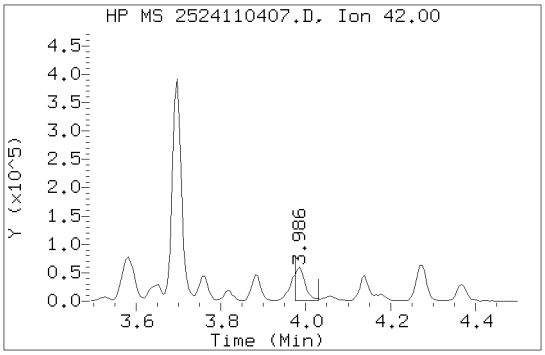
BEFORE

MASS
42
AREA
131130
HEIGHT
58666
04-Nov-2024
17:51



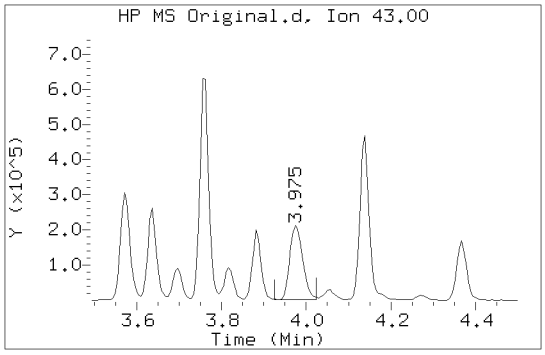
AFTER

MASS
42
AREA
95240
HEIGHT
57998
04-Nov-2024
17:58



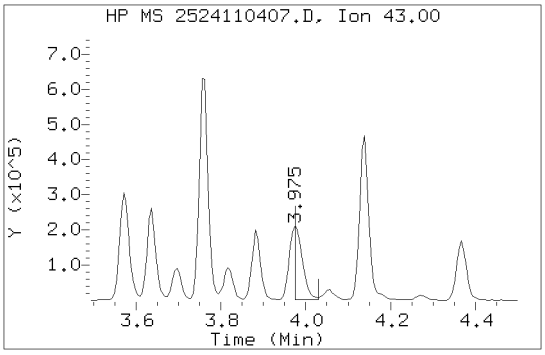
BEFORE

MASS
43
AREA
449726
HEIGHT
211913
04-Nov-2024
17:51



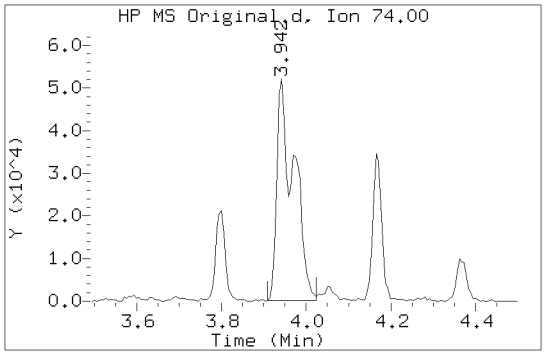
AFTER

MASS
43
AREA
288236
HEIGHT
211227
04-Nov-2024
17:58



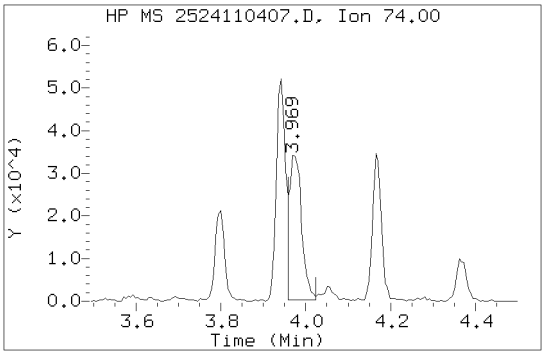
BEFORE

MASS
74
AREA
144191
HEIGHT
51963
04-Nov-2024
17:51



AFTER

MASS
74
AREA
71659
HEIGHT
33907
04-Nov-2024
17:58



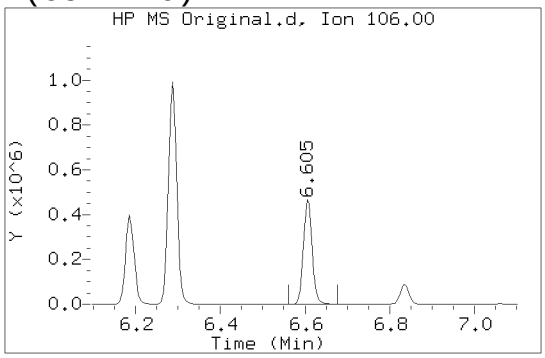
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Inj Date : 04-NOV-2024 15:17
InstruID : ms25.i
LabSampID : 1237

o-Xylene (95-47-6)

Reason Code: MP

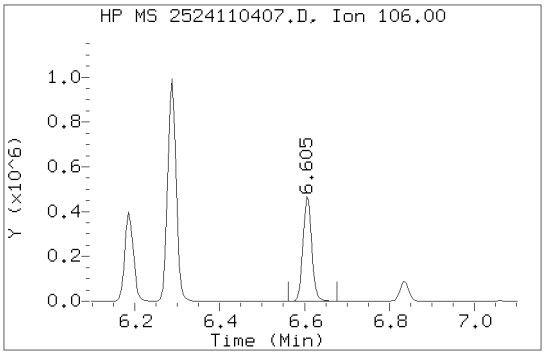
BEFORE

MASS
106
AREA
671602
HEIGHT
468928
04-Nov-2024
17:51



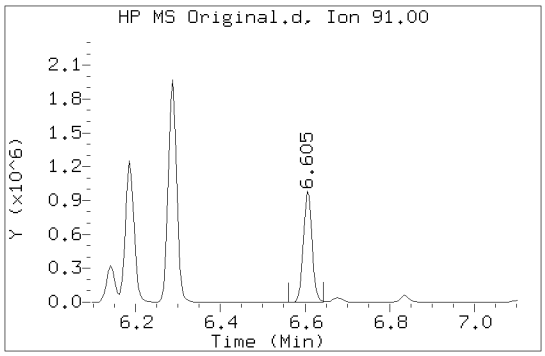
AFTER

MASS
106
AREA
671602
HEIGHT
468928
04-Nov-2024
17:58



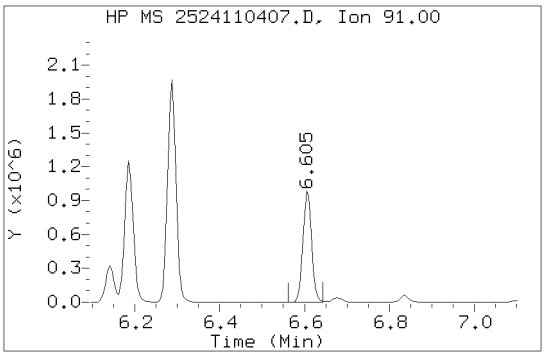
BEFORE

MASS
91
AREA
1403528
HEIGHT
985486
04-Nov-2024
17:51



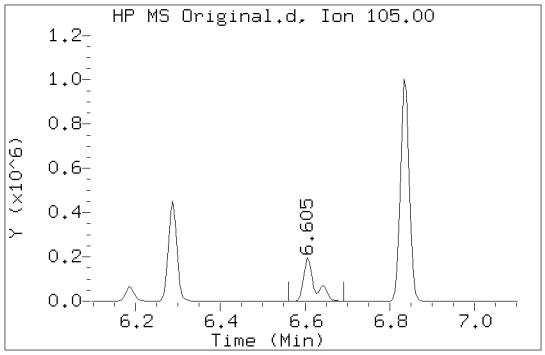
AFTER

MASS
91
AREA
1403528
HEIGHT
985486
04-Nov-2024
17:58



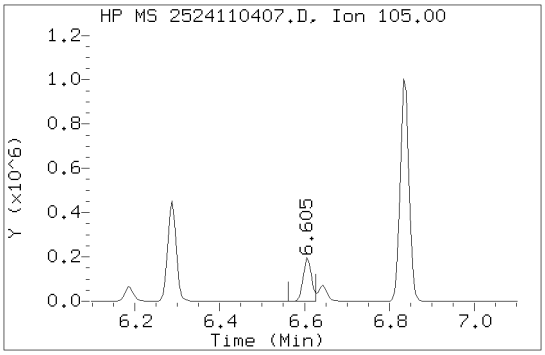
BEFORE

MASS
105
AREA
368702
HEIGHT
196992
04-Nov-2024
17:51



AFTER

MASS
105
AREA
272495
HEIGHT
196992
04-Nov-2024
17:58

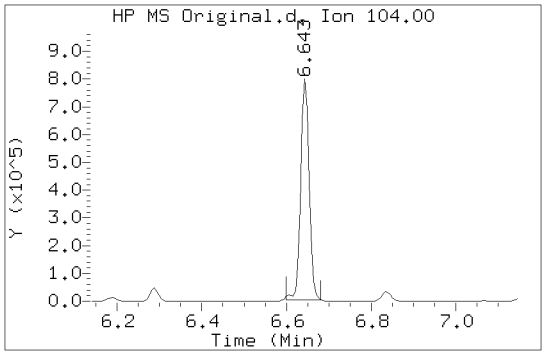


Styrene (100-42-5)

Reason Code: MP

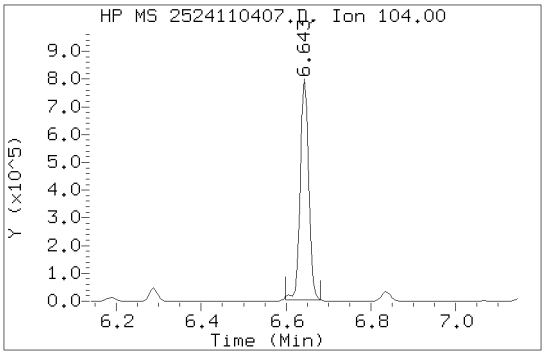
BEFORE

MASS
104
AREA
1105801
HEIGHT
795162
04-Nov-2024
17:51



AFTER

MASS
104
AREA
1105801
HEIGHT
795162
04-Nov-2024
17:58

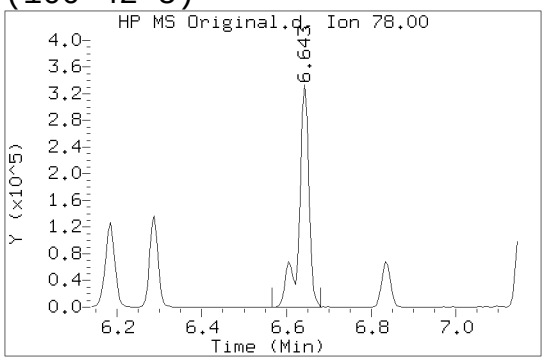


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InstruID : ms25.i
LabSampID : 1237

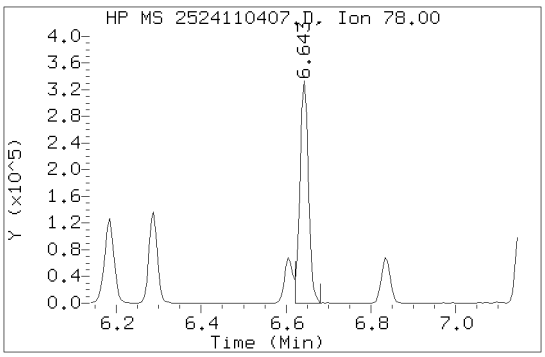
Styrene (100-42-5)

Reason Code: MP

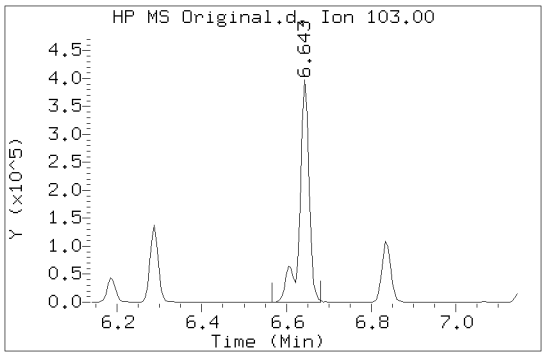
BEFORE
MASS
78
AREA
558207
HEIGHT
333312
04-Nov-2024
17:51



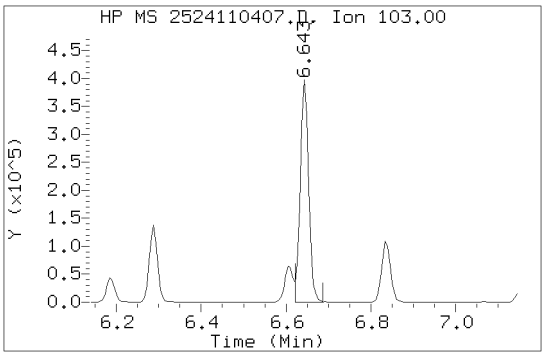
AFTER
MASS
78
AREA
470499
HEIGHT
333282
04-Nov-2024
17:58



BEFORE
MASS
103
AREA
630647
HEIGHT
397195
04-Nov-2024
17:51



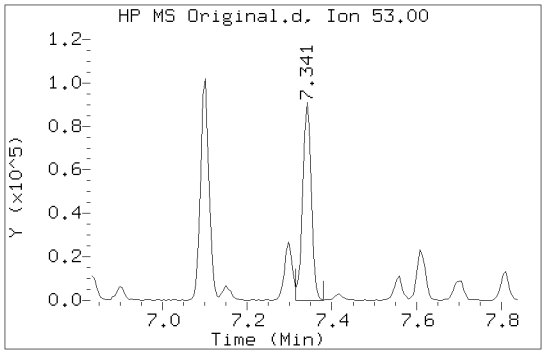
AFTER
MASS
103
AREA
548007
HEIGHT
397218
04-Nov-2024
17:58



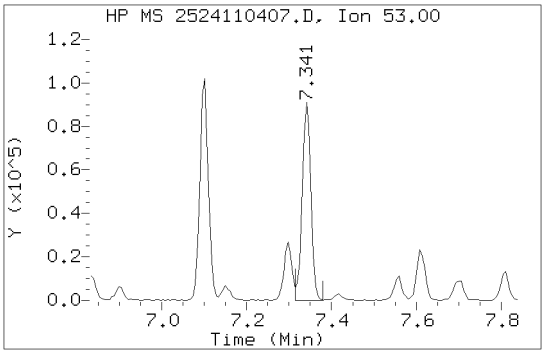
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

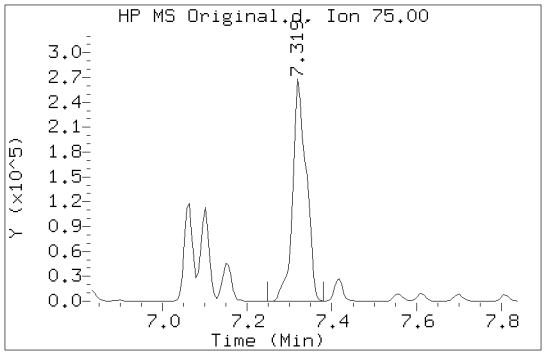
BEFORE
MASS
53
AREA
129910
HEIGHT
90976
04-Nov-2024
17:51



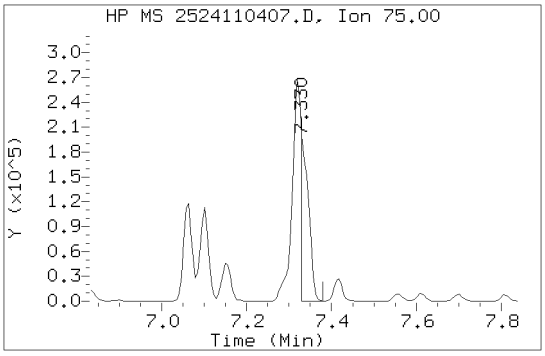
AFTER
MASS
53
AREA
129910
HEIGHT
90976
04-Nov-2024
17:58



BEFORE
MASS
75
AREA
598355
HEIGHT
268183
04-Nov-2024
17:51



AFTER
MASS
75
AREA
246093
HEIGHT
199421
04-Nov-2024
17:58



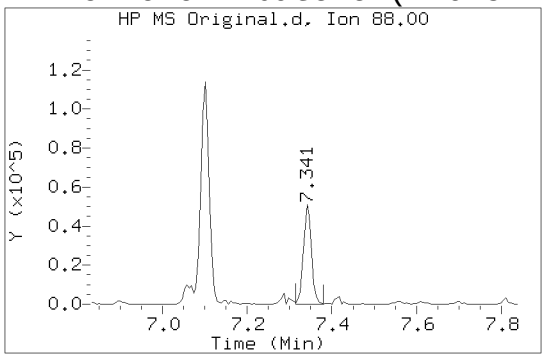
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Inj Date : 04-NOV-2024 15:17
InstruID : ms25.i
LabSampID : 1237

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

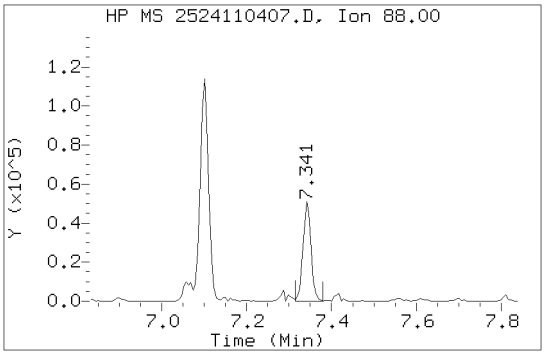
BEFORE

MASS
88
AREA
67080
HEIGHT
51184
04-Nov-2024
17:51



AFTER

MASS
88
AREA
67080
HEIGHT
51184
04-Nov-2024
17:58

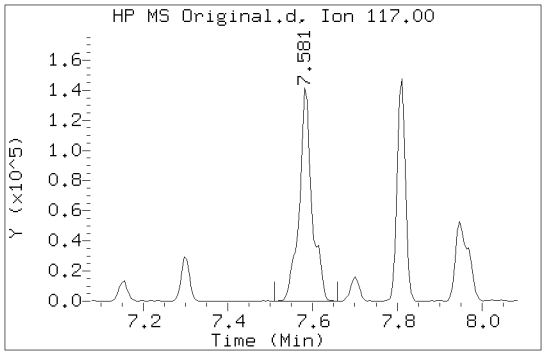


Pentachloroethane (76-01-7)

Reason Code: MP

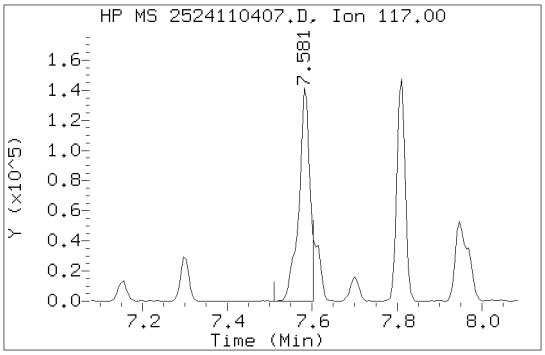
BEFORE

MASS
117
AREA
295611
HEIGHT
141440
04-Nov-2024
17:51



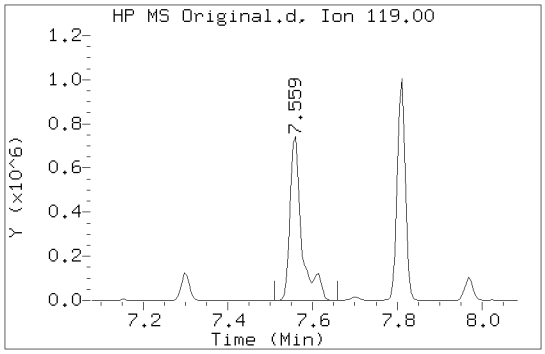
AFTER

MASS
117
AREA
257102
HEIGHT
141440
04-Nov-2024
17:58



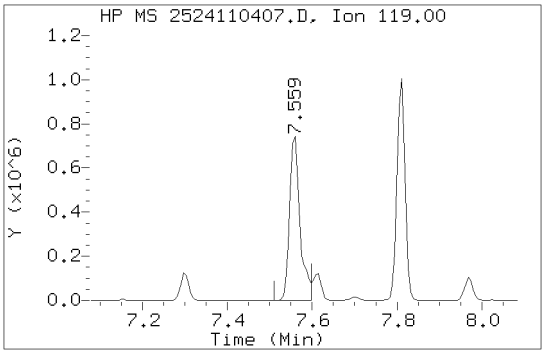
BEFORE

MASS
119
AREA
1442900
HEIGHT
744768
04-Nov-2024
17:51



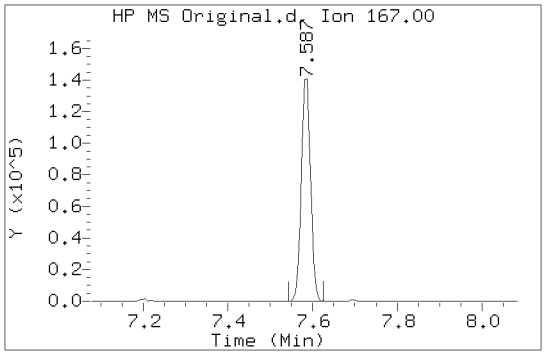
AFTER

MASS
119
AREA
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HEIGHT
744768
04-Nov-2024
17:58



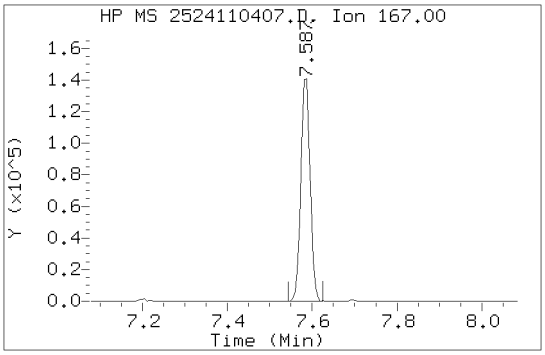
BEFORE

MASS
167
AREA
214890
HEIGHT
140736
04-Nov-2024
17:51



AFTER

MASS
167
AREA
214890
HEIGHT
140736
04-Nov-2024
17:58

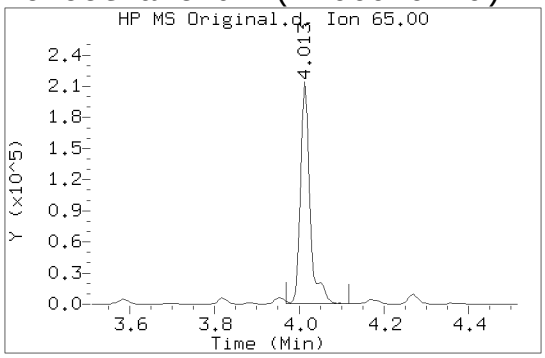


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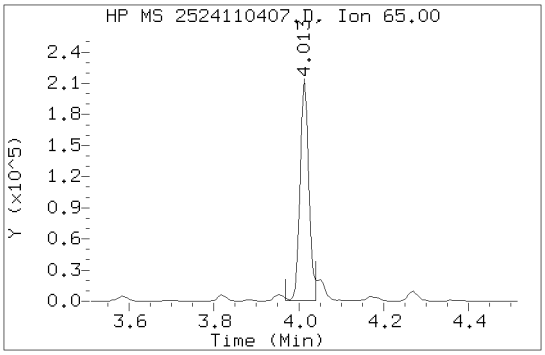
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

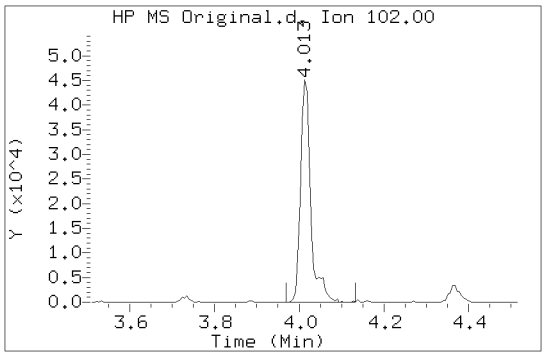
BEFORE
MASS
65
AREA
334692
HEIGHT
213714
04-Nov-2024
17:51



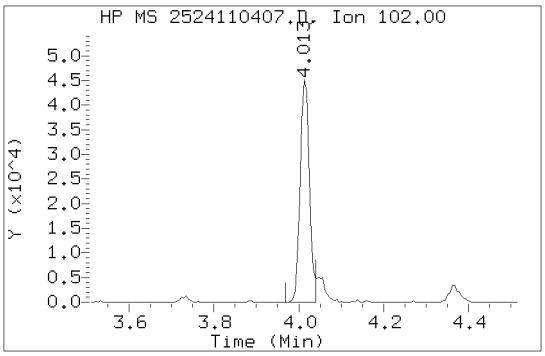
AFTER
MASS
65
AREA
308312
HEIGHT
213714
04-Nov-2024
17:58



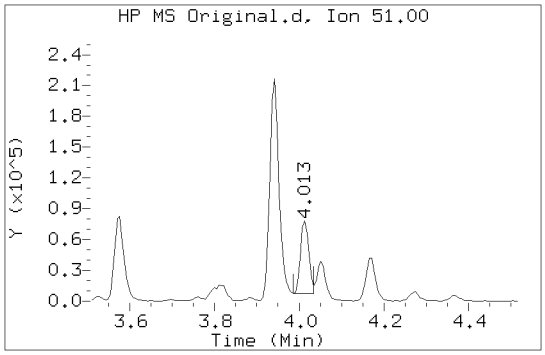
BEFORE
MASS
102
AREA
76374
HEIGHT
45120
04-Nov-2024
17:51



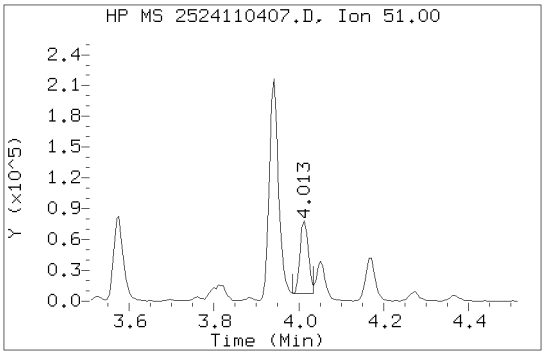
AFTER
MASS
102
AREA
69264
HEIGHT
45120
04-Nov-2024
17:58



BEFORE
MASS
51
AREA
97829
HEIGHT
70963
04-Nov-2024
17:51



AFTER
MASS
51
AREA
97829
HEIGHT
70963
04-Nov-2024
17:58



UNASSIGNED PEAK REPORT

Report Date: 11/05/2024 04:11
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241104.b/252411040
Inj Date: 04-NOV-2024 15:17
Operator: TMP

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110408.D
Lab Smp Id: 1238
Inj Date : 04-NOV-2024 15:37
Operator : TMP Inst ID: ms25.i
Smp Info : 1238;;1;1;5;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\25-8260b09.m
Meth Date : 04-Nov-2024 19:36 pdk Quant Type: ISTD
Cal Date : 04-NOV-2024 15:37 Cal File: 2524110408.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.497	1.497	(0.359)	1153151	100.000	102.909	
2	Chloromethane	50	1.644	1.645	(0.395)	1036618	100.000	102.517	
3	Vinyl Chloride	62	1.704	1.705	(0.409)	1301000	100.000	100.954	
4	Bromomethane	94	1.922	1.923	(0.462)	1329316	100.000	108.244	
5	Chloroethane	64	2.004	2.005	(0.481)	913864	100.000	100.633	
6	Pentane	41	2.092	2.097	(0.502)	656039	100.000	102.278(M)	MP
7	Trichlorofluoromethane	101	2.097	2.097	(0.504)	1712681	100.000	100.948	
8	Dichlorofluoromethane	67	2.124	2.125	(0.510)	1722290	100.000	101.690	
9	Ethyl Ether	74	2.277	2.278	(0.547)	538880	100.000	103.764	
10	1,1-Dichloroethene	61	2.408	2.409	(0.578)	1016179	100.000	105.326	
11	Freon 113	101	2.424	2.419	(0.582)	618305	100.000	103.656	
12	Carbon Disulfide	76	2.446	2.447	(0.587)	2197673	100.000	105.534	
13	Iodomethane	127	2.506	2.507	(0.602)	349151	100.000	112.790(M)	MP
14	Acrolein	56	2.599	2.605	(0.624)	669896	500.000	512.132(A)	
15	Isopropyl Alcohol	45	2.654	2.654	(0.637)	233894	500.000	512.591(A)	
16	3-Chloro-1-propene	41	2.675	2.676	(0.642)	877459	100.000	104.062	
17	Methylene Chloride	84	2.735	2.736	(0.657)	907688	100.000	101.874	
18	Acetone	58	2.752	2.752	(0.661)	458923	500.000	510.844(A)	
19	Methyl acetate	74	2.812	2.818	(0.675)	170630	100.000	102.067	
20	trans-1,2-Dichloroethene	61	2.828	2.823	(0.679)	1035909	100.000	103.782	
21	Hexane	57	2.861	2.867	(0.687)	1355279	100.000	102.653	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	2.872	2.878	(0.690)	2540593	100.000	102.740	
	23 tert.- Butyl Alcohol	59	2.894	2.900	(0.695)	433447	500.000	516.902(A)	
	24 Acetonitrile	41	3.019	3.020	(0.725)	520296	500.000	517.441(A)	
	25 Diisopropyl ether	45	3.063	3.063	(0.735)	2424348	100.000	103.629	
	26 Chloroprene	53	3.150	3.151	(0.756)	1103314	100.000	103.877	
	27 1,1-Dichloroethane	63	3.166	3.162	(0.760)	1495877	100.000	103.626	
	28 Acrylonitrile	53	3.188	3.189	(0.766)	1832158	500.000	502.155(AM)	MP
	29 Ethyl tert-butyl ether	59	3.265	3.265	(0.784)	2668780	100.000	103.741	
	30 n-Propanol	41	3.265	3.260	(0.784)	478291	1000.00	1029.63(A)	
	31 Vinyl Acetate	86	3.276	3.271	(0.786)	214480	100.000	103.749	
	32 cis-1,2-Dichloroethene	61	3.461	3.462	(0.831)	1128692	100.000	103.476	
	33 2,2-Dichloropropane	77	3.527	3.522	(0.847)	1013942	100.000	104.685	
	34 Bromochloromethane	128	3.576	3.571	(0.859)	498458	100.000	102.428	
	35 Cyclohexane	84	3.587	3.587	(0.861)	1090286	100.000	103.745	
	36 Chloroform	83	3.598	3.598	(0.864)	1649938	100.000	103.680	
	37 Ethyl Acetate	43	3.636	3.631	(0.873)	840425	100.000	105.197	
	38 Methyl acrylate	55	3.652	3.658	(0.877)	859870	100.000	106.731	
	39 Carbon Tetrachloride	117	3.696	3.696	(0.887)	993508	100.000	105.780(M)	MP
$	41 Dibromofluoromethane	113	3.701	3.702	(0.889)	288328	30.0000	30.1025	
	40 Tetrahydrofuran	42	3.696	3.702	(0.887)	1253055	500.000	518.349(A)	
	42 1,1,1-Trichloroethane	97	3.734	3.729	(0.897)	1208500	100.000	104.699	
	43 2-Butanone	72	3.761	3.762	(0.903)	620876	500.000	515.972(AM)	MP
	44 1,1-Dichloropropene	75	3.799	3.795	(0.912)	1082291	100.000	104.481	
	45 1-Chlorobutane	41	3.816	3.816	(0.916)	682870	100.000	104.800	
	46 Heptane	71	3.881	3.876	(0.932)	462152	100.000	102.722	
	47 Benzene	78	3.941	3.942	(0.946)	3455672	100.000	103.735	
	48 Propionitrile	54	3.941	3.942	(0.946)	699632	500.000	509.328(AQ)	
	49 Methacrylonitrile	67	3.952	3.953	(0.949)	438904	100.000	103.651	
	50 tert-Amyl methyl ether	73	3.974	3.975	(0.954)	2541091	100.000	103.734	
	54 Isobutyl alcohol	42	3.985	3.996	(0.957)	243254	1000.00	1112.04(AQM)	MP
$	51 1,2-Dichloroethane-d4	65	4.012	4.013	(0.963)	314703	30.0000	30.0147(M)	MP
	52 1,2-Dichloroethane	62	4.050	4.056	(0.972)	1196259	100.000	103.034	
	53 tert-Amyl Alcohol	59	4.056	4.062	(0.974)	332348	500.000	529.434(A)	
*	55 Fluorobenzene	96	4.165	4.166	(1.000)	1059563	30.0000		
	56 Diisobutylene	57	4.176	4.171	(1.003)	1631071	100.000	102.453	
	57 Trichloroethene	95	4.263	4.269	(1.024)	869903	100.000	103.889	
	58 Methyl cyclohexane	83	4.274	4.275	(0.692)	1129673	100.000	101.583	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.048)	1980947	100.000	104.380	
	60 Dibromomethane	93	4.525	4.526	(1.086)	627480	100.000	103.538	
	61 1,2-Dichloropropane	63	4.585	4.586	(1.101)	895879	100.000	103.113	
	62 Bromodichloromethane	83	4.607	4.602	(1.106)	1162304	100.000	103.854	
	63 Methyl methacrylate	41	4.667	4.668	(1.121)	725211	100.000	104.597	
	64 1,4-Dioxane	88	4.716	4.717	(1.132)	299089	2500.00	2502.63(A)	
	65 2-Chloroethylvinyl ether	63	4.929	4.935	(1.183)	317943	100.000	112.954	
	66 cis-1,3-Dichloropropene	75	4.994	4.995	(0.809)	1487042	100.000	103.596	
	67 Octane	85	4.994	5.000	(0.809)	403671	100.000	101.822	
$	68 Toluene-d8	98	5.114	5.115	(0.829)	1066648	30.0000	29.5686	
	69 Toluene	92	5.147	5.153	(0.834)	2119407	100.000	102.527	
	70 Chloroacetonitrile	75	5.207	5.213	(0.844)	274813	500.000	534.680(A)	
	71 2-Nitropropane	41	5.294	5.295	(0.858)	1151797	500.000	532.836(A)	
	72 1,1-Dichloro-2-Propanone	63	5.311	5.317	(0.860)	102248	500.000	526.571(AQ)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.870)	4492935	500.000	516.148(A)	
	75 trans-1,3-Dichloropropene	75	5.404	5.404	(0.875)	1425902	100.000	104.301	
	74 Tetrachloroethene	164	5.409	5.404	(0.876)	785444	100.000	102.146	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.480	5.481	(0.888)	1315136	100.000	104.145	
77	1,1,2-Trichloroethane	83	5.518	5.524	(0.894)	737300	100.000	101.524	
78	Chlorodibromomethane	129	5.649	5.650	(0.915)	990826	100.000	103.276	
79	1,3-Dichloropropane	76	5.709	5.710	(0.925)	1471838	100.000	100.928	
80	1,2-Dibromoethane	107	5.829	5.830	(0.944)	906097	100.000	102.771	
81	2-Hexanone	43	5.933	5.933	(0.961)	3003014	500.000	510.591(A)	
82	1-Chlorohexane	91	6.140	6.141	(0.995)	1054191	100.000	103.887(M)	I
* 83	Chlorobenzene-d5	82	6.173	6.168	(1.000)	444753	30.0000		
84	Chlorobenzene	112	6.184	6.184	(1.002)	2414320	100.000	103.308	
85	Ethylbenzene	106	6.184	6.190	(1.002)	1257219	100.000	103.477	
86	1,1,1,2-Tetrachloroethane	131	6.222	6.223	(1.008)	848589	100.000	103.479	
87	mp-Xylene	106	6.288	6.288	(1.019)	3043799	200.000	207.923(A)	
88	o-Xylene	106	6.604	6.599	(1.070)	1495479	100.000	103.405(M)	MP
89	Styrene	104	6.642	6.643	(0.836)	2514362	100.000	105.126(M)	MP
90	Bromoform	173	6.680	6.681	(0.841)	682692	100.000	106.332	
91	Isopropylbenzene	105	6.833	6.839	(0.860)	3216009	100.000	103.643	
M 100	1,2-Dichloroethene, Total	61				2164601	200.000	207.258	
$ 92	4-Bromofluorobenzene	174	7.062	7.063	(0.889)	318026	30.0000	29.9541	
93	Bromobenzene	156	7.155	7.150	(0.900)	1032091	100.000	103.656	
94	n-Propylbenzene	120	7.155	7.150	(0.900)	993593	100.000	104.815	
95	1,1,2,2-Tetrachloroethane	83	7.199	7.205	(0.906)	1096275	100.000	104.566	
96	o-Chlorotoluene	91	7.286	7.287	(0.917)	2871214	100.000	104.763	
97	1,3,5-Trimethylbenzene	105	7.297	7.298	(0.918)	2908607	100.000	104.243	
98	1,2,3-Trichloropropane	110	7.319	7.319	(0.921)	337668	100.000	102.596	
99	trans-1,4-Dichloro-2-butene	53	7.341	7.336	(0.924)	307882	100.000	107.190(QM)	MP
101	p-Chlorotoluene	91	7.417	7.418	(0.933)	2590111	100.000	103.885	
102	tert-Butylbenzene	134	7.559	7.565	(0.951)	670491	100.000	103.046(M)	MP
103	Pentachloroethane	117	7.586	7.581	(0.955)	578109	100.000	104.570(M)	MP
104	1,2,4-Trimethylbenzene	105	7.608	7.614	(0.957)	2937711	100.000	103.689	
105	sec-Butylbenzene	105	7.701	7.701	(0.969)	3453809	100.000	102.755	
106	p-Isopropyltoluene	134	7.810	7.805	(0.983)	778328	100.000	103.131	
107	1,3-Dichlorobenzene	146	7.892	7.887	(0.993)	1728528	100.000	103.483	
* 108	1,4-Dichlorobenzene-d4	152	7.946	7.947	(1.000)	406573	30.0000	(Q)	
109	1,4-Dichlorobenzene	146	7.957	7.963	(1.001)	1779838	100.000	103.986	
110	Benzyl Chloride	126	8.159	8.148	(1.027)	341943	100.000	108.570(Q)	
111	n-Butylbenzene	134	8.159	8.154	(1.027)	681495	100.000	103.074(Q)	
112	Hexachloroethane	117	8.290	8.285	(1.043)	534912	100.000	105.943	
113	1,2-Dichlorobenzene	146	8.306	8.307	(1.045)	1656263	100.000	103.268	
114	1,2-Dibromo-3-chloropropane	75	8.978	8.973	(1.130)	179024	100.000	107.808	
115	Nitrobenzene	77	9.463	9.469	(1.191)	574692	1000.00	1163.36(A)	
116	Hexachlorobutadiene	225	9.523	9.524	(1.198)	427615	100.000	103.707	
M 120	1,3-Dichloropropene, Total	75				2912944	200.000	207.896	
117	1,2,4-Trichlorobenzene	180	9.556	9.551	(1.203)	1054773	100.000	104.282	
M 121	Total Xylenes	106				4539278	300.000	311.328	
118	Naphthalene	128	9.823	9.824	(1.236)	2857487	100.000	104.343	
119	1,2,3-Trichlorobenzene	180	9.976	9.982	(1.255)	1044154	100.000	103.193	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

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Date : 04-NOV-2024 15:37

Client ID:

Instrument: ms25.i

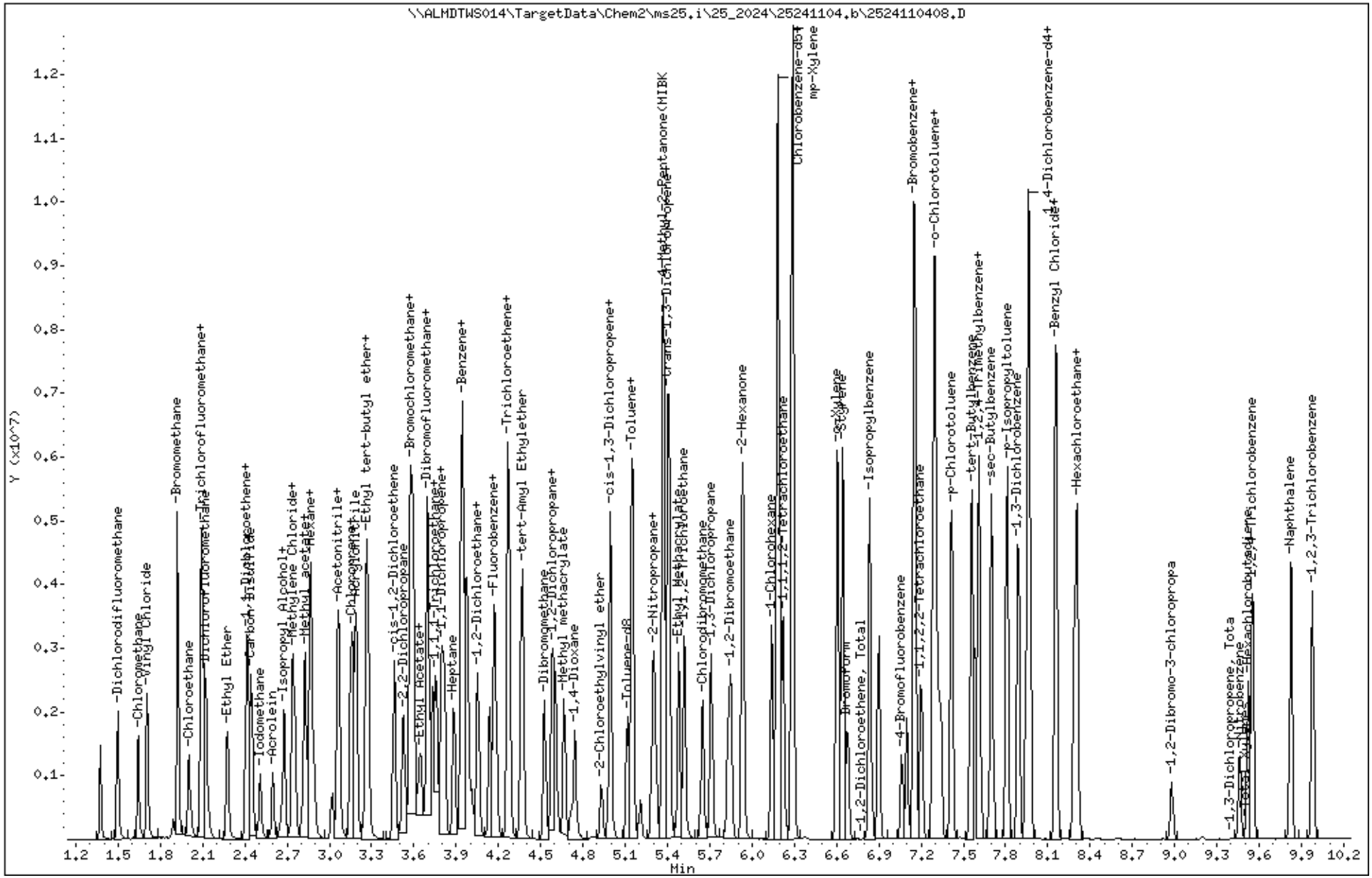
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Purge Volume: 5.0

Operator: TMP

Column phase: DB-VRX

Column diameter: 0.25

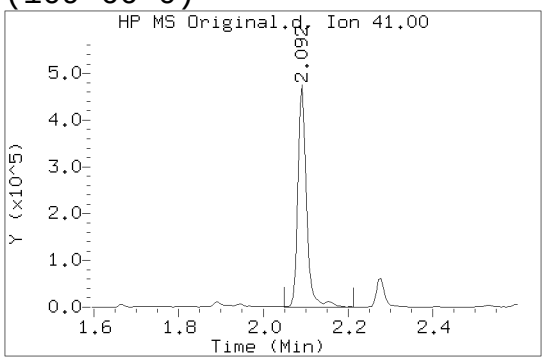


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LabSampID : 1238

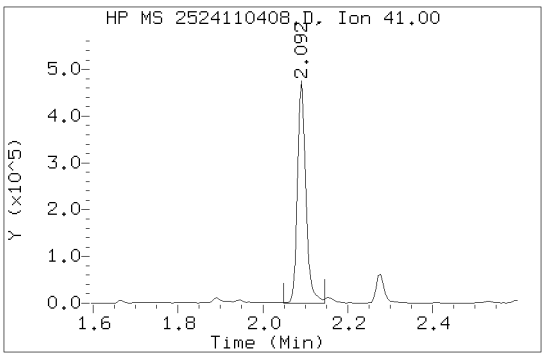
Pentane (109-66-0)

Reason Code: MP

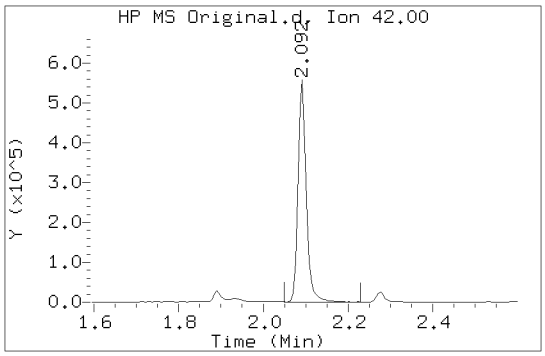
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04-Nov-2024
17:57



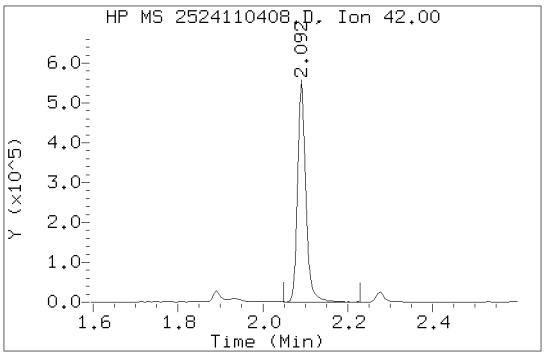
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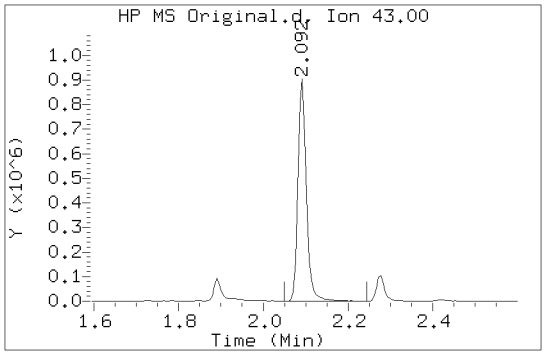
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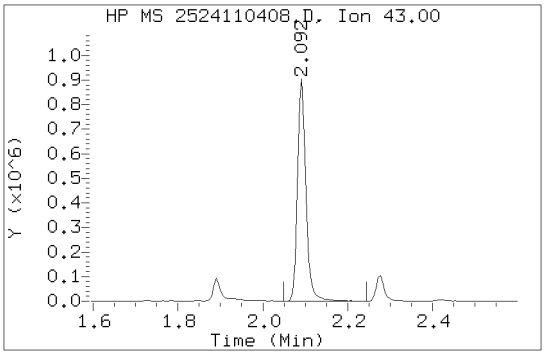
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BEFORE
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HEIGHT
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04-Nov-2024
17:57



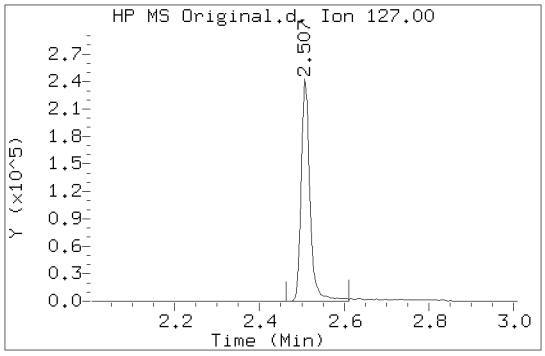
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04-Nov-2024
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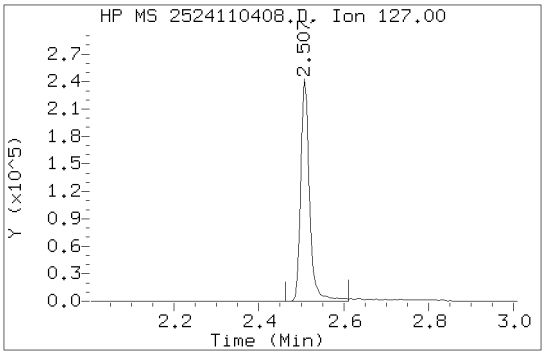
Iodomethane (74-88-4)

Reason Code: MP

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04-Nov-2024
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AFTER
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HEIGHT
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04-Nov-2024
18:04



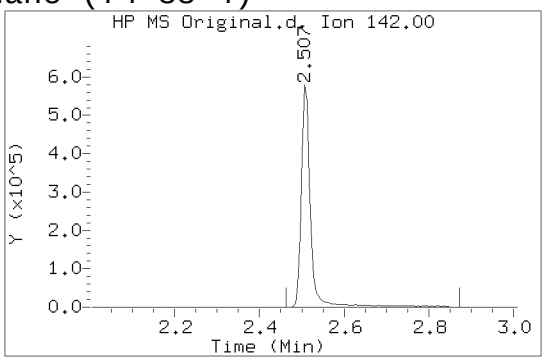
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LabSampID : 1238

Iodomethane (74-88-4)

Reason Code: MP

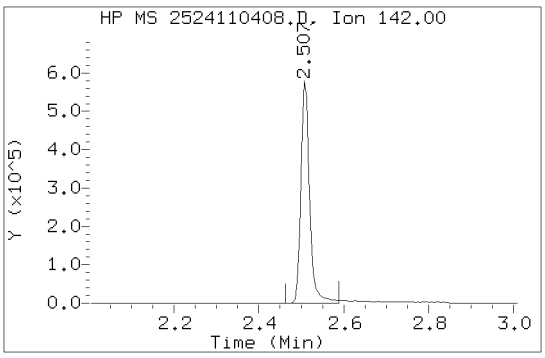
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AFTER

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04-Nov-2024
18:04

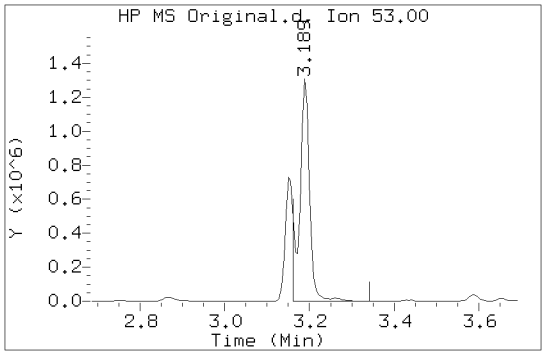


Acrylonitrile (107-13-1)

Reason Code: MP

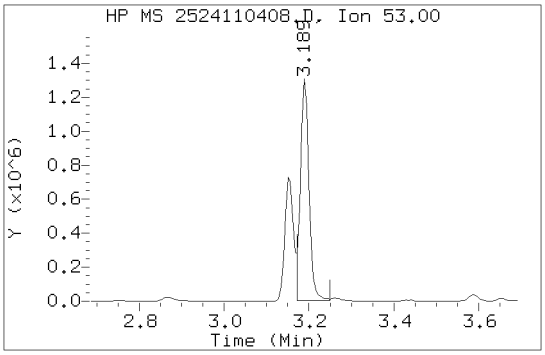
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04-Nov-2024
17:57



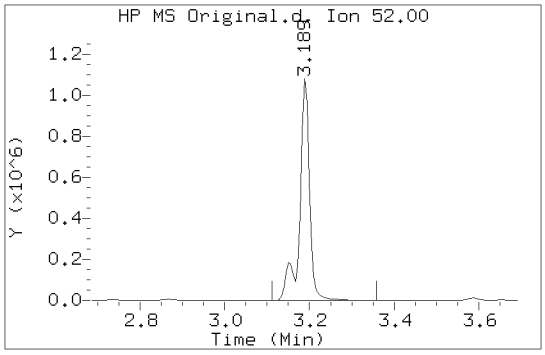
AFTER

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04-Nov-2024
18:04



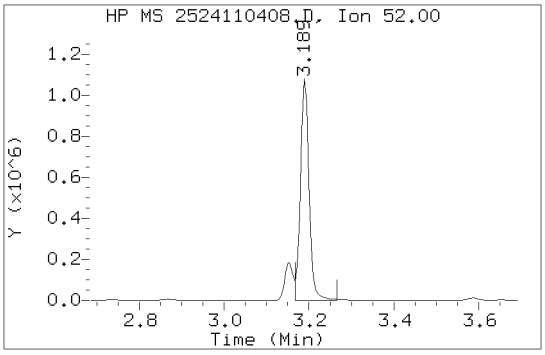
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17:57



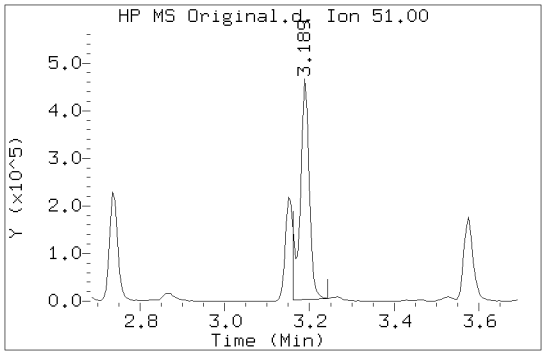
AFTER

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04-Nov-2024
18:04



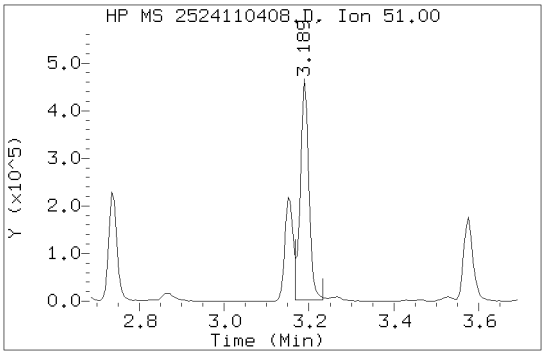
BEFORE

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AREA
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04-Nov-2024
17:57



AFTER

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04-Nov-2024
18:04

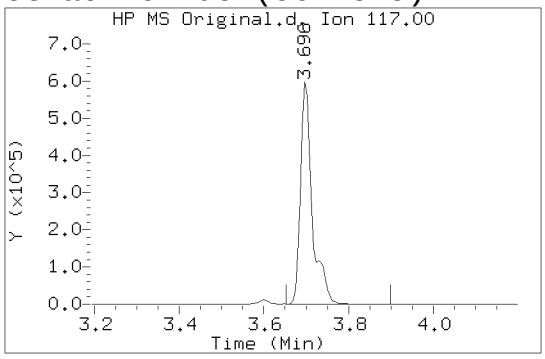


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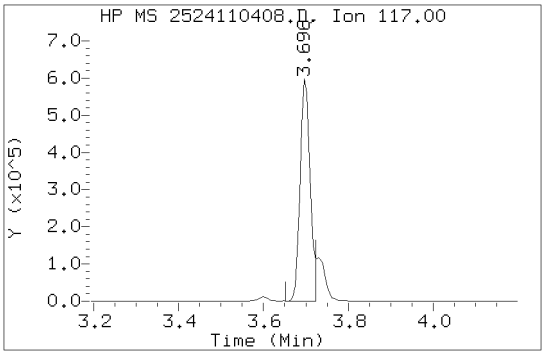
Carbon Tetrachloride (56-23-5)

Reason Code: MP

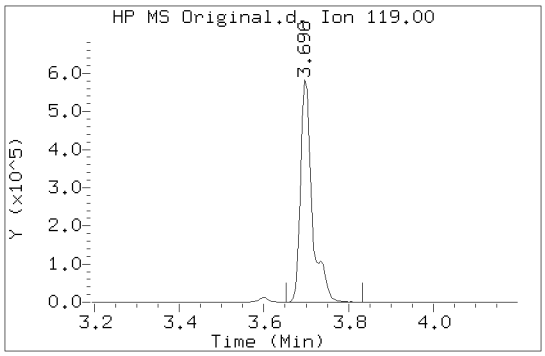
BEFORE
MASS
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HEIGHT
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04-Nov-2024
17:57



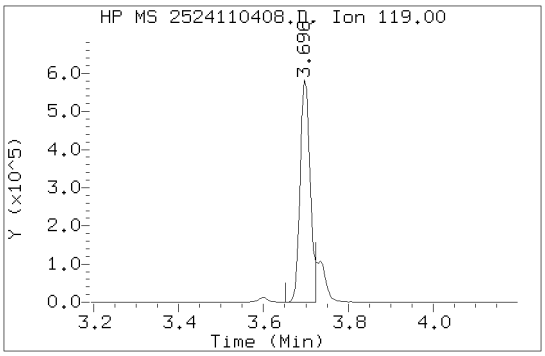
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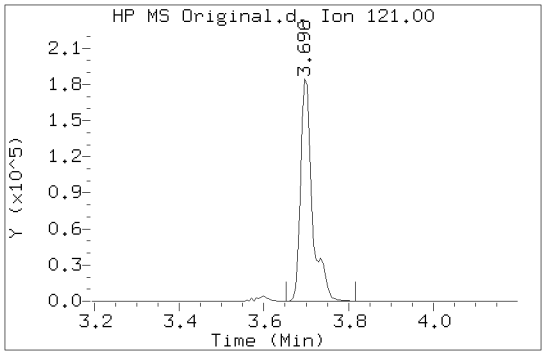
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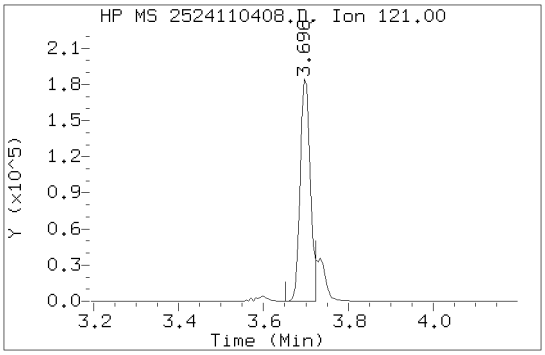
AFTER
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BEFORE
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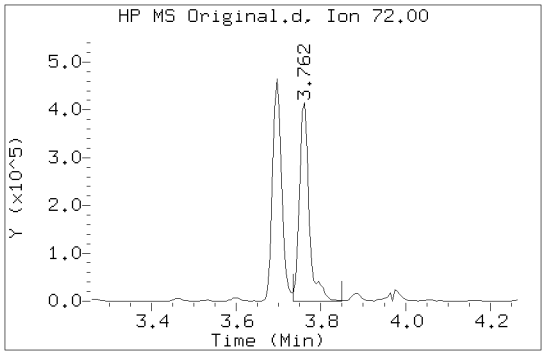
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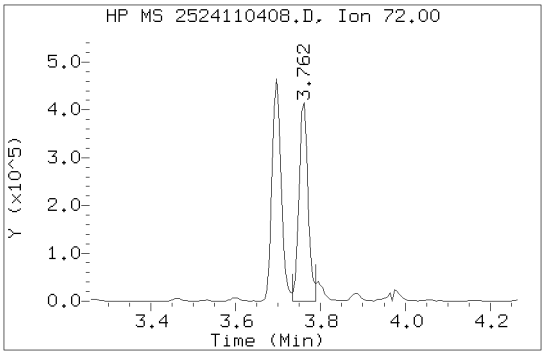
2-Butanone (78-93-3)

Reason Code: MP

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AFTER
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04-Nov-2024
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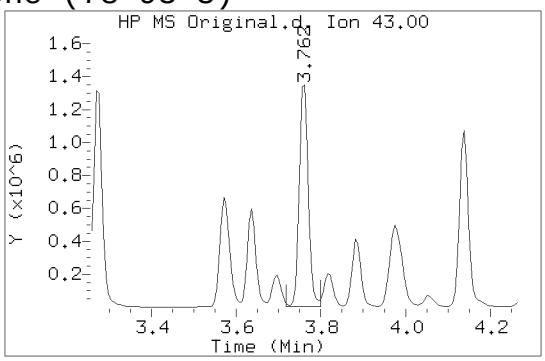
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InstruID : ms25.i
LabSampID : 1238

2-Butanone (78-93-3)

Reason Code: MP

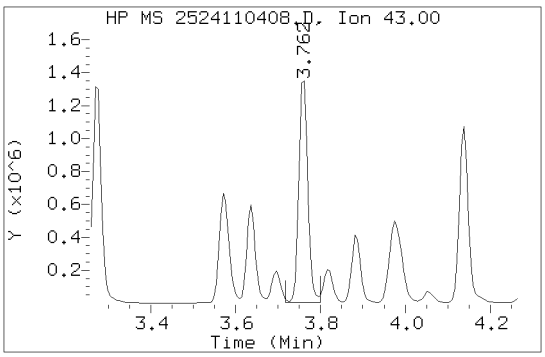
BEFORE

MASS
43
AREA
2013143
HEIGHT
1345300
04-Nov-2024
17:57



AFTER

MASS
43
AREA
2013143
HEIGHT
1345300
04-Nov-2024
18:04

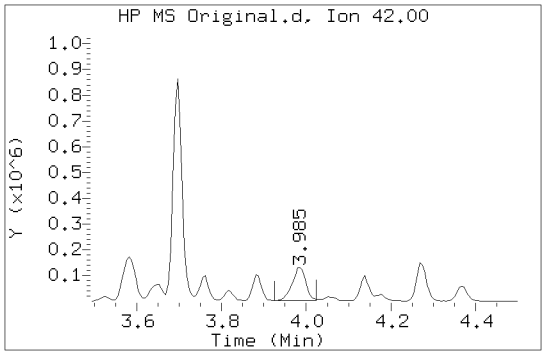


Isobutyl alcohol (78-83-1)

Reason Code: MP

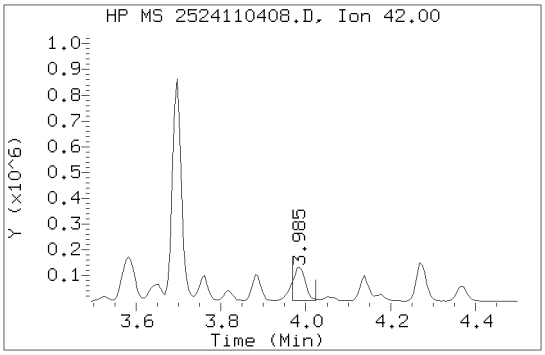
BEFORE

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42
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HEIGHT
128305
04-Nov-2024
17:57



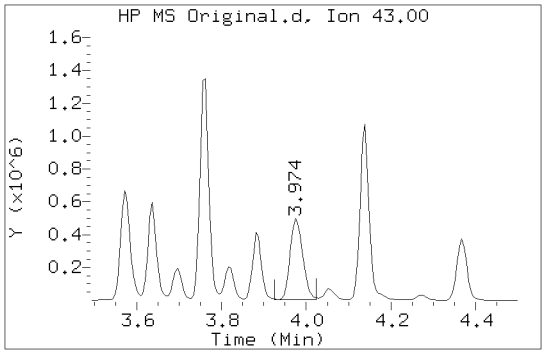
AFTER

MASS
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04-Nov-2024
18:04



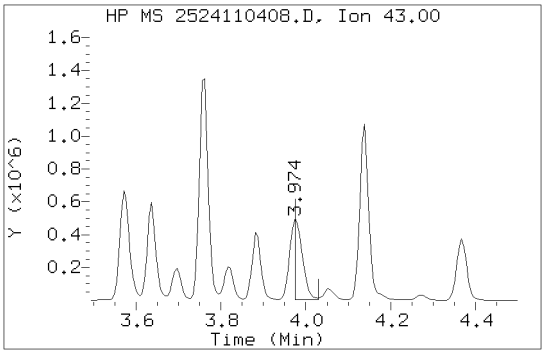
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HEIGHT
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04-Nov-2024
17:57



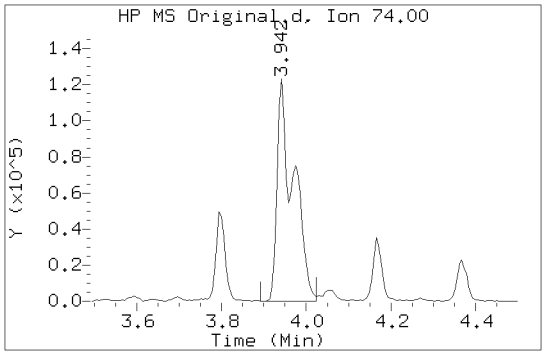
AFTER

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HEIGHT
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04-Nov-2024
18:04



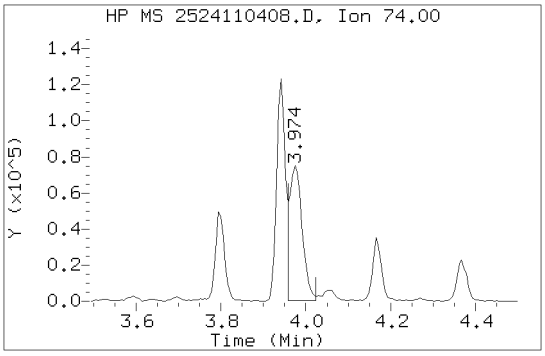
BEFORE

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HEIGHT
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04-Nov-2024
17:57



AFTER

MASS
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AREA
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HEIGHT
74734
04-Nov-2024
18:04

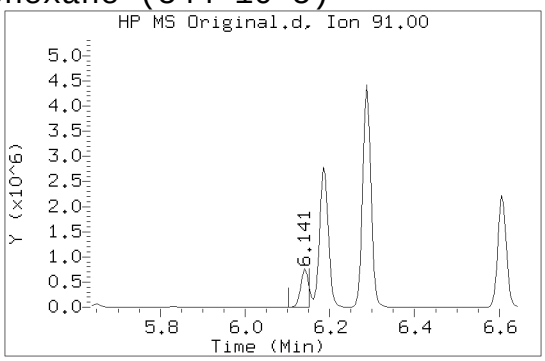


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InstruID : ms25.i
LabSampID : 1238

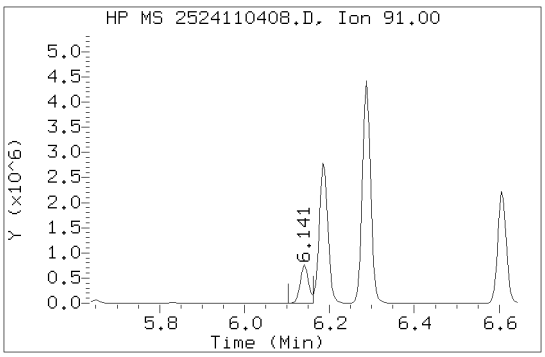
1-Chlorohexane (544-10-5)

Reason Code: I

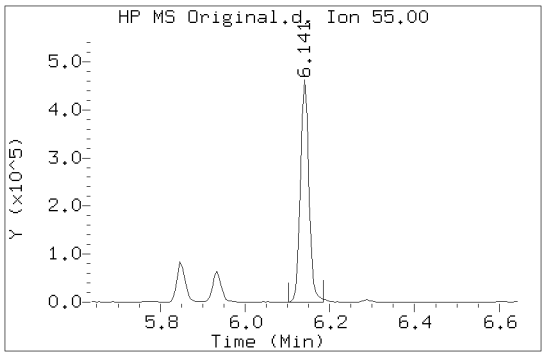
BEFORE
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91
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HEIGHT
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04-Nov-2024
17:57



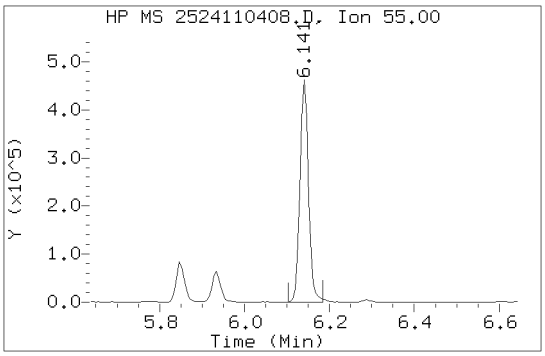
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04-Nov-2024
18:04



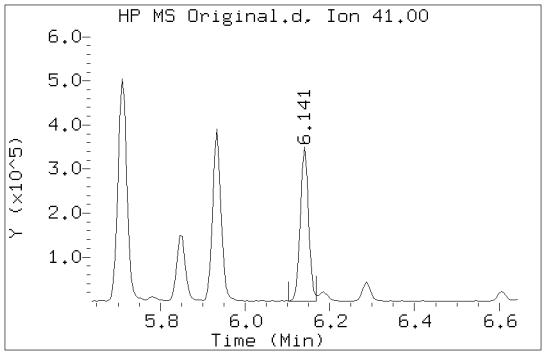
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MASS
55
AREA
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HEIGHT
461958
04-Nov-2024
17:57



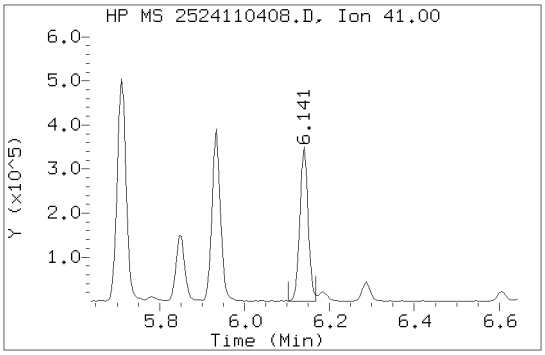
AFTER
MASS
55
AREA
646902
HEIGHT
461958
04-Nov-2024
18:04



BEFORE
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41
AREA
475291
HEIGHT
349058
04-Nov-2024
17:57



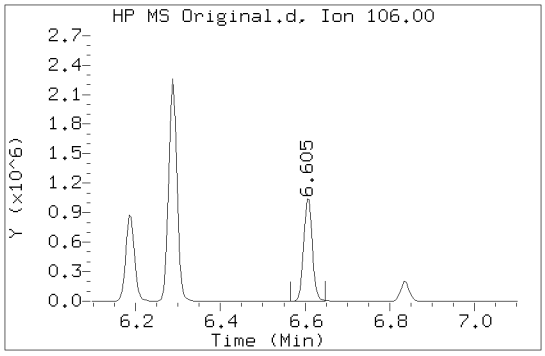
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AREA
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HEIGHT
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04-Nov-2024
18:04



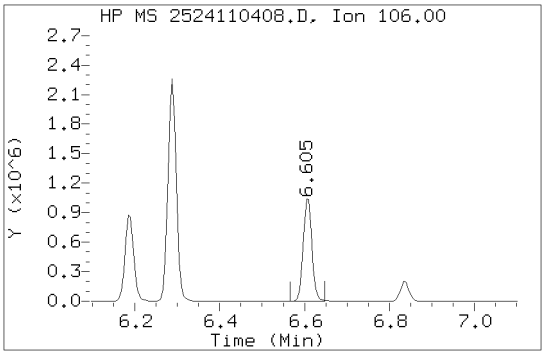
o-Xylene (95-47-6)

Reason Code: MP

BEFORE
MASS
106
AREA
1495479
HEIGHT
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04-Nov-2024
17:57



AFTER
MASS
106
AREA
1495479
HEIGHT
1040384
04-Nov-2024
18:04

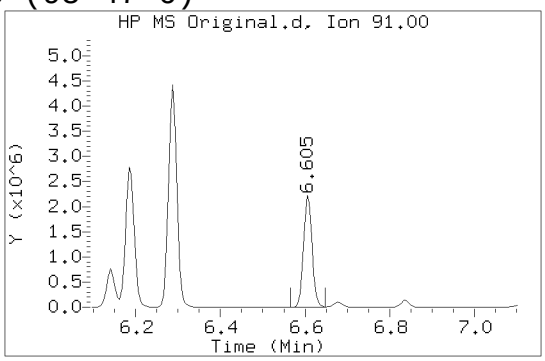


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Inj Date : 04-NOV-2024 15:37
InstruID : ms25.i
LabSampID : 1238

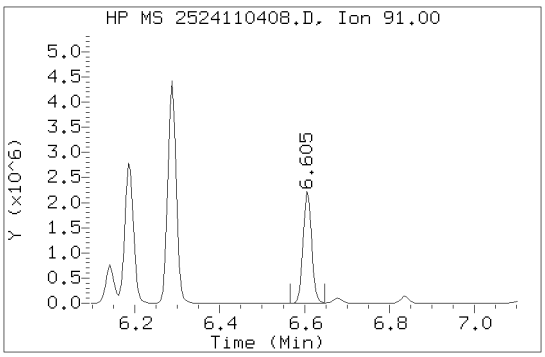
o-Xylene (95-47-6)

Reason Code: MP

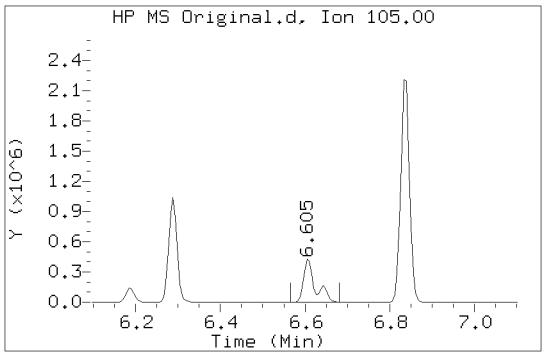
BEFORE
MASS
91
AREA
3120089
HEIGHT
2222080
04-Nov-2024
17:57



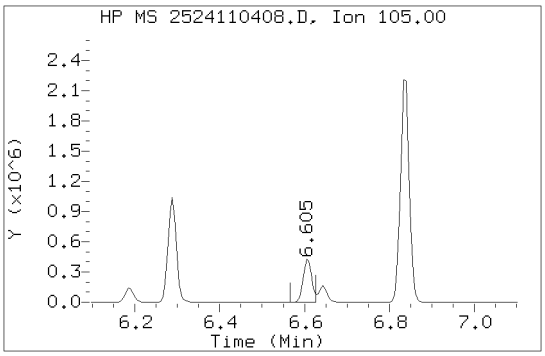
AFTER
MASS
91
AREA
3120089
HEIGHT
2222080
04-Nov-2024
18:04



BEFORE
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105
AREA
821059
HEIGHT
427120
04-Nov-2024
17:57



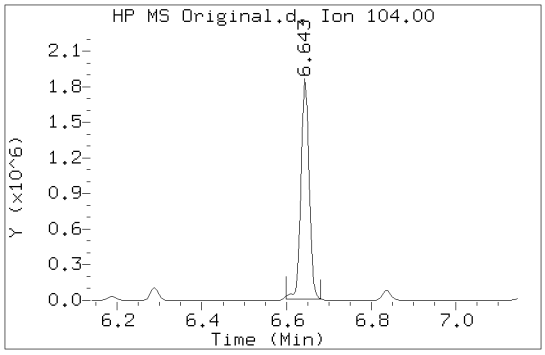
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105
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HEIGHT
427120
04-Nov-2024
18:04



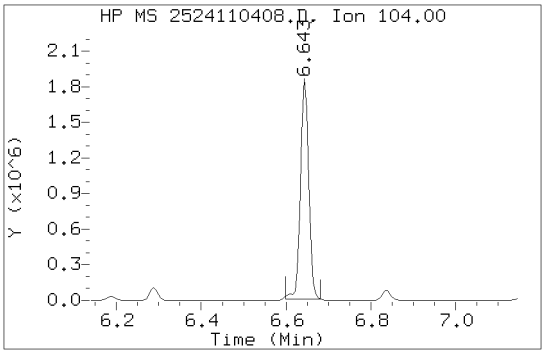
Styrene (100-42-5)

Reason Code: MP

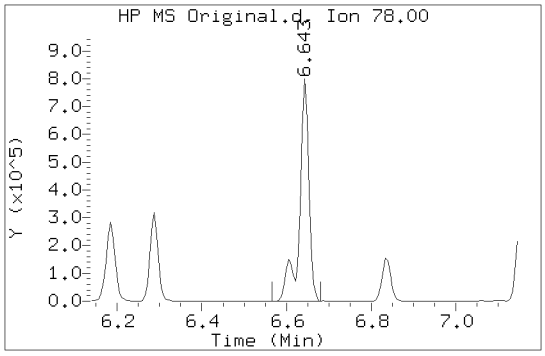
BEFORE
MASS
104
AREA
2514362
HEIGHT
1860732
04-Nov-2024
17:57



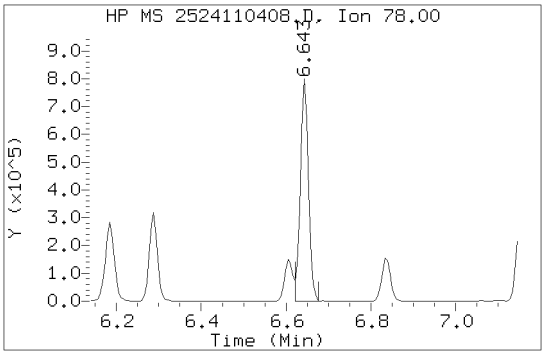
AFTER
MASS
104
AREA
2514362
HEIGHT
1860732
04-Nov-2024
18:04



BEFORE
MASS
78
AREA
1251166
HEIGHT
799168
04-Nov-2024
17:57



AFTER
MASS
78
AREA
1060433
HEIGHT
799107
04-Nov-2024
18:04



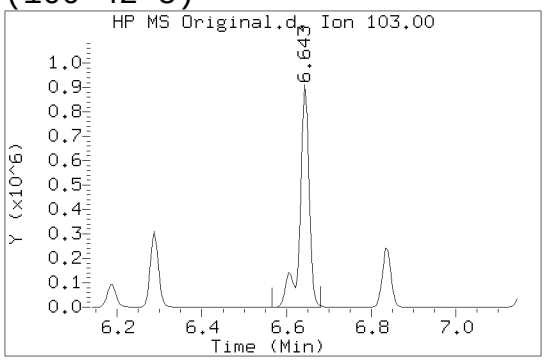
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InstruID : ms25.i
LabSampID : 1238

Styrene (100-42-5)

Reason Code: MP

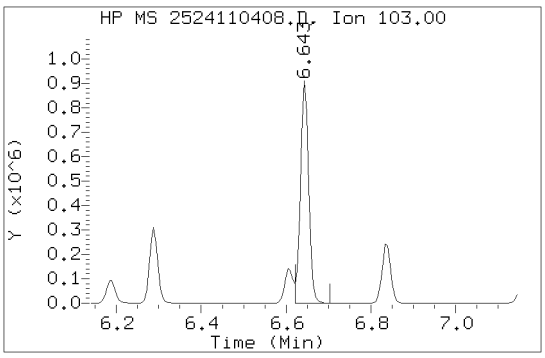
BEFORE

MASS
103
AREA
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HEIGHT
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04-Nov-2024
17:57



AFTER

MASS
103
AREA
1228078
HEIGHT
910351
04-Nov-2024
18:04

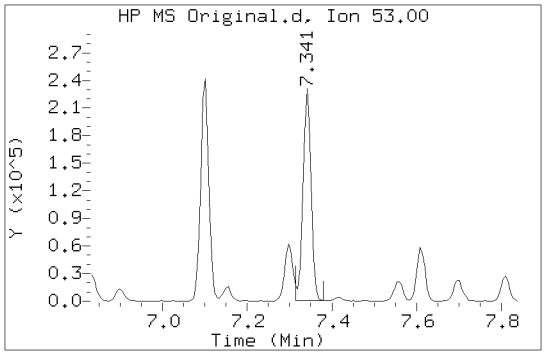


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

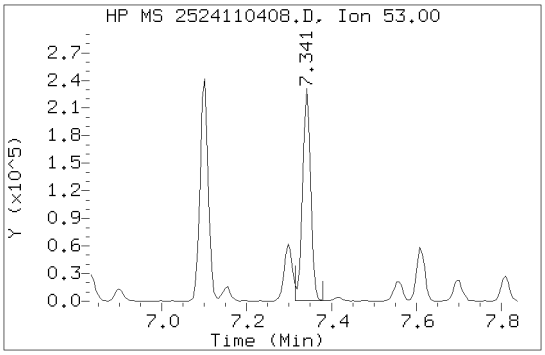
BEFORE

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HEIGHT
230718
04-Nov-2024
17:57



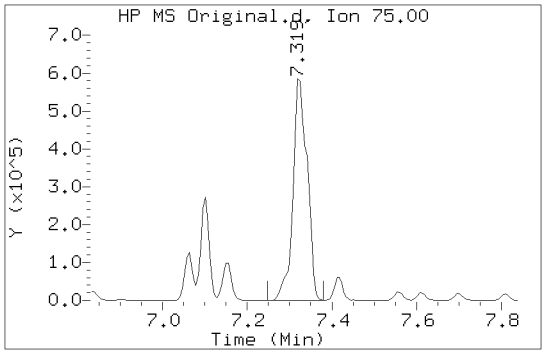
AFTER

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AREA
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HEIGHT
230718
04-Nov-2024
18:04



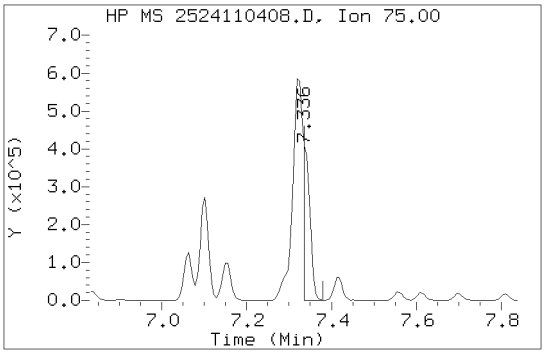
BEFORE

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HEIGHT
585344
04-Nov-2024
17:57



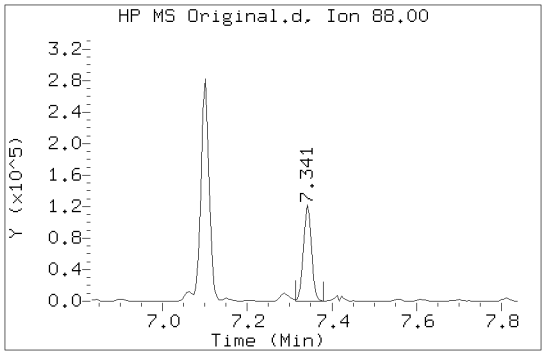
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75
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HEIGHT
409392
04-Nov-2024
18:04



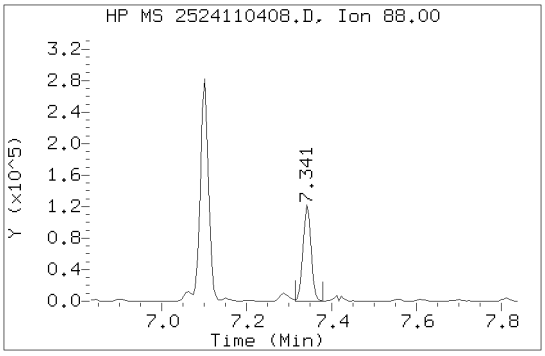
BEFORE

MASS
88
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161429
HEIGHT
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04-Nov-2024
17:57



AFTER

MASS
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161429
HEIGHT
122498
04-Nov-2024
18:04

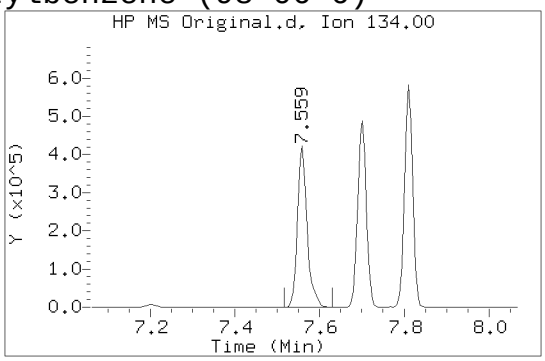


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LabSampID : 1238

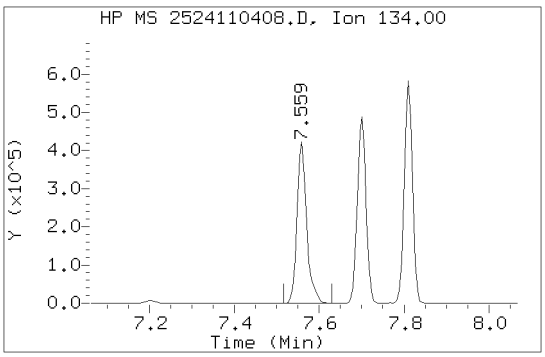
tert-Butylbenzene (98-06-6)

Reason Code: MP

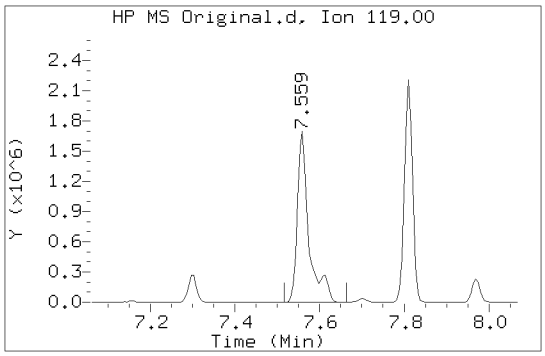
BEFORE
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134
AREA
670491
HEIGHT
422080
04-Nov-2024
17:57



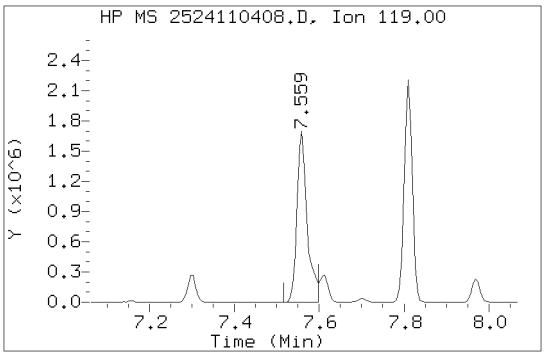
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422080
04-Nov-2024
18:04



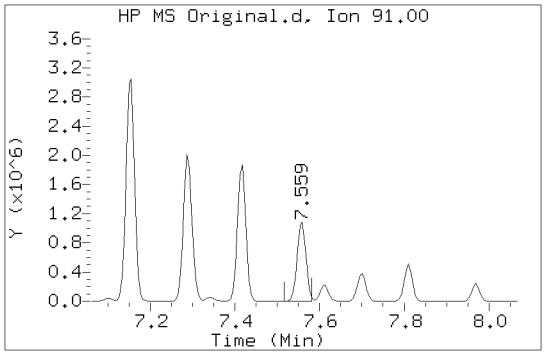
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119
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3202872
HEIGHT
1698138
04-Nov-2024
17:57



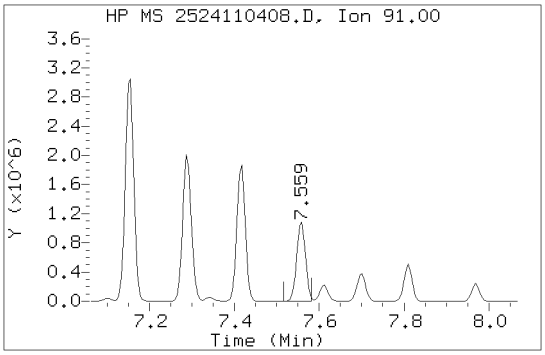
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119
AREA
2857056
HEIGHT
1698138
04-Nov-2024
18:04



BEFORE
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91
AREA
1576243
HEIGHT
1083436
04-Nov-2024
17:57



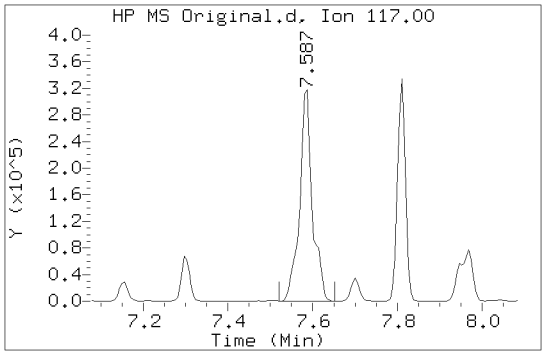
AFTER
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91
AREA
1576243
HEIGHT
1083436
04-Nov-2024
18:04



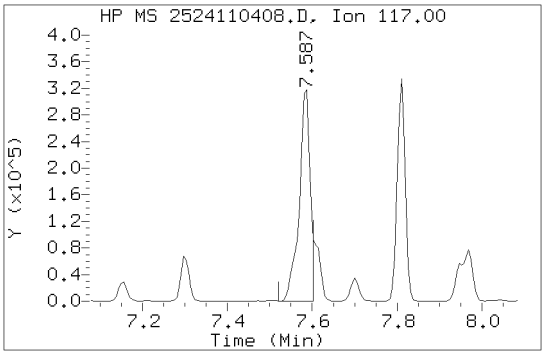
Pentachloroethane (76-01-7)

Reason Code: MP

BEFORE
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117
AREA
662199
HEIGHT
317632
04-Nov-2024
17:57



AFTER
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117
AREA
578109
HEIGHT
317632
04-Nov-2024
18:04



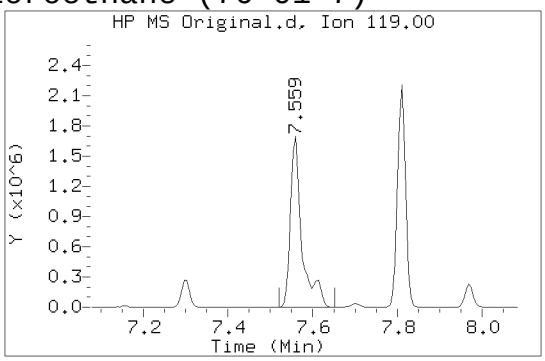
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Inj Date : 04-NOV-2024 15:37
InstruID : ms25.i
LabSampID : 1238

Pentachloroethane (76-01-7)

Reason Code: MP

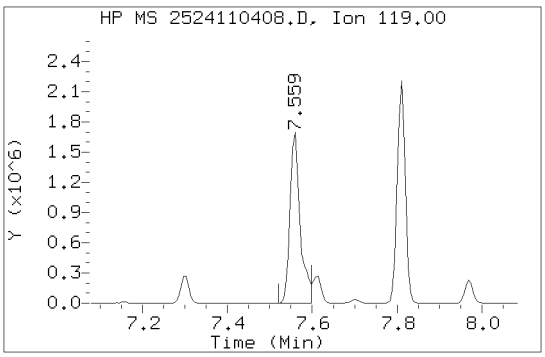
BEFORE

MASS
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AREA
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HEIGHT
1697868
04-Nov-2024
17:57



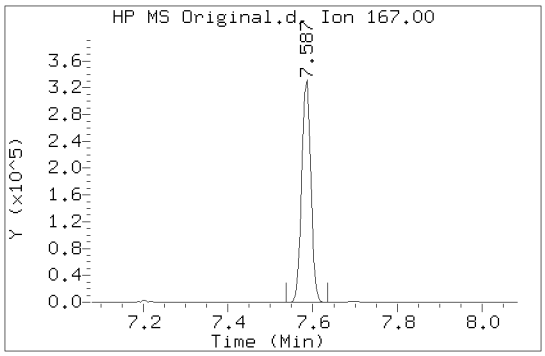
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04-Nov-2024
18:04



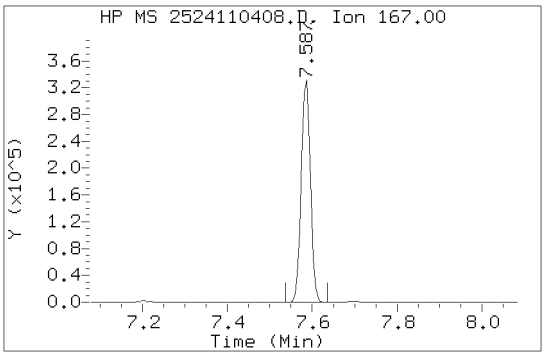
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17:57



AFTER

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04-Nov-2024
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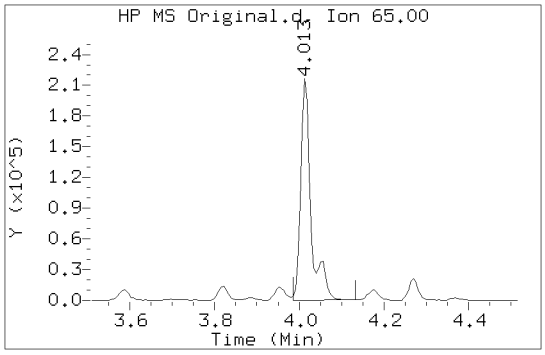


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

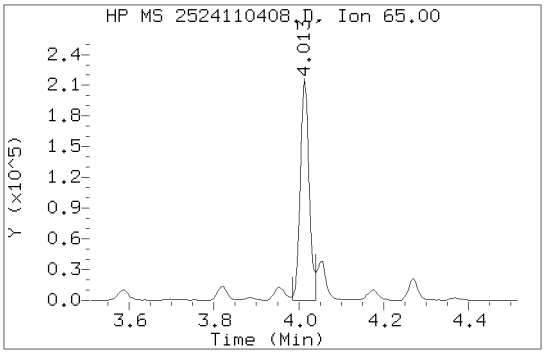
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17:57



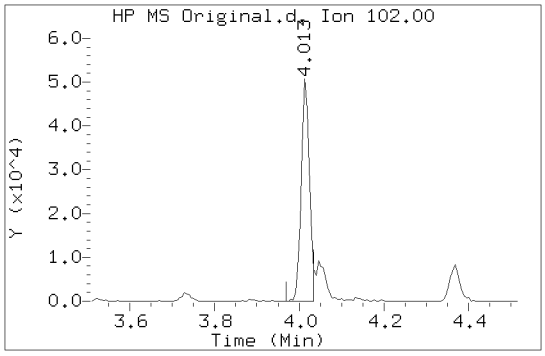
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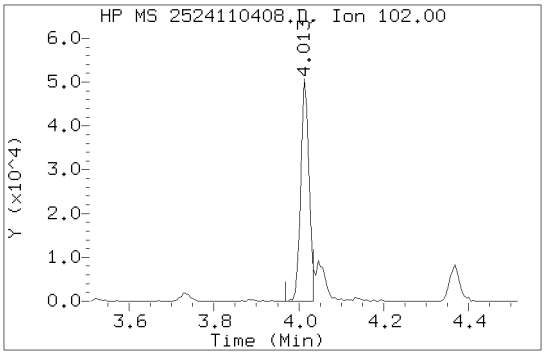
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17:57



AFTER

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04-Nov-2024
18:04



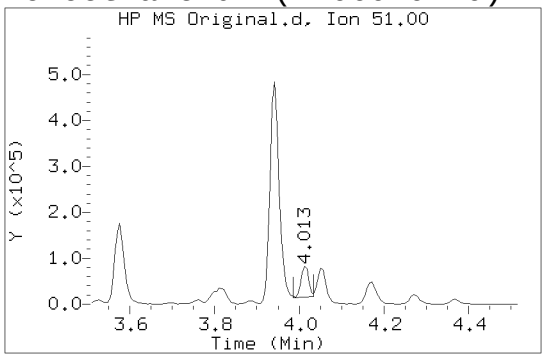
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1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

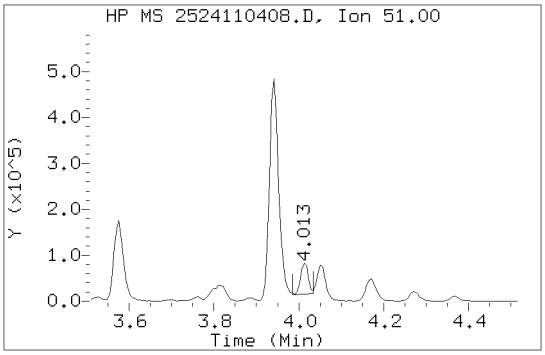
BEFORE

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67021
04-Nov-2024
17:57



AFTER

MASS
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AREA
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67021
04-Nov-2024
18:04



UNASSIGNED PEAK REPORT

Report Date: 11/05/2024 04:11
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Inj Date: 04-NOV-2024 15:37
Operator: TMP

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

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Operator : TMP Inst ID: ms25.i
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Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260ICAL.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
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Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

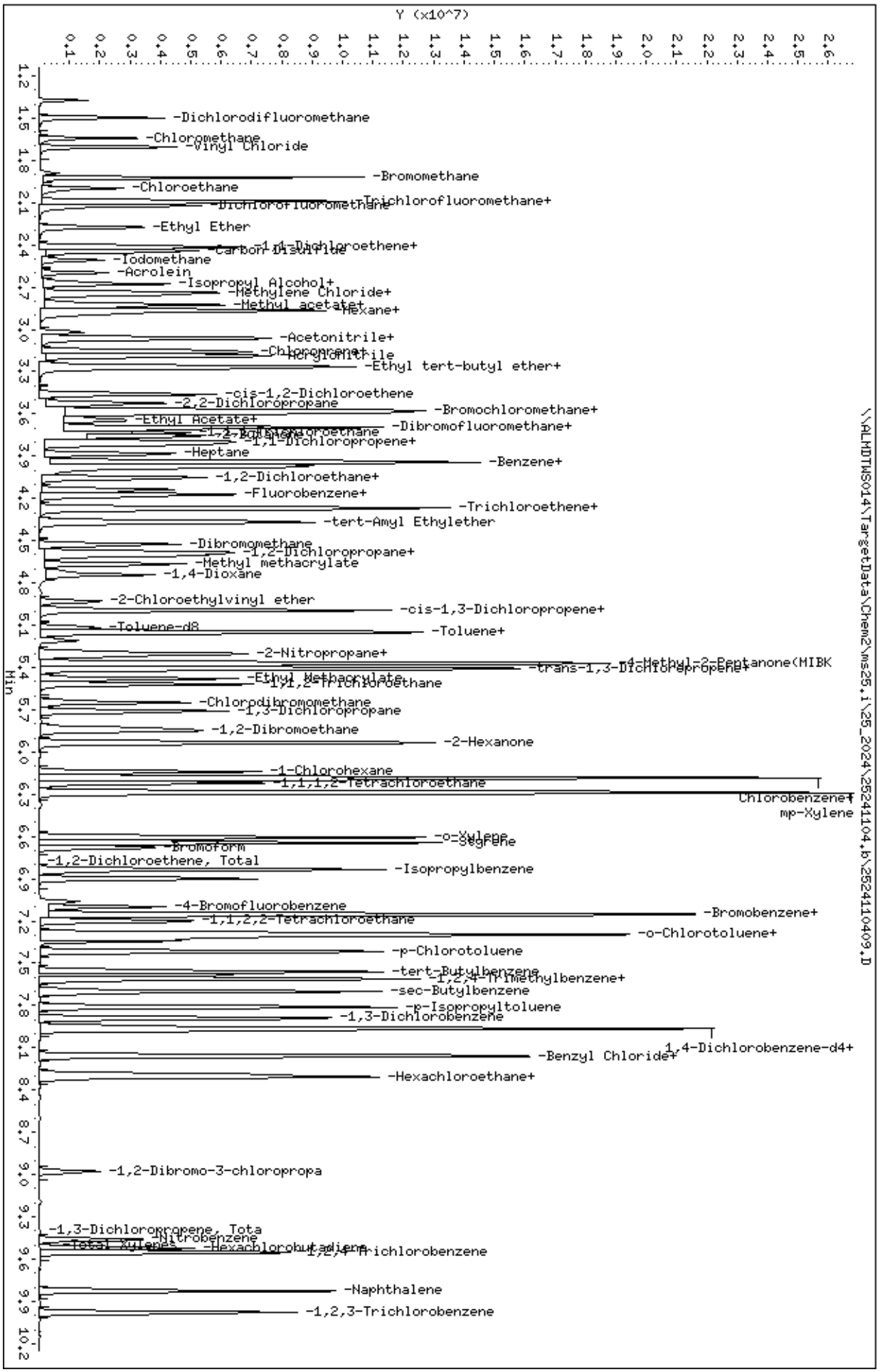
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1	Dichlorodifluoromethane	85	1.497	1.497	(0.359)	2408629	200.000	204.478(A)	
2	Chloromethane	50	1.644	1.645	(0.395)	2117732	200.000	200.989(A)	
3	Vinyl Chloride	62	1.704	1.705	(0.409)	2632976	200.000	197.692	
4	Bromomethane	94	1.923	1.923	(0.462)	2785382	200.000	211.778(A)	
5	Chloroethane	64	1.999	2.005	(0.480)	1939052	200.000	203.583(A)	
6	Pentane	41	2.086	2.097	(0.501)	1412853	200.000	207.785(AM)	MP
7	Trichlorofluoromethane	101	2.097	2.097	(0.504)	3548745	200.000	200.819(A)	
8	Dichlorofluoromethane	67	2.124	2.125	(0.510)	3555330	200.000	201.298(A)	
9	Ethyl Ether	74	2.277	2.278	(0.547)	1132440	200.000	206.418(A)	
10	1,1-Dichloroethene	61	2.408	2.409	(0.578)	2118455	200.000	207.358(A)	
11	Freon 113	101	2.425	2.419	(0.582)	1303075	200.000	206.664(A)	
12	Carbon Disulfide	76	2.446	2.447	(0.587)	4531492	200.000	206.136(A)	
13	Iodomethane	127	2.506	2.507	(0.602)	749058	200.000	220.730(AM)	MP
14	Acrolein	56	2.599	2.605	(0.624)	1457594	1000.00	1046.90(A)	
15	Isopropyl Alcohol	45	2.654	2.654	(0.637)	514068	1000.00	1054.39(A)	
16	3-Chloro-1-propene	41	2.676	2.676	(0.642)	1812848	200.000	204.506(A)	
17	Methylene Chloride	84	2.736	2.736	(0.657)	1891574	200.000	202.810(A)	
18	Acetone	58	2.752	2.752	(0.661)	966329	1000.00	1022.96(A)	
19	Methyl acetate	74	2.812	2.818	(0.675)	370896	200.000	208.765(A)	
20	trans-1,2-Dichloroethene	61	2.828	2.823	(0.679)	2173434	200.000	206.223(A)	
21	Hexane	57	2.861	2.867	(0.687)	2909606	200.000	207.856(A)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	2.872	2.878	(0.690)	5411448	200.000	206.900(A)	
	23 tert.- Butyl Alcohol	59	2.899	2.900	(0.696)	959952	1000.00	1065.35(A)	
	24 Acetonitrile	41	3.019	3.020	(0.725)	1084002	1000.00	1024.46(A)	
	25 Diisopropyl ether	45	3.063	3.063	(0.735)	5104625	200.000	206.505(A)	
	26 Chloroprene	53	3.150	3.151	(0.756)	2384352	200.000	210.369(A)	
	27 1,1-Dichloroethane	63	3.167	3.162	(0.760)	3163356	200.000	207.089(A)	
	28 Acrylonitrile	53	3.188	3.189	(0.766)	3861236	1000.00	1012.01(AM)	MP
	29 Ethyl tert-butyl ether	59	3.265	3.265	(0.784)	5800787	200.000	210.978(A)	
	30 n-Propanol	41	3.265	3.260	(0.784)	1021155	2000.00	2075.13(A)	
	31 Vinyl Acetate	86	3.276	3.271	(0.786)	466274	200.000	211.014(AQ)	
	32 cis-1,2-Dichloroethene	61	3.461	3.462	(0.831)	2398911	200.000	207.575(A)	
	33 2,2-Dichloropropane	77	3.527	3.522	(0.847)	2171810	200.000	210.213(AM)	MP
	34 Bromochloromethane	128	3.576	3.571	(0.859)	1008165	200.000	199.538	
	35 Cyclohexane	84	3.587	3.587	(0.861)	2350940	200.000	209.891(A)	
	36 Chloroform	83	3.598	3.598	(0.864)	3499795	200.000	207.572(A)	
	37 Ethyl Acetate	43	3.636	3.631	(0.873)	1822492	200.000	212.571(A)	
	38 Methyl acrylate	55	3.652	3.658	(0.877)	1780506	200.000	208.239(A)	
	39 Carbon Tetrachloride	117	3.696	3.696	(0.887)	2150801	200.000	213.097(AM)	MP
$	41 Dibromofluoromethane	113	3.701	3.702	(0.889)	294692	30.0000	29.7318	
	40 Tetrahydrofuran	42	3.696	3.702	(0.887)	2751068	1000.00	1061.29(A)	
	42 1,1,1-Trichloroethane	97	3.734	3.729	(0.897)	2551541	200.000	208.270(A)	
	43 2-Butanone	72	3.761	3.762	(0.903)	1247879	1000.00	998.456(AQ)	
	44 1,1-Dichloropropene	75	3.794	3.795	(0.911)	2281906	200.000	207.798(A)	
	45 1-Chlorobutane	41	3.816	3.816	(0.916)	1436386	200.000	207.892(A)	
	46 Heptane	71	3.881	3.876	(0.932)	1010832	200.000	216.151(A)	
	47 Benzene	78	3.941	3.942	(0.946)	7221576	200.000	205.625(A)	
	48 Propionitrile	54	3.941	3.942	(0.946)	1522796	1000.00	1043.39(AM)	MP
	49 Methacrylonitrile	67	3.952	3.953	(0.949)	960004	200.000	211.721(A)	
	50 tert-Amyl methyl ether	73	3.974	3.975	(0.954)	5483289	200.000	209.977(A)	
	54 Isobutyl alcohol	42	3.985	3.996	(0.957)	500231	2000.00	2129.06(AM)	MP
$	51 1,2-Dichloroethane-d4	65	4.012	4.013	(0.963)	324021	30.0000	29.8200(QM)	I
	52 1,2-Dichloroethane	62	4.051	4.056	(0.972)	2539075	200.000	206.811(A)	
	53 tert-Amyl Alcohol	59	4.056	4.062	(0.974)	748831	1000.00	1093.81(A)	
*	55 Fluorobenzene	96	4.165	4.166	(1.000)	1101353	30.0000		
	56 Diisobutylene	57	4.176	4.171	(1.003)	3499815	200.000	211.493(A)	
	57 Trichloroethene	95	4.263	4.269	(1.024)	1870460	200.000	209.696(A)	
	58 Methyl cyclohexane	83	4.274	4.275	(0.692)	2477417	200.000	207.856(A)	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.048)	4347509	200.000	213.144(A)	
	60 Dibromomethane	93	4.525	4.526	(1.086)	1327609	200.000	207.042(A)	
	61 1,2-Dichloropropane	63	4.580	4.586	(1.100)	1889465	200.000	206.054(A)	
	62 Bromodichloromethane	83	4.607	4.602	(1.106)	2497078	200.000	209.536(A)	
	63 Methyl methacrylate	41	4.667	4.668	(1.121)	1580585	200.000	212.477(A)	
	64 1,4-Dioxane	88	4.716	4.717	(1.132)	629583	5000.00	5045.22(A)	
	65 2-Chloroethylvinyl ether	63	4.929	4.935	(1.183)	753544	200.000	235.009(A)	
	66 cis-1,3-Dichloropropene	75	4.994	4.995	(0.809)	3230372	200.000	209.235(A)	
	67 Octane	85	4.994	5.000	(0.809)	893579	200.000	214.513(A)	
$	68 Toluene-d8	98	5.115	5.115	(0.829)	1100930	30.0000	29.3568	
	69 Toluene	92	5.147	5.153	(0.834)	4517029	200.000	205.238(A)	
	70 Chloroacetonitrile	75	5.207	5.213	(0.844)	598303	1000.00	1069.41(A)	
	71 2-Nitropropane	41	5.300	5.295	(0.859)	2604985	1000.00	1093.37(A)	
	72 1,1-Dichloro-2-Propanone	63	5.311	5.317	(0.860)	243564	1000.00	1121.35(AQ)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.870)	9434797	1000.00	1020.81(A)	
	75 trans-1,3-Dichloropropene	75	5.404	5.404	(0.875)	3152837	200.000	212.582(A)	
	74 Tetrachloroethene	164	5.409	5.404	(0.876)	1704421	200.000	207.173(A)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
76	Ethyl Methacrylate	69	5.480	5.481	(0.888)	2886150	200.000	211.347(A)	
77	1,1,2-Trichloroethane	83	5.518	5.524	(0.894)	1584176	200.000	205.005(A)	
78	Chlorodibromomethane	129	5.649	5.650	(0.915)	2133322	200.000	207.602(A)	
79	1,3-Dichloropropane	76	5.709	5.710	(0.925)	3113860	200.000	202.133(A)	
80	1,2-Dibromoethane	107	5.829	5.830	(0.944)	1937740	200.000	206.021(A)	
81	2-Hexanone	43	5.933	5.933	(0.961)	6444974	1000.00	1028.20(A)	
82	1-Chlorohexane	91	6.140	6.141	(0.995)	2235389	200.000	206.334(A)	
* 83	Chlorobenzene-d5	82	6.173	6.168	(1.000)	467316	30.0000	(M)	MP
84	Chlorobenzene	112	6.184	6.184	(1.002)	5166826	200.000	206.823(A)	
85	Ethylbenzene	106	6.184	6.190	(1.002)	2718148	200.000	208.432(A)	
86	1,1,1,2-Tetrachloroethane	131	6.222	6.223	(1.008)	1809802	200.000	206.581(A)	
87	mp-Xylene	106	6.288	6.288	(1.019)	6458719	400.000	413.048(A)	
88	o-Xylene	106	6.604	6.599	(1.070)	3120337	200.000	203.528(A)	
89	Styrene	104	6.642	6.643	(0.836)	5383371	200.000	210.570(AM)	MP
90	Bromoform	173	6.681	6.681	(0.841)	1513870	200.000	216.966(A)	
91	Isopropylbenzene	105	6.833	6.839	(0.860)	6706624	200.000	205.061(A)	
M 100	1,2-Dichloroethene, Total	61				4572345	400.000	413.799	
$ 92	4-Bromofluorobenzene	174	7.062	7.063	(0.889)	321620	30.0000	29.3999	
93	Bromobenzene	156	7.155	7.150	(0.900)	2183473	200.000	207.023(A)	
94	n-Propylbenzene	120	7.155	7.150	(0.900)	2078800	200.000	207.024(A)	
95	1,1,2,2-Tetrachloroethane	83	7.199	7.205	(0.906)	2340436	200.000	209.448(A)	
96	o-Chlorotoluene	91	7.286	7.287	(0.917)	6040857	200.000	207.716(A)	
97	1,3,5-Trimethylbenzene	105	7.297	7.298	(0.918)	6069851	200.000	205.937(A)	
98	1,2,3-Trichloropropane	110	7.319	7.319	(0.921)	725185	200.000	207.668(A)	
99	trans-1,4-Dichloro-2-butene	53	7.341	7.336	(0.924)	679150	200.000	217.352(AQM)	MP
101	p-Chlorotoluene	91	7.417	7.418	(0.933)	5433963	200.000	206.189(A)	
102	tert-Butylbenzene	134	7.559	7.565	(0.951)	1372227	200.000	201.760(AQ)	
103	Pentachloroethane	117	7.586	7.581	(0.955)	1239884	200.000	210.079(AQM)	MP
104	1,2,4-Trimethylbenzene	105	7.614	7.614	(0.958)	5992991	200.000	202.162(A)	
105	sec-Butylbenzene	105	7.701	7.701	(0.969)	6884198	200.000	197.861	
106	p-Isopropyltoluene	134	7.810	7.805	(0.983)	1593478	200.000	201.917(A)	
107	1,3-Dichlorobenzene	146	7.892	7.887	(0.993)	3588278	200.000	204.239(A)	
* 108	1,4-Dichlorobenzene-d4	152	7.946	7.947	(1.000)	423107	30.0000	(Q)	
109	1,4-Dichlorobenzene	146	7.963	7.963	(1.002)	3791525	200.000	208.395(A)	
110	Benzyl Chloride	126	8.159	8.148	(1.027)	779803	200.000	223.776(AQ)	
111	n-Butylbenzene	134	8.159	8.154	(1.027)	1405414	200.000	202.818(AQ)	
112	Hexachloroethane	117	8.290	8.285	(1.043)	1157844	200.000	213.127(A)	
113	1,2-Dichlorobenzene	146	8.307	8.307	(1.045)	3528518	200.000	207.462(A)	
114	1,2-Dibromo-3-chloropropane	75	8.978	8.973	(1.130)	401050	200.000	220.298(A)	
115	Nitrobenzene	77	9.458	9.469	(1.190)	1537021	2000.00	2989.83(A)	
116	Hexachlorobutadiene	225	9.523	9.524	(1.198)	902156	200.000	210.245(A)	
M 120	1,3-Dichloropropene, Total	75				6383209	400.000	421.817	
117	1,2,4-Trichlorobenzene	180	9.551	9.551	(1.202)	2203784	200.000	206.148(A)	
M 121	Total Xylenes	106				9579056	600.000	616.576	
118	Naphthalene	128	9.823	9.824	(1.236)	6216840	200.000	211.739(A)	
119	1,2,3-Trichlorobenzene	180	9.982	9.982	(1.256)	2262885	200.000	209.692(A)	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.



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Instrument: ms25.i
Operator: THP
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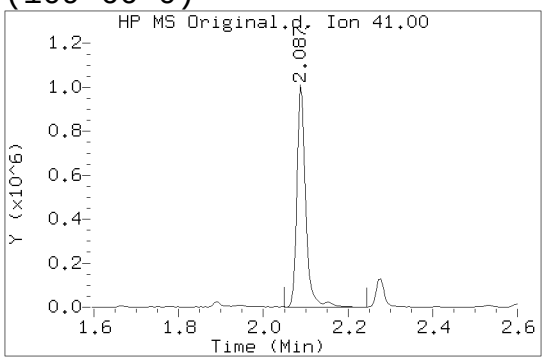
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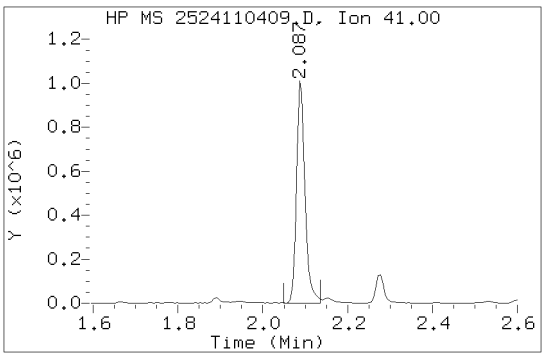
Pentane (109-66-0)

Reason Code: MP

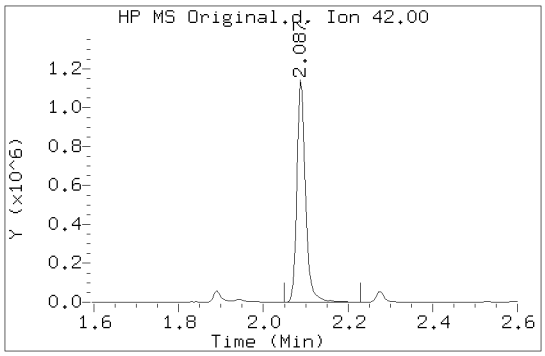
BEFORE
MASS
41
AREA
1452016
HEIGHT
1010295
04-Nov-2024
18:04



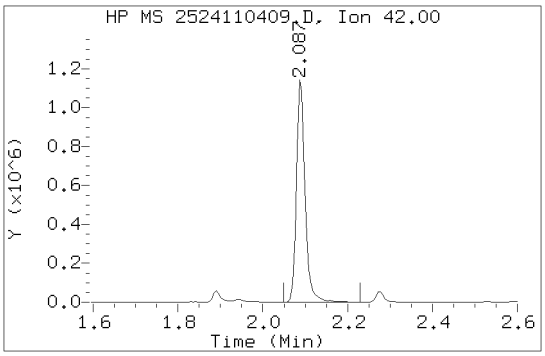
AFTER
MASS
41
AREA
1412853
HEIGHT
1010295
04-Nov-2024
18:09



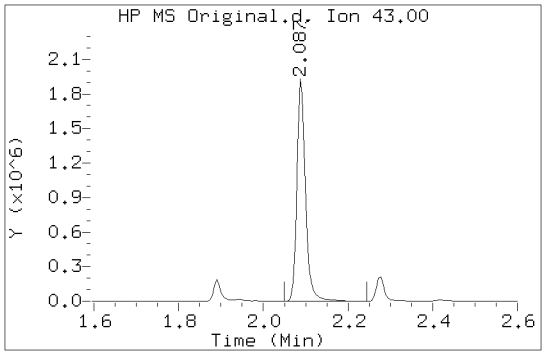
BEFORE
MASS
42
AREA
1618896
HEIGHT
1142233
04-Nov-2024
18:04



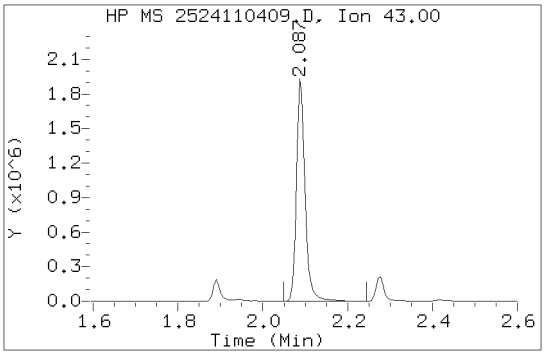
AFTER
MASS
42
AREA
1618896
HEIGHT
1142233
04-Nov-2024
18:09



BEFORE
MASS
43
AREA
2720601
HEIGHT
1929743
04-Nov-2024
18:04



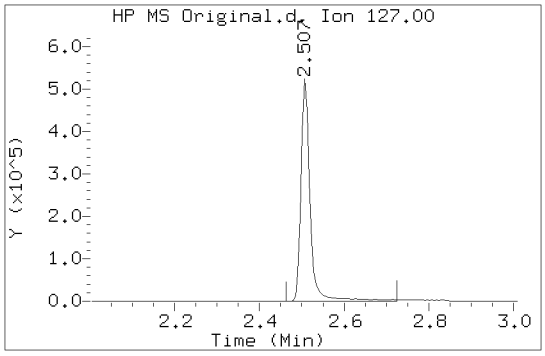
AFTER
MASS
43
AREA
2720601
HEIGHT
1929743
04-Nov-2024
18:09



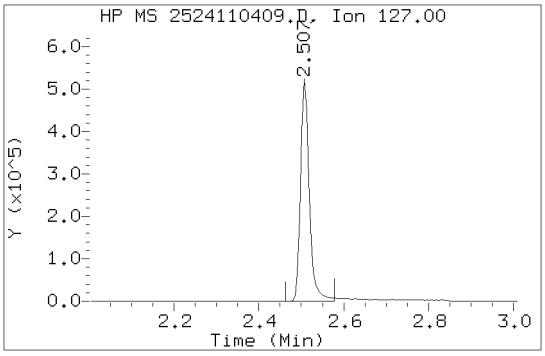
Iodomethane (74-88-4)

Reason Code: MP

BEFORE
MASS
127
AREA
788062
HEIGHT
524096
04-Nov-2024
18:04



AFTER
MASS
127
AREA
749058
HEIGHT
524096
04-Nov-2024
18:09



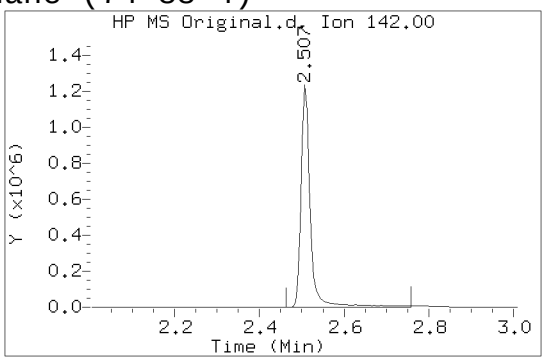
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Inj Date : 04-NOV-2024 15:57
InstruID : ms25.i
LabSampID : 1239

Iodomethane (74-88-4)

Reason Code: MP

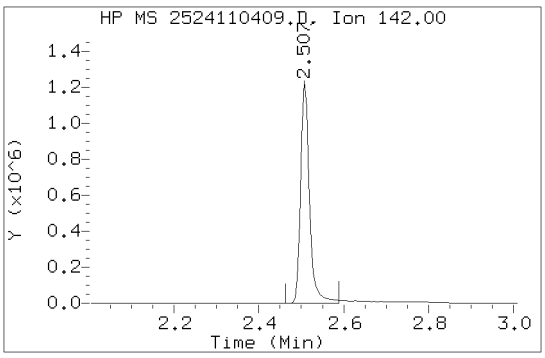
BEFORE

MASS
142
AREA
1873206
HEIGHT
1235456
04-Nov-2024
18:04



AFTER

MASS
142
AREA
1777240
HEIGHT
1235456
04-Nov-2024
18:09

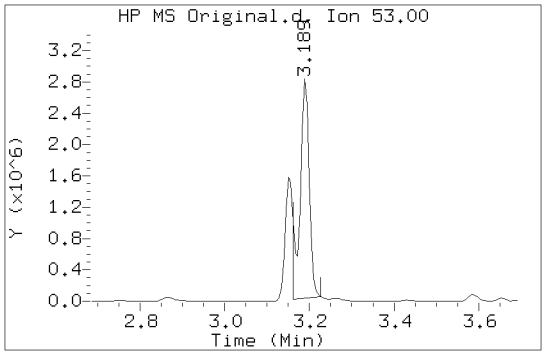


Acrylonitrile (107-13-1)

Reason Code: MP

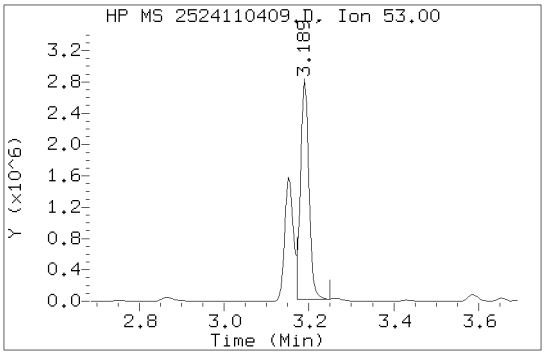
BEFORE

MASS
53
AREA
4312782
HEIGHT
2801487
04-Nov-2024
18:04



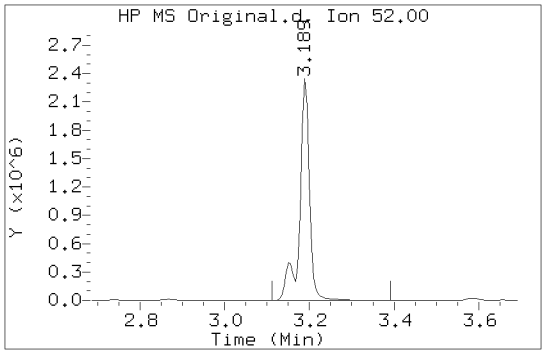
AFTER

MASS
53
AREA
3861236
HEIGHT
2812108
04-Nov-2024
18:09



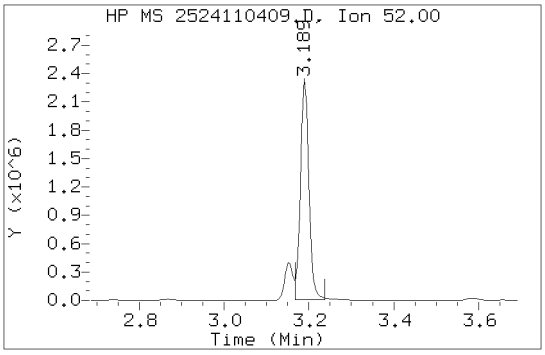
BEFORE

MASS
52
AREA
3822095
HEIGHT
2345771
04-Nov-2024
18:04



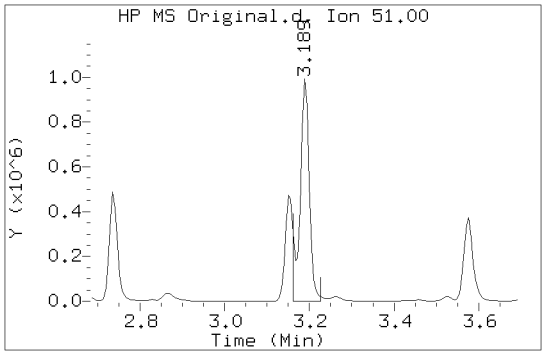
AFTER

MASS
52
AREA
3249714
HEIGHT
2340723
04-Nov-2024
18:09



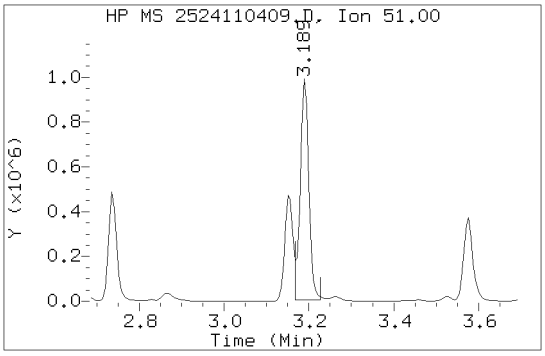
BEFORE

MASS
51
AREA
1531757
HEIGHT
993012
04-Nov-2024
18:04



AFTER

MASS
51
AREA
1412301
HEIGHT
988064
04-Nov-2024
18:09

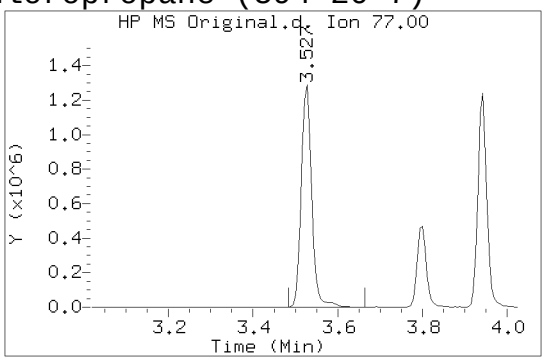


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Inj Date : 04-NOV-2024 15:57
InstruID : ms25.i
LabSampID : 1239

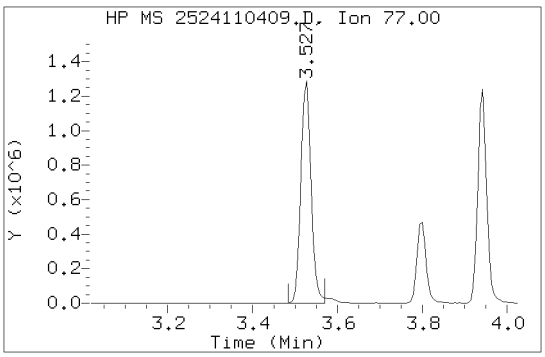
2,2-Dichloropropane (594-20-7)

Reason Code: MP

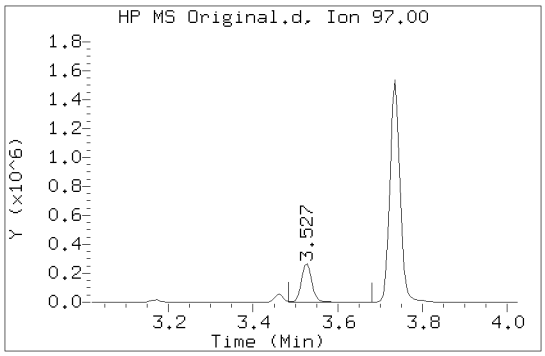
BEFORE
MASS
77
AREA
2214599
HEIGHT
1287835
04-Nov-2024
18:04



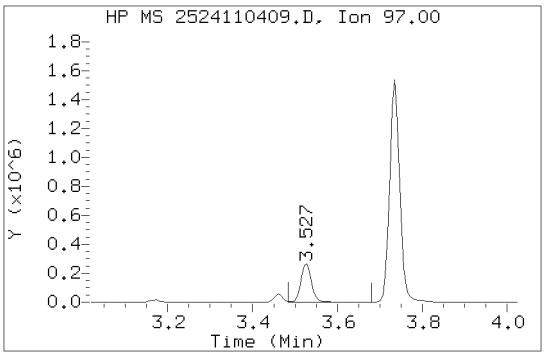
AFTER
MASS
77
AREA
2171810
HEIGHT
1287835
04-Nov-2024
18:09



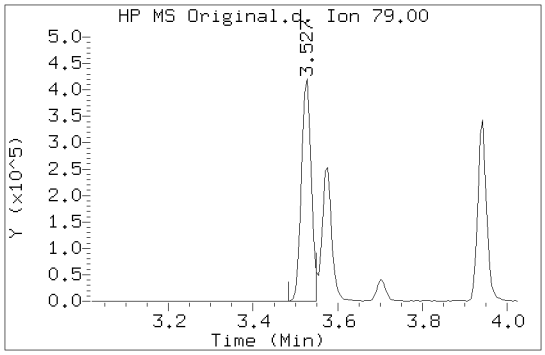
BEFORE
MASS
97
AREA
459448
HEIGHT
264960
04-Nov-2024
18:04



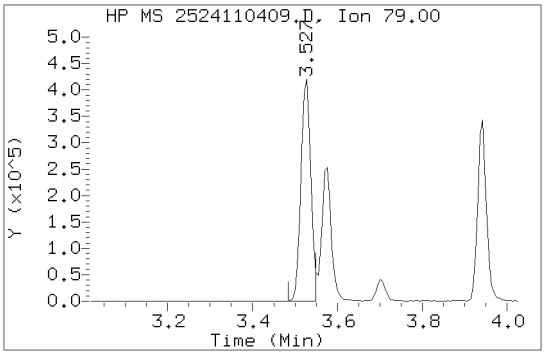
AFTER
MASS
97
AREA
459448
HEIGHT
264960
04-Nov-2024
18:09



BEFORE
MASS
79
AREA
683430
HEIGHT
420454
04-Nov-2024
18:04



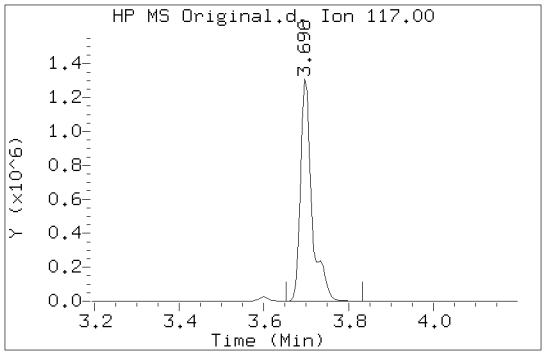
AFTER
MASS
79
AREA
683430
HEIGHT
420454
04-Nov-2024
18:09



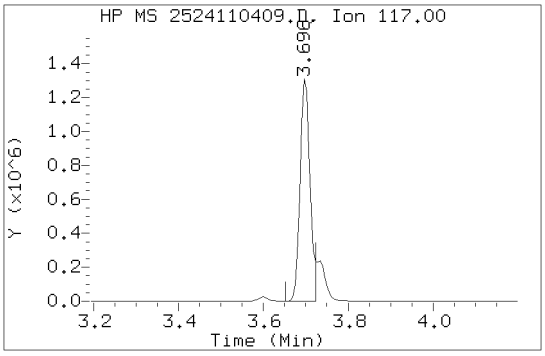
Carbon Tetrachloride (56-23-5)

Reason Code: MP

BEFORE
MASS
117
AREA
2478266
HEIGHT
1309696
04-Nov-2024
18:04



AFTER
MASS
117
AREA
2150801
HEIGHT
1309696
04-Nov-2024
18:09

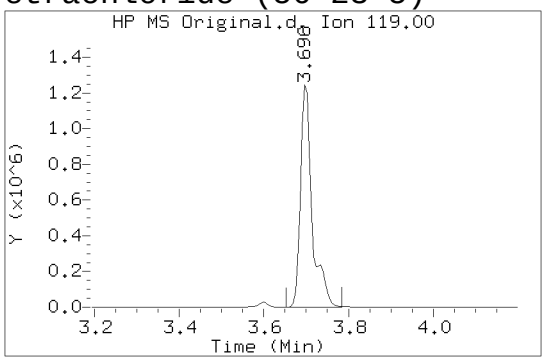


Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110409.D
Inj Date : 04-NOV-2024 15:57
InstruID : ms25.i
LabSampID : 1239

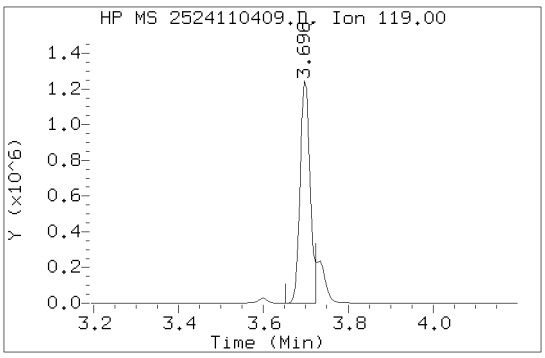
Carbon Tetrachloride (56-23-5)

Reason Code: MP

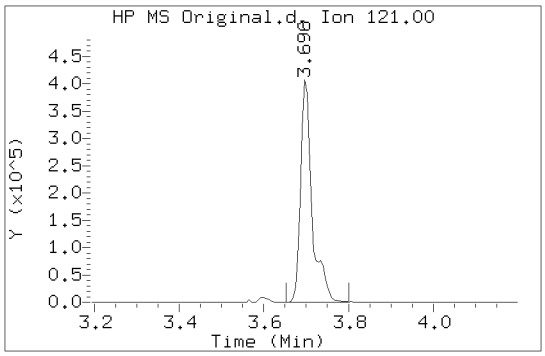
BEFORE
MASS
119
AREA
2379340
HEIGHT
1244679
04-Nov-2024
18:04



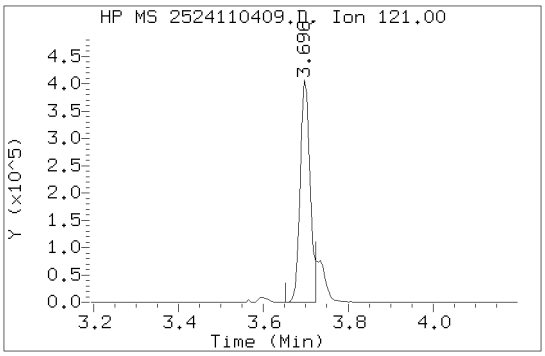
AFTER
MASS
119
AREA
2063840
HEIGHT
1244679
04-Nov-2024
18:09



BEFORE
MASS
121
AREA
770440
HEIGHT
407104
04-Nov-2024
18:04



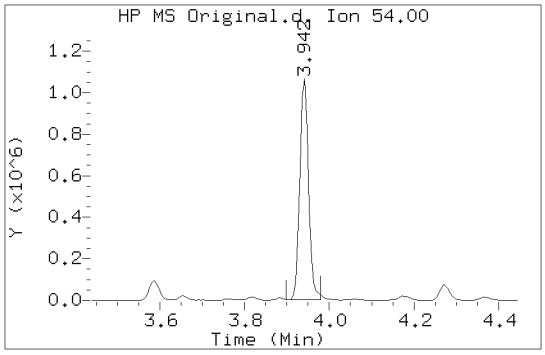
AFTER
MASS
121
AREA
665464
HEIGHT
407104
04-Nov-2024
18:09



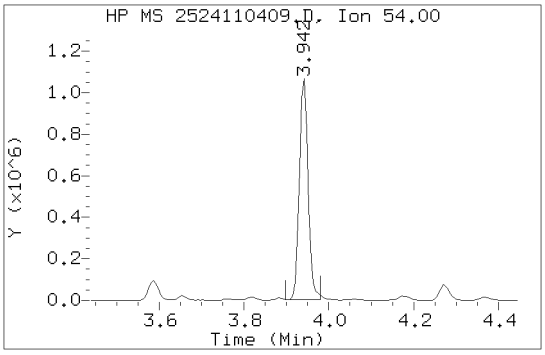
Propionitrile (107-12-0)

Reason Code: MP

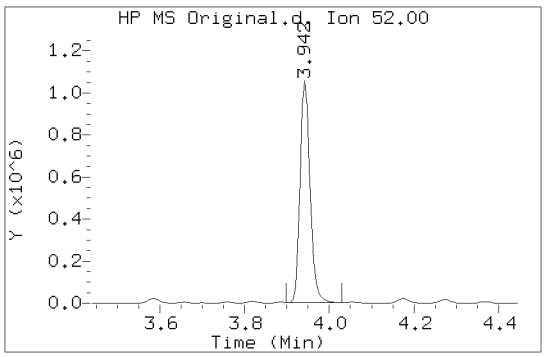
BEFORE
MASS
54
AREA
1522796
HEIGHT
1063095
04-Nov-2024
18:04



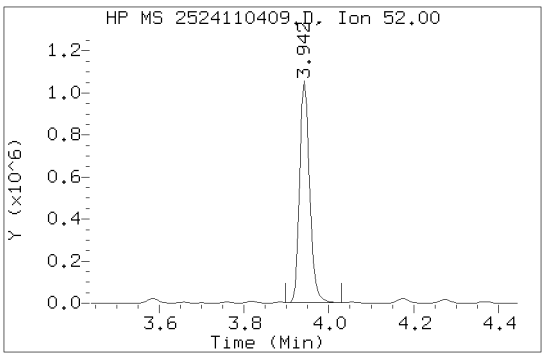
AFTER
MASS
54
AREA
1522796
HEIGHT
1063095
04-Nov-2024
18:09



BEFORE
MASS
52
AREA
1737201
HEIGHT
1055065
04-Nov-2024
18:04



AFTER
MASS
52
AREA
1737201
HEIGHT
1055065
04-Nov-2024
18:09



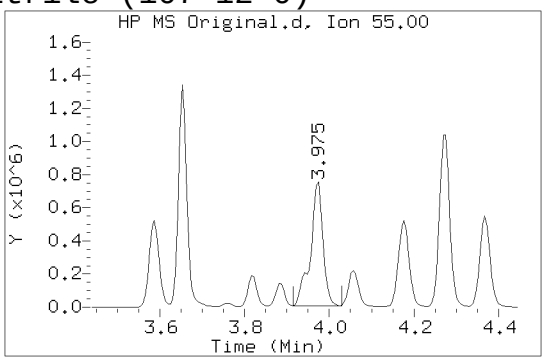
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Inj Date : 04-NOV-2024 15:57
InstruID : ms25.i
LabSampID : 1239

Propionitrile (107-12-0)

Reason Code: MP

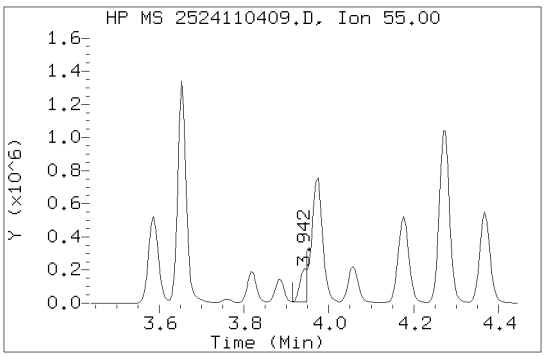
BEFORE

MASS
55
AREA
1526028
HEIGHT
746605
04-Nov-2024
18:04



AFTER

MASS
55
AREA
233907
HEIGHT
199488
04-Nov-2024
18:09

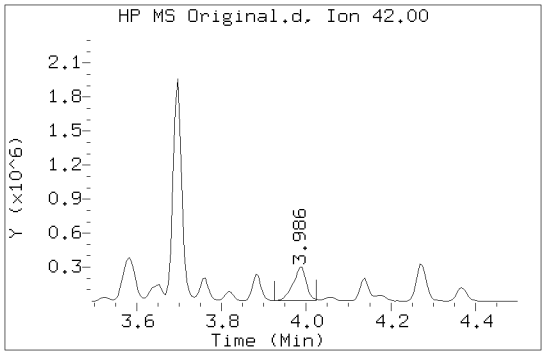


Isobutyl alcohol (78-83-1)

Reason Code: MP

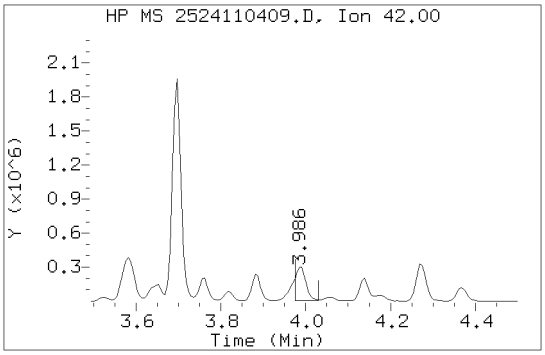
BEFORE

MASS
42
AREA
648694
HEIGHT
298379
04-Nov-2024
18:04



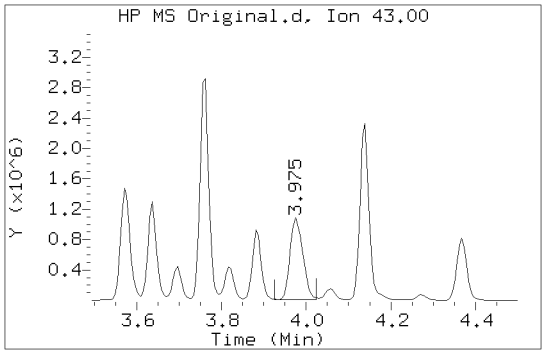
AFTER

MASS
42
AREA
500231
HEIGHT
297695
04-Nov-2024
18:09



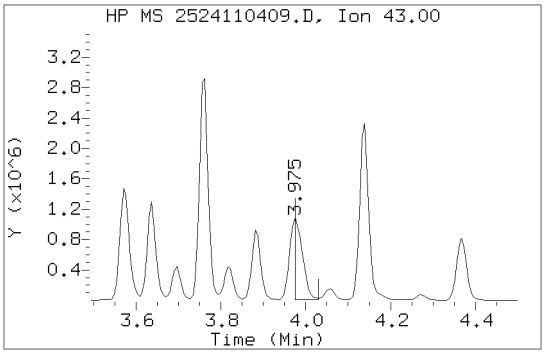
BEFORE

MASS
43
AREA
2299486
HEIGHT
1079587
04-Nov-2024
18:04



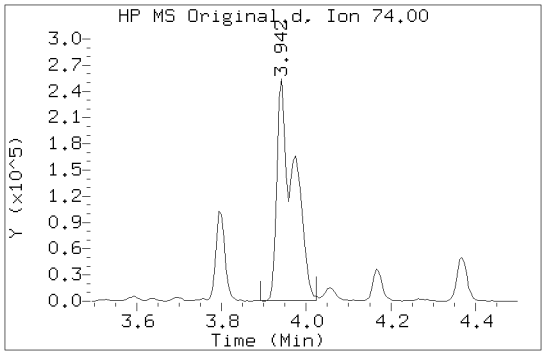
AFTER

MASS
43
AREA
1511811
HEIGHT
1078520
04-Nov-2024
18:09



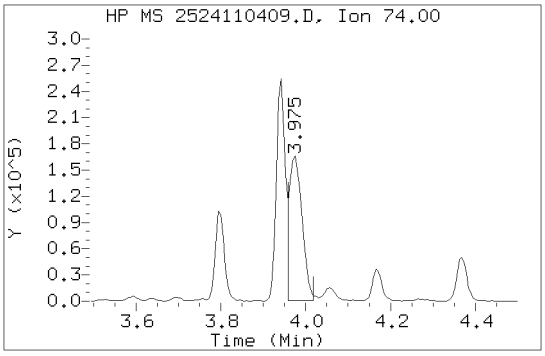
BEFORE

MASS
74
AREA
706954
HEIGHT
253816
04-Nov-2024
18:04



AFTER

MASS
74
AREA
358603
HEIGHT
165701
04-Nov-2024
18:09

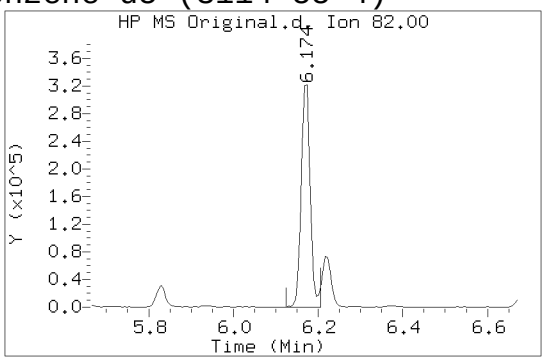


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InstruID : ms25.i
LabSampID : 1239

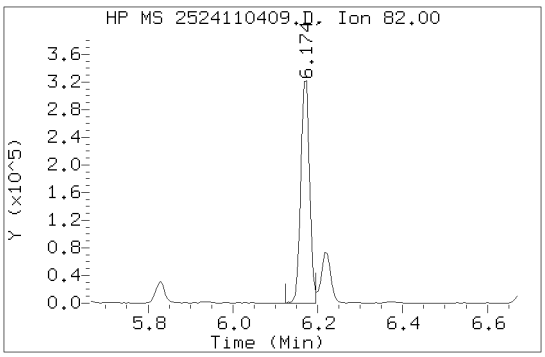
Chlorobenzene-d5 (3114-55-4)

Reason Code: MP

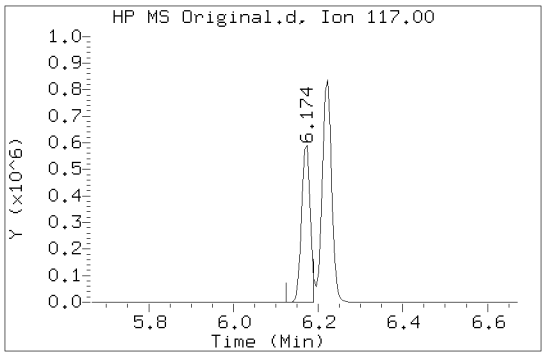
BEFORE
MASS
82
AREA
482379
HEIGHT
321225
04-Nov-2024
18:04



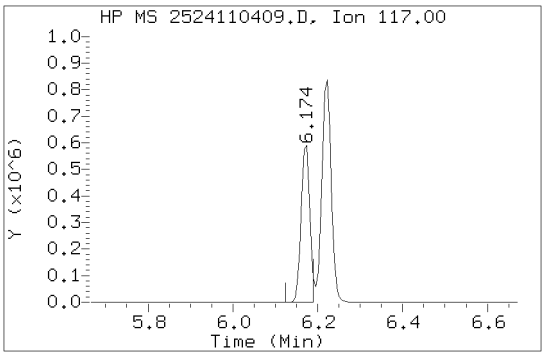
AFTER
MASS
82
AREA
467316
HEIGHT
321225
04-Nov-2024
18:09



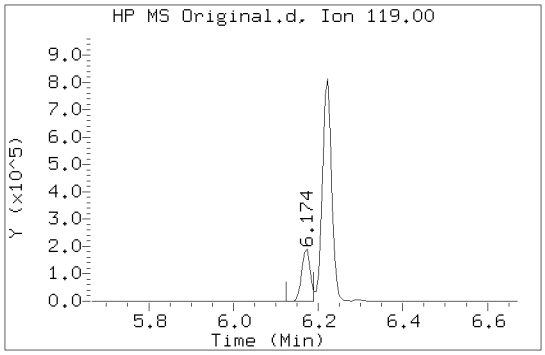
BEFORE
MASS
117
AREA
848033
HEIGHT
591232
04-Nov-2024
18:04



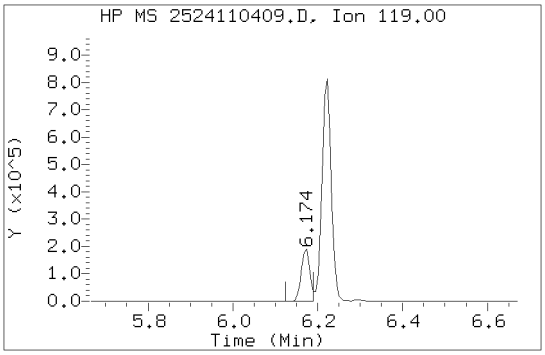
AFTER
MASS
117
AREA
848033
HEIGHT
591232
04-Nov-2024
18:09



BEFORE
MASS
119
AREA
272529
HEIGHT
191488
04-Nov-2024
18:04



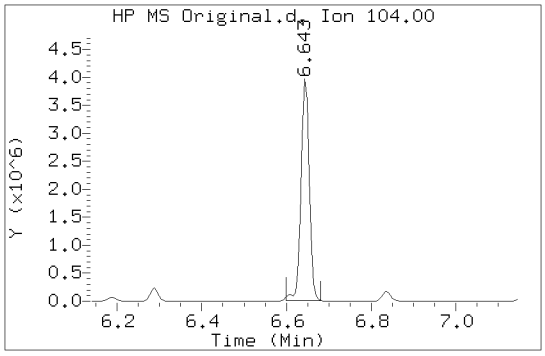
AFTER
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119
AREA
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HEIGHT
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04-Nov-2024
18:09



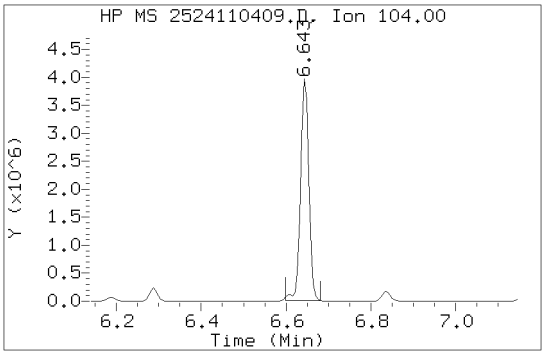
Styrene (100-42-5)

Reason Code: MP

BEFORE
MASS
104
AREA
5383371
HEIGHT
3958757
04-Nov-2024
18:04



AFTER
MASS
104
AREA
5383371
HEIGHT
3958757
04-Nov-2024
18:09

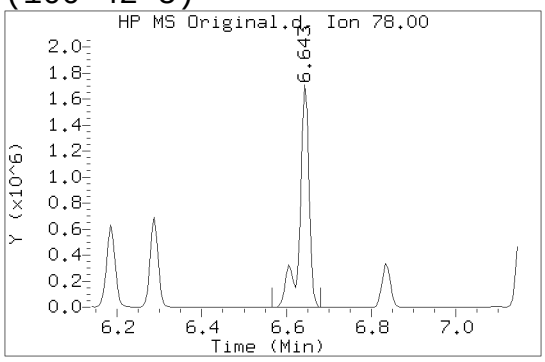


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Inj Date : 04-NOV-2024 15:57
InstruID : ms25.i
LabSampID : 1239

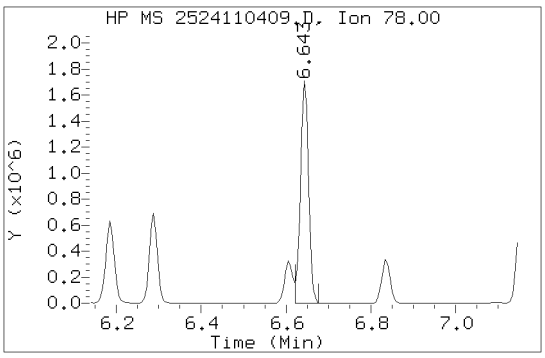
Styrene (100-42-5)

Reason Code: MP

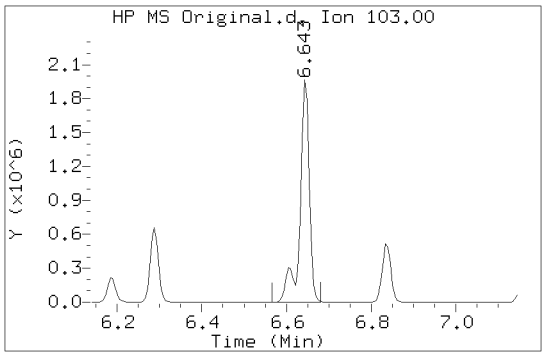
BEFORE
MASS
78
AREA
2691583
HEIGHT
1708032
04-Nov-2024
18:04



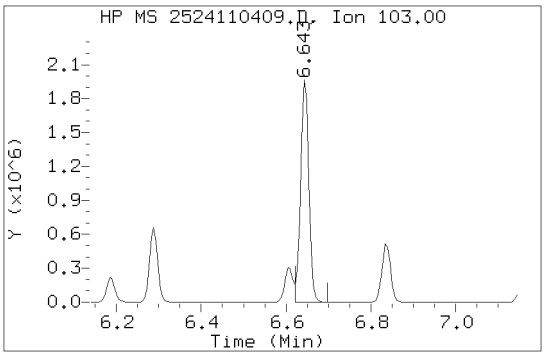
AFTER
MASS
78
AREA
2280919
HEIGHT
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04-Nov-2024
18:09



BEFORE
MASS
103
AREA
3034922
HEIGHT
1965368
04-Nov-2024
18:04



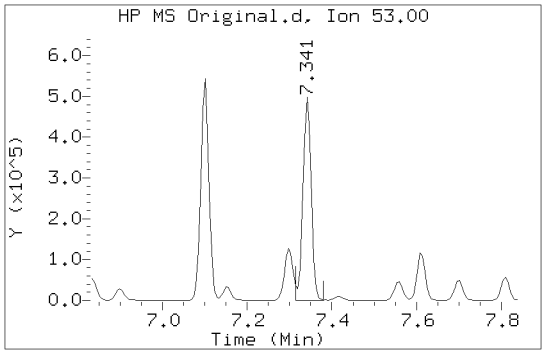
AFTER
MASS
103
AREA
2649313
HEIGHT
1965248
04-Nov-2024
18:09



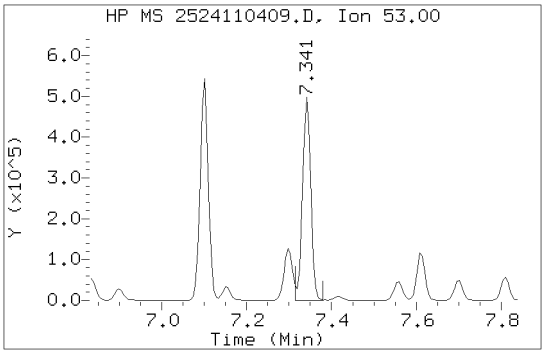
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

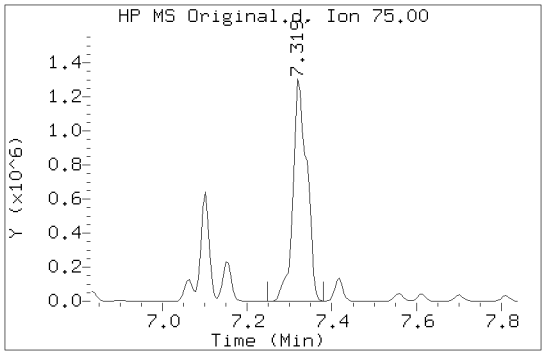
BEFORE
MASS
53
AREA
679150
HEIGHT
497100
04-Nov-2024
18:04



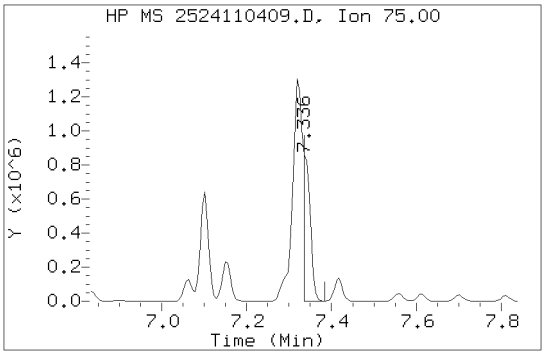
AFTER
MASS
53
AREA
679150
HEIGHT
497100
04-Nov-2024
18:09



BEFORE
MASS
75
AREA
3000473
HEIGHT
1305600
04-Nov-2024
18:04



AFTER
MASS
75
AREA
977427
HEIGHT
861464
04-Nov-2024
18:09



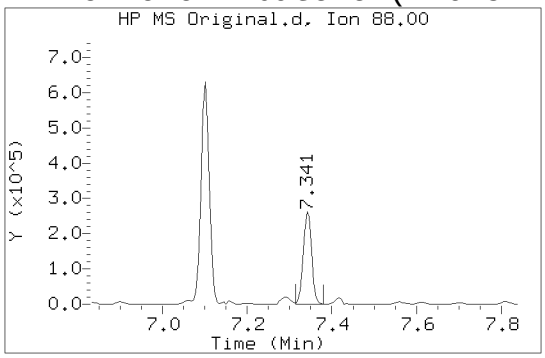
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Inj Date : 04-NOV-2024 15:57
InstruID : ms25.i
LabSampID : 1239

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code: MP

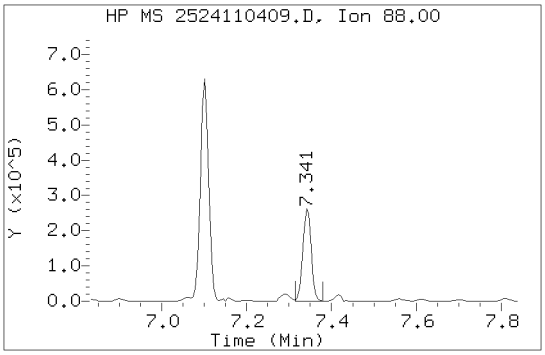
BEFORE

MASS
88
AREA
358404
HEIGHT
262646
04-Nov-2024
18:04



AFTER

MASS
88
AREA
358404
HEIGHT
262646
04-Nov-2024
18:09

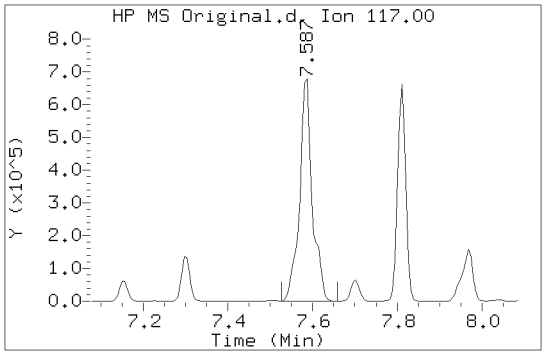


Pentachloroethane (76-01-7)

Reason Code: MP

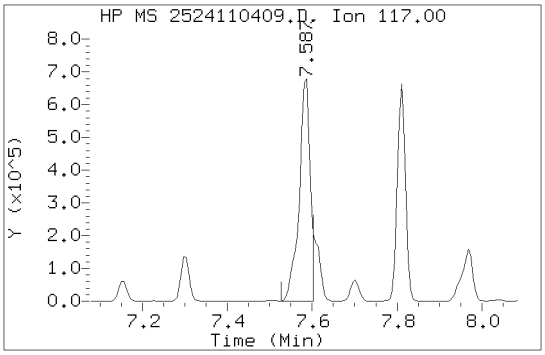
BEFORE

MASS
117
AREA
1412572
HEIGHT
678518
04-Nov-2024
18:04



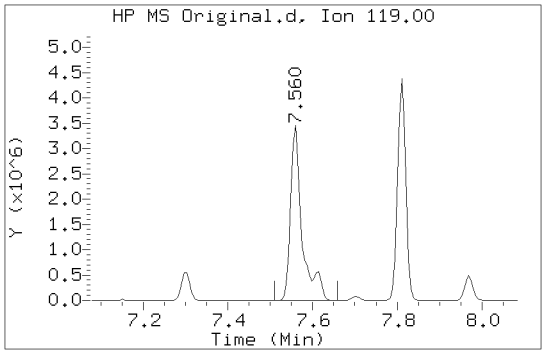
AFTER

MASS
117
AREA
1239884
HEIGHT
678518
04-Nov-2024
18:09



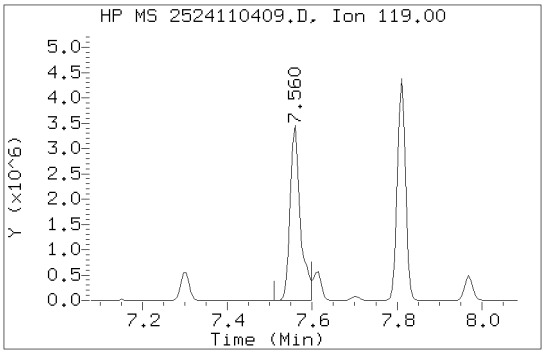
BEFORE

MASS
119
AREA
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HEIGHT
3460811
04-Nov-2024
18:04



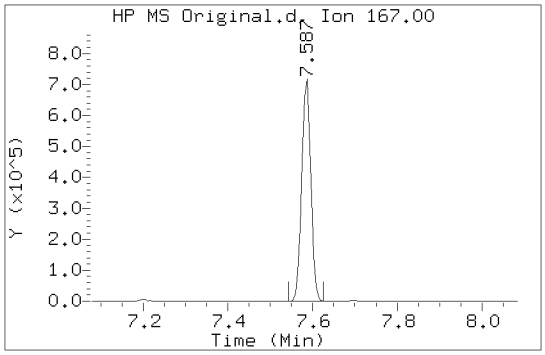
AFTER

MASS
119
AREA
5851155
HEIGHT
3460811
04-Nov-2024
18:09



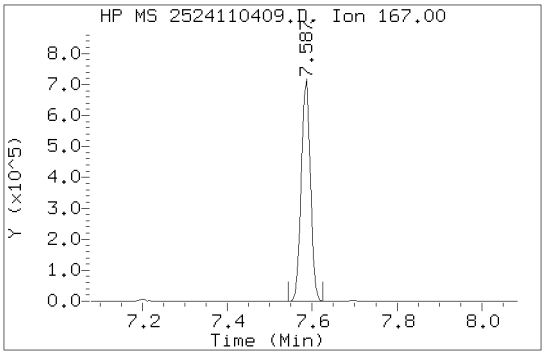
BEFORE

MASS
167
AREA
1075464
HEIGHT
717977
04-Nov-2024
18:04



AFTER

MASS
167
AREA
1075464
HEIGHT
717977
04-Nov-2024
18:09



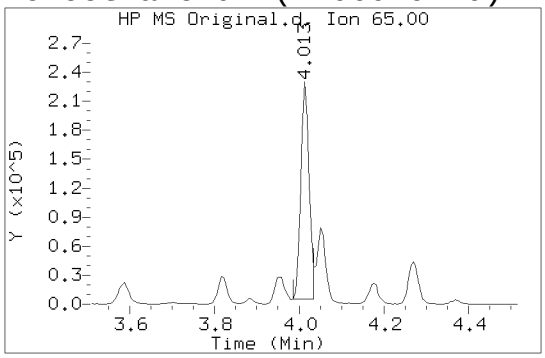
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Inj Date : 04-NOV-2024 15:57
InstruID : ms25.i
LabSampID : 1239

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: I

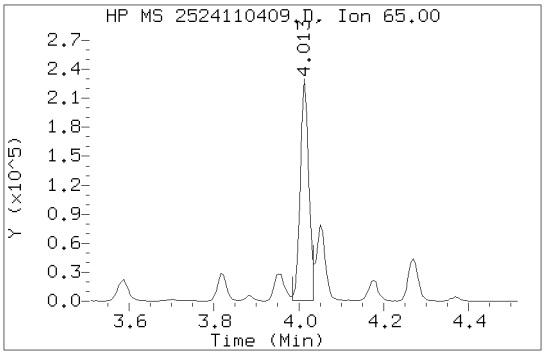
BEFORE

MASS
65
AREA
307003
HEIGHT
224386
04-Nov-2024
18:04



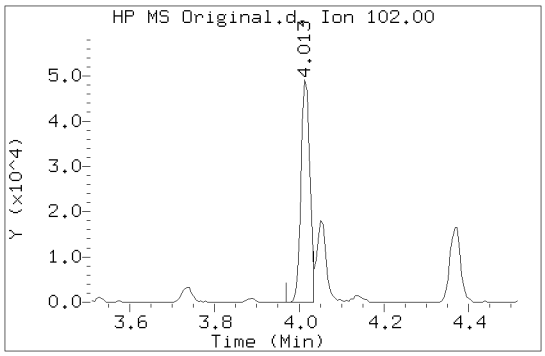
AFTER

MASS
65
AREA
324021
HEIGHT
229585
04-Nov-2024
18:09



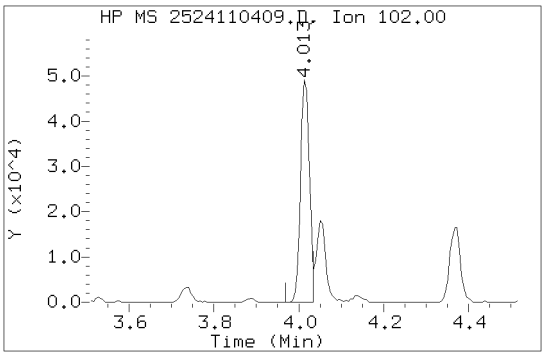
BEFORE

MASS
102
AREA
72507
HEIGHT
49152
04-Nov-2024
18:04



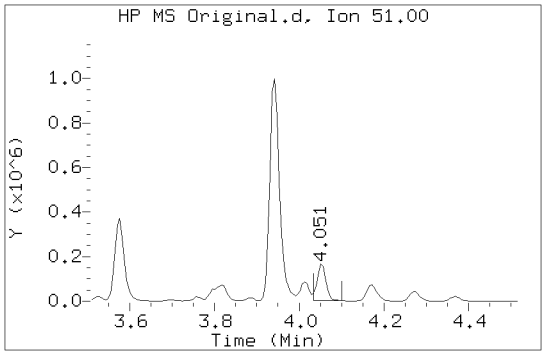
AFTER

MASS
102
AREA
72507
HEIGHT
49152
04-Nov-2024
18:09



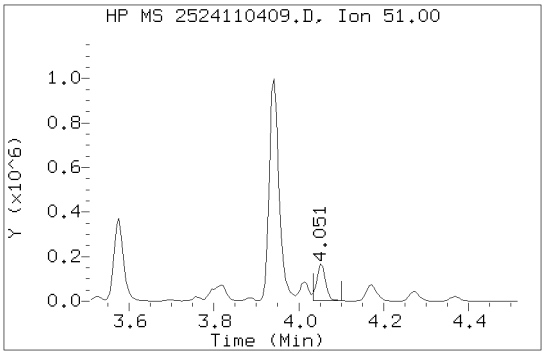
BEFORE

MASS
51
AREA
240657
HEIGHT
166429
04-Nov-2024
18:04



AFTER

MASS
51
AREA
240657
HEIGHT
166429
04-Nov-2024
18:09



UNASSIGNED PEAK REPORT

Report Date: 11/05/2024 04:11
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241104.b/252411040
Inj Date: 04-NOV-2024 15:57
Operator: TMP

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\2524110415ICV
Lab Smp Id: ICVQ
Inj Date : 04-NOV-2024 18:00
Operator : TMP Inst ID: ms25.i
Smp Info : ICVQ;;1;3;;ICVQ;1;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241104.b\25-8260b09.m
Meth Date : 04-Nov-2024 19:36 pdk Quant Type: ISTD
Cal Date : 04-NOV-2024 14:15 Cal File: 2524110404.D
Als bottle: 15 QC Sample: ICV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14
Processing Host: ALMDTW7060

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.497	1.497	(0.359)	196889	19.1162	19.1162	
2 Chloromethane	50	1.644	1.645	(0.395)	190701	19.5243	19.5243	
3 Vinyl Chloride	62	1.704	1.705	(0.409)	243366	20.9668	20.9668	
4 Bromomethane	94	1.922	1.923	(0.462)	191910	16.0074	16.0074(M)	I
5 Chloroethane	64	1.999	2.005	(0.480)	189954	21.2216	21.2216	
6 Pentane	41	2.086	2.097	(0.501)	132122	19.9294	19.9294	
7 Trichlorofluoromethane	101	2.091	2.097	(0.502)	320814	20.9438	20.9438	
8 Dichlorofluoromethane	67	2.119	2.125	(0.509)	345971	20.8110	20.8110	
9 Ethyl Ether	74	2.277	2.278	(0.547)	100383	20.3520	20.3520	
10 1,1-Dichloroethene	61	2.408	2.409	(0.578)	190855	20.8491	20.8491	
12 Carbon Disulfide	76	2.446	2.447	(0.587)	375439	19.8599	19.8599	
11 Freon 113	101	2.424	2.419	(0.582)	123714	21.2625	21.2625	
13 Iodomethane	127	2.506	2.507	(0.602)	34268	16.5054	16.5054(M)	SP
14 Acrolein	56	2.599	2.605	(0.624)	221296	166.548	166.548	
16 3-Chloro-1-propene	41	2.675	2.676	(0.642)	166285	21.8583	21.8583	
15 Isopropyl Alcohol	45	2.653	2.654	(0.637)	45968	95.9404	95.9404	
17 Methylene Chloride	84	2.735	2.736	(0.657)	174230	20.5696	20.5696	
18 Acetone	58	2.752	2.752	(0.661)	96901	107.333	107.333	
19 Methyl acetate	74	2.812	2.818	(0.675)	36805	21.4834	21.4834(Q)	
20 trans-1,2-Dichloroethene	61	2.828	2.823	(0.679)	198448	20.7836	20.7836	
21 Hexane	57	2.861	2.867	(0.687)	260618	20.3890	20.3890	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	2.872	2.878	(0.690)	499484	22.0876	22.0876	
	23 tert.- Butyl Alcohol	59	2.894	2.900	(0.695)	80803	98.4495	98.4495	
	24 Acetonitrile	41	3.019	3.020	(0.725)	102155	100.454	100.454	
	25 Diisopropyl ether	45	3.063	3.063	(0.735)	463462	21.4632	21.4632	
	26 Chloroprene	53	3.150	3.151	(0.756)	207431	21.7539	21.7539	
	27 1,1-Dichloroethane	63	3.166	3.162	(0.760)	280101	21.3085	21.3085	
	28 Acrylonitrile	53	3.188	3.189	(0.766)	367281	111.733	111.733(M)	I
	30 n-Propanol	41	3.265	3.260	(0.784)	94364	199.548	199.548(a)	
	29 Ethyl tert-butyl ether	59	3.265	3.265	(0.784)	509204	21.6802	21.6802	
	31 Vinyl acetate	86	3.276	3.271	(0.786)	35520	17.0499	17.0499(Q)	
	32 cis-1,2-Dichloroethene	61	3.461	3.462	(0.831)	214104	20.6814	20.6814	
	33 2,2-Dichloropropane	77	3.527	3.522	(0.847)	179984	19.9992	19.9992	
M	100 1,2-Dichloroethene, Total	61				412552	41.4651	41.4651	
	34 Bromochloromethane	128	3.576	3.571	(0.859)	96717	21.2138	21.2138	
	35 Cyclohexane	84	3.587	3.587	(0.861)	212427	21.6262	21.6262	
	36 Chloroform	83	3.597	3.598	(0.864)	314621	21.1307	21.1307	
	37 Ethyl acetate	43	3.636	3.631	(0.873)	139428	18.3023	18.3023	
	38 Methyl acrylate	55	3.652	3.658	(0.877)	152828	21.0792	21.0792	
	39 Carbon Tetrachloride	117	3.696	3.696	(0.887)	176278	18.4174	18.4174(M)	MP
	40 Tetrahydrofuran	42	3.696	3.702	(0.887)	243282	106.476	106.476	
$	41 Dibromofluoromethane	113	3.701	3.702	(0.889)	279845	30.5407	30.5407	
	42 1,1,1-Trichloroethane	97	3.734	3.729	(0.897)	228618	21.5062	21.5062	
	43 2-Butanone	72	3.761	3.762	(0.903)	124364	111.186	111.186(M)	MP
	44 1,1-Dichloropropene	75	3.794	3.795	(0.911)	204108	20.9569	20.9569	
	45 1-Chlorobutane	41	3.816	3.816	(0.916)	129245	20.1289	20.1289	
	46 Heptane	71	3.881	3.876	(0.932)	90556	19.4273	19.4273	
	48 Propionitrile	54	3.941	3.942	(0.946)	142025	108.461	108.461(Q)	
	47 Benzene	78	3.941	3.942	(0.946)	647603	20.3410	20.3410	
	49 Methacrylonitrile	67	3.952	3.953	(0.949)	86284	21.6482	21.6482	
	50 tert-amyl methyl Ether	73	3.974	3.975	(0.954)	506984	22.6899	22.6899	
$	51 1,2-Dichloroethane-d4	65	4.012	4.013	(0.963)	307074	29.7078	29.7078(M)	MP
	54 Isobutyl alcohol	42	3.985	3.996	(0.957)	37406	182.522	182.522(QM)	MP
	52 1,2-Dichloroethane	62	4.050	4.056	(0.972)	232372	20.9734	20.9734	
	53 tert-Amyl Alcohol	59	4.056	4.062	(0.974)	56896	84.0473	84.0473	
*	55 Fluorobenzene	96	4.165	4.166	(1.000)	1043758	30.0000		
	56 Diisobutylene	57	4.170	4.171	(1.001)	325290	18.5871	18.5871	
	57 Trichloroethene	95	4.263	4.269	(1.024)	159493	18.8325	18.8325	
	58 Methyl cyclohexane	83	4.274	4.275	(0.693)	220337	21.0956	21.0956	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.048)	353688	20.7467	20.7467	
	60 Dibromomethane	93	4.525	4.526	(1.086)	118103	20.6635	20.6635	
	61 1,2-Dichloropropane	63	4.585	4.586	(1.101)	174005	21.7024	21.7024	
	62 Bromodichloromethane	83	4.607	4.602	(1.106)	224665	22.4280	22.4280	
	63 Methyl methacrylate	41	4.667	4.668	(1.121)	128204	19.9663	19.9663	
	65 2-Chloroethylvinyl ether	63	4.929	4.935	(1.183)	44079	18.8446	18.8446	
	66 cis-1,3-Dichloropropene	75	4.994	4.995	(0.810)	256376	20.8878	20.8878	
	67 Octane	85	4.994	5.000	(0.810)	74855	20.6984	20.6984	
$	68 Toluene-d8	98	5.114	5.115	(0.829)	1052197	30.0125	30.0125	
	69 Toluene	92	5.147	5.153	(0.835)	409487	20.5253	20.5253	
	70 Chloroacetonitrile	75	5.207	5.213	(0.844)	46373	91.0342	91.0342	
	71 2-Nitropropane	41	5.294	5.295	(0.858)	178282	82.1844	82.1844	
	72 1,1-Dichloro-2-propanone	63	5.316	5.317	(0.862)	17391	86.5336	86.5336(Q)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.871)	819078	106.458	106.458	
	75 trans-1,3-Dichloropropene	75	5.404	5.404	(0.876)	245309	18.2577	18.2577	
	74 Tetrachloroethene	164	5.409	5.404	(0.877)	153985	21.6957	21.6957	

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/L)	REVIEW CODE
	76	Ethyl methacrylate	69	5.480	5.481	(0.889)	229683	18.5084	18.5084	
	77	1,1,2-Trichloroethane	83	5.518	5.524	(0.895)	142942	21.5984	21.5984	
	78	Chlorodibromomethane	129	5.649	5.650	(0.916)	170782	18.3858	18.3858	
	79	1,3-Dichloropropane	76	5.709	5.710	(0.926)	279611	21.2924	21.2924	
	80	1,2-Dibromoethane	107	5.829	5.830	(0.945)	170429	22.1244	22.1244	
	81	2-Hexanone	43	5.933	5.933	(0.962)	540827	103.526	103.526	
	82	1-Chlorohexane	91	6.140	6.141	(0.996)	196018	21.3936	21.3936	
*	83	Chlorobenzene-d5	82	6.167	6.168	(1.000)	424327	30.0000		
	85	Ethylbenzene	106	6.189	6.190	(1.004)	234938	21.2077	21.2077	
	84	Chlorobenzene	112	6.184	6.184	(1.003)	443910	20.4660	20.4660	
	86	1,1,1,2-Tetrachloroethane	131	6.222	6.223	(1.009)	157741	21.7253	21.7253	
	87	mp-Xylene	106	6.287	6.288	(1.019)	566661	42.3683	42.3683	
M	120	1,3-Dichloropropene, Total	75				501685	39.1455	39.1455	
	88	o-Xylene	106	6.604	6.599	(1.071)	280656	21.7744	21.7744	
	89	Styrene	104	6.642	6.643	(0.836)	464282	22.4512	22.4512	
	90	Bromoform	173	6.680	6.681	(0.841)	111568	18.0295	18.0295	
	91	Isopropylbenzene	105	6.833	6.839	(0.860)	666898	23.0731	23.0731	
$	92	4-Bromofluorobenzene	174	7.062	7.063	(0.889)	291188	29.7871	29.7871	
M	121	TOTAL XYLENES	106				847317	64.1427	64.1427	
	94	n-Propylbenzene	120	7.155	7.150	(0.900)	180253	21.1872	21.1872	
	93	Bromobenzene	156	7.155	7.150	(0.900)	188992	21.1752	21.1752	
	95	1,1,2,2-Tetrachloroethane	83	7.199	7.205	(0.906)	199338	20.7897	20.7897	
	97	1,3,5-Trimethylbenzene	105	7.297	7.298	(0.918)	531463	22.0043	22.0043	
	96	o-Chlorotoluene	91	7.286	7.287	(0.917)	517996	21.4211	21.4211	
	98	1,2,3-Trichloropropane	110	7.319	7.319	(0.921)	63537	21.4319	21.4319	
	99	trans-1,4-Dichloro-2-butene	53	7.341	7.336	(0.924)	51111	18.4141	18.4141(Q)	
	101	p-Chlorotoluene	91	7.417	7.418	(0.933)	470654	21.0917	21.0917	
	102	tert-Butylbenzene	134	7.559	7.565	(0.951)	124005	21.4093	21.4093(Q)	
	103	Pentachloroethane	117	7.581	7.581	(0.954)	94265	19.6067	19.6067(QM)	MP
	104	1,2,4-Trimethylbenzene	105	7.608	7.614	(0.957)	537763	21.6627	21.6627	
	105	sec-Butylbenzene	105	7.701	7.701	(0.969)	629554	21.8421	21.8421	
	106	p-Isopropyltoluene	134	7.810	7.805	(0.983)	142223	21.9061	21.9061	
	107	1,3-Dichlorobenzene	146	7.892	7.887	(0.993)	312389	21.2123	21.2123	
*	108	1,4-Dichlorobenzene-d4	152	7.946	7.947	(1.000)	371523	30.0000		
	109	1,4-Dichlorobenzene	146	7.957	7.963	(1.001)	319416	20.3327	20.3327	
	111	n-Butylbenzene	134	8.154	8.154	(1.026)	121814	21.6639	21.6639(Q)	
	110	Benzyl Chloride	126	8.159	8.148	(1.027)	46080	17.1530	17.1530(Q)	
	112	Hexachloroethane	117	8.290	8.285	(1.043)	84655	17.6203	17.6203	
	113	1,2-Dichlorobenzene	146	8.306	8.307	(1.045)	300987	20.8911	20.8911	
	114	1,2-Dibromo-3-chloropropane	75	8.978	8.973	(1.130)	28330	17.8911	17.8911	
	115	Nitrobenzene	77	9.458	9.469	(1.190)	61742	169.778	169.778	
	116	Hexachlorobutadiene	225	9.523	9.524	(1.198)	78783	22.5751	22.5751	
	117	1,2,4-Trichlorobenzene	180	9.550	9.551	(1.202)	195182	23.4754	23.4754	
	118	Naphthalene	128	9.823	9.824	(1.236)	485061	18.8215	18.8215	
	119	1,2,3-Trichlorobenzene	180	9.976	9.982	(1.255)	175073	20.7020	20.7020	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

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Date : 04-NOV-2024 18:00

Client ID:

Instrument: ms25.i

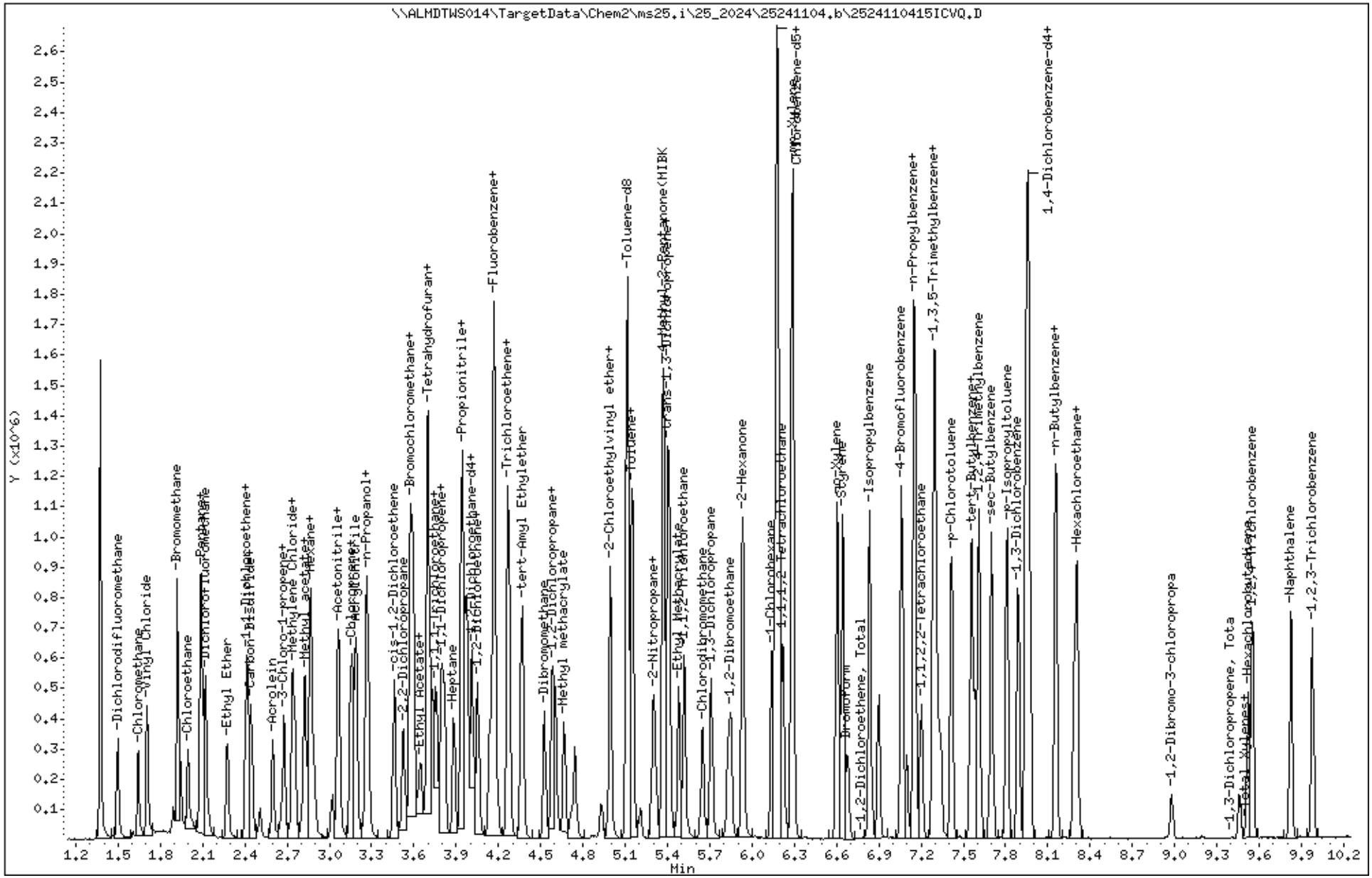
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Purge Volume: 5.0

Operator: TMP

Column phase: DB-VRX

Column diameter: 0.25

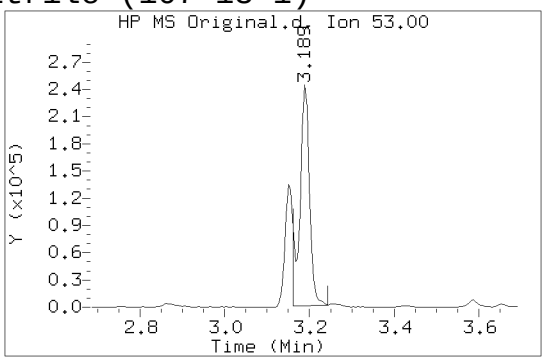


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LabSampID : ICVQ

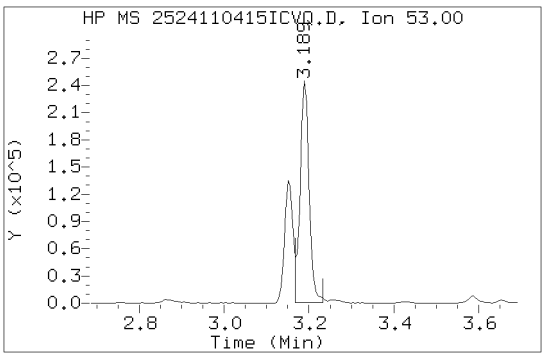
Acrylonitrile (107-13-1)

Reason Code: I

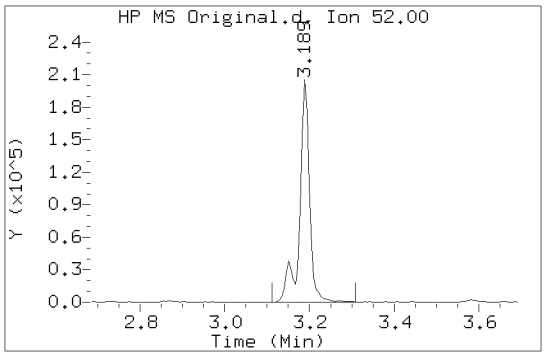
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HEIGHT
243404
04-Nov-2024
19:20



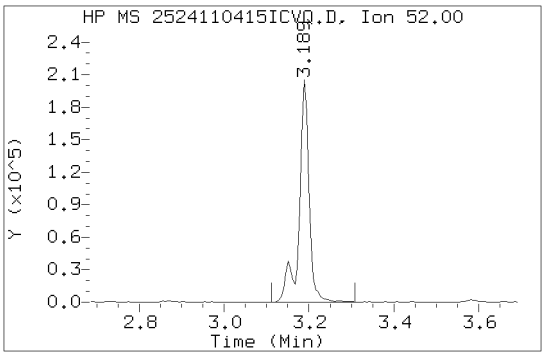
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04-Nov-2024
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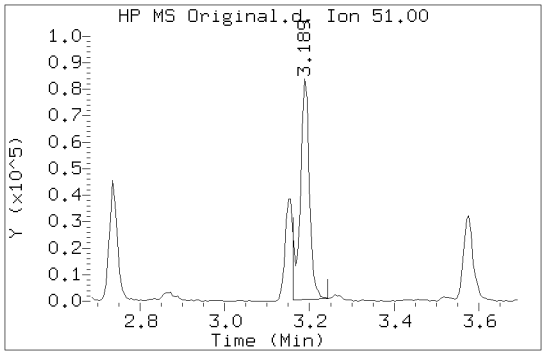
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52
AREA
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HEIGHT
205248
04-Nov-2024
19:20



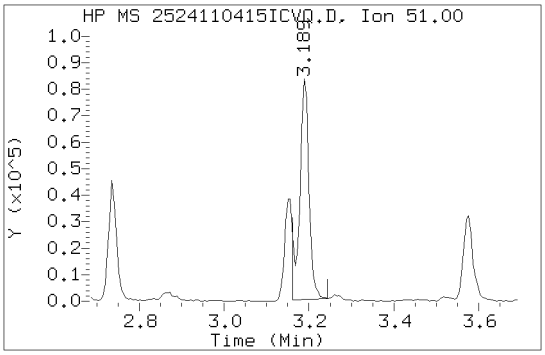
AFTER
MASS
52
AREA
337419
HEIGHT
205248
04-Nov-2024
19:35



BEFORE
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51
AREA
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HEIGHT
83296
04-Nov-2024
19:20



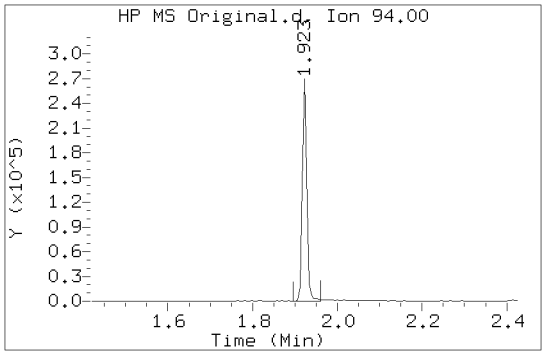
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04-Nov-2024
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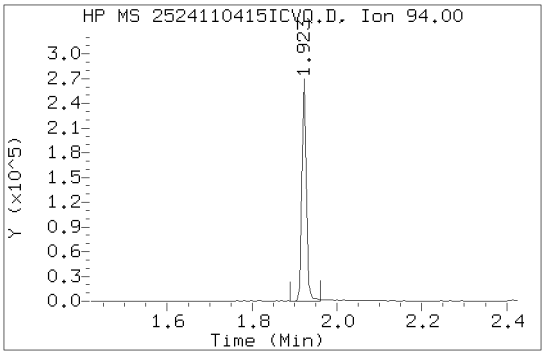
Bromomethane (74-83-9)

Reason Code: I

BEFORE
MASS
94
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HEIGHT
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04-Nov-2024
19:20



AFTER
MASS
94
AREA
191910
HEIGHT
269687
04-Nov-2024
19:35



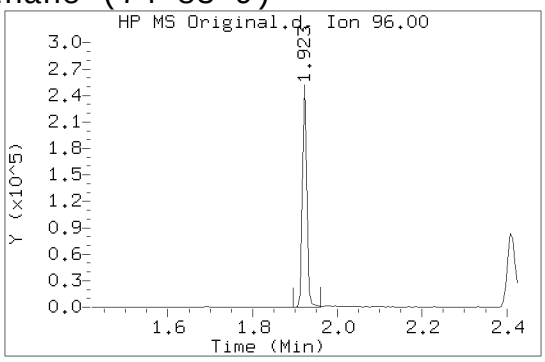
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InstruID : ms25.i
LabSampID : ICVQ

Bromomethane (74-83-9)

Reason Code: I

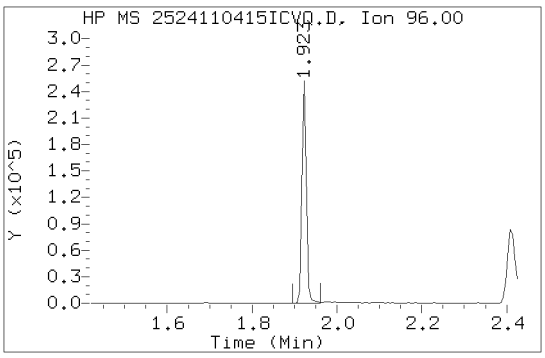
BEFORE

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HEIGHT
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04-Nov-2024
19:20



AFTER

MASS
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AREA
177847
HEIGHT
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04-Nov-2024
19:35

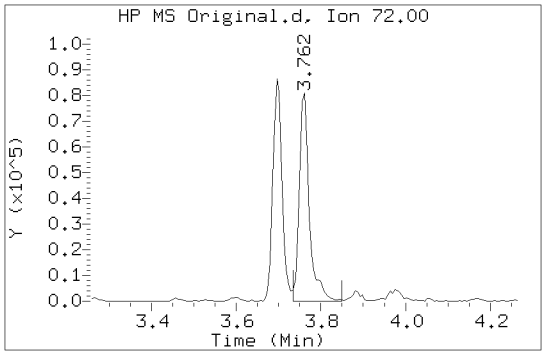


2-Butanone (78-93-3)

Reason Code: MP

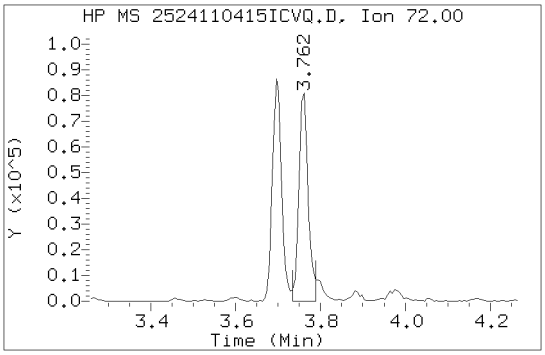
BEFORE

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HEIGHT
80944
04-Nov-2024
19:20



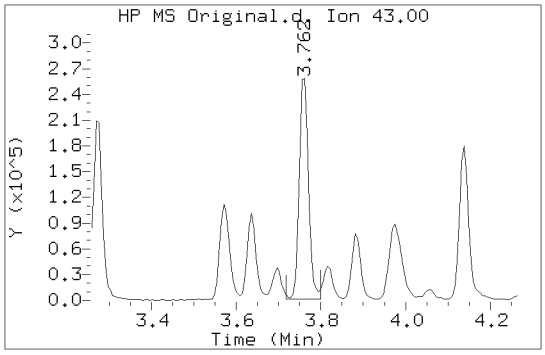
AFTER

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80944
04-Nov-2024
19:35



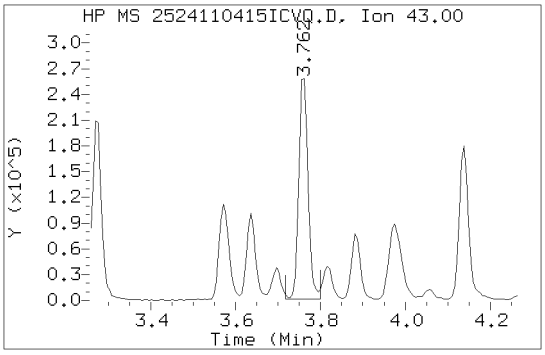
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04-Nov-2024
19:20



AFTER

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HEIGHT
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04-Nov-2024
19:35

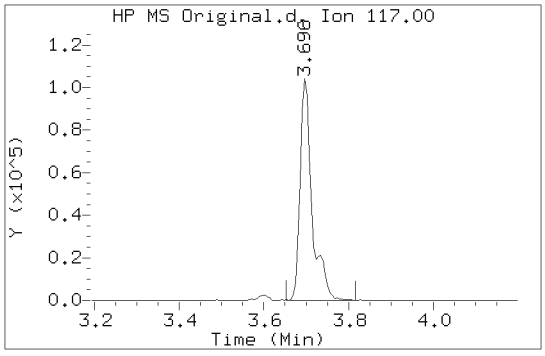


Carbon Tetrachloride (56-23-5)

Reason Code: MP

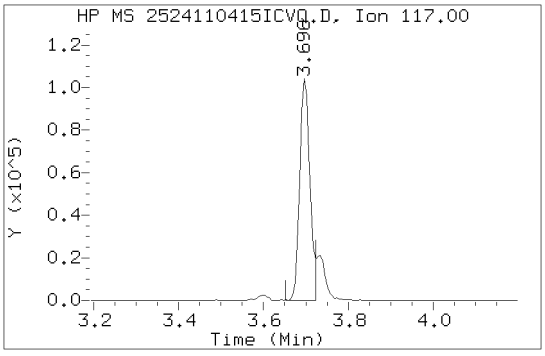
BEFORE

MASS
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04-Nov-2024
19:20



AFTER

MASS
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176278
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04-Nov-2024
19:35

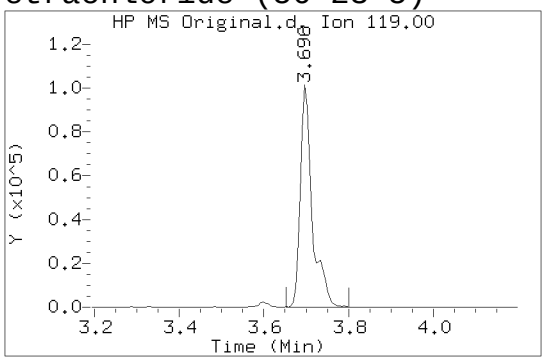


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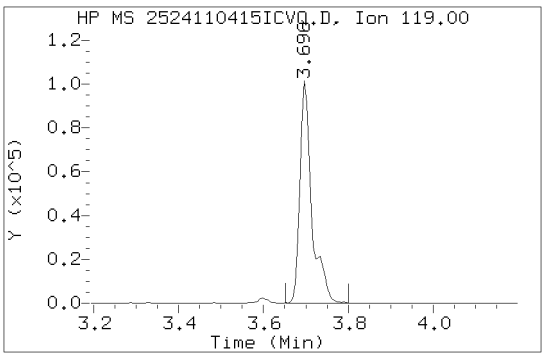
Carbon Tetrachloride (56-23-5)

Reason Code: MP

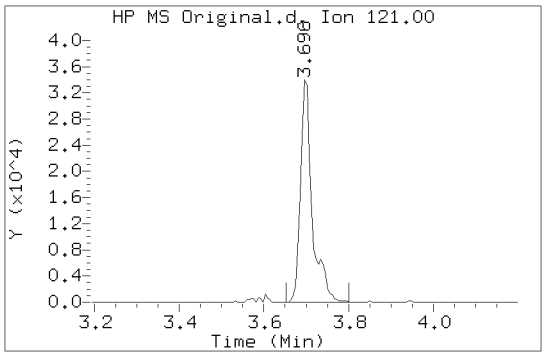
BEFORE
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04-Nov-2024
19:20



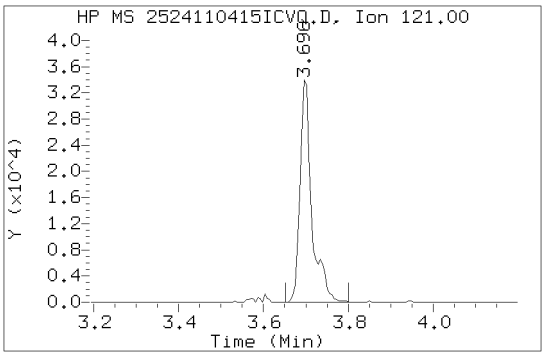
AFTER
MASS
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04-Nov-2024
19:35



BEFORE
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04-Nov-2024
19:20



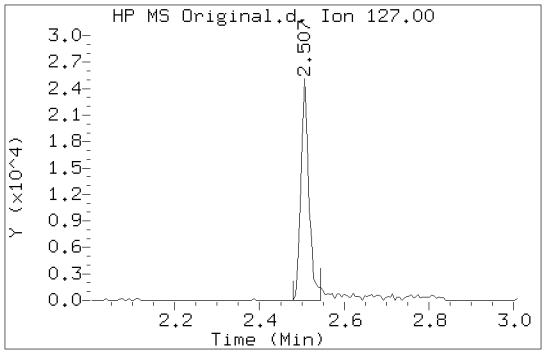
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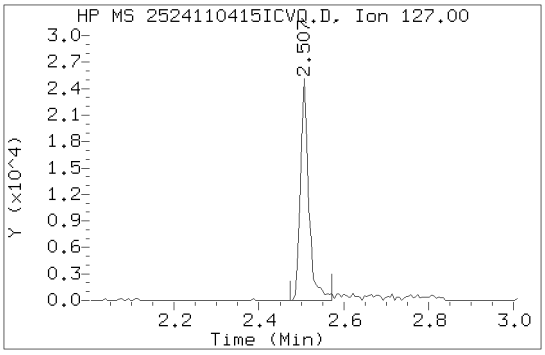
Iodomethane (74-88-4)

Reason Code: SP

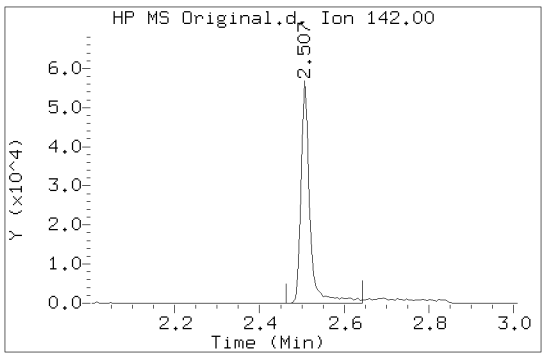
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HEIGHT
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04-Nov-2024
19:20



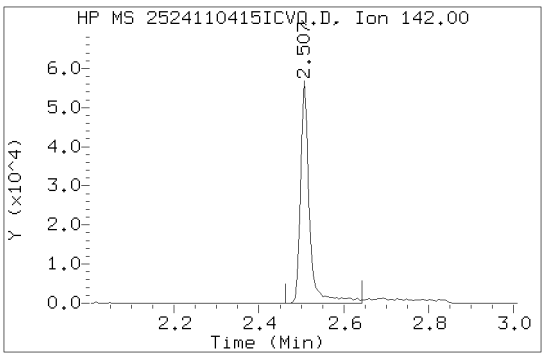
AFTER
MASS
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34268
HEIGHT
25128
04-Nov-2024
19:35



BEFORE
MASS
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AREA
83016
HEIGHT
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04-Nov-2024
19:20



AFTER
MASS
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83016
HEIGHT
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04-Nov-2024
19:35

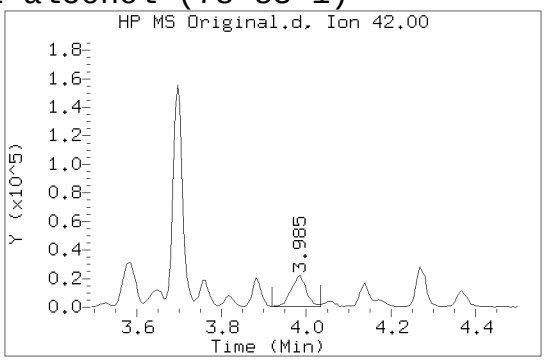


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InstruID : ms25.i
LabSampID : ICVQ

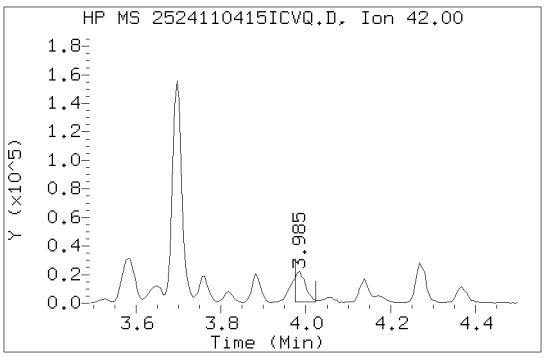
Isobutyl alcohol (78-83-1)

Reason Code: MP

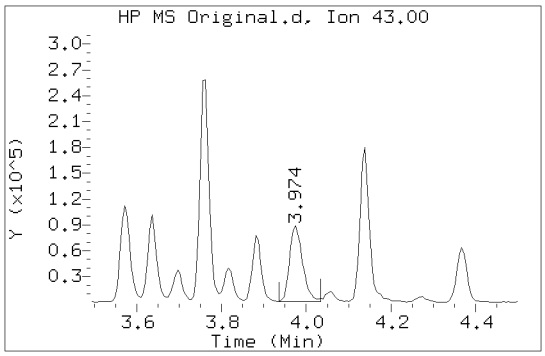
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MASS
42
AREA
52847
HEIGHT
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04-Nov-2024
19:20



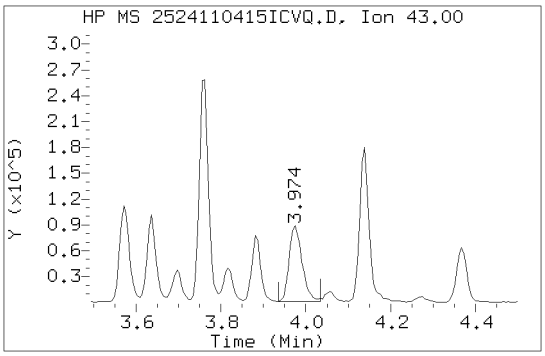
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04-Nov-2024
19:35



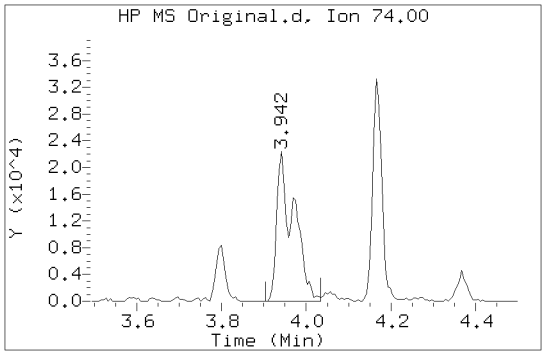
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HEIGHT
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04-Nov-2024
19:20



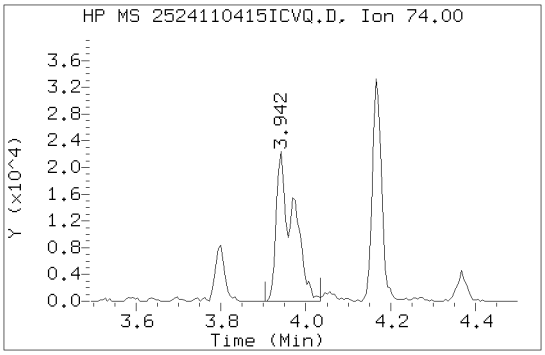
AFTER
MASS
43
AREA
187352
HEIGHT
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04-Nov-2024
19:35



BEFORE
MASS
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AREA
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HEIGHT
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04-Nov-2024
19:20



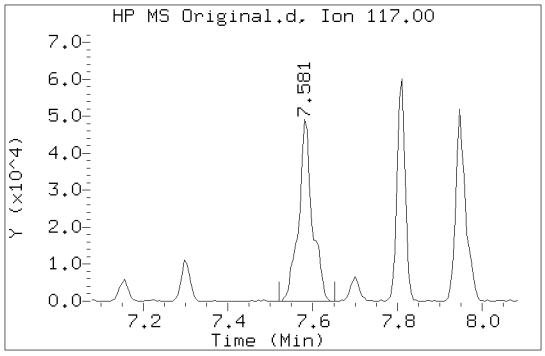
AFTER
MASS
74
AREA
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HEIGHT
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04-Nov-2024
19:35



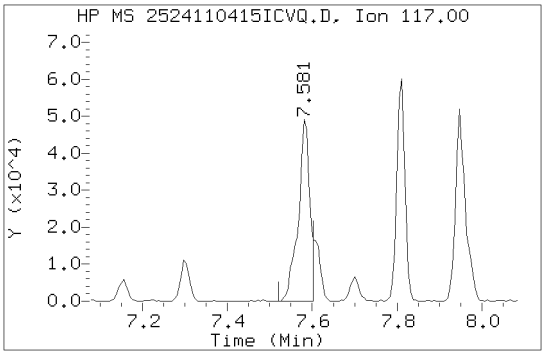
Pentachloroethane (76-01-7)

Reason Code: MP

BEFORE
MASS
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AREA
109832
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04-Nov-2024
19:20



AFTER
MASS
117
AREA
94265
HEIGHT
49152
04-Nov-2024
19:35

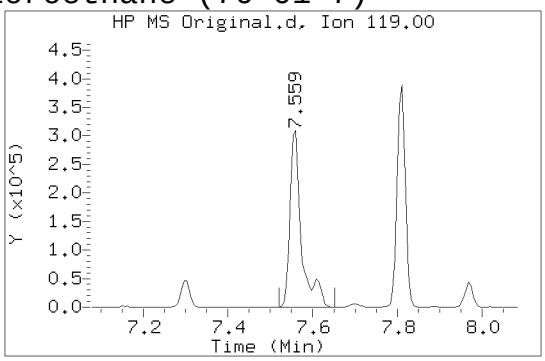


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Inj Date : 04-NOV-2024 18:00
InstruID : ms25.i
LabSampID : ICVQ

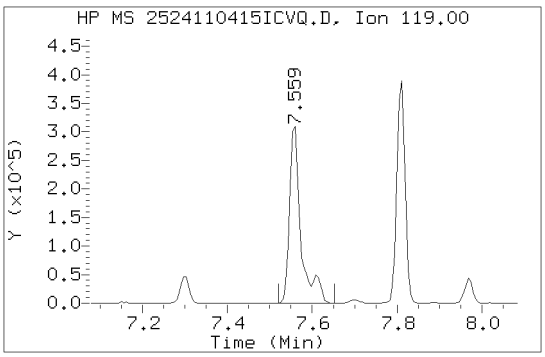
Pentachloroethane (76-01-7)

Reason Code: MP

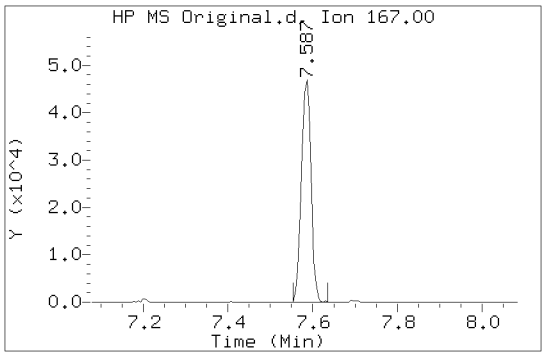
BEFORE
MASS
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AREA
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HEIGHT
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04-Nov-2024
19:20



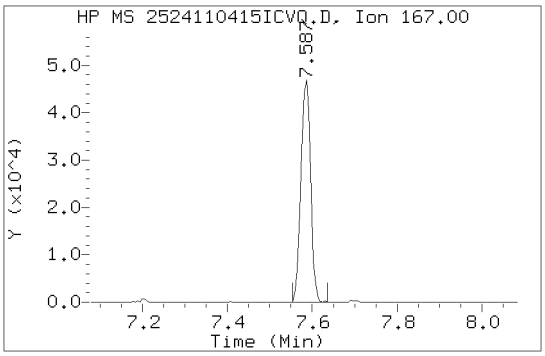
AFTER
MASS
119
AREA
584044
HEIGHT
309760
04-Nov-2024
19:35



BEFORE
MASS
167
AREA
74911
HEIGHT
46952
04-Nov-2024
19:20



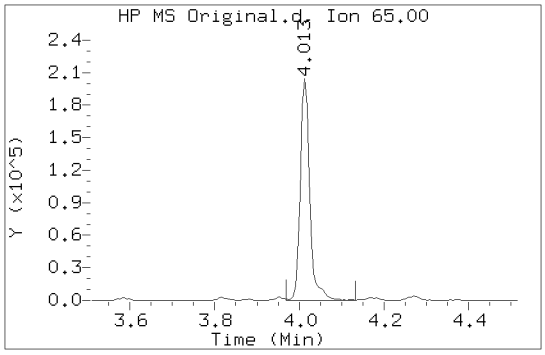
AFTER
MASS
167
AREA
74911
HEIGHT
46952
04-Nov-2024
19:35



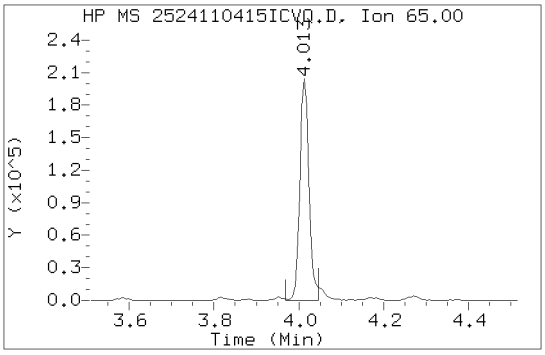
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

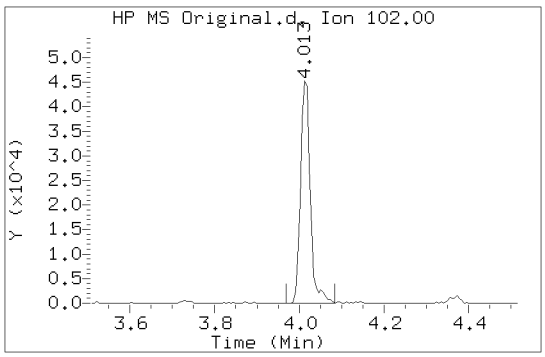
BEFORE
MASS
65
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HEIGHT
204416
04-Nov-2024
19:20



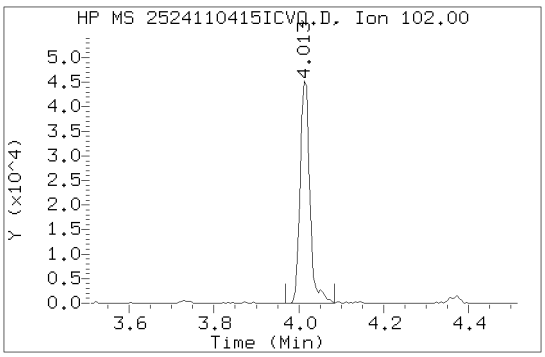
AFTER
MASS
65
AREA
307074
HEIGHT
204416
04-Nov-2024
19:35



BEFORE
MASS
102
AREA
72641
HEIGHT
45280
04-Nov-2024
19:20



AFTER
MASS
102
AREA
72641
HEIGHT
45280
04-Nov-2024
19:35



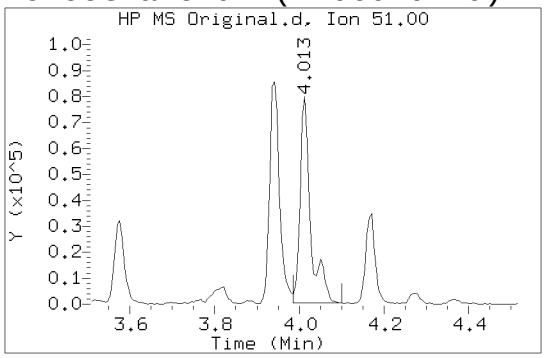
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Inj Date : 04-NOV-2024 18:00
InstruID : ms25.i
LabSampID : ICVQ

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

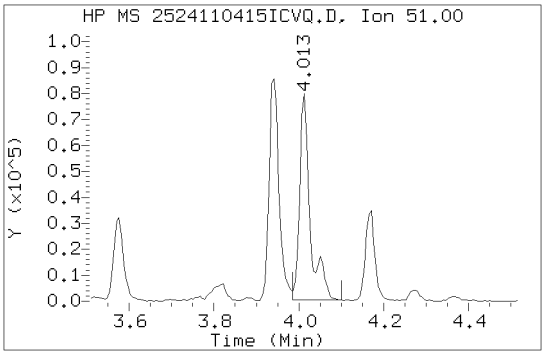
BEFORE

MASS
51
AREA
137103
HEIGHT
79697
04-Nov-2024
19:20



AFTER

MASS
51
AREA
137103
HEIGHT
79697
04-Nov-2024
19:35



UNASSIGNED PEAK REPORT

Report Date: 11/05/2024 04:12
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241104.b/252411041
Inj Date: 04-NOV-2024 18:00
Operator: TMP

There were no Unassigned peaks in this sample!

right solutions.
right partner.

k| T| | 9C9B887C

o | fi UhQF9D7S

h vx

SSbUMTS

Mfk

Q |

a xu

QSkCHBf VQkl A77ADDBD5ABST

7869A6979C

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ALS Environmental Services

BFB Tune

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110500.D
Lab Smp Id: 1000
Inj Date : 05-NOV-2024 09:03
Operator : ILY Inst ID: ms25.i
Smp Info : 1000
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\bfb288.m
Meth Date : 15-Oct-2024 09:42 tmp Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAMDTW7026

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
7.052	8.129	(0.000)	95	99312			0.00- 100.00	100.00
7.052	8.129	(0.000)	50	19688			15.00- 40.00	19.82
7.052	8.129	(0.000)	75	49944			30.00- 60.00	50.29
7.052	8.129	(0.000)	96	7067			5.00- 9.00	7.12
7.052	8.129	(0.000)	173	789			0.00- 2.00	0.91
7.052	8.129	(0.000)	174	87048			50.00- 0.00	87.65
7.052	8.129	(0.000)	175	7596			5.00- 9.00	8.73
7.052	8.129	(0.000)	176	82872			95.00- 101.00	95.20
7.052	8.129	(0.000)	177	5640			5.00- 9.00	6.81

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.82
75	30.00 - 60.00% of mass 95	50.29
96	5.00 - 9.00% of mass 95	7.12
173	Less than 2.00% of mass 174	0.79 (0.91)
174	Greater than 50.00% of mass 95	87.65
175	5.00 - 9.00% of mass 174	7.65 (8.73)
176	95.00 - 101.00% of mass 174	83.45 (95.20)
177	5.00 - 9.00% of mass 176	5.68 (6.81)

Data File: 2524110500.D
Spectrum: Avg. Scans 1083-1085 (7.05), Background Scan 1077
Location of Maximum: 95.00
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1069	68.00	9915	104.00	544	149.00	60
37.00	4911	69.00	10117	105.00	79	150.00	130
38.00	4409	70.00	984	106.00	636	152.00	86
39.00	1602	71.00	97	107.00	215	153.00	56
40.00	202	72.00	288	110.00	190	154.00	63
41.00	106	73.00	4097	112.00	149	155.00	75
43.00	90	74.00	16640	113.00	51	157.00	66
44.00	892	75.00	49944	115.00	298	159.00	413
45.00	947	76.00	4439	116.00	650	161.00	143
46.00	125	77.00	862	117.00	545	169.00	164
47.00	1250	78.00	403	118.00	462	170.00	171
48.00	641	79.00	3692	119.00	336	171.00	173
49.00	4103	80.00	1048	127.00	87	172.00	430
50.00	19688	81.00	4059	128.00	263	173.00	789
51.00	6695	82.00	816	129.00	226	174.00	87048
52.00	384	86.00	158	130.00	240	175.00	7596
53.00	55	87.00	5463	131.00	207	176.00	82872
55.00	301	88.00	4698	134.00	63	177.00	5640
56.00	1777	91.00	473	135.00	274	178.00	222
57.00	2504	92.00	3055	136.00	111	195.00	53
60.00	1121	93.00	4057	137.00	135	207.00	128
61.00	4521	94.00	12856	140.00	67	211.00	150
62.00	4995	95.00	99312	141.00	935	215.00	84
63.00	3901	96.00	7067	143.00	1129		
64.00	395	97.00	232	145.00	148		
65.00	87	100.00	52	146.00	270		
67.00	274	103.00	64	148.00	400		

Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110500.D

Date : 05-NOV-2024 09:03

Client ID:

Instrument: ms25.i

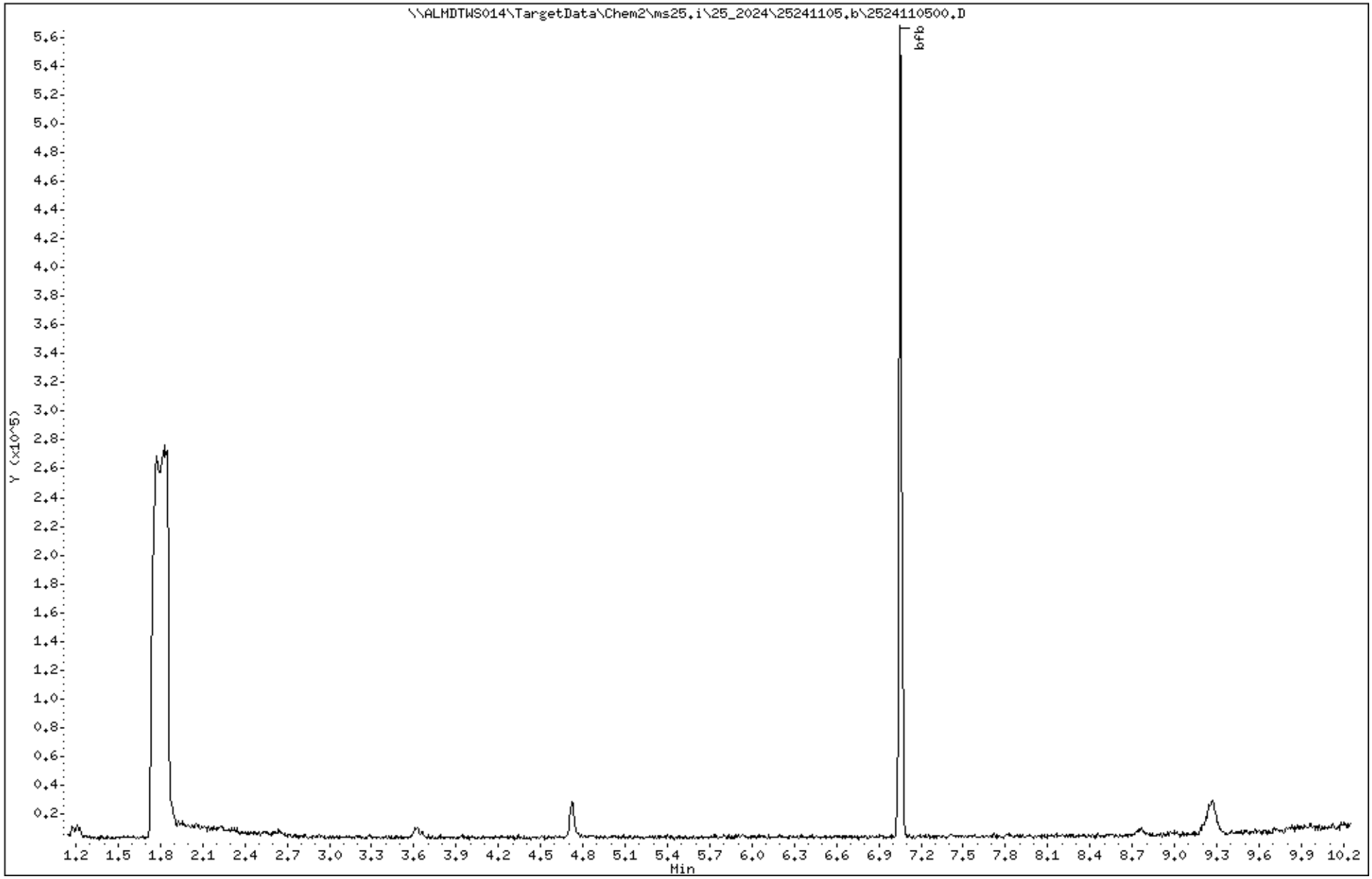
Sample Info: 1000

Volume Injected (uL): 1.0

Operator: ILY

Column phase: DB624

Column diameter: 0.53



Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110500.D
Inj Date : 05-NOV-2024 09:03
InstruID : ms25.i
LabSampID : 1000

NO MANUAL INTEGRATIONS

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110501.D
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Inj Date : 05-NOV-2024 09:34
Operator : ILY Inst ID: ms25.i
Smp Info : 1800;;1;2;4;;;
Misc Info :
Comment :
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Meth Date : 05-Nov-2024 10:11 ily Quant Type: ISTD
Cal Date : 04-NOV-2024 14:15 Cal File: 2524110404.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14
Processing Host: NAMDTW7026

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.497	1.497	(0.359)	559768	50.0000	56.5367	
2 Chloromethane	50	1.644	1.644	(0.395)	521611	50.0000	55.5534	
3 Vinyl Chloride	62	1.704	1.704	(0.409)	629994	50.0000	56.4611	
4 Bromomethane	94	1.922	1.922	(0.462)	611412	50.0000	51.9855	
5 Chloroethane	64	2.004	2.004	(0.481)	425516	50.0000	49.4523	
6 Pentane	41	2.091	2.091	(0.502)	358172	50.0000	57.0511	
7 Trichlorofluoromethane	101	2.097	2.097	(0.504)	809641	50.0000	54.9840	
8 Dichlorofluoromethane	67	2.124	2.124	(0.510)	856180	50.0000	53.5747	
9 Ethyl Ether	74	2.277	2.277	(0.547)	261546	50.0000	55.1615	
10 1,1-Dichloroethene	61	2.413	2.413	(0.580)	488901	50.0000	55.5578	
12 Carbon Disulfide	76	2.446	2.446	(0.587)	1020198	50.0000	56.1387	
11 Freon 113	101	2.424	2.424	(0.582)	307228	50.0000	54.9284	
13 Iodomethane	127	2.506	2.506	(0.602)	148848	50.0000	56.6491	
14 Acrolein	56	2.599	2.599	(0.624)	335733	250.000	262.352	
16 3-Chloro-1-propene	41	2.675	2.675	(0.642)	430517	50.0000	58.8701	
15 Isopropyl Alcohol	45	2.648	2.648	(0.636)	102728	250.000	223.036	
17 Methylene Chloride	84	2.735	2.735	(0.657)	443247	50.0000	54.4363	
18 Acetone	58	2.752	2.752	(0.661)	215435	250.000	248.235	
19 Methyl acetate	74	2.812	2.812	(0.675)	79911	50.0000	48.7724	
20 trans-1,2-Dichloroethene	61	2.828	2.828	(0.679)	527942	50.0000	57.5178	
21 Hexane	57	2.861	2.861	(0.687)	695522	50.0000	56.6035	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	22 Methyl t-Butyl Ether	73	2.872	2.872	(0.690)	1198237	50.0000	55.1202	
	23 tert.- Butyl Alcohol	59	2.894	2.894	(0.695)	166979	250.000	211.636	
	24 Acetonitrile	41	3.019	3.019	(0.725)	244741	250.000	251.174	
	25 Diisopropyl ether	45	3.063	3.063	(0.735)	1184443	50.0000	57.0604	
	26 Chloroprene	53	3.155	3.155	(0.758)	536510	50.0000	58.5304	
	27 1,1-Dichloroethane	63	3.166	3.166	(0.760)	727180	50.0000	57.5469	
	28 Acrylonitrile	53	3.188	3.188	(0.766)	860433	250.000	272.297(M)	MP
	30 n-Propanol	41	3.265	3.265	(0.784)	231868	500.000	511.224	
	29 Ethyl tert-butyl ether	59	3.265	3.265	(0.784)	1266340	50.0000	56.0871	
	31 Vinyl acetate	86	3.270	3.270	(0.785)	99889	50.0000	49.1343	
	32 cis-1,2-Dichloroethene	61	3.461	3.461	(0.831)	550559	50.0000	55.3223	
	33 2,2-Dichloropropane	77	3.526	3.526	(0.847)	511110	50.0000	59.0790	
M	100 1,2-Dichloroethene, Total	61				1078501	100.000	112.840	
	34 Bromochloromethane	128	3.576	3.576	(0.859)	249817	50.0000	57.0006	
	35 Cyclohexane	84	3.587	3.587	(0.861)	538731	50.0000	57.0536	
	36 Chloroform	83	3.597	3.597	(0.864)	801074	50.0000	55.9680	
	37 Ethyl acetate	43	3.636	3.636	(0.873)	362530	50.0000	49.5040	
	38 Methyl acrylate	55	3.652	3.652	(0.877)	369999	50.0000	53.0876	
	39 Carbon Tetrachloride	117	3.696	3.696	(0.887)	461120	50.0000	49.4118(M)	MP
	40 Tetrahydrofuran	42	3.696	3.696	(0.887)	578769	250.000	263.504	
$	41 Dibromofluoromethane	113	3.701	3.701	(0.889)	271694	30.0000	30.8448	
	42 1,1,1-Trichloroethane	97	3.734	3.734	(0.897)	569585	50.0000	55.7381	
	43 2-Butanone	72	3.761	3.761	(0.903)	276371	250.000	257.033(M)	B
	44 1,1-Dichloropropene	75	3.794	3.794	(0.911)	533288	50.0000	56.9600	
	45 1-Chlorobutane	41	3.816	3.816	(0.916)	339976	50.0000	55.0801	
	46 Heptane	71	3.881	3.881	(0.932)	258892	50.0000	58.0459	
	48 Propionitrile	54	3.936	3.936	(0.945)	327510	250.000	260.181	
	47 Benzene	78	3.941	3.941	(0.946)	1673631	50.0000	54.6844	
	49 Methacrylonitrile	67	3.952	3.952	(0.949)	206560	50.0000	53.9112	
	50 tert-amyl methyl Ether	73	3.974	3.974	(0.954)	1173099	50.0000	54.6152	
$	51 1,2-Dichloroethane-d4	65	4.012	4.012	(0.963)	301209	30.0000	30.3136(M)	MP
	54 Isobutyl alcohol	42	3.985	3.985	(0.957)	88728	500.000	450.376(M)	MP
	52 1,2-Dichloroethane	62	4.050	4.050	(0.972)	578218	50.0000	54.2897	
	53 tert-Amyl Alcohol	59	4.056	4.056	(0.974)	132312	250.000	204.858	
*	55 Fluorobenzene	96	4.165	4.165	(1.000)	1003365	30.0000		
	56 Diisobutylene	57	4.176	4.176	(1.003)	851895	50.0000	53.8959	
	57 Trichloroethene	95	4.269	4.269	(1.025)	422385	50.0000	51.8818	
	58 Methyl cyclohexane	83	4.274	4.274	(0.693)	582349	50.0000	56.3698	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.048)	939773	50.0000	57.3445	
	60 Dibromomethane	93	4.525	4.525	(1.086)	296818	50.0000	54.0225	
	61 1,2-Dichloropropane	63	4.585	4.585	(1.101)	438152	50.0000	56.8474	
	62 Bromodichloromethane	83	4.607	4.607	(1.106)	545604	50.0000	56.6596	
	63 Methyl methacrylate	41	4.667	4.667	(1.121)	329611	50.0000	53.3998	
	65 2-Chloroethylvinyl ether	63	4.929	4.929	(1.183)	124740	50.0000	48.4347	
	66 cis-1,3-Dichloropropene	75	4.994	4.994	(0.810)	694712	50.0000	57.2240	
	67 Octane	85	4.994	4.994	(0.810)	223935	50.0000	62.6033	
$	68 Toluene-d8	98	5.114	5.114	(0.829)	1025054	30.0000	29.5604	
	69 Toluene	92	5.147	5.147	(0.835)	1032292	50.0000	52.3132	
	70 Chloroacetonitrile	75	5.207	5.207	(0.844)	106249	250.000	207.505	
	71 2-Nitropropane	41	5.294	5.294	(0.858)	449942	250.000	206.222	
	72 1,1-Dichloro-2-propanone	63	5.311	5.311	(0.861)	42961	250.000	212.753	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.871)	1987062	250.000	261.110	
	75 trans-1,3-Dichloropropene	75	5.404	5.404	(0.876)	661621	50.0000	49.1130	
	74 Tetrachloroethene	164	5.409	5.409	(0.877)	359723	50.0000	51.2415	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	76 Ethyl methacrylate	69	5.480	5.480	(0.889)	586140	50.0000	47.2137	
	77 1,1,2-Trichloroethane	83	5.518	5.518	(0.895)	352885	50.0000	53.9080	
	78 Chlorodibromomethane	129	5.649	5.649	(0.916)	448593	50.0000	48.3350	
	79 1,3-Dichloropropane	76	5.709	5.709	(0.926)	714201	50.0000	54.9856	
	80 1,2-Dibromoethane	107	5.829	5.829	(0.945)	421950	50.0000	55.3792	
	81 2-Hexanone	43	5.933	5.933	(0.962)	1321622	250.000	255.774	
	82 1-Chlorohexane	91	6.140	6.140	(0.996)	506309	50.0000	55.8679	
*	83 Chlorobenzene-d5	82	6.167	6.167	(1.000)	419703	30.0000		
	85 Ethylbenzene	106	6.184	6.184	(1.003)	588449	50.0000	53.7041	
	84 Chlorobenzene	112	6.184	6.184	(1.003)	1136371	50.0000	52.9683	
	86 1,1,1,2-Tetrachloroethane	131	6.222	6.222	(1.009)	390274	50.0000	54.3436	
	87 mp-Xylene	106	6.287	6.287	(1.019)	1445226	100.000	109.248	
M	120 1,3-Dichloropropene, Total	75				1356333	100.000	106.337	
	88 o-Xylene	106	6.604	6.604	(1.071)	700604	50.0000	54.9545	
	89 Styrene	104	6.642	6.642	(0.836)	1169892	50.0000	56.2232	
	90 Bromoform	173	6.680	6.680	(0.841)	277411	50.0000	44.0016	
	91 Isopropylbenzene	105	6.839	6.839	(0.861)	1543445	50.0000	52.9371	
$	92 4-Bromofluorobenzene	174	7.062	7.062	(0.889)	285486	30.0000	29.0236	
M	121 TOTAL XYLENES	106				2145830	150.000	164.202	
	94 n-Propylbenzene	120	7.155	7.155	(0.900)	462602	50.0000	54.0395	
	93 Bromobenzene	156	7.155	7.155	(0.900)	476584	50.0000	53.0685	
	95 1,1,2,2-Tetrachloroethane	83	7.199	7.199	(0.906)	483806	50.0000	50.1467	
	97 1,3,5-Trimethylbenzene	105	7.297	7.297	(0.918)	1377782	50.0000	56.6929	
	96 o-Chlorotoluene	91	7.286	7.286	(0.917)	1346885	50.0000	55.3552	
	98 1,2,3-Trichloropropane	110	7.319	7.319	(0.921)	151121	50.0000	50.6608	
	99 trans-1,4-Dichloro-2-butene	53	7.341	7.341	(0.924)	128059	50.0000	45.2070	
	101 p-Chlorotoluene	91	7.417	7.417	(0.933)	1230148	50.0000	54.7874	
	102 tert-Butylbenzene	134	7.559	7.559	(0.951)	328972	50.0000	56.4462	
	103 Pentachloroethane	117	7.586	7.586	(0.955)	279772	50.0000	57.8325(M)	MP
	104 1,2,4-Trimethylbenzene	105	7.613	7.613	(0.958)	1393682	50.0000	55.7953	
	105 sec-Butylbenzene	105	7.701	7.701	(0.969)	1697819	50.0000	58.5417	
	106 p-Isopropyltoluene	134	7.810	7.810	(0.983)	382137	50.0000	58.4961	
	107 1,3-Dichlorobenzene	146	7.886	7.886	(0.992)	814930	50.0000	54.9951	
*	108 1,4-Dichlorobenzene-d4	152	7.946	7.946	(1.000)	373829	30.0000		
	109 1,4-Dichlorobenzene	146	7.963	7.963	(1.002)	834318	50.0000	52.7817	
	111 n-Butylbenzene	134	8.159	8.159	(1.027)	335840	50.0000	59.3587	
	110 Benzyl Chloride	126	8.159	8.159	(1.027)	150738	50.0000	52.8926	
	112 Hexachloroethane	117	8.290	8.290	(1.043)	231556	50.0000	47.4395	
	113 1,2-Dichlorobenzene	146	8.306	8.306	(1.045)	779970	50.0000	53.8028	
	114 1,2-Dibromo-3-chloropropane	75	8.977	8.977	(1.130)	70381	50.0000	44.1733	
	115 Nitrobenzene	77	9.463	9.463	(1.191)	161069	500.000	397.595	
	116 Hexachlorobutadiene	225	9.523	9.523	(1.198)	216139	50.0000	61.5521	
	117 1,2,4-Trichlorobenzene	180	9.556	9.556	(1.203)	490864	50.0000	58.6741	
	118 Naphthalene	128	9.829	9.829	(1.237)	1237286	50.0000	47.1152	
	119 1,2,3-Trichlorobenzene	180	9.981	9.981	(1.256)	476834	50.0000	56.0367	

QC Flag Legend

M - Compound response manually integrated.

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Client ID:

Instrument: ms25.i

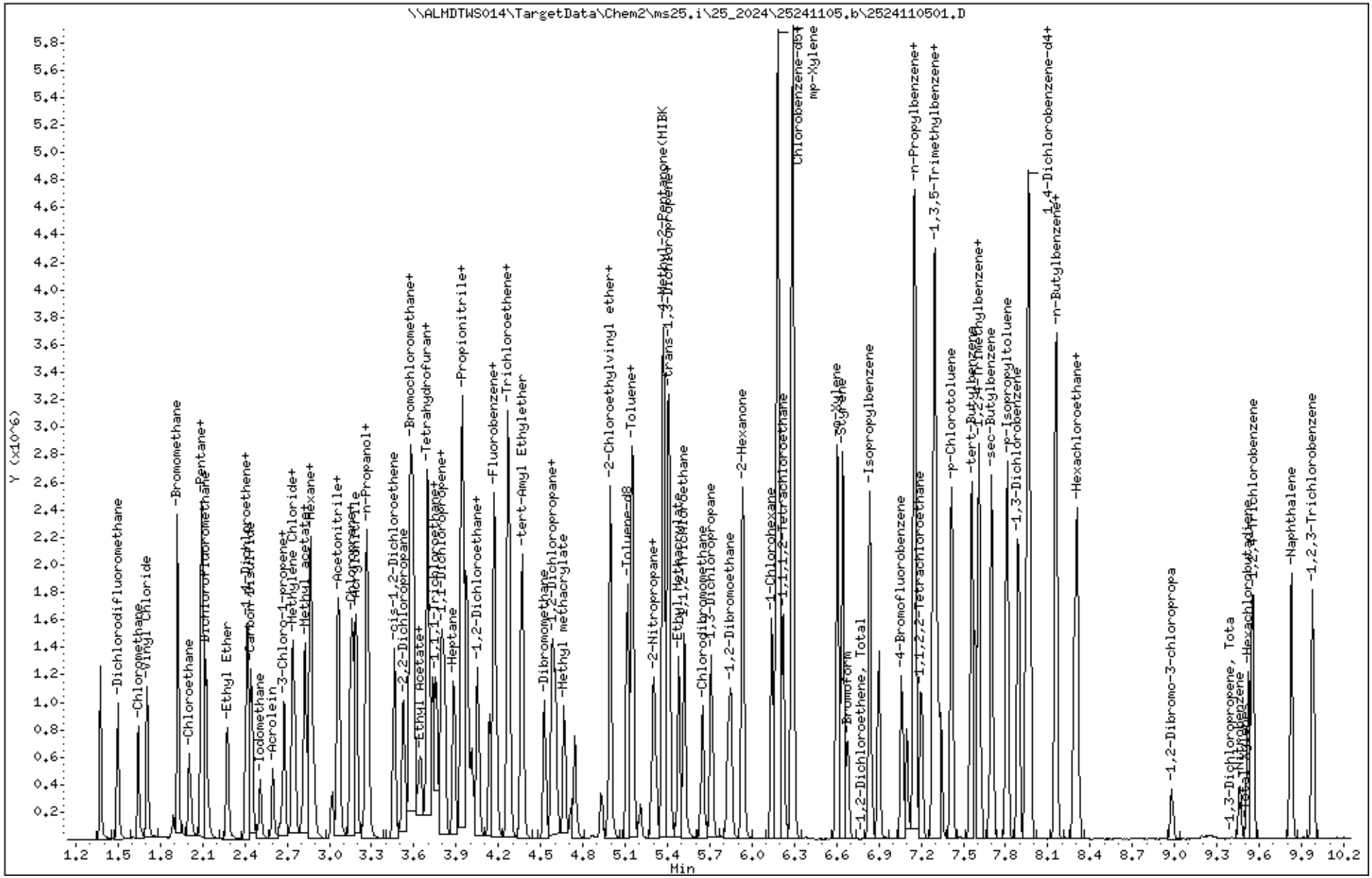
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Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25



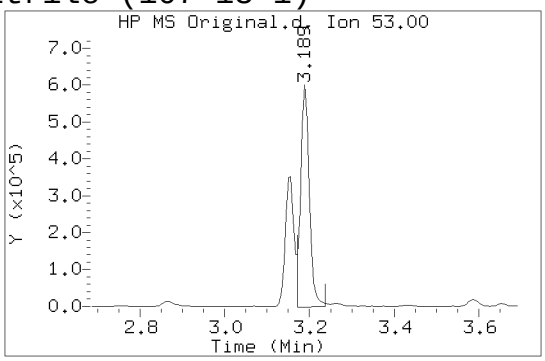
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Inj Date : 05-NOV-2024 09:34
InstruID : ms25.i
LabSampID : 1800

Acrylonitrile (107-13-1)

Reason Code: MP

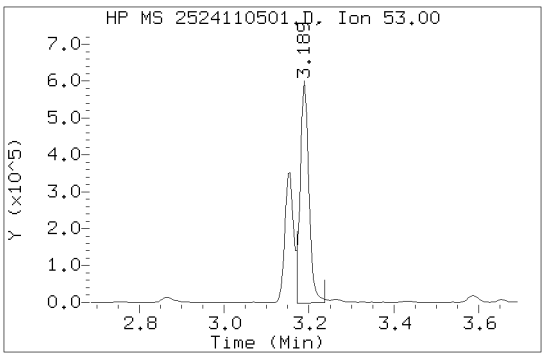
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05-Nov-2024
13:02



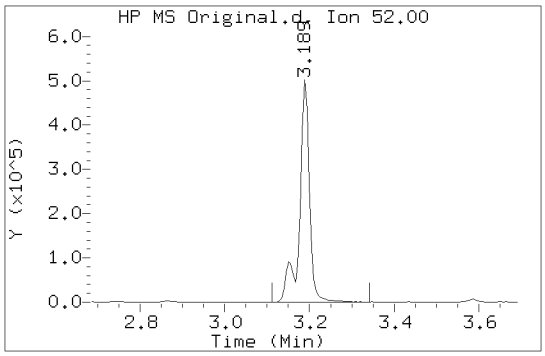
AFTER

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HEIGHT
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06-Nov-2024
14:17



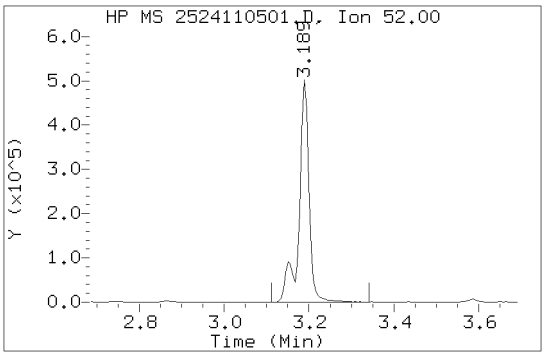
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HEIGHT
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05-Nov-2024
13:02



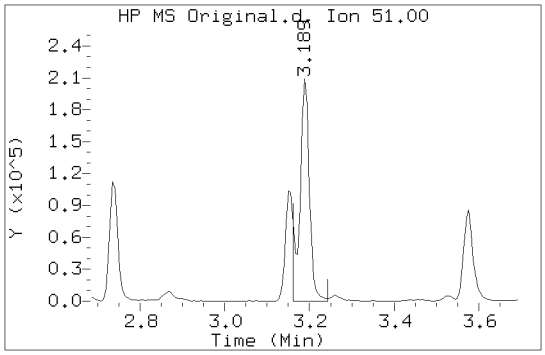
AFTER

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06-Nov-2024
14:17



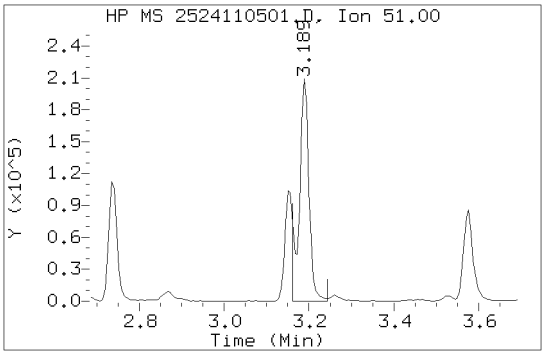
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HEIGHT
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05-Nov-2024
13:02



AFTER

MASS
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AREA
335449
HEIGHT
209024
06-Nov-2024
14:17

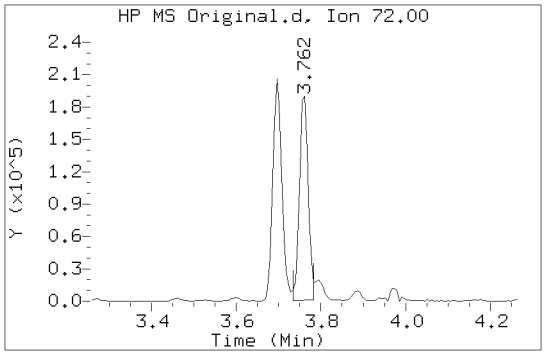


2-Butanone (78-93-3)

Reason Code: B

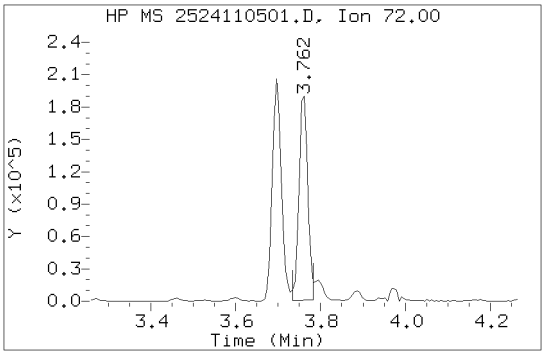
BEFORE

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AREA
276371
HEIGHT
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05-Nov-2024
13:02



AFTER

MASS
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AREA
276371
HEIGHT
189020
06-Nov-2024
14:17



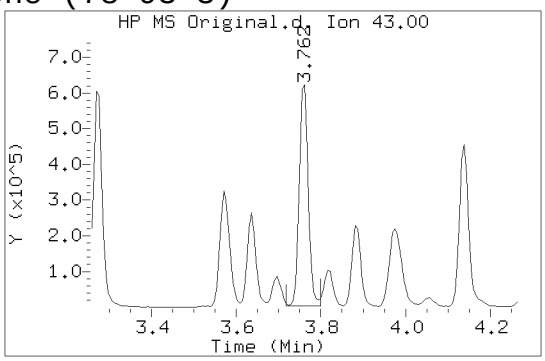
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LabSampID : 1800

2-Butanone (78-93-3)

Reason Code: B

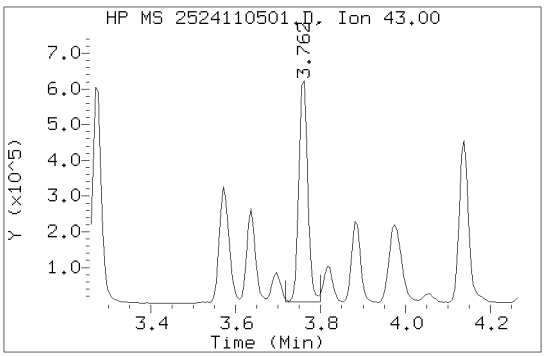
BEFORE

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HEIGHT
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05-Nov-2024
13:02



AFTER

MASS
43
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919245
HEIGHT
618849
06-Nov-2024
14:17

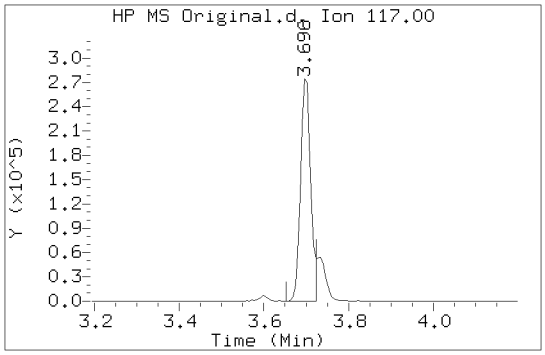


Carbon Tetrachloride (56-23-5)

Reason Code: MP

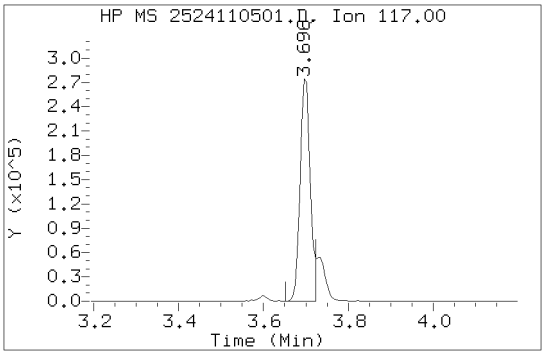
BEFORE

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HEIGHT
274240
05-Nov-2024
13:02



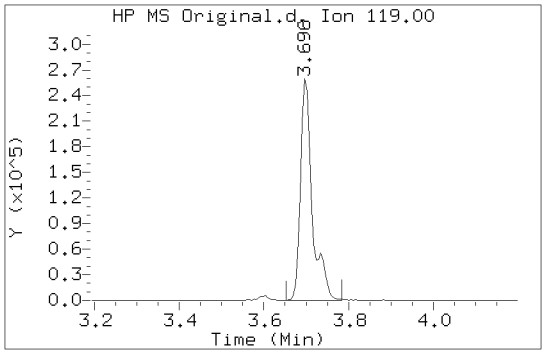
AFTER

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HEIGHT
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06-Nov-2024
14:17



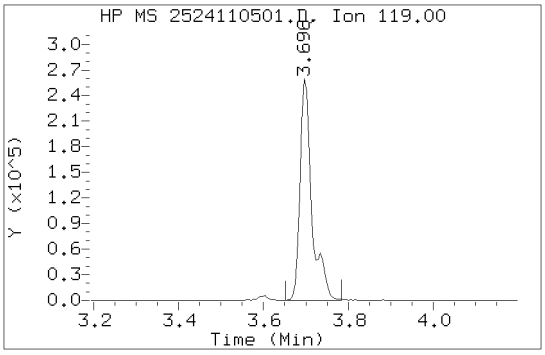
BEFORE

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05-Nov-2024
13:02



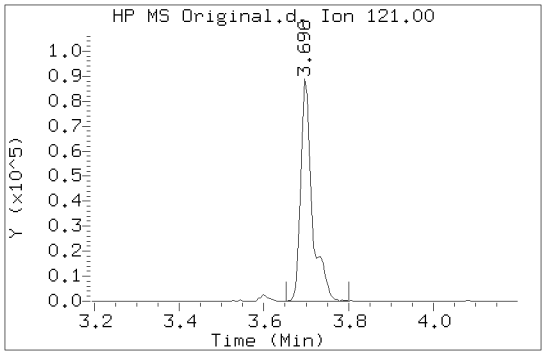
AFTER

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06-Nov-2024
14:17



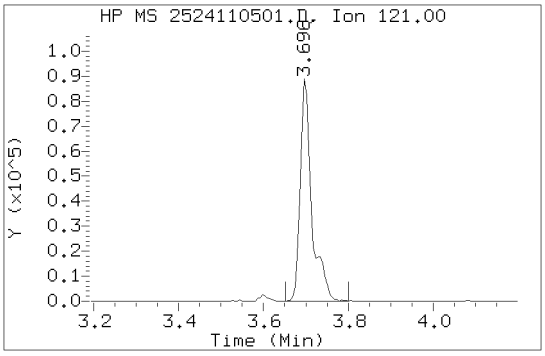
BEFORE

MASS
121
AREA
168221
HEIGHT
88872
05-Nov-2024
13:02



AFTER

MASS
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168221
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06-Nov-2024
14:17

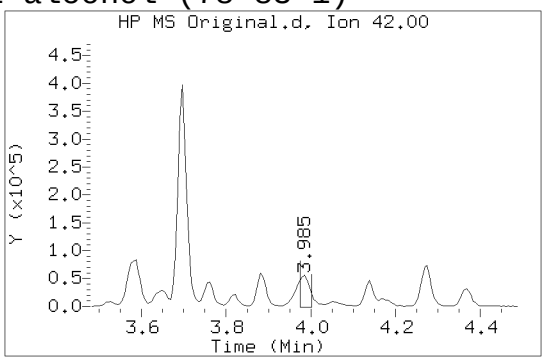


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InstruID : ms25.i
LabSampID : 1800

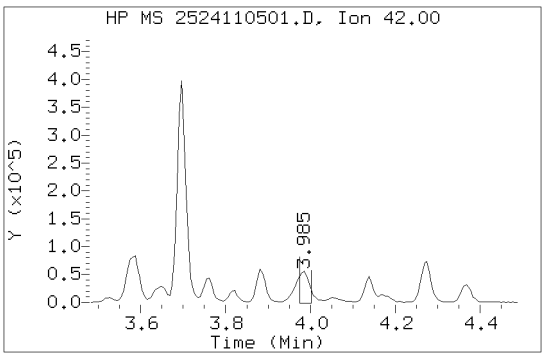
Isobutyl alcohol (78-83-1)

Reason Code: MP

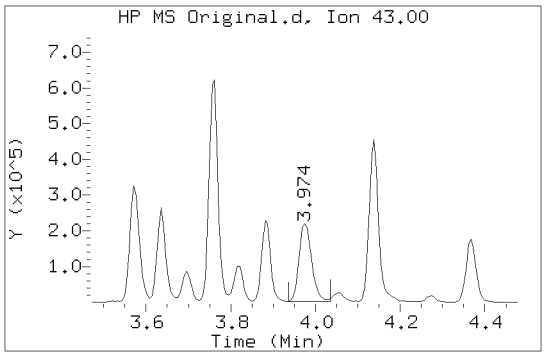
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MASS
42
AREA
88728
HEIGHT
58084
05-Nov-2024
13:02



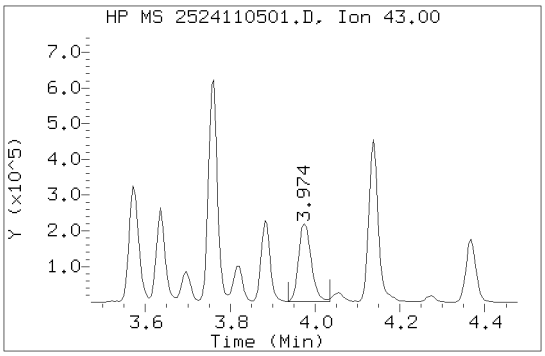
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06-Nov-2024
14:17



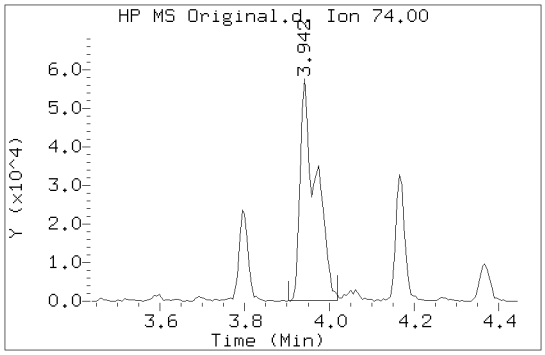
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05-Nov-2024
13:02



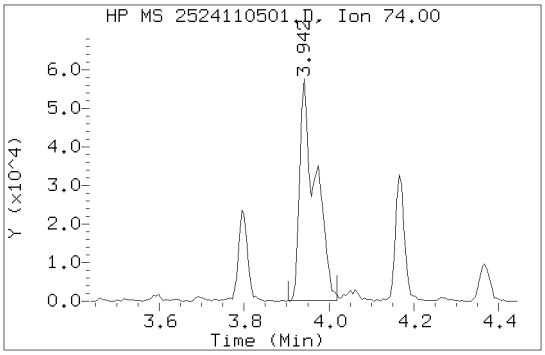
AFTER
MASS
43
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HEIGHT
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14:17



BEFORE
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74
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13:02



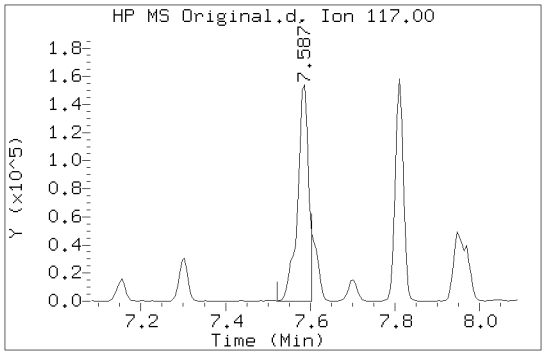
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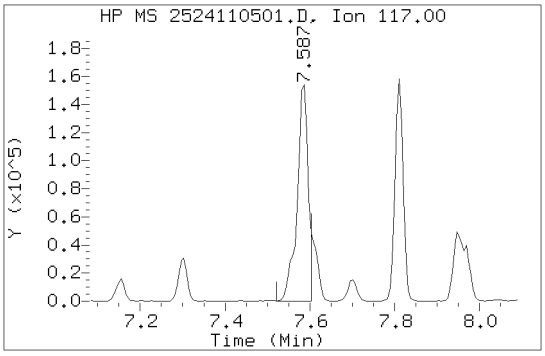
Pentachloroethane (76-01-7)

Reason Code: MP

BEFORE
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117
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279772
HEIGHT
153984
05-Nov-2024
13:02



AFTER
MASS
117
AREA
279772
HEIGHT
153984
06-Nov-2024
14:17



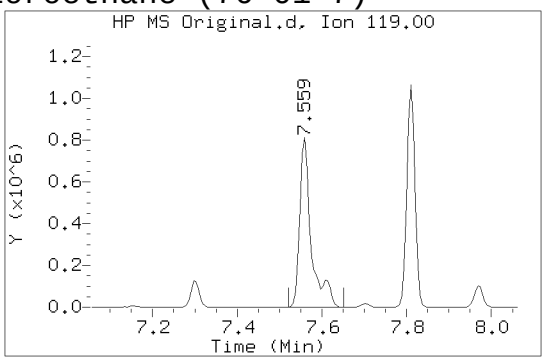
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InstruID : ms25.i
LabSampID : 1800

Pentachloroethane (76-01-7)

Reason Code: MP

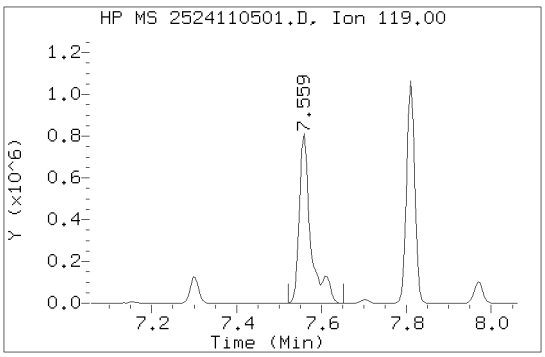
BEFORE

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HEIGHT
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05-Nov-2024
13:02



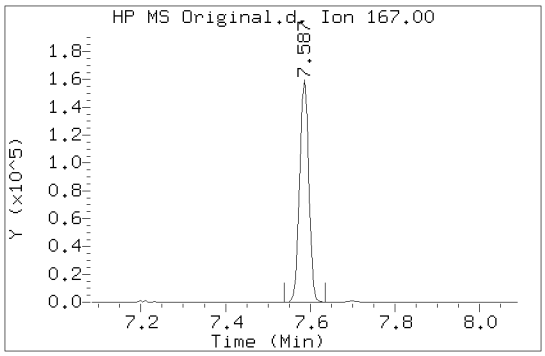
AFTER

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HEIGHT
811923
06-Nov-2024
14:17



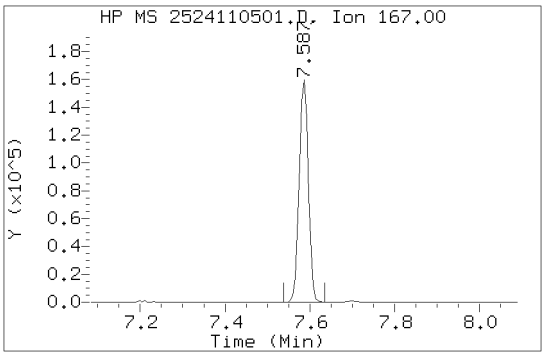
BEFORE

MASS
167
AREA
240618
HEIGHT
159616
05-Nov-2024
13:02



AFTER

MASS
167
AREA
240618
HEIGHT
159616
06-Nov-2024
14:17

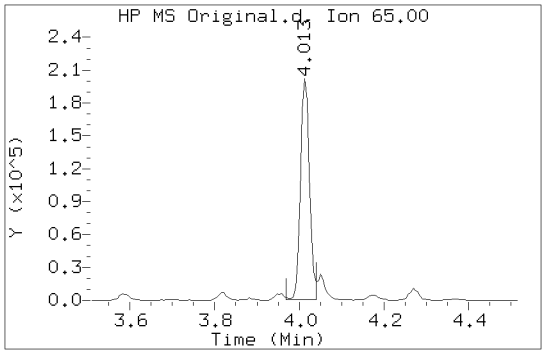


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

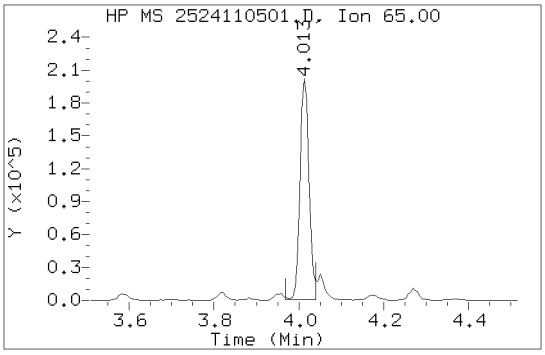
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65
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301209
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201723
05-Nov-2024
13:02



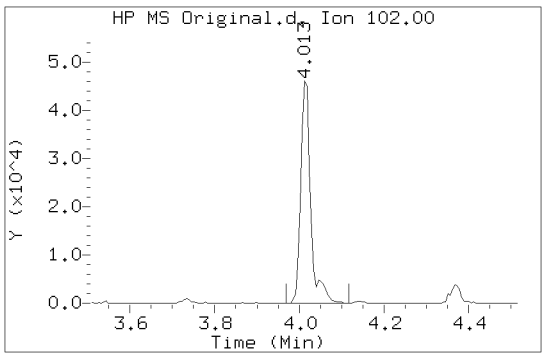
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MASS
65
AREA
301209
HEIGHT
201723
06-Nov-2024
14:17



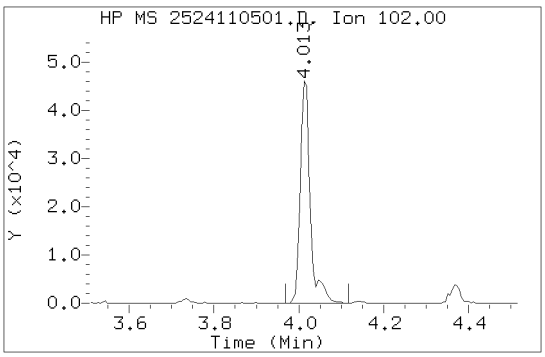
BEFORE

MASS
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75890
HEIGHT
46096
05-Nov-2024
13:02



AFTER

MASS
102
AREA
75890
HEIGHT
46096
06-Nov-2024
14:17



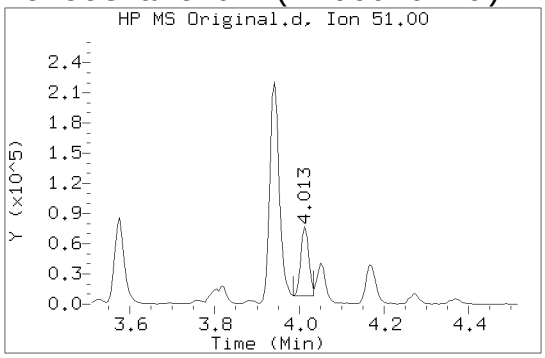
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InstruID : ms25.i
LabSampID : 1800

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

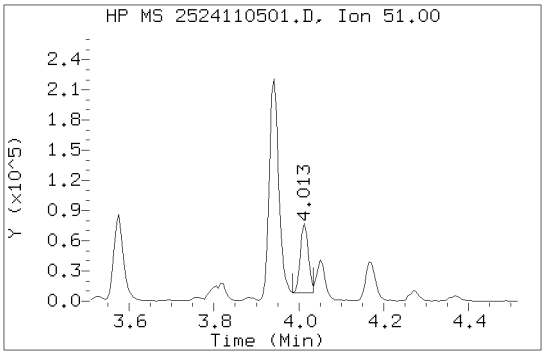
BEFORE

MASS
51
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HEIGHT
68810
05-Nov-2024
13:02



AFTER

MASS
51
AREA
91435
HEIGHT
68810
06-Nov-2024
14:17



UNASSIGNED PEAK REPORT

Report Date: 11/06/2024 14:17
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241105.b/252411050
Inj Date: 05-NOV-2024 09:34
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

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Inj Date : 05-NOV-2024 10:23
Operator : ILY Inst ID: ms25.i
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Misc Info : ZZ VOMS 75367 D8260W
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Meth Date : 05-Nov-2024 10:11 ily Quant Type: ISTD
Cal Date : 04-NOV-2024 14:15 Cal File: 2524110404.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
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Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

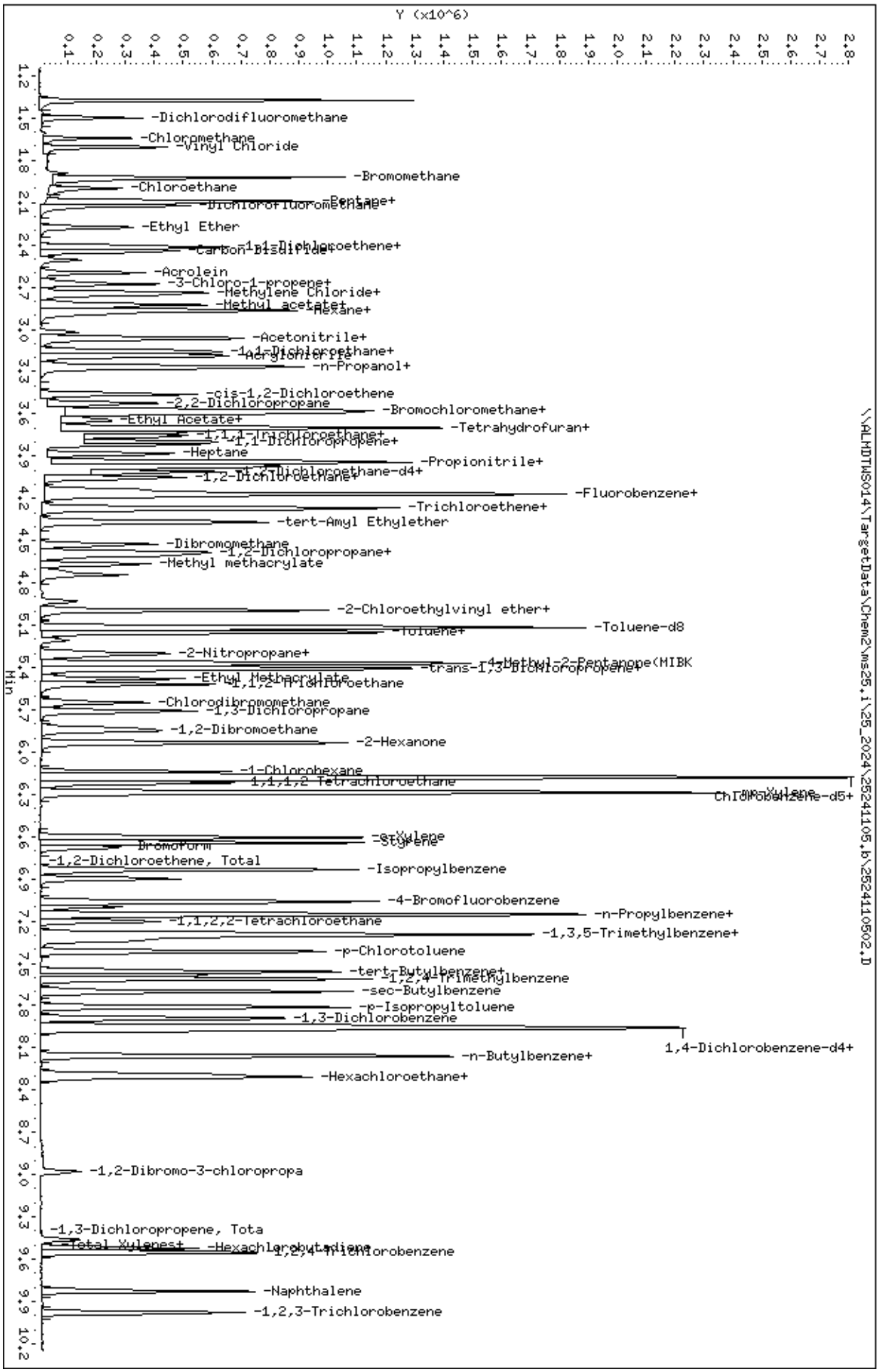
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.497	1.497	(0.359)	210102	20.3252	20.3252	
2 Chloromethane	50	1.644	1.644	(0.395)	209044	21.3247	21.3247	
3 Vinyl Chloride	62	1.704	1.704	(0.409)	258041	22.1505	22.1505	
4 Bromomethane	94	1.922	1.922	(0.462)	235605	19.5415	19.5415	
5 Chloroethane	64	1.999	2.004	(0.480)	187442	20.8651	20.8651	
6 Pentane	41	2.086	2.091	(0.501)	134283	20.1879	20.1879	
7 Trichlorofluoromethane	101	2.097	2.097	(0.504)	322819	20.9983	20.9983	
8 Dichlorofluoromethane	67	2.124	2.124	(0.510)	345031	20.6793	20.6793	
9 Ethyl Ether	74	2.277	2.277	(0.547)	103809	20.9703	20.9703	
10 1,1-Dichloroethene	61	2.408	2.413	(0.578)	203241	22.1217	22.1217	
12 Carbon Disulfide	76	2.446	2.446	(0.587)	406555	21.4279	21.4279	
11 Freon 113	101	2.424	2.424	(0.582)	128816	22.0591	22.0591	
13 Iodomethane	127	2.506	2.506	(0.602)	49715	22.7407	22.7407	
14 Acrolein	56	2.599	2.599	(0.624)	243789	182.728	182.728	
16 3-Chloro-1-propene	41	2.675	2.675	(0.642)	176908	23.1704	23.1704	
15 Isopropyl Alcohol	45	2.654	2.648	(0.637)	46131	95.9316	95.9316	
17 Methylene Chloride	84	2.735	2.735	(0.657)	181409	21.3395	21.3395	
18 Acetone	58	2.752	2.752	(0.661)	103377	114.091	114.091	
19 Methyl acetate	74	2.812	2.812	(0.675)	33499	19.4643	19.4643	
20 trans-1,2-Dichloroethene	61	2.828	2.828	(0.679)	208507	21.7580	21.7580	
21 Hexane	57	2.861	2.861	(0.687)	284450	22.1728	22.1728	
22 Methyl t-Butyl Ether	73	2.872	2.872	(0.690)	509344	22.4420	22.4420	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	2.894	2.894	(0.695)	74423	90.3475	90.3475	
	24 Acetonitrile	41	3.019	3.019	(0.725)	96686	94.7000	94.7000	
	25 Diisopropyl ether	45	3.063	3.063	(0.735)	479498	22.1253	22.1253	
	26 Chloroprene	53	3.150	3.155	(0.756)	203418	21.2557	21.2557(MH)	SP
	27 1,1-Dichloroethane	63	3.167	3.166	(0.760)	286022	21.6801	21.6801	
	28 Acrylonitrile	53	3.188	3.188	(0.766)	342322	103.763	103.763(M)	MP
	30 n-Propanol	41	3.259	3.265	(0.783)	98109	206.743	206.743	
	29 Ethyl tert-butyl ether	59	3.265	3.265	(0.784)	522615	22.1705	22.1705	
	31 Vinyl acetate	86	3.276	3.270	(0.786)	39215	18.7167	18.7167	
	32 cis-1,2-Dichloroethene	61	3.461	3.461	(0.831)	229342	22.0730	22.0730	
	33 2,2-Dichloropropane	77	3.527	3.526	(0.847)	210148	23.2662	23.2662	
M	100 1,2-Dichloroethene, Total	61				437849	43.8310	43.8310	
	34 Bromochloromethane	128	3.576	3.576	(0.859)	99076	21.6525	21.6525	
	35 Cyclohexane	84	3.587	3.587	(0.861)	217722	22.0849	22.0849	
	36 Chloroform	83	3.598	3.597	(0.864)	329175	22.0280	22.0280	
	37 Ethyl acetate	43	3.636	3.636	(0.873)	151806	19.8549	19.8549	
	38 Methyl acrylate	55	3.652	3.652	(0.877)	151133	20.7699	20.7699	
	39 Carbon Tetrachloride	117	3.696	3.696	(0.887)	185423	19.2830	19.2830(M)	MP
	40 Tetrahydrofuran	42	3.696	3.696	(0.887)	225019	98.1260	98.1260	
$	41 Dibromofluoromethane	113	3.701	3.701	(0.889)	284378	30.9229	30.9229	
	42 1,1,1-Trichloroethane	97	3.734	3.734	(0.897)	244319	22.8999	22.8999	
	43 2-Butanone	72	3.761	3.761	(0.903)	124582	110.977	110.977(M)	MP
	44 1,1-Dichloropropene	75	3.794	3.794	(0.911)	215045	21.9998	21.9998	
	45 1-Chlorobutane	41	3.816	3.816	(0.916)	141028	21.8844	21.8844	
	46 Heptane	71	3.881	3.881	(0.932)	106922	22.8792	22.8792	
	48 Propionitrile	54	3.941	3.936	(0.946)	134717	102.507	102.507	
	47 Benzene	78	3.941	3.941	(0.946)	673183	21.0678	21.0678	
	49 Methacrylonitrile	67	3.952	3.952	(0.949)	79279	19.8186	19.8186	
	50 tert-amyl methyl Ether	73	3.974	3.974	(0.954)	498329	22.2217	22.2217	
$	51 1,2-Dichloroethane-d4	65	4.012	4.012	(0.963)	313660	30.2350	30.2350(M)	MP
	54 Isobutyl alcohol	42	3.980	3.985	(0.955)	35691	173.522	173.522(M)	MP
	52 1,2-Dichloroethane	62	4.050	4.050	(0.972)	234139	21.0563	21.0563	
	53 tert-Amyl Alcohol	59	4.056	4.056	(0.974)	56787	83.5762	83.5762	
*	55 Fluorobenzene	96	4.165	4.165	(1.000)	1047555	30.0000		
	56 Diisobutylene	57	4.176	4.176	(1.003)	361908	20.8096	20.8096	
	57 Trichloroethene	95	4.269	4.269	(1.025)	167507	19.7070	19.7070	
	58 Methyl cyclohexane	83	4.274	4.274	(0.693)	232517	21.9774	21.9774	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.048)	370803	21.6718	21.6718	
	60 Dibromomethane	93	4.525	4.525	(1.086)	121057	21.1036	21.1036	
	61 1,2-Dichloropropane	63	4.580	4.585	(1.100)	173252	21.5301	21.5301	
	62 Bromodichloromethane	83	4.607	4.607	(1.106)	231787	23.0551	23.0551	
	63 Methyl methacrylate	41	4.667	4.667	(1.121)	133677	20.7432	20.7432	
	65 2-Chloroethylvinyl ether	63	4.929	4.929	(1.183)	49449	20.7343	20.7343	
	66 cis-1,3-Dichloropropene	75	4.994	4.994	(0.810)	268551	21.6002	21.6002	
	67 Octane	85	4.994	4.994	(0.810)	88985	24.2913	24.2913	
$	68 Toluene-d8	98	5.114	5.114	(0.829)	1074298	30.2515	30.2515	
	69 Toluene	92	5.147	5.147	(0.835)	419738	20.7704	20.7704	
	70 Chloroacetonitrile	75	5.207	5.207	(0.844)	45044	87.4009	87.4009	
	71 2-Nitropropane	41	5.295	5.294	(0.858)	178292	81.1677	81.1677	
	72 1,1-Dichloro-2-propanone	63	5.311	5.311	(0.861)	16146	79.5002	79.5002(Q)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.871)	791615	101.575	101.575	
	75 trans-1,3-Dichloropropene	75	5.404	5.404	(0.876)	266055	19.5213	19.5213	
	74 Tetrachloroethene	164	5.409	5.409	(0.877)	151056	21.0112	21.0112	
	76 Ethyl methacrylate	69	5.480	5.480	(0.889)	229398	18.2541	18.2541	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	77 1,1,2-Trichloroethane	83	5.518	5.518	(0.895)	143410	21.3923	21.3923	
	78 Chlorodibromomethane	129	5.649	5.649	(0.916)	172649	18.3499	18.3499	
	79 1,3-Dichloropropane	76	5.709	5.709	(0.926)	295054	22.1814	22.1814	
	80 1,2-Dibromoethane	107	5.829	5.829	(0.945)	170514	21.8527	21.8527	
	81 2-Hexanone	43	5.933	5.933	(0.962)	553829	104.661	104.661	
	82 1-Chlorohexane	91	6.140	6.140	(0.996)	208739	22.4910	22.4910	
*	83 Chlorobenzene-d5	82	6.168	6.167	(1.000)	429817	30.0000		
	85 Ethylbenzene	106	6.184	6.184	(1.003)	243172	21.6706	21.6706	
	84 Chlorobenzene	112	6.184	6.184	(1.003)	459302	20.9051	20.9051	
	86 1,1,1,2-Tetrachloroethane	131	6.222	6.222	(1.009)	159479	21.6841	21.6841	
	87 mp-Xylene	106	6.288	6.287	(1.019)	583068	43.0382	43.0382	
M	120 1,3-Dichloropropene, Total	75				534606	41.1215	41.1215	
	88 o-Xylene	106	6.610	6.604	(1.072)	288262	22.0788	22.0788	
	89 Styrene	104	6.642	6.642	(0.836)	481285	23.1691	23.1691	
	90 Bromoform	173	6.680	6.680	(0.841)	110615	17.8003	17.8003	
	91 Isopropylbenzene	105	6.839	6.839	(0.861)	692288	23.8408	23.8408	
$	92 4-Bromofluorobenzene	174	7.062	7.062	(0.889)	303423	30.8996	30.8996	
M	121 TOTAL XYLENES	106				871330	65.1170	65.1170	
	94 n-Propylbenzene	120	7.155	7.155	(0.900)	187568	21.9483	21.9483	
	93 Bromobenzene	156	7.155	7.155	(0.900)	193096	21.5381	21.5381	
	95 1,1,2,2-Tetrachloroethane	83	7.199	7.199	(0.906)	194135	20.1564	20.1564	
	97 1,3,5-Trimethylbenzene	105	7.302	7.297	(0.919)	549553	22.6514	22.6514	
	96 o-Chlorotoluene	91	7.286	7.286	(0.917)	538698	22.1774	22.1774	
	98 1,2,3-Trichloropropane	110	7.319	7.319	(0.921)	61863	20.7738	20.7738	
	99 trans-1,4-Dichloro-2-butene	53	7.341	7.341	(0.924)	51111	18.3335	18.3335	
	101 p-Chlorotoluene	91	7.417	7.417	(0.933)	496819	22.1645	22.1645	
	102 tert-Butylbenzene	134	7.559	7.559	(0.951)	133365	22.9221	22.9221(Q)	
	103 Pentachloroethane	117	7.581	7.586	(0.954)	107122	22.1811	22.1811(QM)	MP
	104 1,2,4-Trimethylbenzene	105	7.614	7.613	(0.958)	564306	22.6301	22.6301	
	105 sec-Butylbenzene	105	7.701	7.701	(0.969)	681573	23.5409	23.5409	
	106 p-Isopropyltoluene	134	7.810	7.810	(0.983)	152416	23.3709	23.3709	
	107 1,3-Dichlorobenzene	146	7.892	7.886	(0.993)	324870	21.9609	21.9609	
*	108 1,4-Dichlorobenzene-d4	152	7.946	7.946	(1.000)	373195	30.0000		
	109 1,4-Dichlorobenzene	146	7.963	7.963	(1.002)	336472	21.3225	21.3225	
	111 n-Butylbenzene	134	8.159	8.159	(1.027)	132075	23.3835	23.3835	
	110 Benzyl Chloride	126	8.159	8.159	(1.027)	57603	21.2153	21.2153(Q)	
	112 Hexachloroethane	117	8.290	8.290	(1.043)	91391	18.9171	18.9171	
	113 1,2-Dichlorobenzene	146	8.312	8.306	(1.046)	309429	21.3809	21.3809	
	114 1,2-Dibromo-3-chloropropane	75	8.978	8.977	(1.130)	27217	17.1112	17.1112	
	115 Nitrobenzene	77	9.463	9.463	(1.191)	57560	158.416	158.416	
	116 Hexachlorobutadiene	225	9.523	9.523	(1.198)	92332	26.3390	26.3390	
	117 1,2,4-Trichlorobenzene	180	9.556	9.556	(1.203)	208034	24.9090	24.9090	
	118 Naphthalene	128	9.829	9.829	(1.237)	486830	18.8058	18.8058	
	119 1,2,3-Trichlorobenzene	180	9.982	9.981	(1.256)	185539	21.8413	21.8413	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

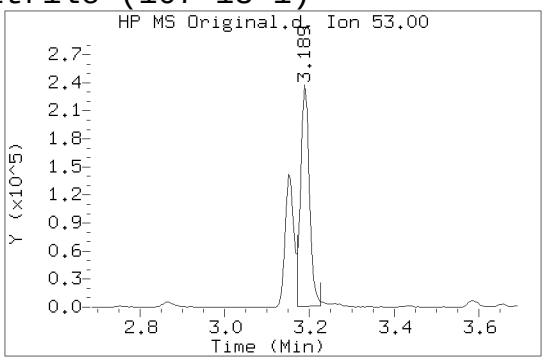

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Instrument: ms25,i
Sample Info: 390104;;1;3;;LCS;1;;
Operator: ILY
Purge Volume: 5.0
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Column phase: DB-VRX
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Y (x10^6)
Min
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-Chloromethane
-Vinyl Chloride
-Bromomethane
-Chloroethane
-Dichlorofluoromethane
-Pentane+
-Ethyl Ether
-Carbon Disulfide
-1,1-Dichloroethene+
-Acrolein
-3-Chloro-1-propene+
-Methylene Chloride+
-Methyl acetate+
-Hexane+
-Acetonitrile+
-Acrylonitrile
-1,1-Dichloroethane+
-n-Propanol+
-cis-1,2-Dichloroethene
-2,2-Dichloropropane
-Bromochloromethane+
-Ethyl Acetate+
-Tetrahydrofuran+
-1,1,1-Trichloroethane+
-1,1-Dichloropropene+
-Heptane
-Propionitrile+
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane+
-Fluorobenzene+
-Trichloroethene+
-tert-Amyl Ethylether
-Dibromomethane
-1,2-Dichloropropane+
-Methyl methacrylate
-2-Chloroethylvinyl ether+
-Toluene-d8
-Toluene+
-2-Nitropropane+
-4-Methyl-2-Pentanone(MIBK
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane
-Chlorodibromomethane
-1,3-Dichloropropane
-1,2-Dibromoethane
-2-Hexanone
-1-Chlorohexane
1,1,1,2 Tetrachloroethane
m,p-Xylene
Chlorobenzene-d5+
-o-Xylene
Bromoform
-Styrene
-1,2-Dichloroethene, Total
-Isopropylbenzene
-4-Bromofluorobenzene
-n-Propylbenzene+
-1,1,2,2-Tetrachloroethane
-1,3,5-Trimethylbenzene+
-p-Chlorotoluene
-tert-Butylbenzene+
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-p-Isopropyltoluene
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-Hexachloroethane+
-1,2-Dibromo-3-chloropropa
-1,3-Dichloropropene, Tota
-Total Xylenes+
-Hexachlorobutadiene
1,2,4-Trichlorobenzene
-Naphthalene
-1,2,3-Trichlorobenzene

Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110502.D
Inj Date : 05-NOV-2024 10:23
InstruID : ms25.i
LabSampID : 3901014

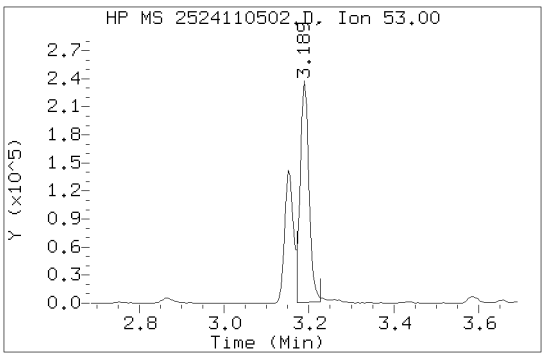
Acrylonitrile (107-13-1)

Reason Code: MP

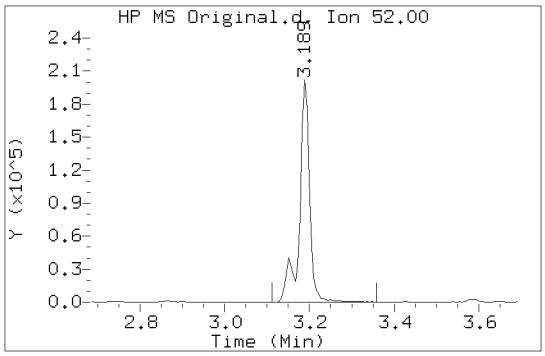
BEFORE
MASS
53
AREA
342322
HEIGHT
236624
05-Nov-2024
13:05



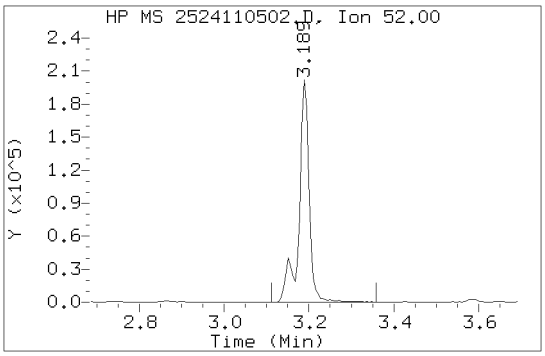
AFTER
MASS
53
AREA
342322
HEIGHT
236624
06-Nov-2024
14:17



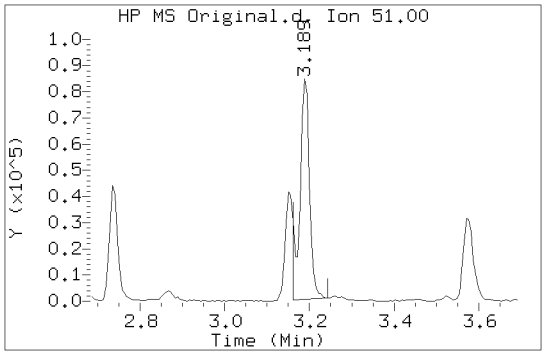
BEFORE
MASS
52
AREA
339217
HEIGHT
201984
05-Nov-2024
13:05



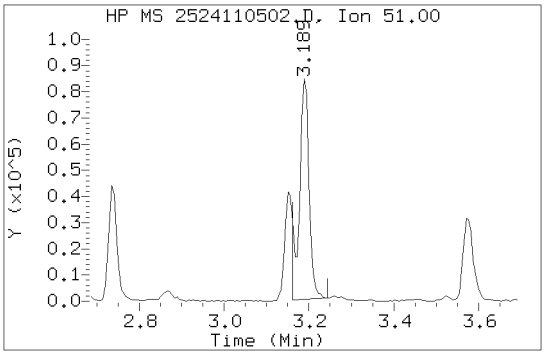
AFTER
MASS
52
AREA
339217
HEIGHT
201984
06-Nov-2024
14:17



BEFORE
MASS
51
AREA
135830
HEIGHT
84257
05-Nov-2024
13:05



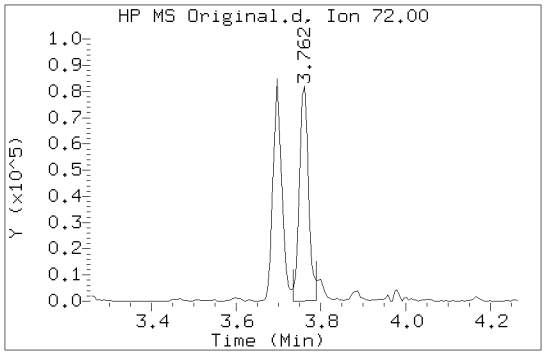
AFTER
MASS
51
AREA
135830
HEIGHT
84257
06-Nov-2024
14:17



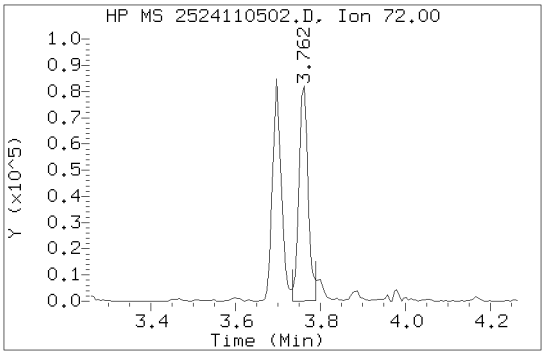
2-Butanone (78-93-3)

Reason Code: MP

BEFORE
MASS
72
AREA
124582
HEIGHT
82169
05-Nov-2024
13:05



AFTER
MASS
72
AREA
124582
HEIGHT
82169
06-Nov-2024
14:17



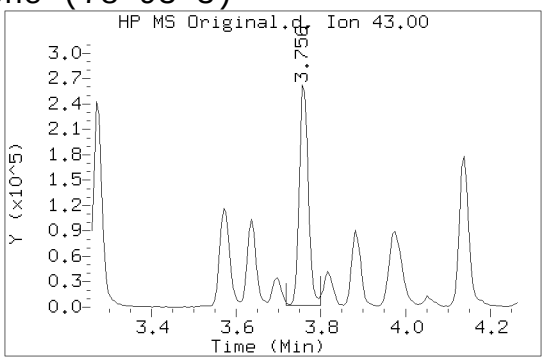
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110502.D
Inj Date : 05-NOV-2024 10:23
InstruID : ms25.i
LabSampID : 3901014

2-Butanone (78-93-3)

Reason Code: MP

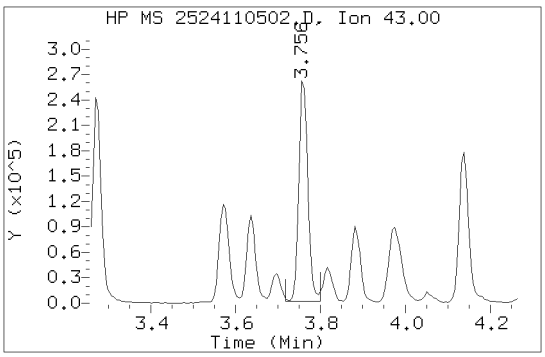
BEFORE

MASS
43
AREA
390126
HEIGHT
260346
05-Nov-2024
13:05



AFTER

MASS
43
AREA
390126
HEIGHT
260346
06-Nov-2024
14:17

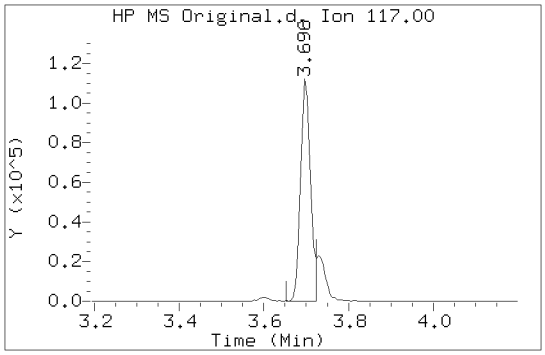


Carbon Tetrachloride (56-23-5)

Reason Code: MP

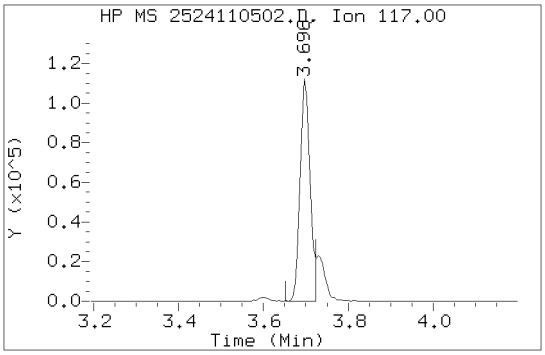
BEFORE

MASS
117
AREA
185423
HEIGHT
112192
05-Nov-2024
13:05



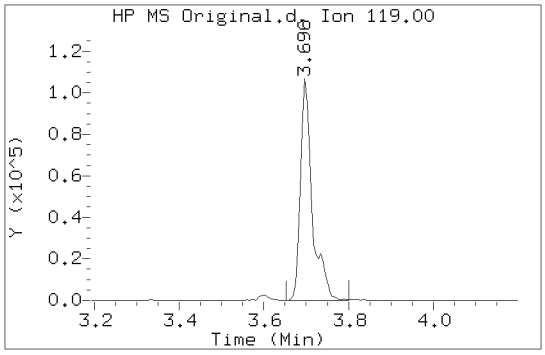
AFTER

MASS
117
AREA
185423
HEIGHT
112192
06-Nov-2024
14:17



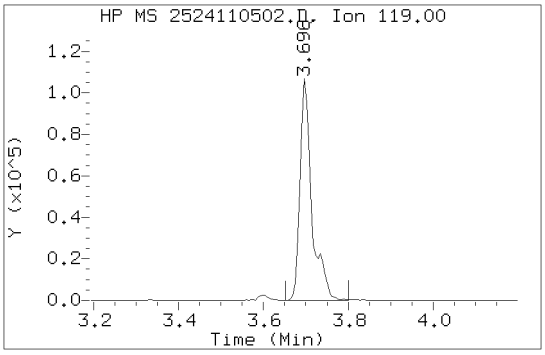
BEFORE

MASS
119
AREA
208124
HEIGHT
106840
05-Nov-2024
13:05



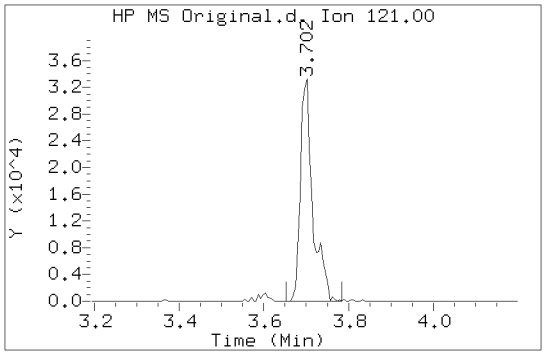
AFTER

MASS
119
AREA
208124
HEIGHT
106840
06-Nov-2024
14:17



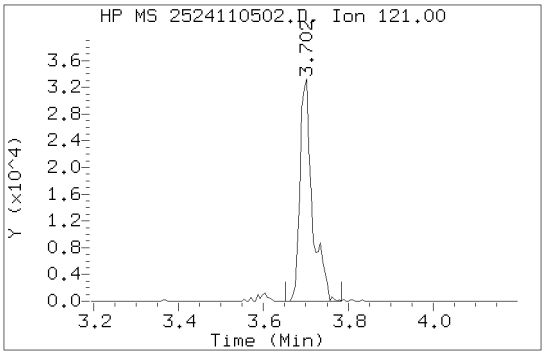
BEFORE

MASS
121
AREA
67518
HEIGHT
33256
05-Nov-2024
13:05



AFTER

MASS
121
AREA
67518
HEIGHT
33256
06-Nov-2024
14:17



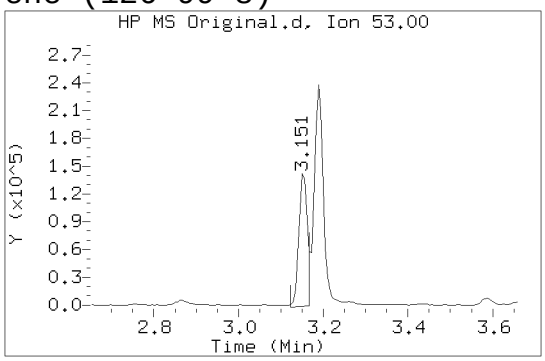
Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110502.D
Inj Date : 05-NOV-2024 10:23
InstruID : ms25.i
LabSampID : 3901014

Chloroprene (126-99-8)

Reason Code: SP

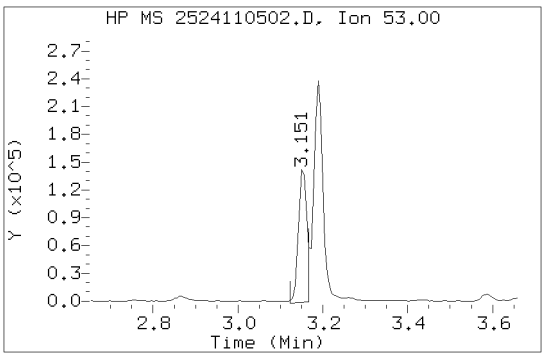
BEFORE

MASS
53
AREA
203418
HEIGHT
143450
05-Nov-2024
13:05



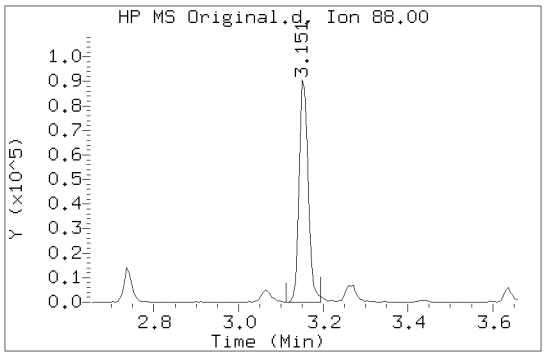
AFTER

MASS
53
AREA
203418
HEIGHT
143450
06-Nov-2024
14:17



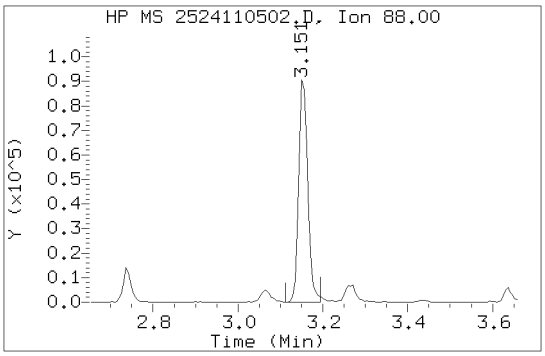
BEFORE

MASS
88
AREA
135718
HEIGHT
90608
05-Nov-2024
13:05



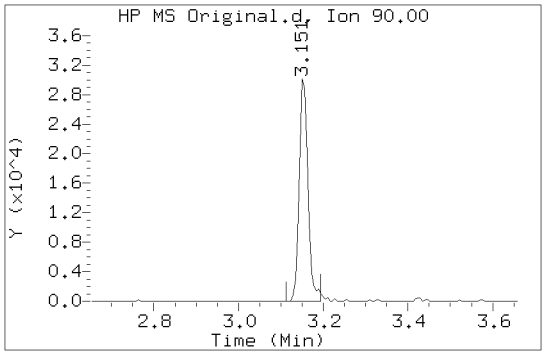
AFTER

MASS
88
AREA
135718
HEIGHT
90608
06-Nov-2024
14:17



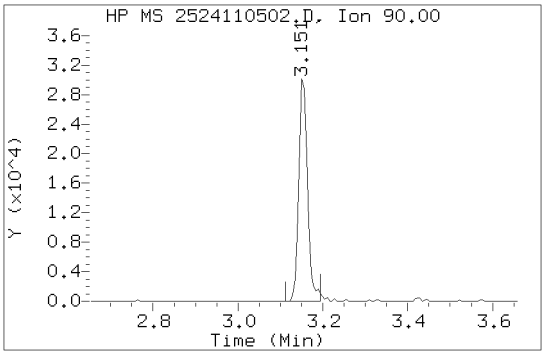
BEFORE

MASS
90
AREA
43655
HEIGHT
30136
05-Nov-2024
13:05



AFTER

MASS
90
AREA
43655
HEIGHT
30136
06-Nov-2024
14:17

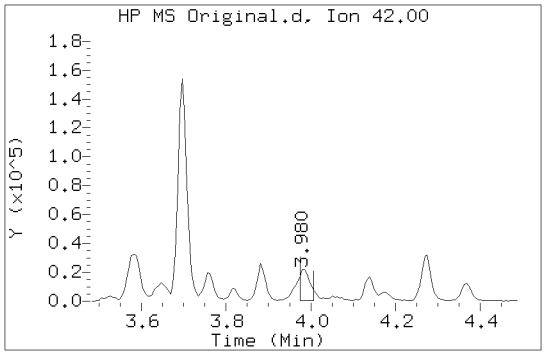


Isobutyl alcohol (78-83-1)

Reason Code: MP

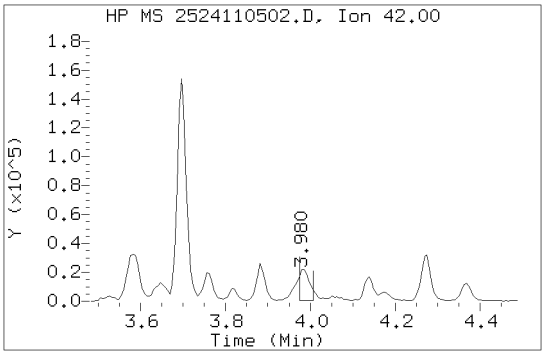
BEFORE

MASS
42
AREA
35691
HEIGHT
21509
05-Nov-2024
13:05



AFTER

MASS
42
AREA
35691
HEIGHT
21509
06-Nov-2024
14:17

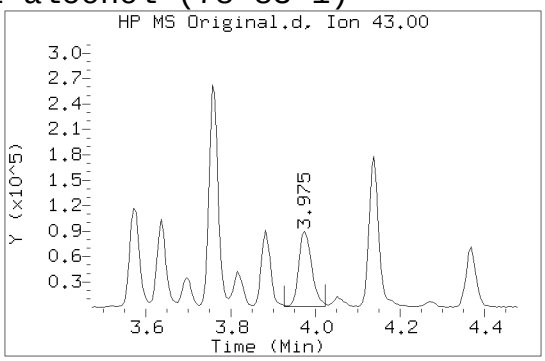


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Inj Date : 05-NOV-2024 10:23
InstruID : ms25.i
LabSampID : 3901014

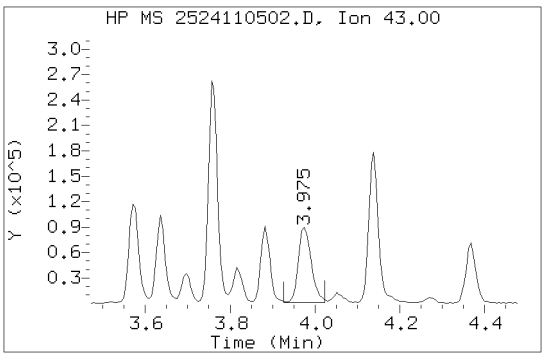
Isobutyl alcohol (78-83-1)

Reason Code: MP

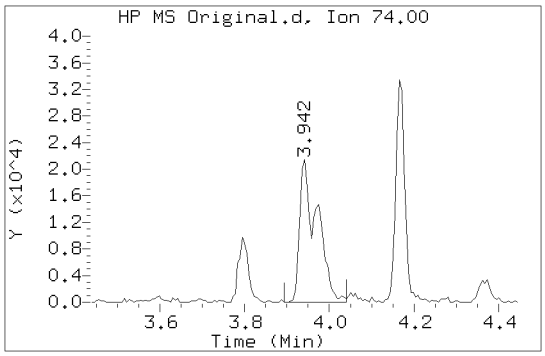
BEFORE
MASS
43
AREA
189388
HEIGHT
88231
05-Nov-2024
13:05



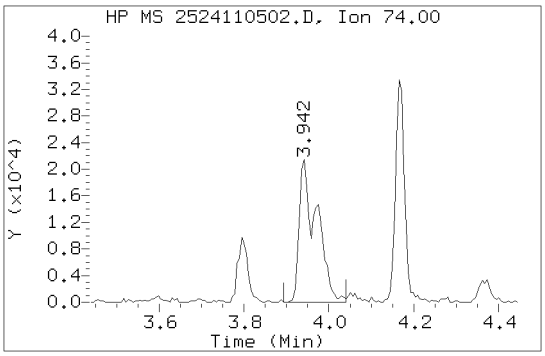
AFTER
MASS
43
AREA
189388
HEIGHT
88231
06-Nov-2024
14:17



BEFORE
MASS
74
AREA
61747
HEIGHT
21416
05-Nov-2024
13:05



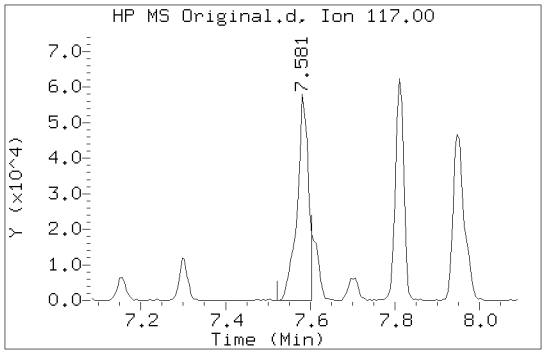
AFTER
MASS
74
AREA
61747
HEIGHT
21416
06-Nov-2024
14:17



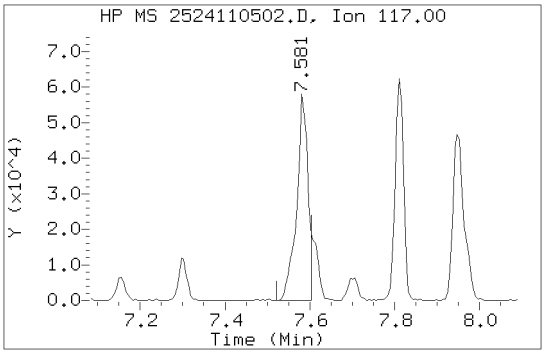
Pentachloroethane (76-01-7)

Reason Code: MP

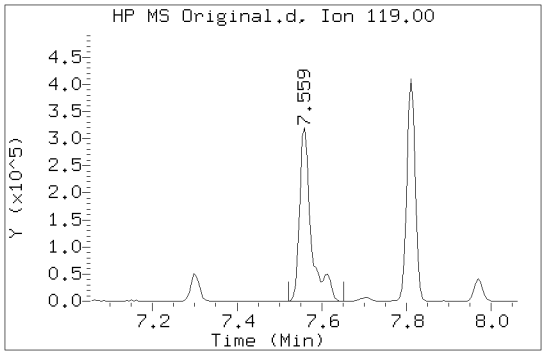
BEFORE
MASS
117
AREA
107122
HEIGHT
58168
05-Nov-2024
13:05



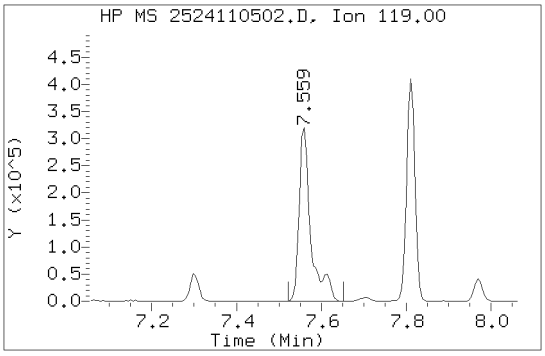
AFTER
MASS
117
AREA
107122
HEIGHT
58168
06-Nov-2024
14:17



BEFORE
MASS
119
AREA
618378
HEIGHT
319872
05-Nov-2024
13:05



AFTER
MASS
119
AREA
618378
HEIGHT
319872
06-Nov-2024
14:17



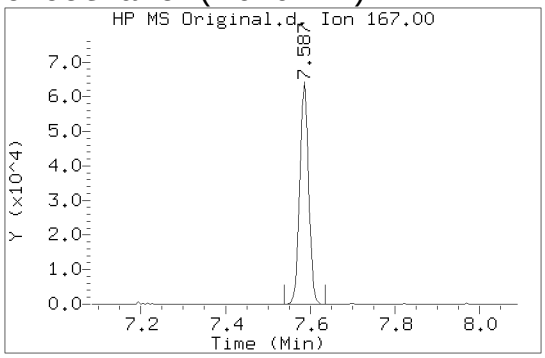
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Inj Date : 05-NOV-2024 10:23
InstruID : ms25.i
LabSampID : 3901014

Pentachloroethane (76-01-7)

Reason Code: MP

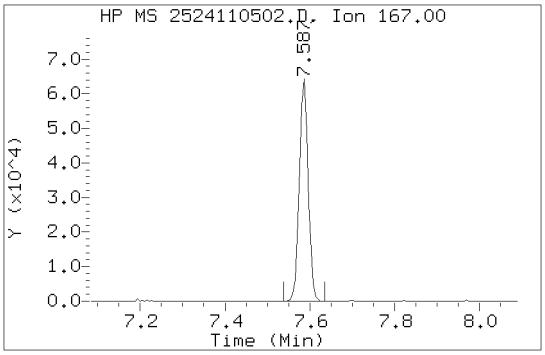
BEFORE

MASS
167
AREA
93458
HEIGHT
64336
05-Nov-2024
13:05



AFTER

MASS
167
AREA
93458
HEIGHT
64336
06-Nov-2024
14:17

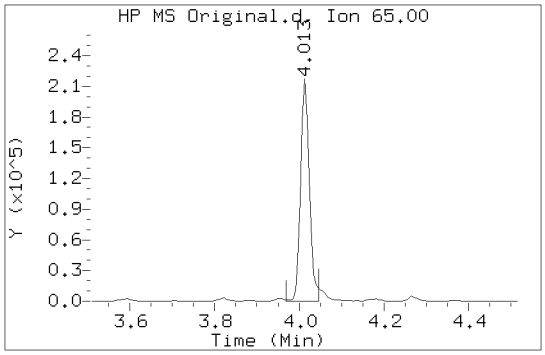


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

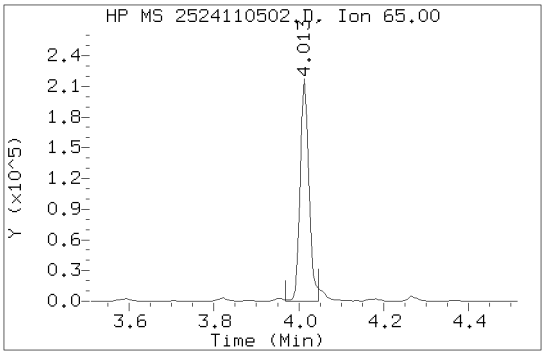
BEFORE

MASS
65
AREA
313660
HEIGHT
217036
05-Nov-2024
13:05



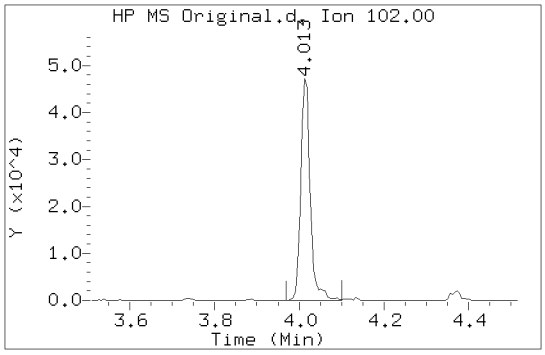
AFTER

MASS
65
AREA
313660
HEIGHT
217036
06-Nov-2024
14:17



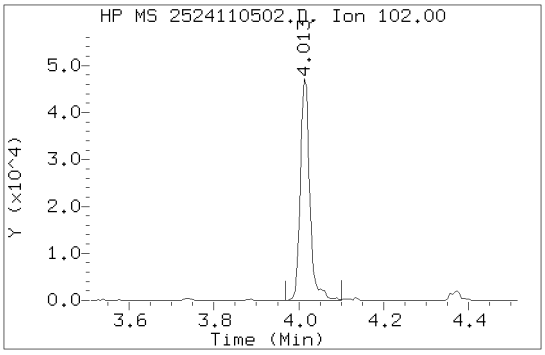
BEFORE

MASS
102
AREA
73360
HEIGHT
47216
05-Nov-2024
13:05



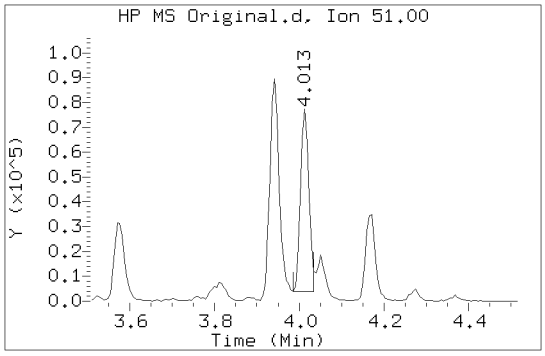
AFTER

MASS
102
AREA
73360
HEIGHT
47216
06-Nov-2024
14:17



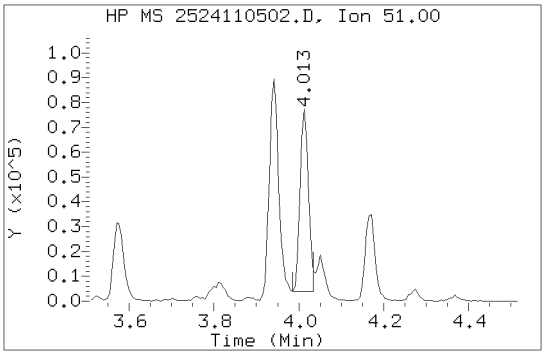
BEFORE

MASS
51
AREA
101834
HEIGHT
73348
05-Nov-2024
13:05



AFTER

MASS
51
AREA
101834
HEIGHT
73348
06-Nov-2024
14:17



UNASSIGNED PEAK REPORT

Report Date: 11/06/2024 14:18
Client ID: LCS for HBN 1327406
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241105.b/252411050
Inj Date: 05-NOV-2024 10:23
Operator: ILY

There were no Unassigned peaks in this sample!

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110505.D
Lab Smp Id: 3901013 Client Smp ID: MB for HBN 1327406
Inj Date : 05-NOV-2024 11:45
Operator : ILY Inst ID: ms25.i
Smp Info : 3901013;;1;3;;MB;;;
Misc Info : ZZ VOMS 75367 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\25-8260b09D.m
Meth Date : 05-Nov-2024 10:11 ily Quant Type: ISTD
Cal Date : 04-NOV-2024 14:15 Cal File: 2524110404.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	Compound Not Detected.						
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	Compound Not Detected.						
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	Compound Not Detected.						
21 Hexane	57	Compound Not Detected.						
22 Methyl t-Butyl Ether	73	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	Compound Not Detected.						
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61	Compound Not Detected.						
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	3.598	3.597	(0.864)	4448	0.30328	0.303278(a)	
	37 Ethyl acetate	43	Compound Not Detected.						
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.701	3.701	(0.889)	270136	29.9291	29.9291	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	Compound Not Detected.						
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.012	4.012	(0.963)	313263	30.7672	30.7672	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.165	4.165	(1.000)	1028134	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	Compound Not Detected.						
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.115	5.114	(0.829)	1037942	31.0882	31.0882	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						
	76 Ethyl methacrylate	69	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
77	1,1,2-Trichloroethane	83	Compound Not Detected.						
78	Chlorodibromomethane	129	Compound Not Detected.						
79	1,3-Dichloropropane	76	Compound Not Detected.						
80	1,2-Dibromoethane	107	Compound Not Detected.						
81	2-Hexanone	43	Compound Not Detected.						
82	1-Chlorohexane	91	Compound Not Detected.						
* 83	Chlorobenzene-d5	82	6.168	6.167	(1.000)	404095	30.0000		
85	Ethylbenzene	106	Compound Not Detected.						
84	Chlorobenzene	112	Compound Not Detected.						
86	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
87	mp-Xylene	106	Compound Not Detected.						
M 120	1,3-Dichloropropene, Total	75	Compound Not Detected.						
88	o-Xylene	106	Compound Not Detected.						
89	Styrene	104	Compound Not Detected.						
90	Bromoform	173	Compound Not Detected.						
91	Isopropylbenzene	105	Compound Not Detected.						
$ 92	4-Bromofluorobenzene	174	7.062	7.062	(0.889)	285335	30.8950	30.8950	
M 121	TOTAL XYLENES	106	Compound Not Detected.						
94	n-Propylbenzene	120	Compound Not Detected.						
93	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
97	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
96	o-Chlorotoluene	91	Compound Not Detected.						
98	1,2,3-Trichloropropane	110	Compound Not Detected.						
99	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
101	p-Chlorotoluene	91	Compound Not Detected.						
102	tert-Butylbenzene	134	Compound Not Detected.						
103	Pentachloroethane	117	Compound Not Detected.						
104	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
105	sec-Butylbenzene	105	Compound Not Detected.						
106	p-Isopropyltoluene	134	Compound Not Detected.						
107	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 108	1,4-Dichlorobenzene-d4	152	7.946	7.946	(1.000)	351000	30.0000		
109	1,4-Dichlorobenzene	146	Compound Not Detected.						
111	n-Butylbenzene	134	Compound Not Detected.						
110	Benzyl Chloride	126	Compound Not Detected.						
112	Hexachloroethane	117	Compound Not Detected.						
113	1,2-Dichlorobenzene	146	Compound Not Detected.						
114	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
115	Nitrobenzene	77	Compound Not Detected.						
116	Hexachlorobutadiene	225	Compound Not Detected.						
117	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
118	Naphthalene	128	Compound Not Detected.						
119	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110505.D

Date : 05-NOV-2024 11:45

Client ID: MB for HBN 1327406

Instrument: ms25.i

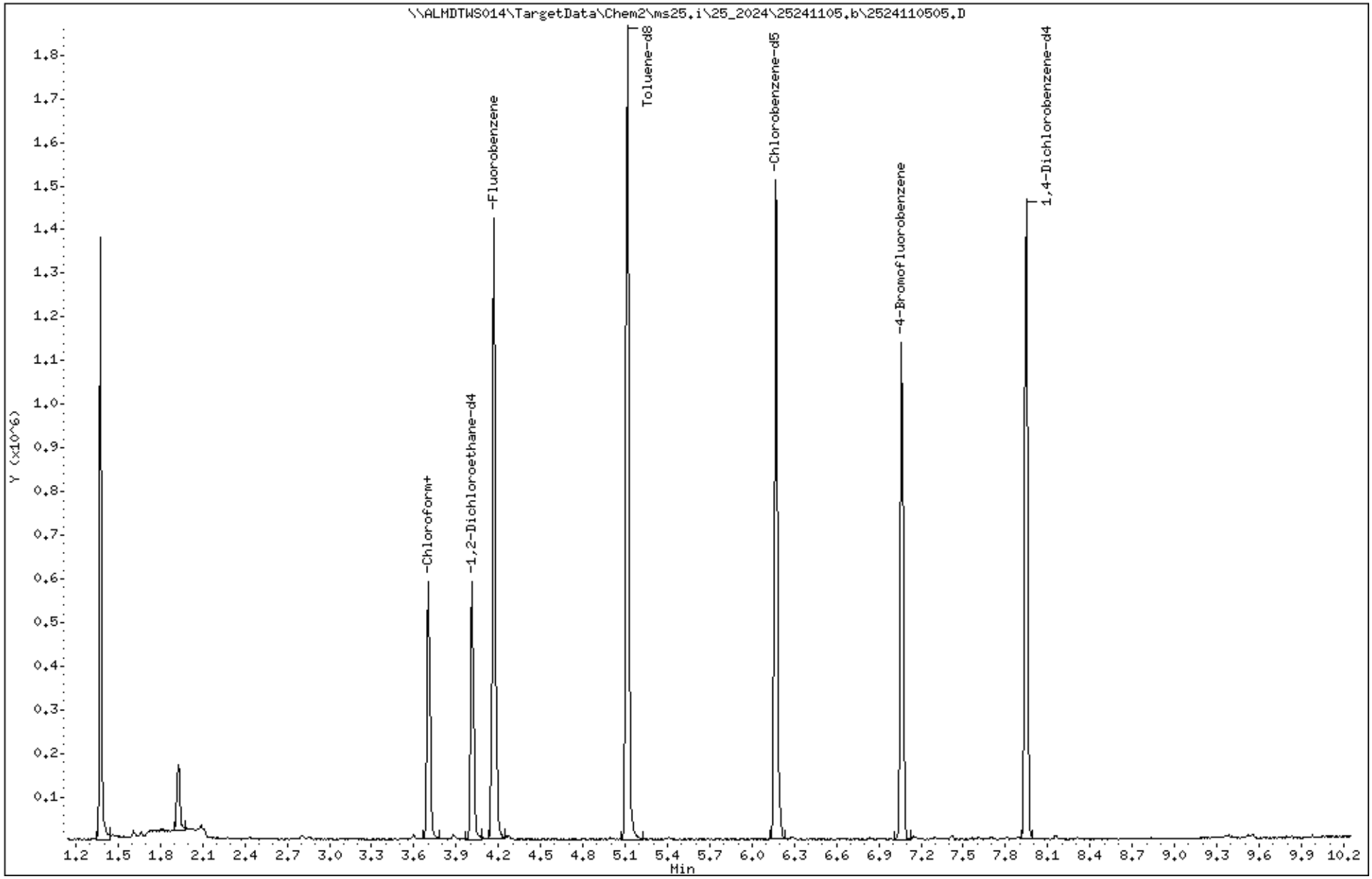
Sample Info: 3901013;;1;3;;MB;;;

Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25



Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110505.D
Inj Date : 05-NOV-2024 11:45
InstruID : ms25.i
LabSampID : 3901013

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 11/06/2024 14:18
Client ID: MB for HBN 1327406
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241105.b/252411050
Inj Date: 05-NOV-2024 11:45
Operator: ILY

Analytes listed below were unassigned due to not meeting one or more of the following qualitative criteria (retention time, mass spectral match, extracted ion ratios)
Rationale other than qualitative criteria are noted on the quantitation report.:

Bromomethane
1-Chlorobutane
Chloromethane
Ethyl methacrylate
Methacrylonitrile
2-Nitropropane
Chloroethane
1-Chlorohexane
1,2-Dichloroethane
Heptane
Methyl acetate
Trichloroethene

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110513.D
Lab Smp Id: 3385043008 Client Smp ID: MW13-4D
Inj Date : 05-NOV-2024 14:29
Operator : ILY Inst ID: ms25.i
Smp Info : 3385043008;;1;;;;;
Misc Info : ZZ VOMS 75367 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\25-8260b09D.m
Meth Date : 05-Nov-2024 10:11 ily Quant Type: ISTD
Cal Date : 04-NOV-2024 14:15 Cal File: 2524110404.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	1.704	1.704	(0.409)	43282	3.88230	3.88230(Q)	
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	2.452	2.446	(0.588)	4451	0.24513	0.245135(a)	
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	Compound Not Detected.						
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	Compound Not Detected.						
21 Hexane	57	Compound Not Detected.						
22 Methyl t-Butyl Ether	73	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	3.461	3.461	(0.830)	74262	7.46849	7.46849	
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61				74262	7.46849	7.46849	
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	3.598	3.597	(0.863)	7090	0.49577	0.495773(a)	
	37 Ethyl acetate	43	Compound Not Detected.						
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.701	3.701	(0.887)	263684	29.9609	29.9609	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	3.936	3.941	(0.944)	8073	0.26400	0.264003(a)	
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.012	4.012	(0.962)	294389	29.6524	29.6524	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.170	4.165	(1.000)	1002512	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	Compound Not Detected.						
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.114	5.114	(0.829)	997989	30.3959	30.3959	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						
	76 Ethyl methacrylate	69	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
77	1,1,2-Trichloroethane	83	Compound Not Detected.						
78	Chlorodibromomethane	129	Compound Not Detected.						
79	1,3-Dichloropropane	76	Compound Not Detected.						
80	1,2-Dibromoethane	107	Compound Not Detected.						
81	2-Hexanone	43	Compound Not Detected.						
82	1-Chlorohexane	91	Compound Not Detected.						
* 83	Chlorobenzene-d5	82	6.168	6.167	(1.000)	397390	30.0000		
85	Ethylbenzene	106	Compound Not Detected.						
84	Chlorobenzene	112	Compound Not Detected.						
86	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
87	mp-Xylene	106	Compound Not Detected.						
M 120	1,3-Dichloropropene, Total	75	Compound Not Detected.						
88	o-Xylene	106	Compound Not Detected.						
89	Styrene	104	Compound Not Detected.						
90	Bromoform	173	Compound Not Detected.						
91	Isopropylbenzene	105	Compound Not Detected.						
$ 92	4-Bromofluorobenzene	174	7.062	7.062	(0.889)	278198	30.0604	30.0604	
M 121	TOTAL XYLENES	106	Compound Not Detected.						
94	n-Propylbenzene	120	Compound Not Detected.						
93	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
97	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
96	o-Chlorotoluene	91	Compound Not Detected.						
98	1,2,3-Trichloropropane	110	Compound Not Detected.						
99	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
101	p-Chlorotoluene	91	Compound Not Detected.						
102	tert-Butylbenzene	134	Compound Not Detected.						
103	Pentachloroethane	117	Compound Not Detected.						
104	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
105	sec-Butylbenzene	105	Compound Not Detected.						
106	p-Isopropyltoluene	134	Compound Not Detected.						
107	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 108	1,4-Dichlorobenzene-d4	152	7.946	7.946	(1.000)	351722	30.0000		(Q)
109	1,4-Dichlorobenzene	146	Compound Not Detected.						
111	n-Butylbenzene	134	Compound Not Detected.						
110	Benzyl Chloride	126	Compound Not Detected.						
112	Hexachloroethane	117	Compound Not Detected.						
113	1,2-Dichlorobenzene	146	Compound Not Detected.						
114	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
115	Nitrobenzene	77	Compound Not Detected.						
116	Hexachlorobutadiene	225	Compound Not Detected.						
117	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
118	Naphthalene	128	Compound Not Detected.						
119	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\almdtws014\targetdata\chem2\ms25.i\25_2024\25241105.b\2524110513.d

Page 1

Date : 05-NOV-2024 14:29

Client ID: MW13-4D

Instrument: ms25.i

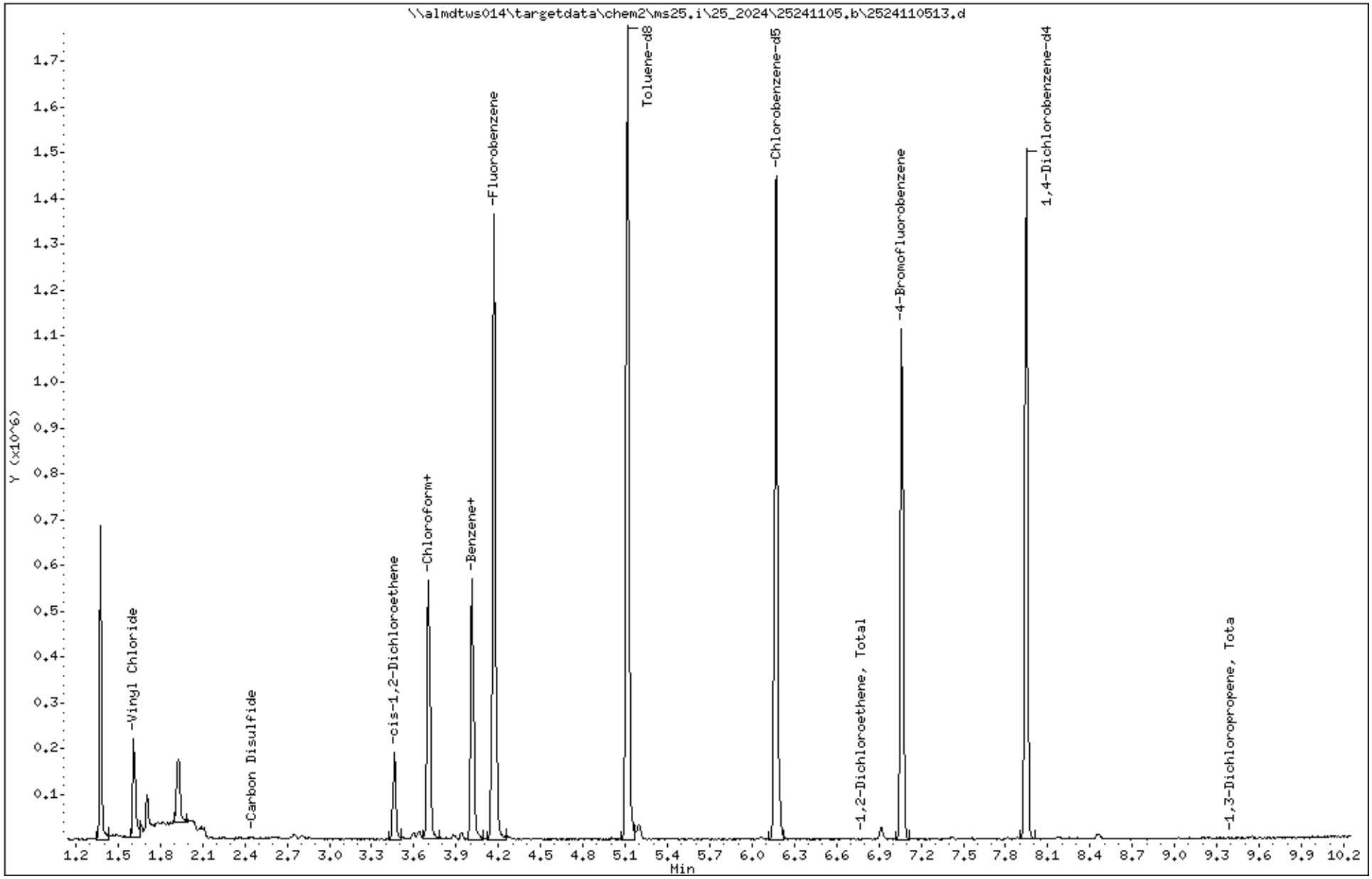
Sample Info: 3385043008;;1;;;;;

Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25



Data File: \\almdtws014\targetdata\chem2\ms25.i\25_2024\25241105.b\2524110513.d

Date : 05-NOV-2024 14:29

Client ID: MW13-4D

Instrument: ms25.i

Sample Info: 3385043008;;1;;;;;

Purge Volume: 5.0

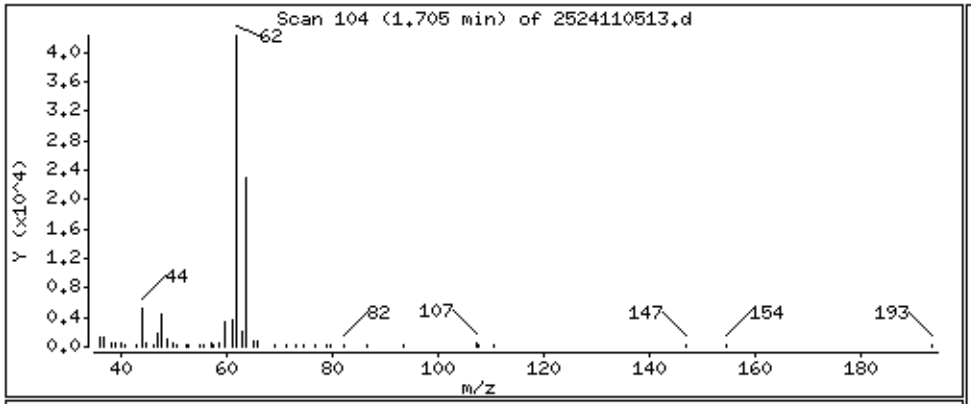
Operator: ILY

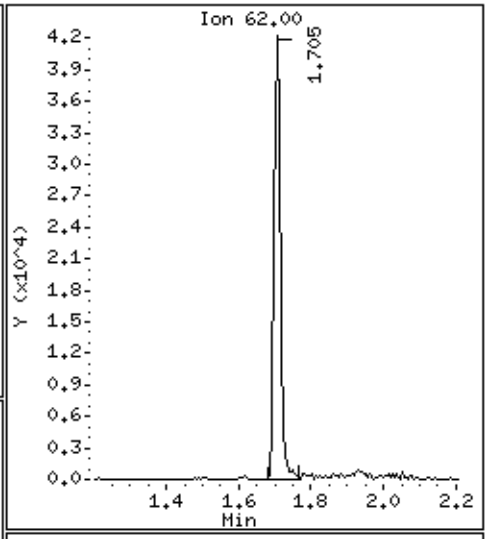
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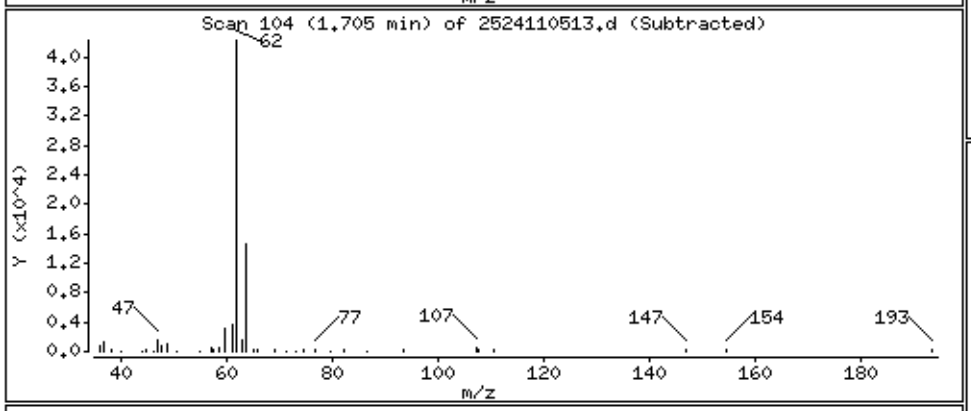
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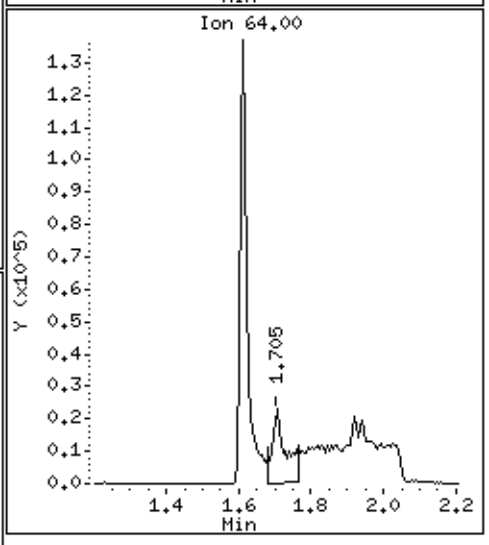
3 Vinyl Chloride

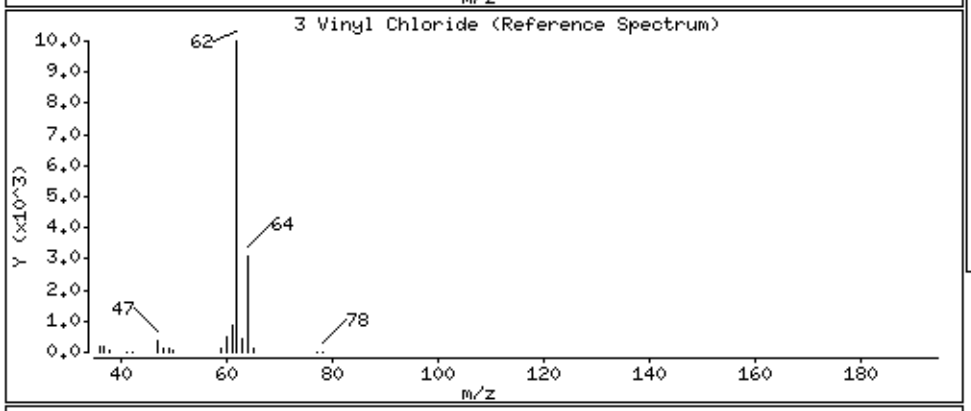
Concentration: 3.88230 ug/L

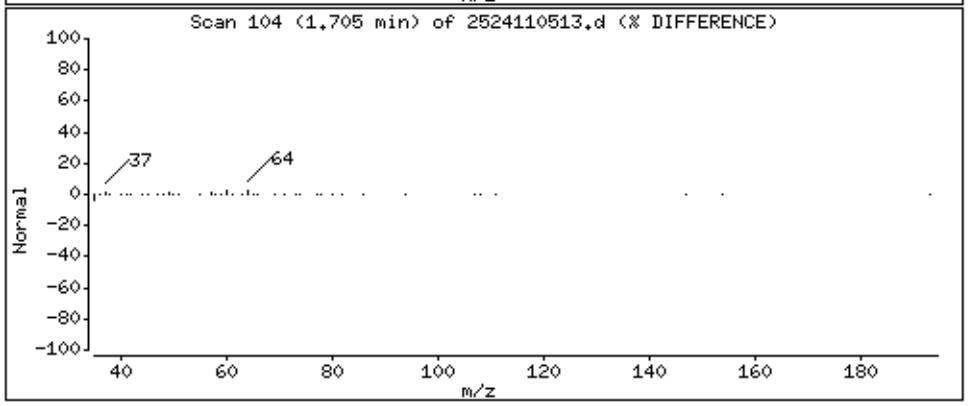












Data File: \\almdtws014\targetdata\chem2\ms25.i\25_2024\25241105.b\2524110513.d

Date : 05-NOV-2024 14:29

Client ID: MW13-4D

Instrument: ms25.i

Sample Info: 3385043008;;1;;;;;

Purge Volume: 5.0

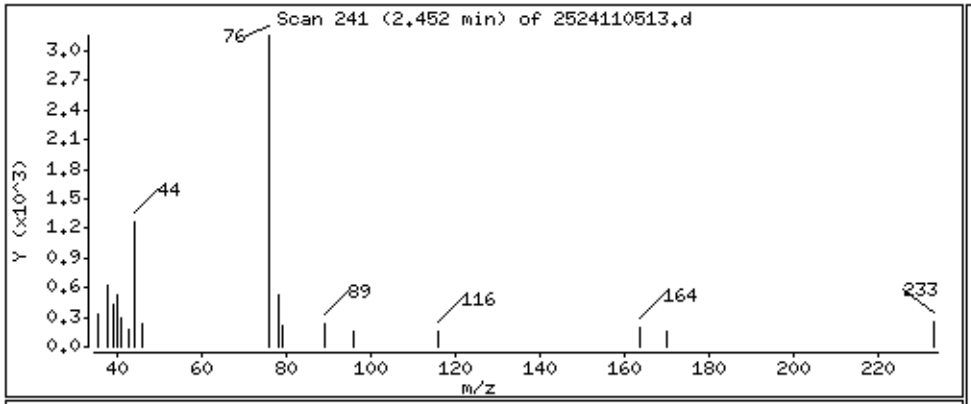
Operator: ILY

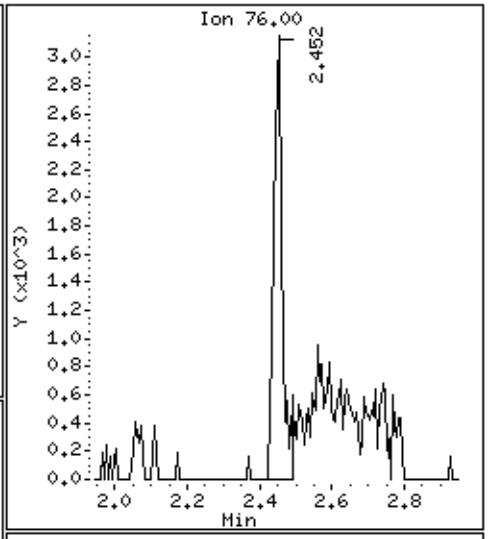
Column phase: DB-VRX

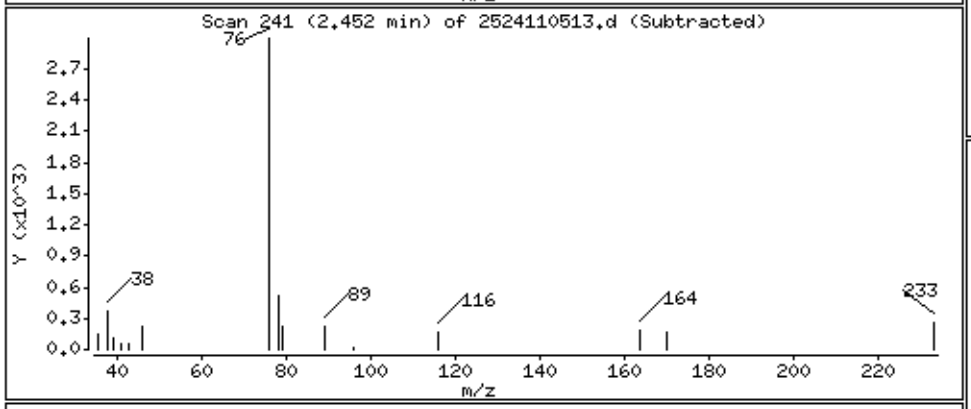
Column diameter: 0.25

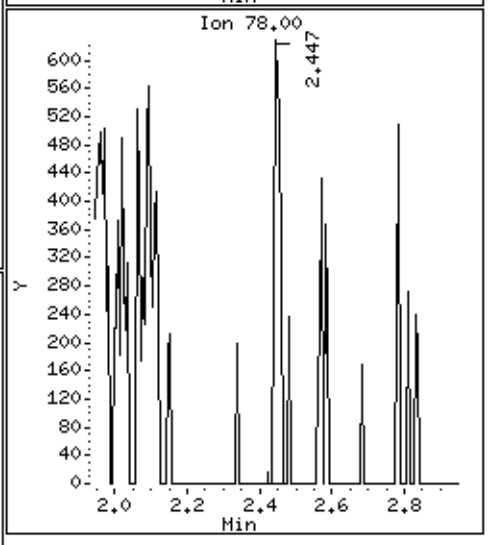
12 Carbon Disulfide

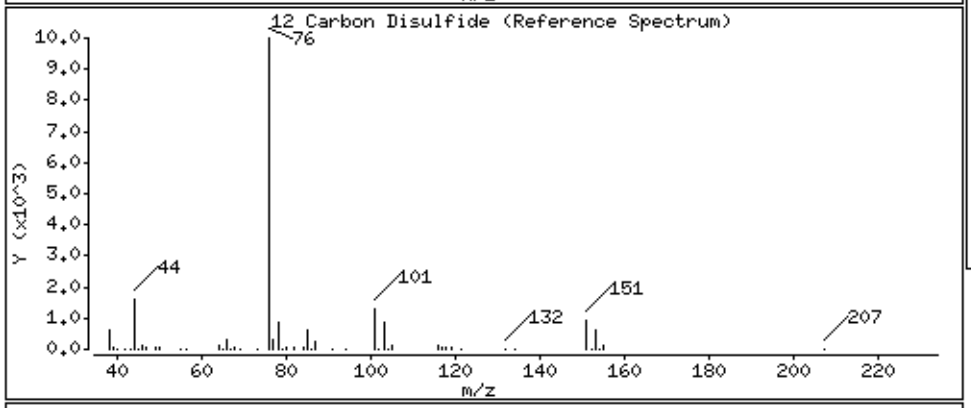
Concentration: 0.245135 ug/L

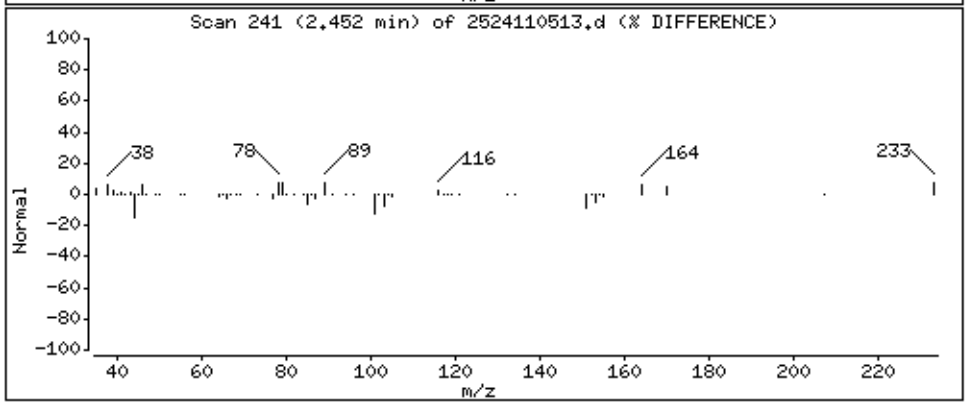












Data File: \\almdtws014\targetdata\chem2\ms25.i\25_2024\25241105.b\2524110513.d

Date : 05-NOV-2024 14:29

Client ID: MW13-4D

Instrument: ms25.i

Sample Info: 3385043008;;1;;;;;

Purge Volume: 5.0

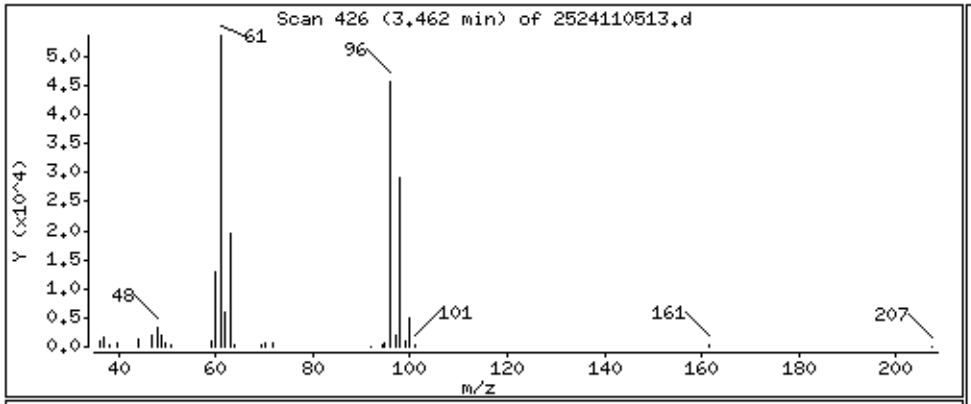
Operator: ILY

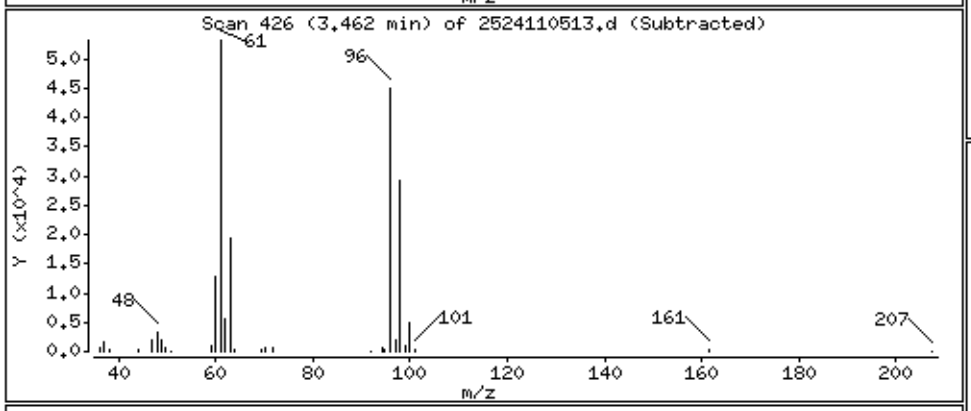
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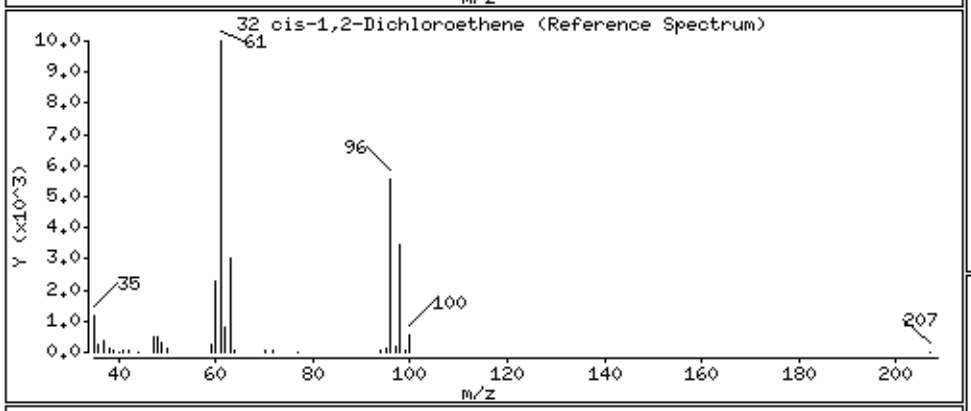
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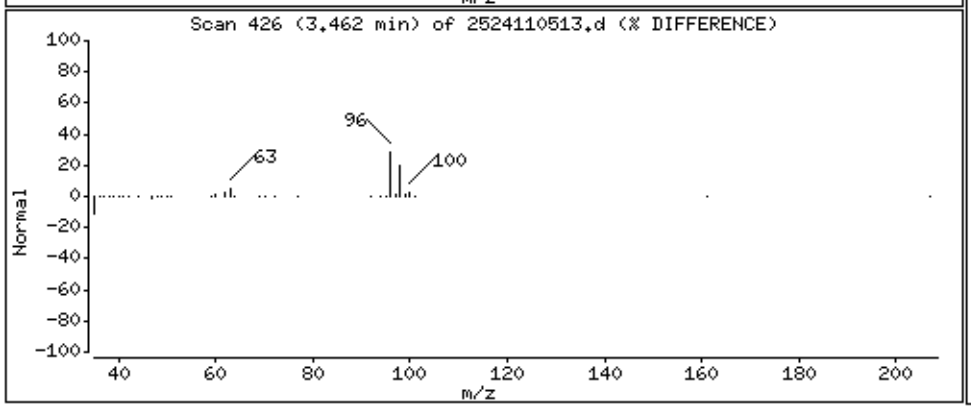
32 cis-1,2-Dichloroethene

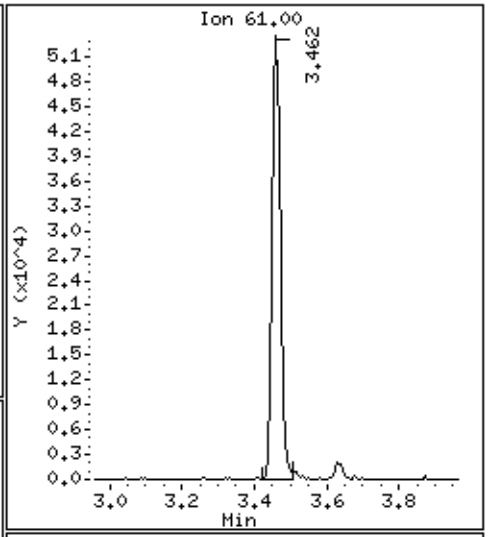
Concentration: 7.46849 ug/L

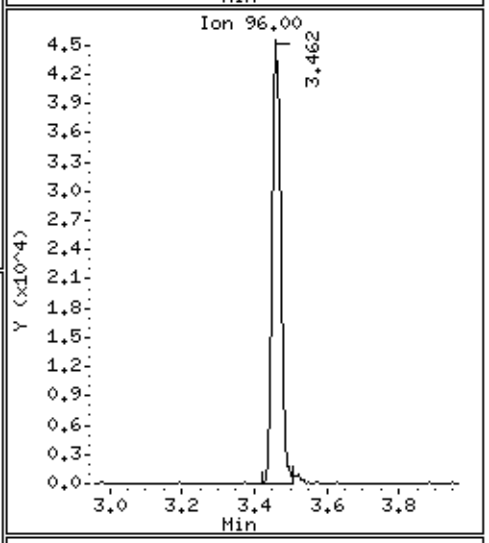


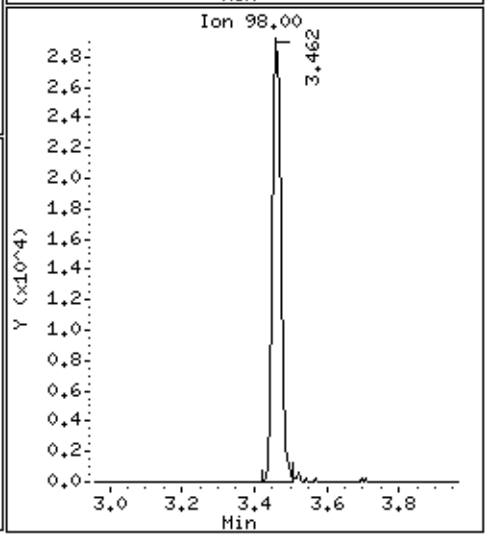












Data File: \\almdtws014\targetdata\chem2\ms25.i\25_2024\25241105.b\2524110513.d

Date : 05-NOV-2024 14:29

Client ID: MW13-4D

Instrument: ms25.i

Sample Info: 3385043008;;1;;;;;

Purge Volume: 5.0

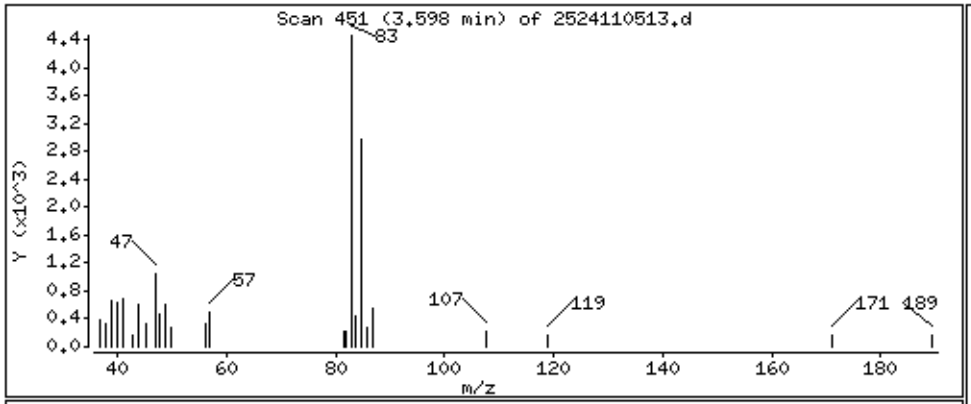
Operator: ILY

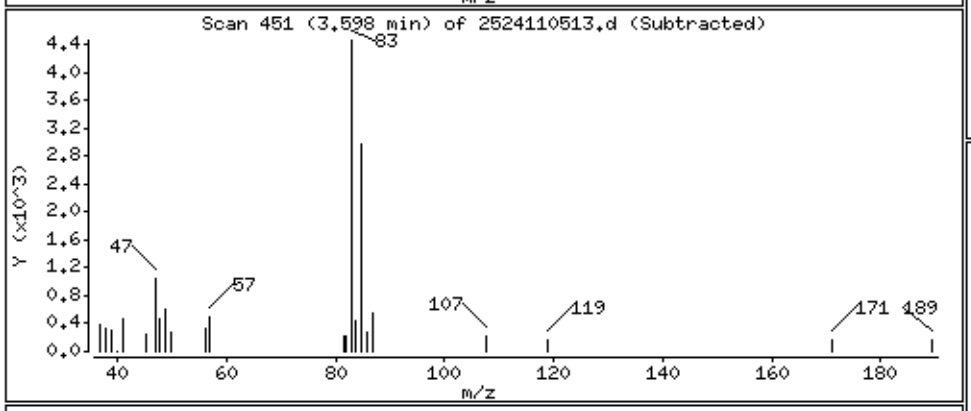
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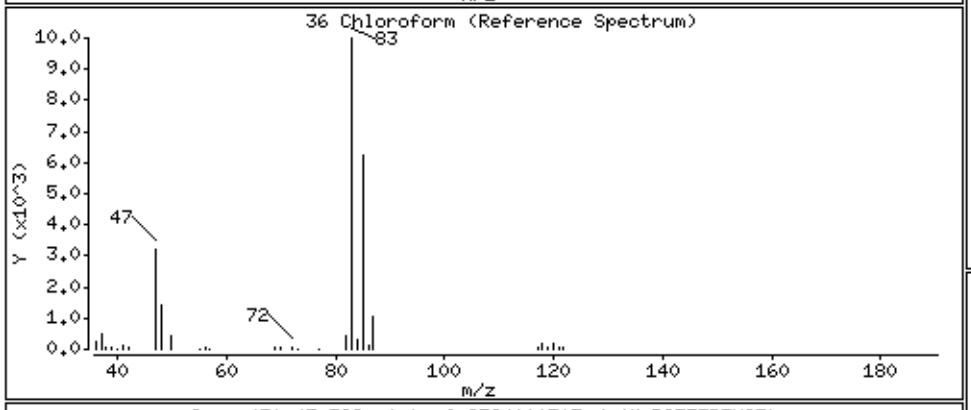
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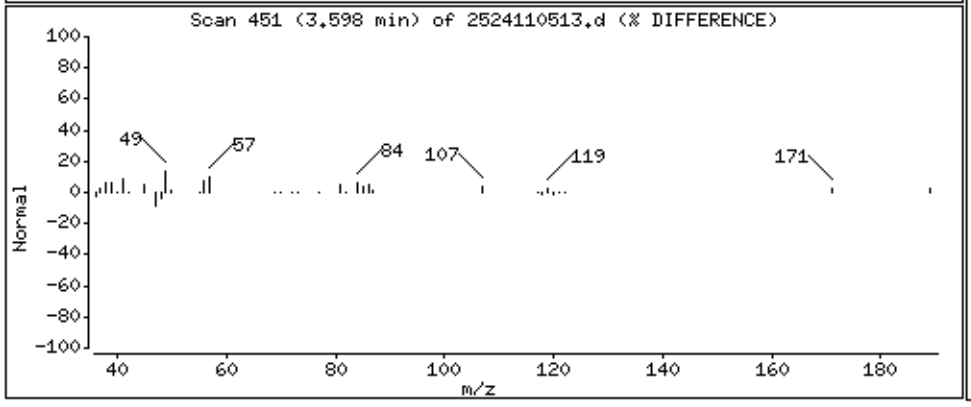
36 Chloroform

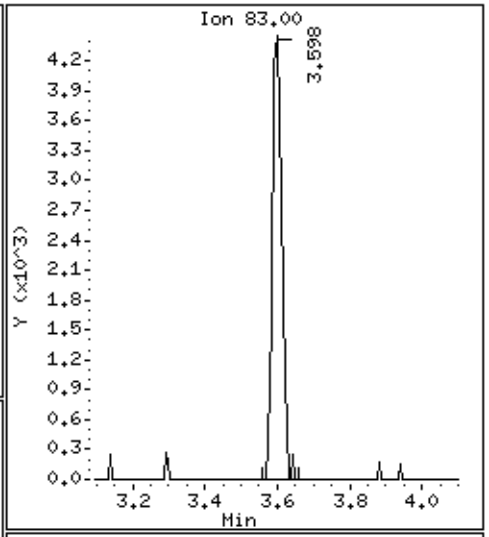
Concentration: 0.495773 ug/L

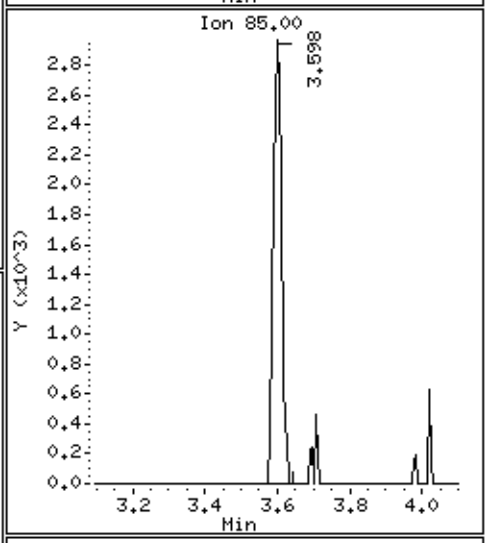


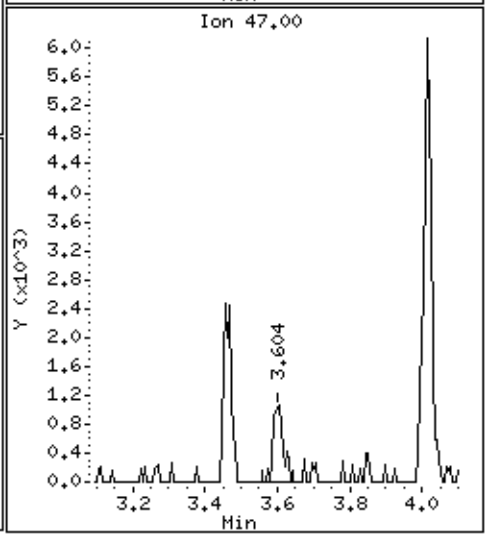












Data File: \\almdtws014\targetdata\chem2\ms25.i\25_2024\25241105.b\2524110513.d

Date : 05-NOV-2024 14:29

Client ID: MW13-4D

Instrument: ms25.i

Sample Info: 3385043008;;1;;;;;

Purge Volume: 5.0

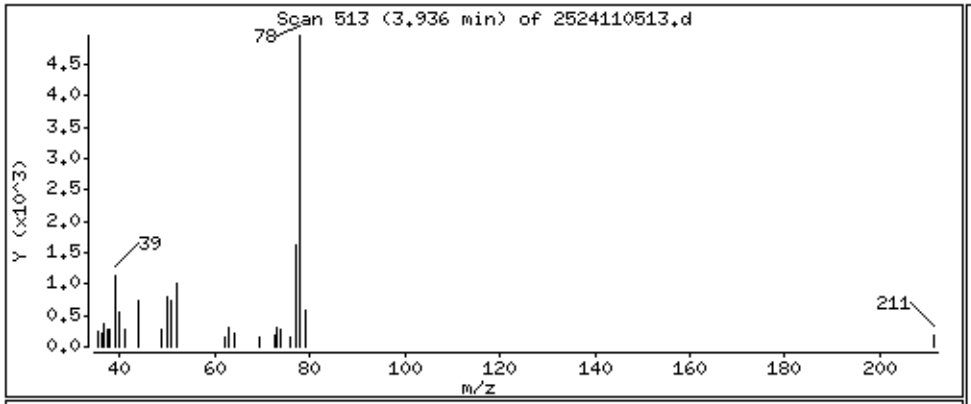
Operator: ILY

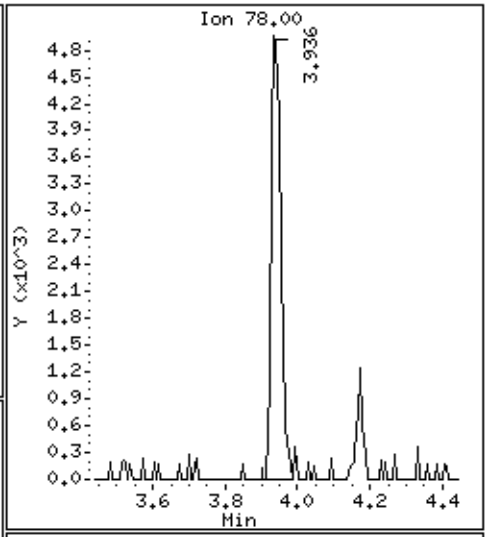
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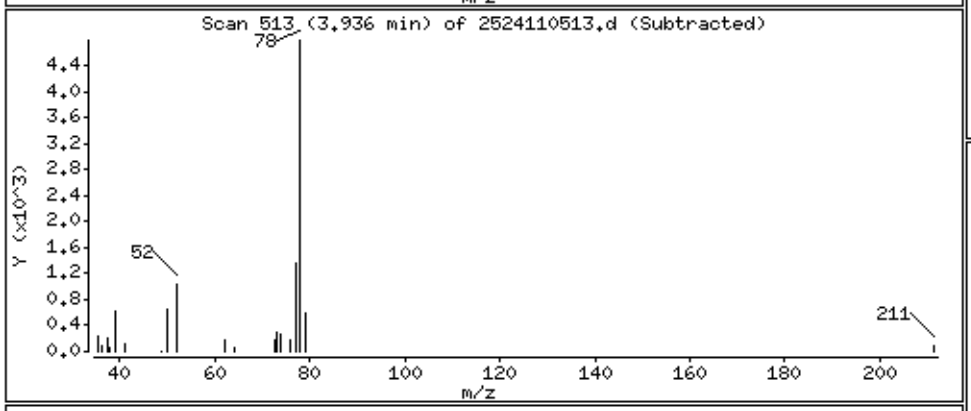
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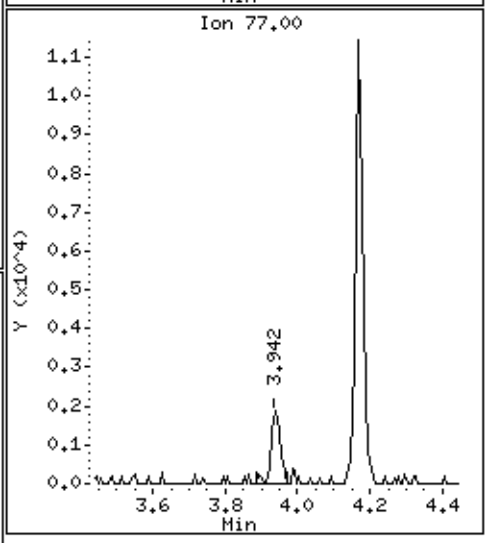
47 Benzene

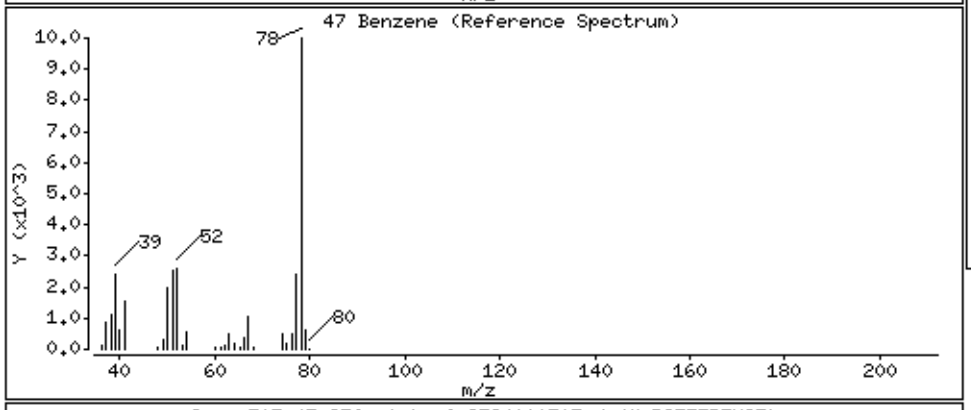
Concentration: 0.264003 ug/L

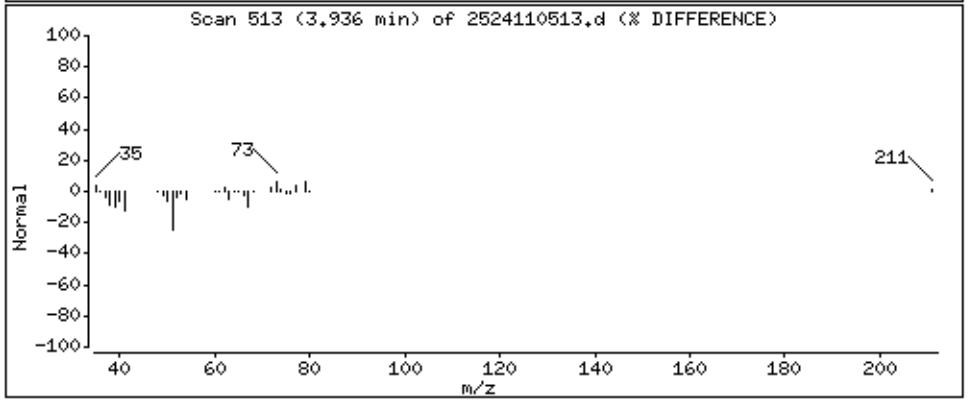












Data File : \\almdtws014\targetdata\chem2\ms25.i\25_2024\25241105.b\2524110513.d
Inj Date : 05-NOV-2024 14:29
InstruID : ms25.i
LabSampID : 3385043008

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 01/23/2025 07:37
Client ID: MW13-4D
DataFile: //almdtws014/targetdata/chem2/ms25.i/25_2024/25241105.b/252411051
Inj Date: 05-NOV-2024 14:29
Operator: ILY

Bromomethane
1-Chlorobutane
3-Chloro-1-propene
trans-1,3-Dichloropropene
Heptane
2-Nitropropane
Trichloroethene
Chloroethane
Chloromethane
1,2-Dichloroethane
Ethyl methacrylate
Methacrylonitrile
Pentane

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110514.D
Lab Smp Id: 3385043009 Client Smp ID: MW13-5D
Inj Date : 05-NOV-2024 14:50
Operator : ILY Inst ID: ms25.i
Smp Info : 3385043009;;1;;;;;
Misc Info : ZZ VOMS 75367 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\25-8260b09D.m
Meth Date : 05-Nov-2024 10:11 ily Quant Type: ISTD
Cal Date : 04-NOV-2024 14:15 Cal File: 2524110404.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	1.704	1.704	(0.409)	11404	1.03901	1.03901(Q)	
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	Compound Not Detected.						
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	2.757	2.752	(0.662)	2922	3.42275	3.42275(aQ)	
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	2.828	2.828	(0.679)	2906	0.32185	0.321855(a)	
21 Hexane	57	Compound Not Detected.						
22 Methyl t-Butyl Ether	73	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	3.461	3.461	(0.831)	132982	13.5843	13.5843	
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61				135888	13.9062	13.9062	
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	3.598	3.597	(0.864)	6008	0.42672	0.426722(a)	
	37 Ethyl acetate	43	Compound Not Detected.						
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.701	3.701	(0.889)	259479	29.9470	29.9470	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	Compound Not Detected.						
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.012	4.012	(0.963)	298545	30.5441	30.5441	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.165	4.165	(1.000)	986985	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	Compound Not Detected.						
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.114	5.114	(0.829)	1003705	30.6274	30.6274	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						
	76 Ethyl methacrylate	69	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)		REVIEW CODE
77	1,1,2-Trichloroethane	83	Compound Not Detected.							
78	Chlorodibromomethane	129	Compound Not Detected.							
79	1,3-Dichloropropane	76	Compound Not Detected.							
80	1,2-Dibromoethane	107	Compound Not Detected.							
81	2-Hexanone	43	Compound Not Detected.							
82	1-Chlorohexane	91	Compound Not Detected.							
* 83	Chlorobenzene-d5	82	6.168	6.167	(1.000)	396645	30.0000			
85	Ethylbenzene	106	Compound Not Detected.							
84	Chlorobenzene	112	Compound Not Detected.							
86	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.							
87	mp-Xylene	106	Compound Not Detected.							
M 120	1,3-Dichloropropene, Total	75	Compound Not Detected.							
88	o-Xylene	106	Compound Not Detected.							
89	Styrene	104	Compound Not Detected.							
90	Bromoform	173	Compound Not Detected.							
91	Isopropylbenzene	105	Compound Not Detected.							
$ 92	4-Bromofluorobenzene	174	7.062	7.062	(0.889)	277073	30.7386	30.7386		
M 121	TOTAL XYLENES	106	Compound Not Detected.							
94	n-Propylbenzene	120	Compound Not Detected.							
93	Bromobenzene	156	Compound Not Detected.							
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.							
97	1,3,5-Trimethylbenzene	105	Compound Not Detected.							
96	o-Chlorotoluene	91	Compound Not Detected.							
98	1,2,3-Trichloropropane	110	Compound Not Detected.							
99	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.							
101	p-Chlorotoluene	91	Compound Not Detected.							
102	tert-Butylbenzene	134	Compound Not Detected.							
103	Pentachloroethane	117	Compound Not Detected.							
104	1,2,4-Trimethylbenzene	105	Compound Not Detected.							
105	sec-Butylbenzene	105	Compound Not Detected.							
106	p-Isopropyltoluene	134	Compound Not Detected.							
107	1,3-Dichlorobenzene	146	Compound Not Detected.							
* 108	1,4-Dichlorobenzene-d4	152	7.946	7.946	(1.000)	342571	30.0000		(Q)	
109	1,4-Dichlorobenzene	146	Compound Not Detected.							
111	n-Butylbenzene	134	Compound Not Detected.							
110	Benzyl Chloride	126	Compound Not Detected.							
112	Hexachloroethane	117	Compound Not Detected.							
113	1,2-Dichlorobenzene	146	Compound Not Detected.							
114	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.							
115	Nitrobenzene	77	Compound Not Detected.							
116	Hexachlorobutadiene	225	Compound Not Detected.							
117	1,2,4-Trichlorobenzene	180	Compound Not Detected.							
118	Naphthalene	128	Compound Not Detected.							
119	1,2,3-Trichlorobenzene	180	Compound Not Detected.							

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110514.D

Page 1

Date : 05-NOV-2024 14:50

Client ID: MW13-5D

Instrument: ms25.i

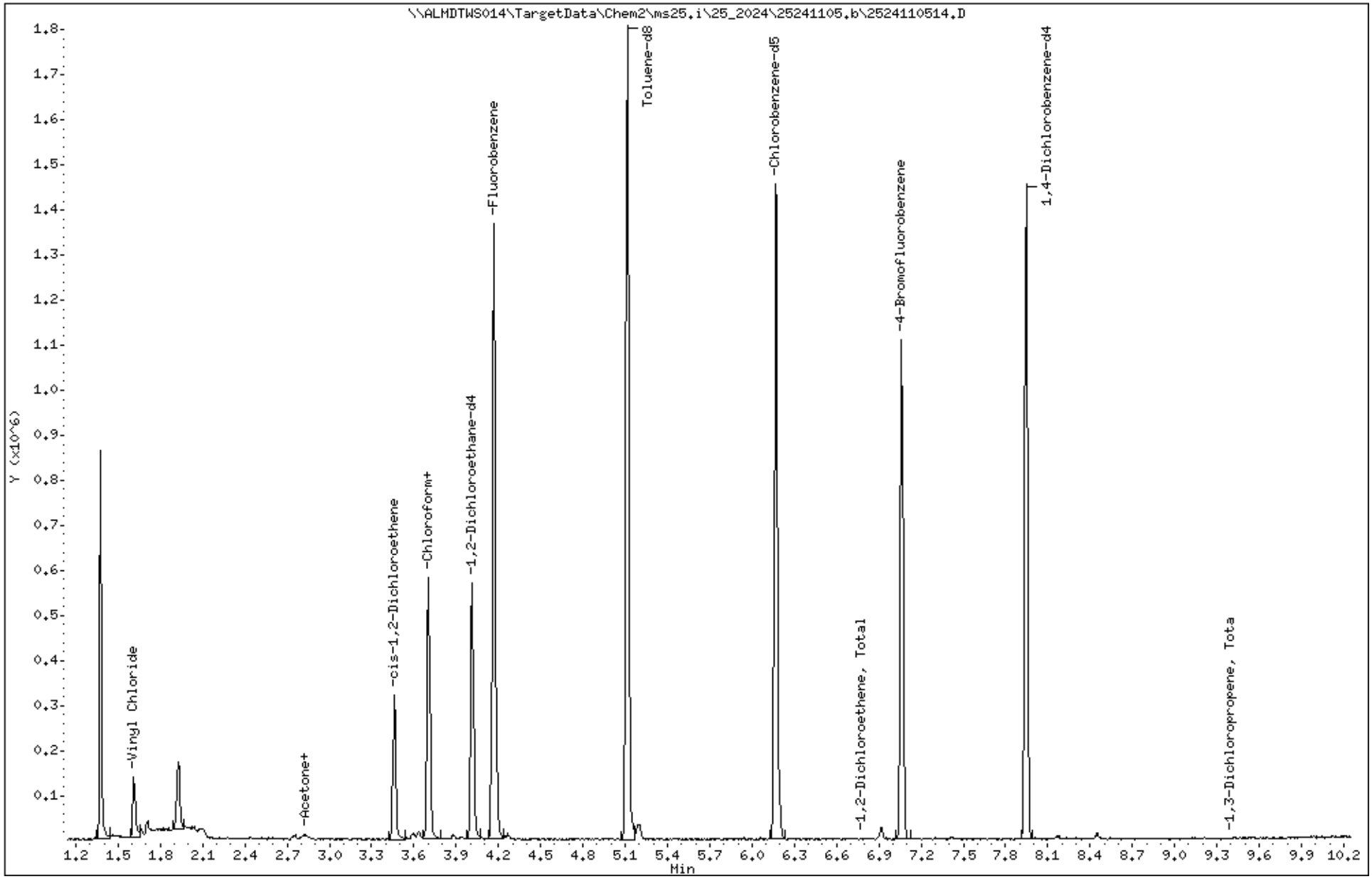
Sample Info: 3385043009;;1;;;;;

Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25



Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110514.D

Date : 05-NOV-2024 14:50

Client ID: MW13-5D

Instrument: ms25.i

Sample Info: 3385043009;;1;;;;;

Purge Volume: 5.0

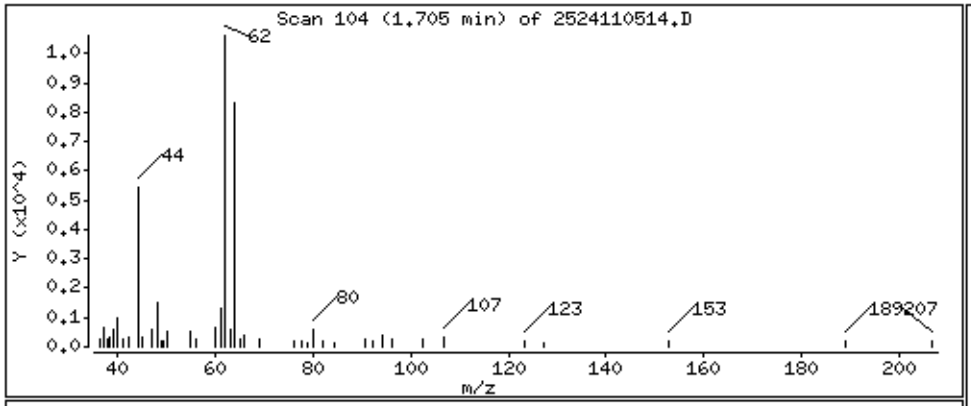
Operator: ILY

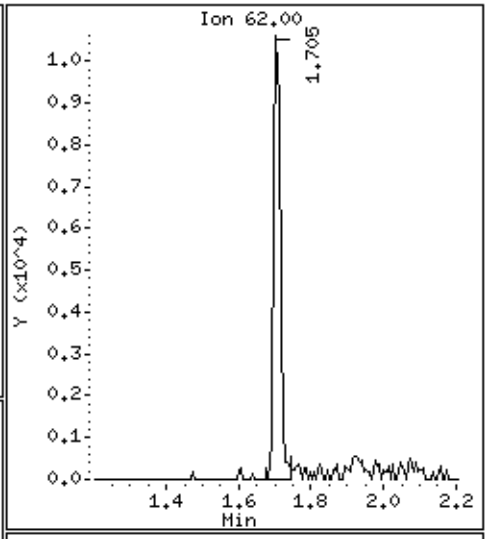
Column phase: DB-VRX

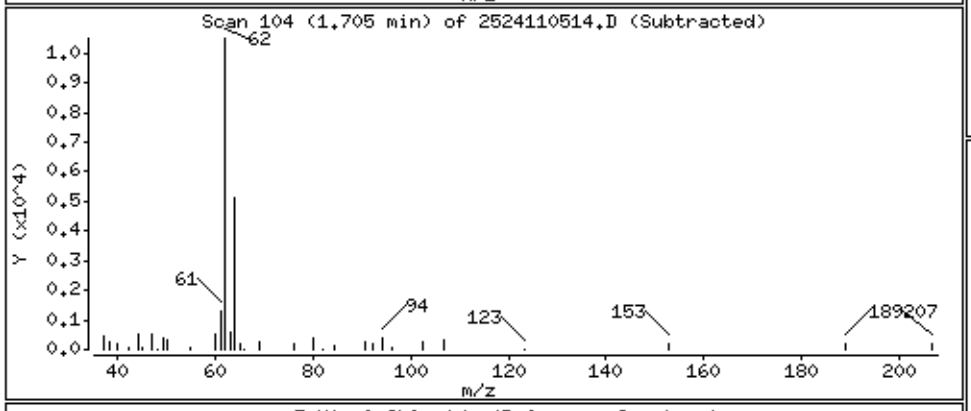
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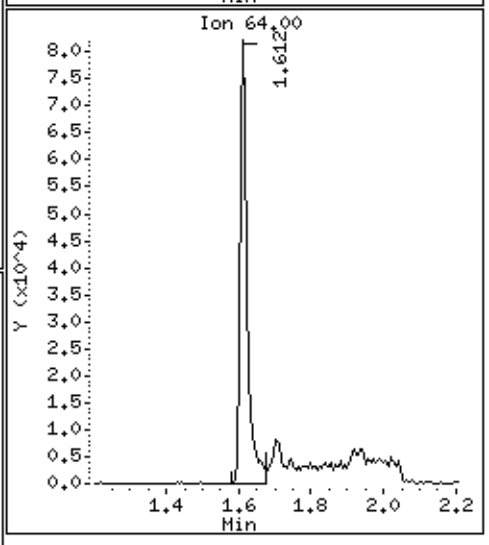
3 Vinyl Chloride

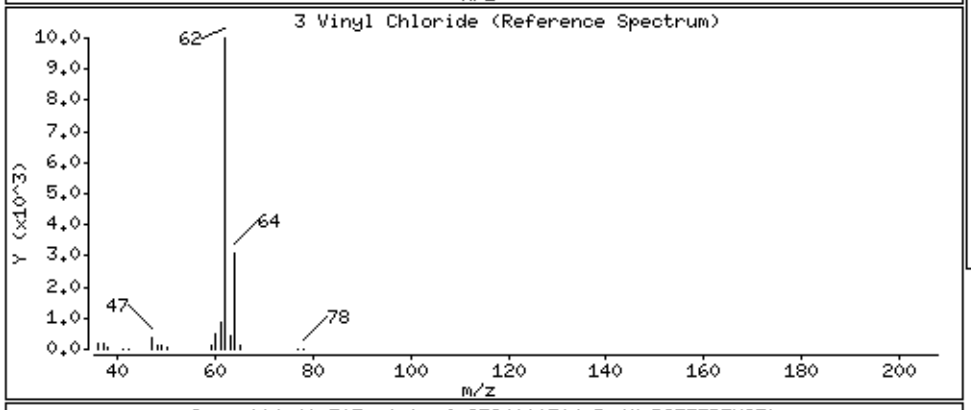
Concentration: 1.03901 ug/L

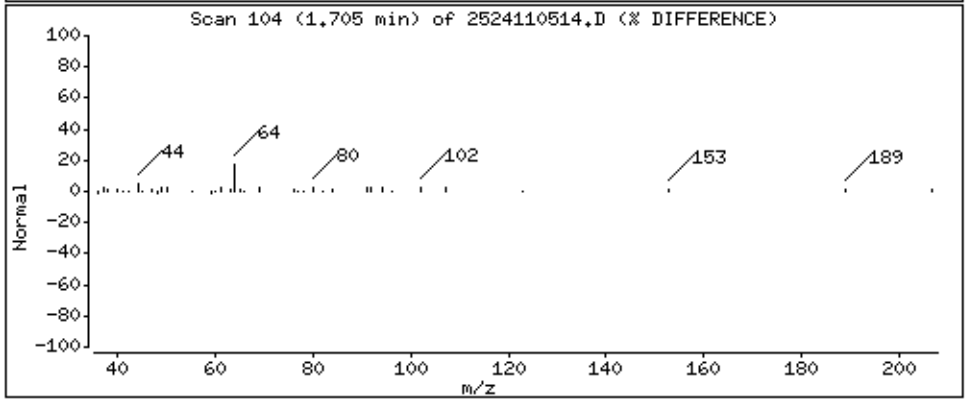












Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110514.D

Date : 05-NOV-2024 14:50

Client ID: MW13-5D

Instrument: ms25.i

Sample Info: 3385043009;;1;;;;;

Purge Volume: 5.0

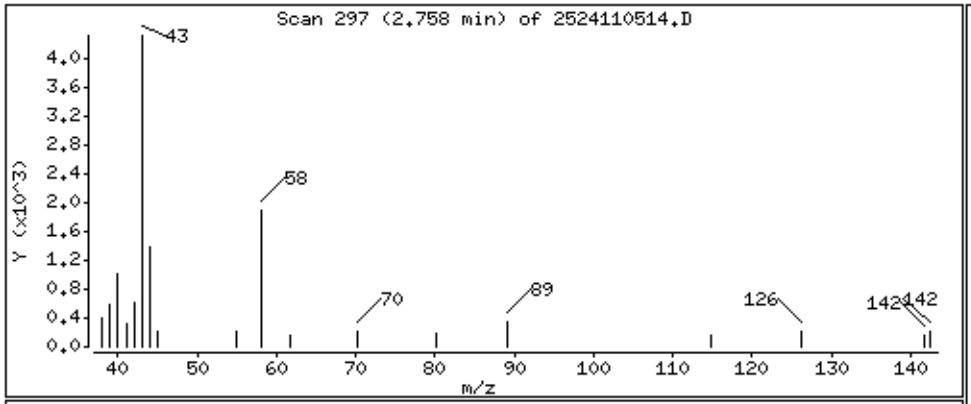
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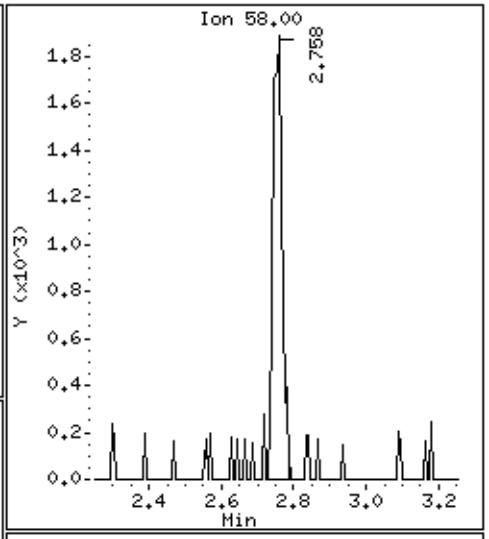
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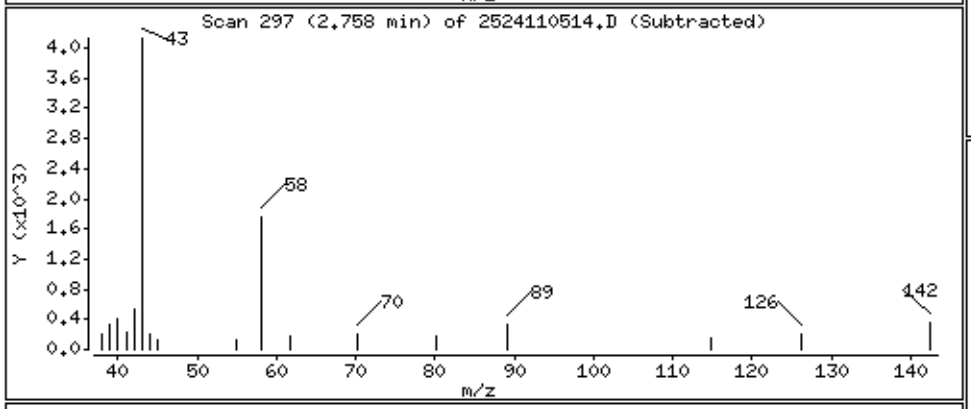
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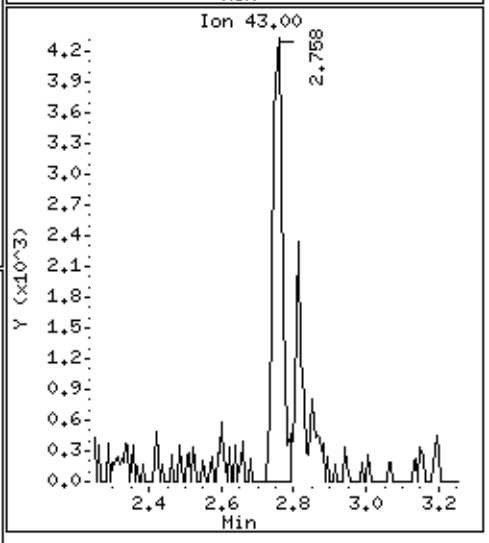
18 Acetone

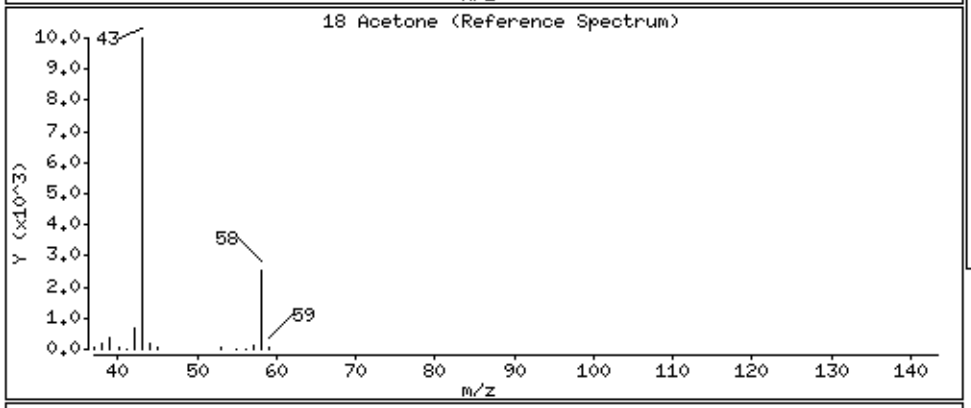
Concentration: 3.42275 ug/L

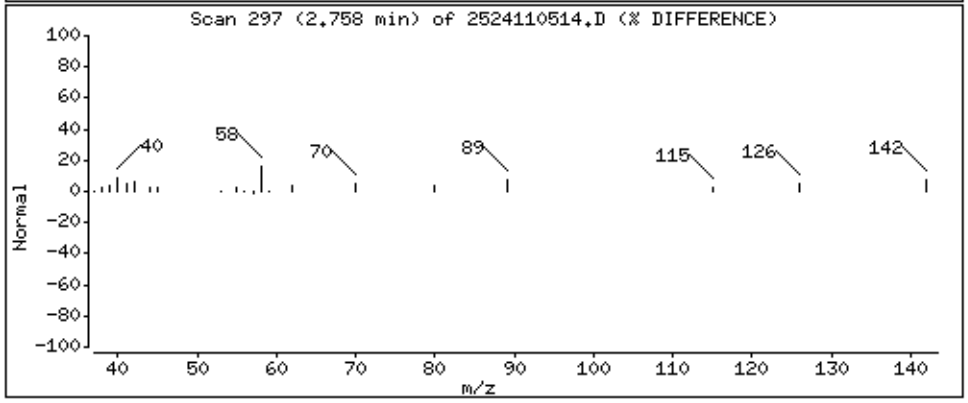












Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110514.D

Date : 05-NOV-2024 14:50

Client ID: MW13-5D

Instrument: ms25.i

Sample Info: 3385043009;;1;;;;;

Purge Volume: 5.0

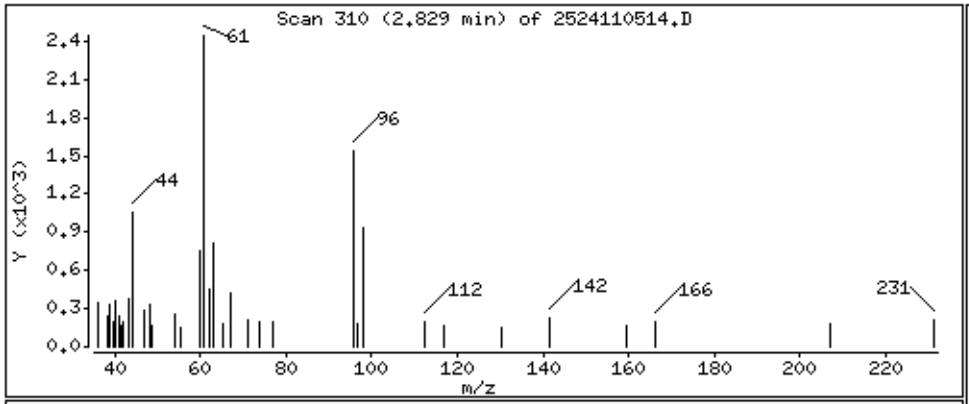
Operator: ILY

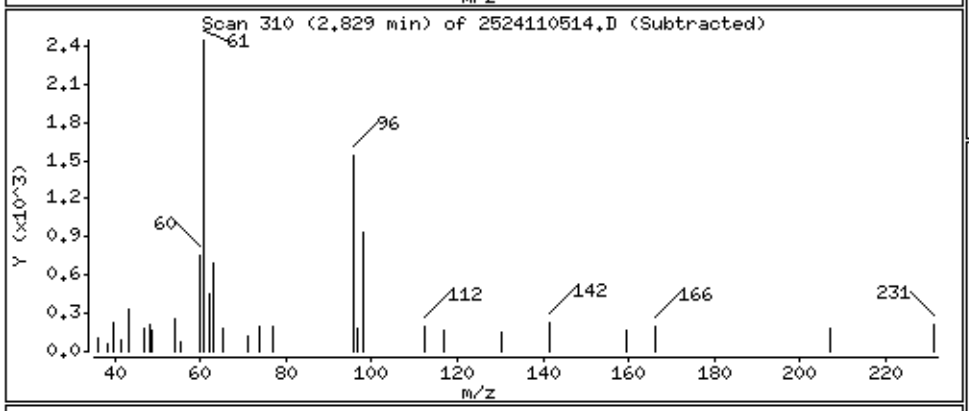
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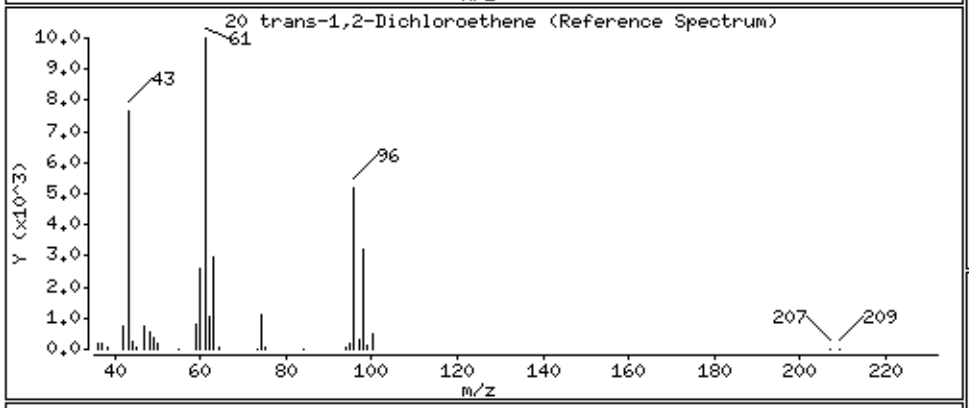
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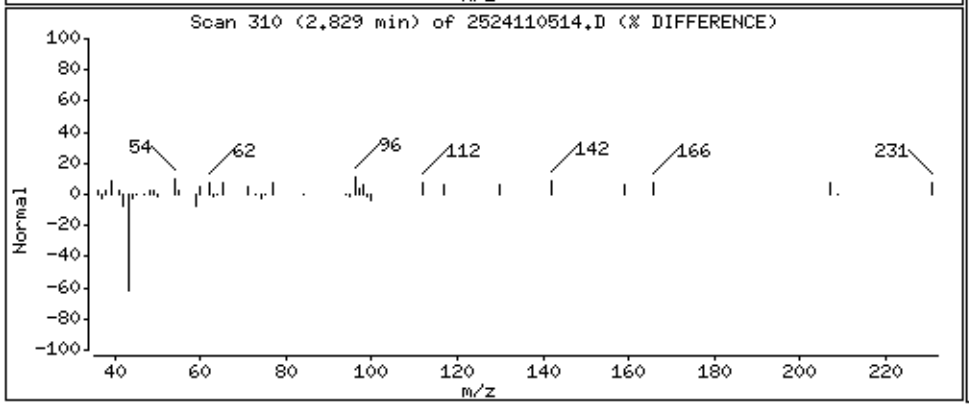
20 trans-1,2-Dichloroethene

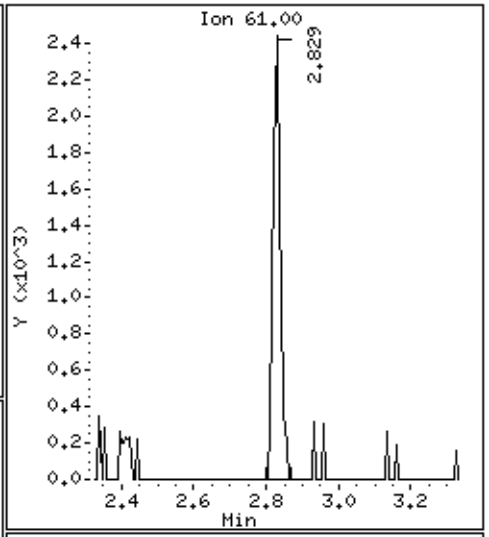
Concentration: 0.321855 ug/L

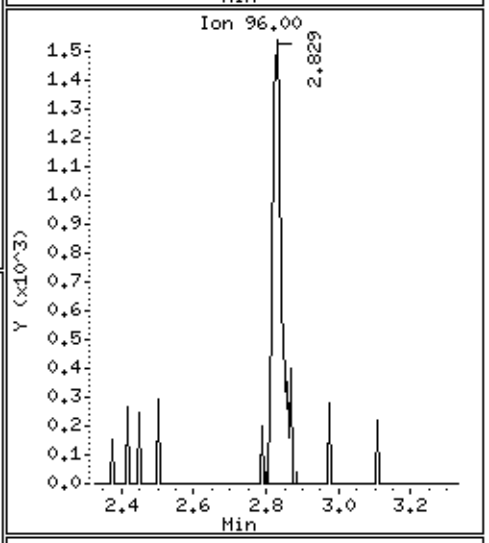


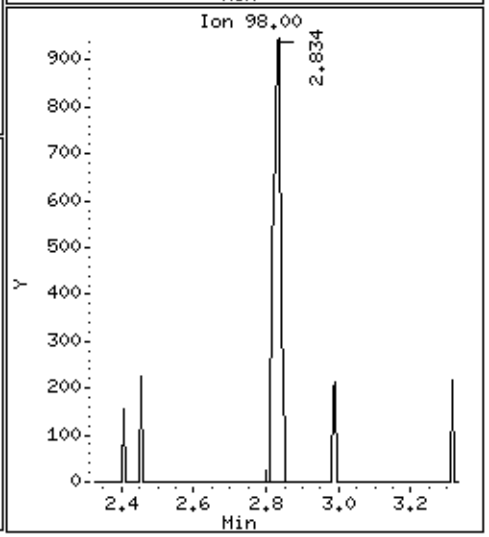












Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110514.D

Date : 05-NOV-2024 14:50

Client ID: MW13-5D

Instrument: ms25.i

Sample Info: 3385043009;;1;;;;;

Purge Volume: 5.0

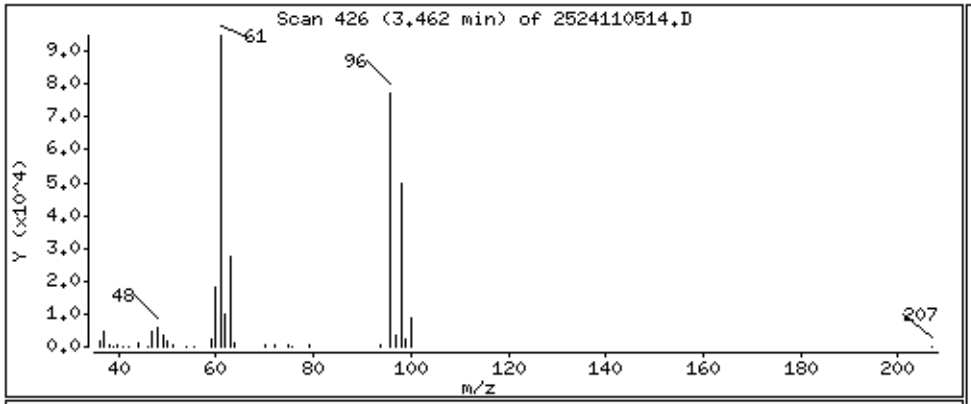
Operator: ILY

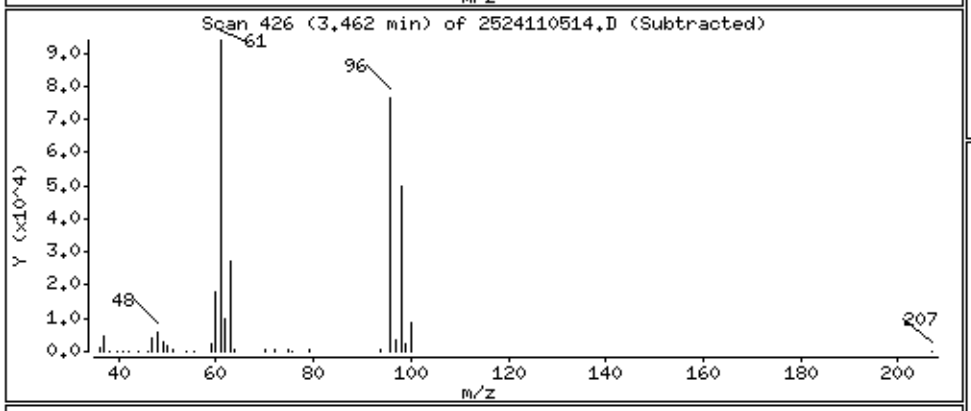
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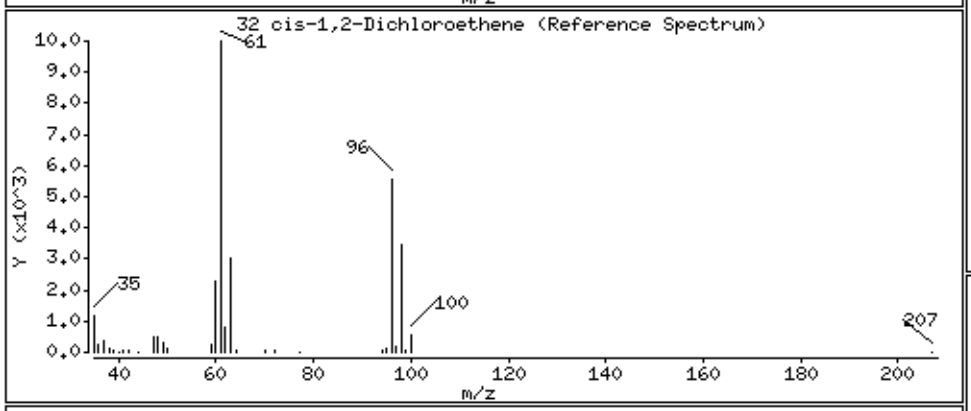
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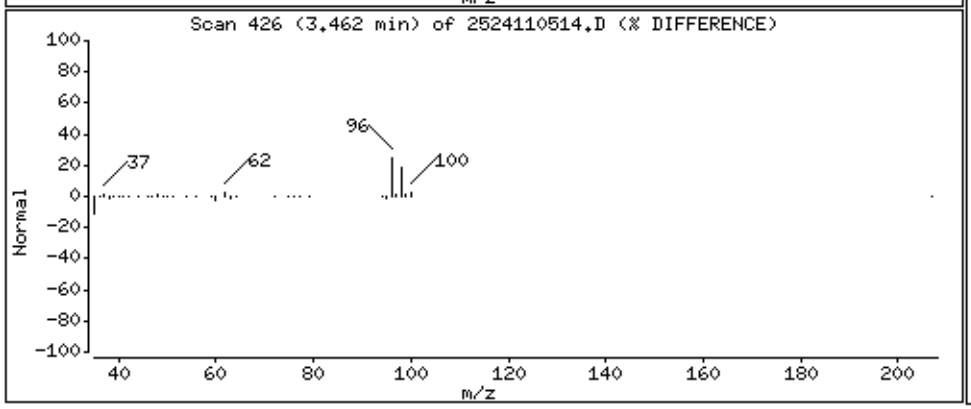
32 cis-1,2-Dichloroethene

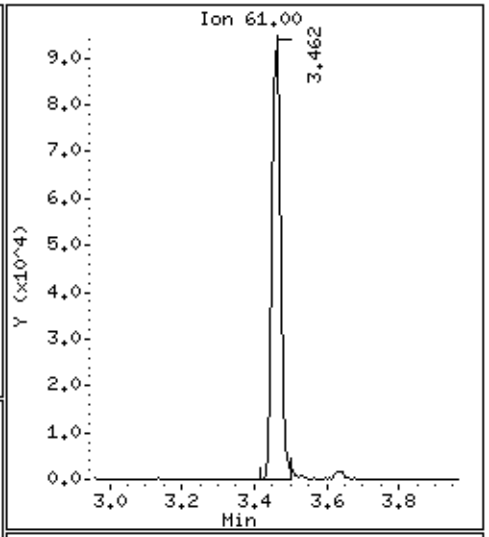
Concentration: 13.5843 ug/L

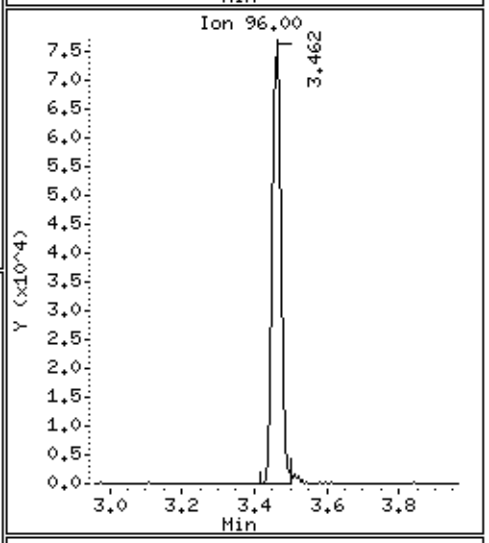


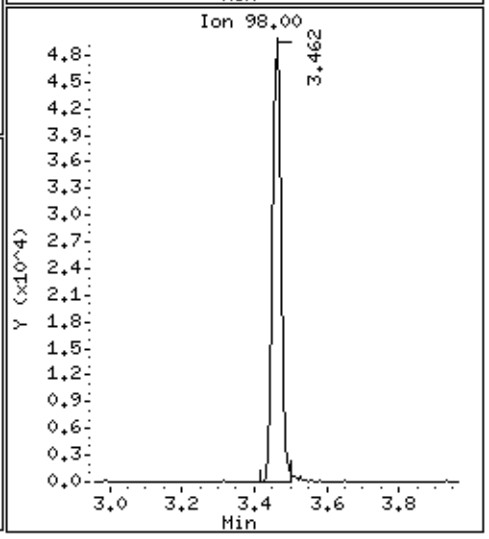












Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110514.D

Date : 05-NOV-2024 14:50

Client ID: MW13-5D

Instrument: ms25.i

Sample Info: 3385043009;;1;;;;;

Purge Volume: 5.0

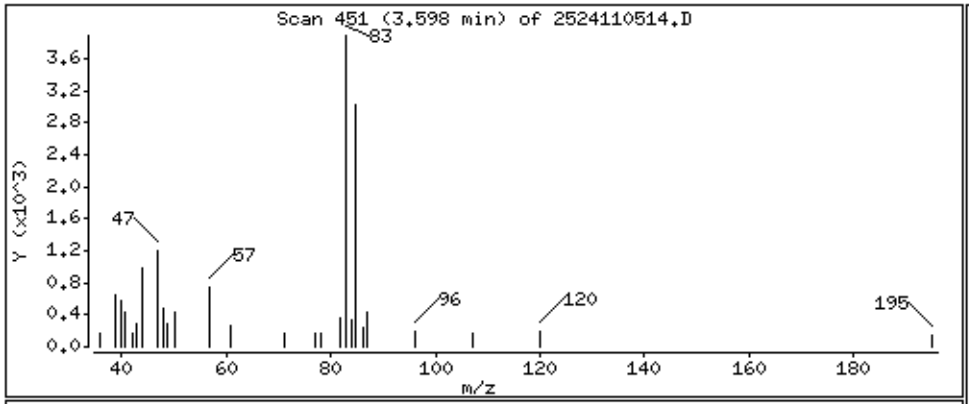
Operator: ILY

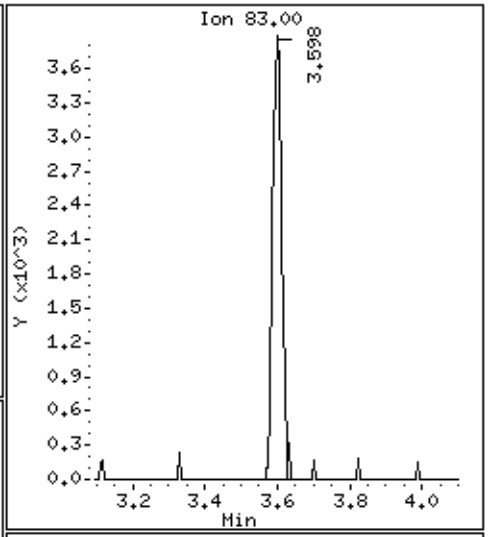
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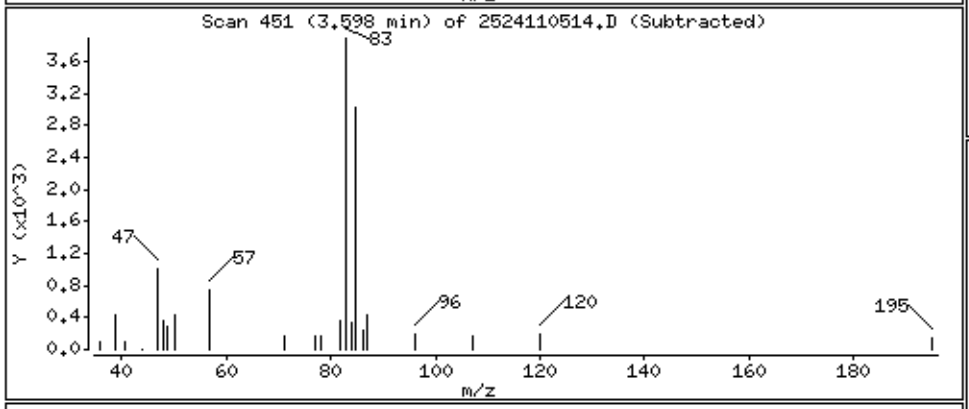
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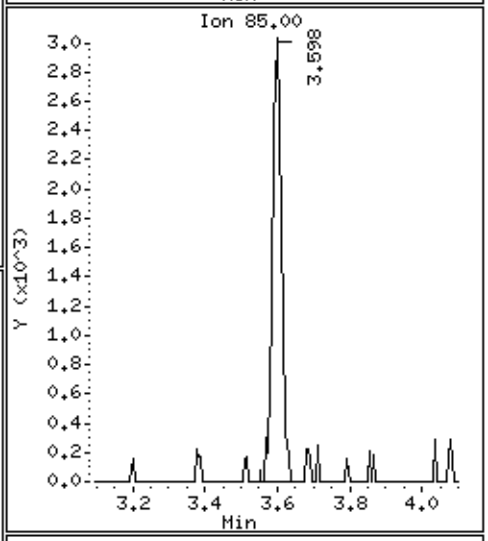
36 Chloroform

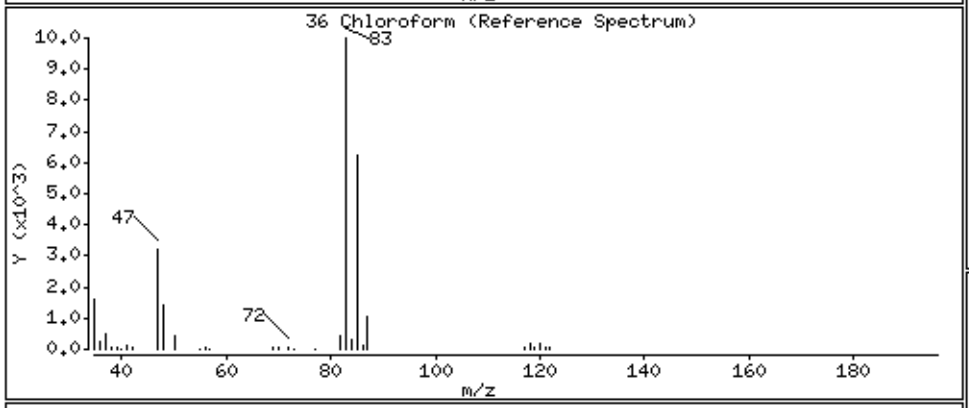
Concentration: 0.426722 ug/L

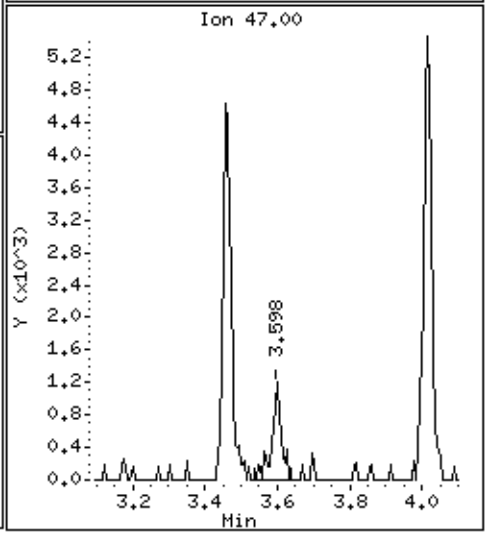


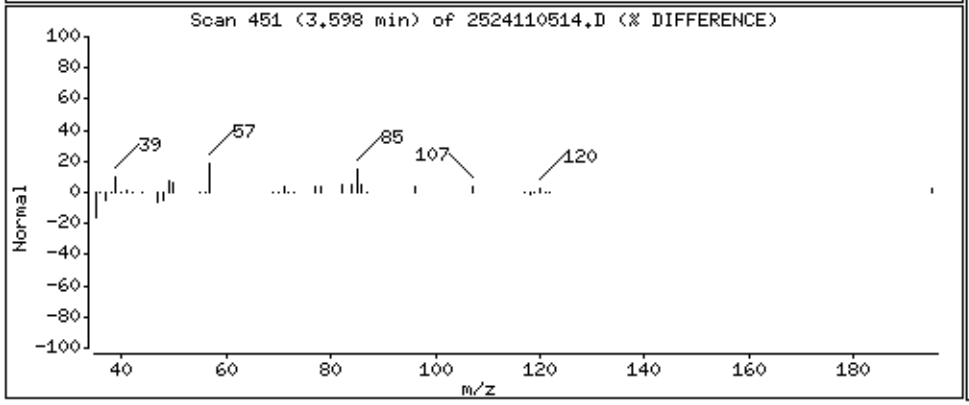












Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110514.D
Inj Date : 05-NOV-2024 14:50
InstruID : ms25.i
LabSampID : 3385043009

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 11/06/2024 14:31
Client ID: MW13-5D
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241105.b/252411051
Inj Date: 05-NOV-2024 14:50
Operator: ILY

Analytes listed below were unassigned due to not meeting one or more of the following qualitative criteria (retention time, mass spectral match, extracted ion ratios)
Rationale other than qualitative criteria are noted on the quantitation report.:

Chloroethane	1-Chlorobutane
1-Chlorohexane	Chloromethane
1,2-Dichloroethane	1,1-Dichloroethene
trans-1,3-Dichloropropene	Ethyl methacrylate
Heptane	Methacrylonitrile
2-Nitropropane	Pentane
1,1,1-Trichloroethane	Trichloroethene

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110515.D
Lab Smp Id: 3385043010 Client Smp ID: PW13-1
Inj Date : 05-NOV-2024 15:10
Operator : ILY Inst ID: ms25.i
Smp Info : 3385043010;;1;;;;;
Misc Info : ZZ VOMS 75367 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\25-8260b09D.m
Meth Date : 05-Nov-2024 10:11 ily Quant Type: ISTD
Cal Date : 04-NOV-2024 14:15 Cal File: 2524110404.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	Compound Not Detected.						
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	Compound Not Detected.						
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	Compound Not Detected.						
21 Hexane	57	Compound Not Detected.						
22 Methyl t-Butyl Ether	73	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	3.461	3.461	(0.831)	10742	1.09111	1.09111	
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61				10742	1.09111	1.09111(a)	
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	3.603	3.597	(0.865)	5638	0.39818	0.398179(a)	
	37 Ethyl acetate	43	3.636	3.636	(0.873)	11195	1.54528	1.54528(a)	
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.701	3.701	(0.889)	265556	30.4751	30.4751	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	Compound Not Detected.						
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.012	4.012	(0.963)	309050	31.4401	31.4401	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.165	4.165	(1.000)	992596	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	Compound Not Detected.						
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.114	5.114	(0.829)	1018722	31.1808	31.1808	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						
	76 Ethyl methacrylate	69	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
77	1,1,2-Trichloroethane	83	Compound Not Detected.						
78	Chlorodibromomethane	129	Compound Not Detected.						
79	1,3-Dichloropropane	76	Compound Not Detected.						
80	1,2-Dibromoethane	107	Compound Not Detected.						
81	2-Hexanone	43	Compound Not Detected.						
82	1-Chlorohexane	91	Compound Not Detected.						
* 83	Chlorobenzene-d5	82	6.167	6.167	(1.000)	395435	30.0000		
85	Ethylbenzene	106	Compound Not Detected.						
84	Chlorobenzene	112	Compound Not Detected.						
86	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
87	mp-Xylene	106	Compound Not Detected.						
M 120	1,3-Dichloropropene, Total	75	Compound Not Detected.						
88	o-Xylene	106	Compound Not Detected.						
89	Styrene	104	Compound Not Detected.						
90	Bromoform	173	Compound Not Detected.						
91	Isopropylbenzene	105	Compound Not Detected.						
$ 92	4-Bromofluorobenzene	174	7.062	7.062	(0.889)	268654	29.9369	29.9369	
M 121	TOTAL XYLENES	106	Compound Not Detected.						
94	n-Propylbenzene	120	Compound Not Detected.						
93	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
97	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
96	o-Chlorotoluene	91	Compound Not Detected.						
98	1,2,3-Trichloropropane	110	Compound Not Detected.						
99	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
101	p-Chlorotoluene	91	Compound Not Detected.						
102	tert-Butylbenzene	134	Compound Not Detected.						
103	Pentachloroethane	117	Compound Not Detected.						
104	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
105	sec-Butylbenzene	105	Compound Not Detected.						
106	p-Isopropyltoluene	134	Compound Not Detected.						
107	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 108	1,4-Dichlorobenzene-d4	152	7.946	7.946	(1.000)	341057	30.0000		
109	1,4-Dichlorobenzene	146	Compound Not Detected.						
111	n-Butylbenzene	134	Compound Not Detected.						
110	Benzyl Chloride	126	Compound Not Detected.						
112	Hexachloroethane	117	Compound Not Detected.						
113	1,2-Dichlorobenzene	146	Compound Not Detected.						
114	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
115	Nitrobenzene	77	Compound Not Detected.						
116	Hexachlorobutadiene	225	Compound Not Detected.						
117	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
118	Naphthalene	128	Compound Not Detected.						
119	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110515.D

Date : 05-NOV-2024 15:10

Client ID: PW13-1

Instrument: ms25.i

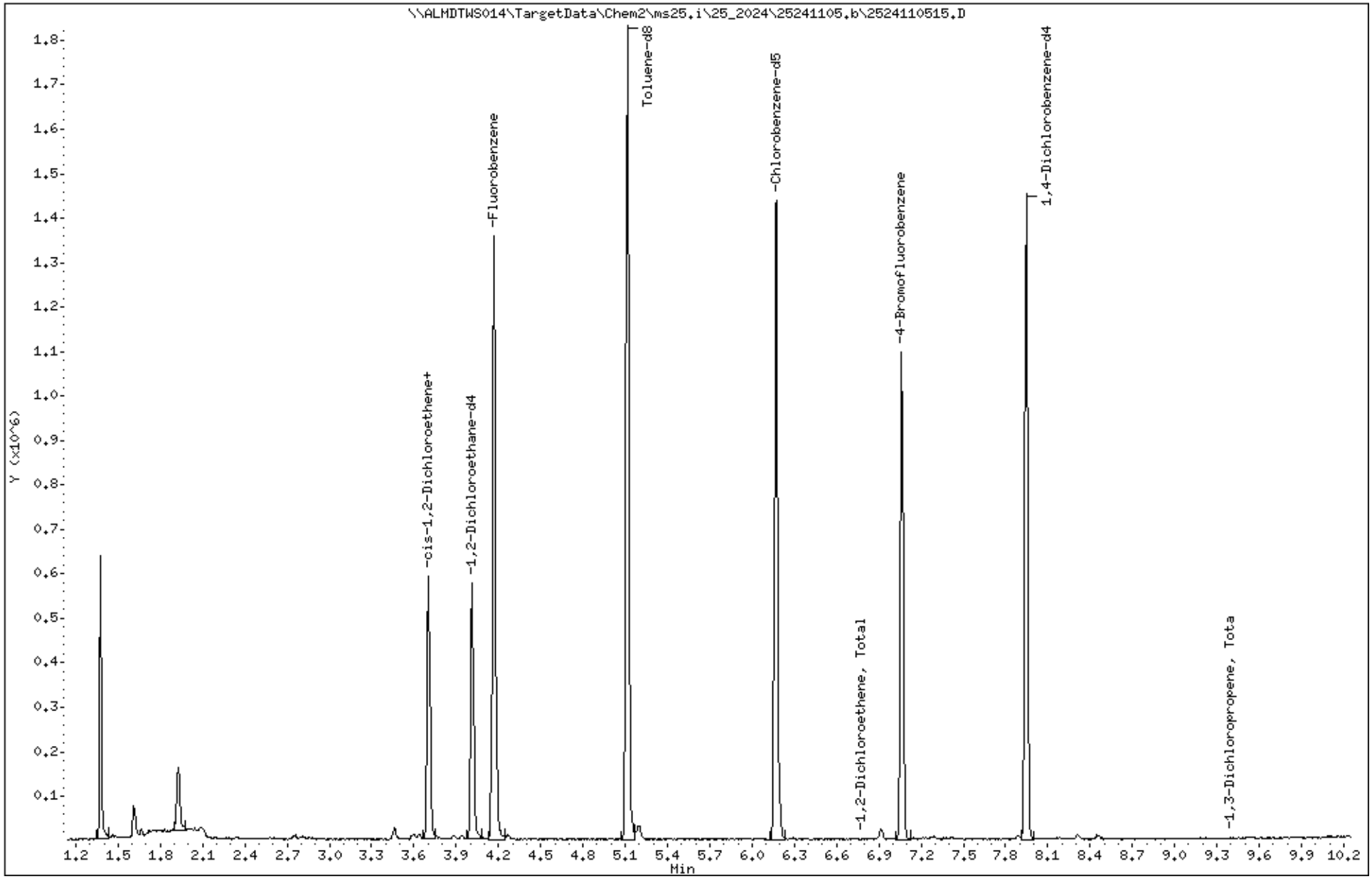
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Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25



Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110515.D

Date : 05-NOV-2024 15:10

Client ID: PW13-1

Instrument: ms25.i

Sample Info: 3385043010;;1;;;;;

Purge Volume: 5.0

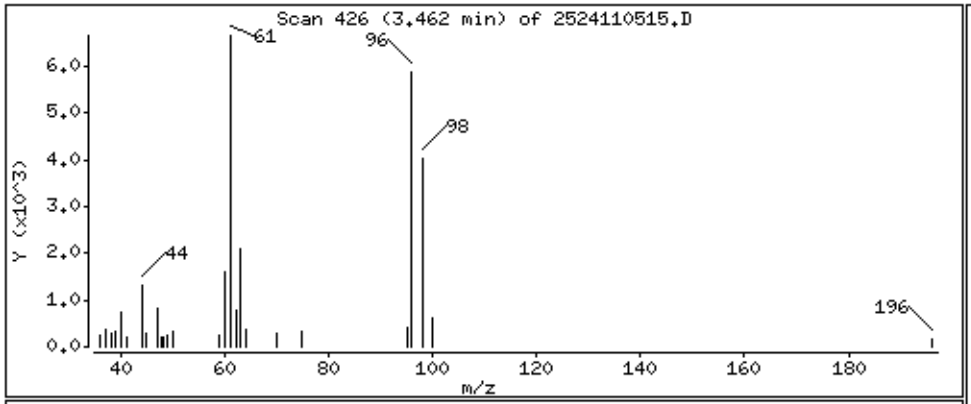
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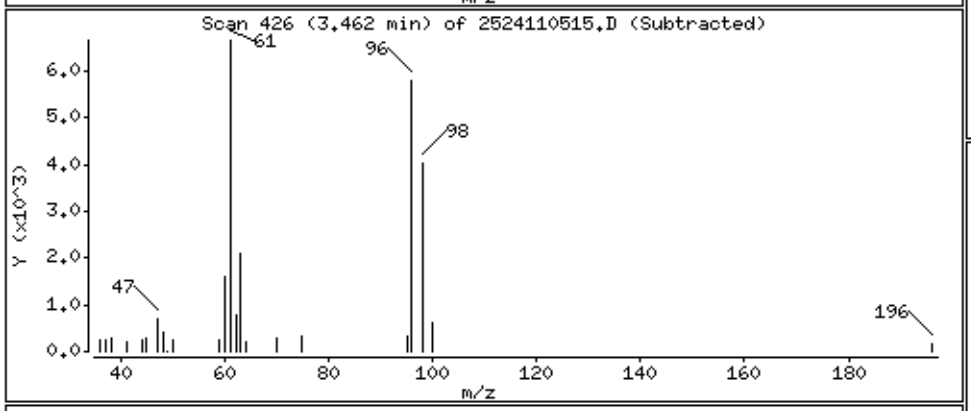
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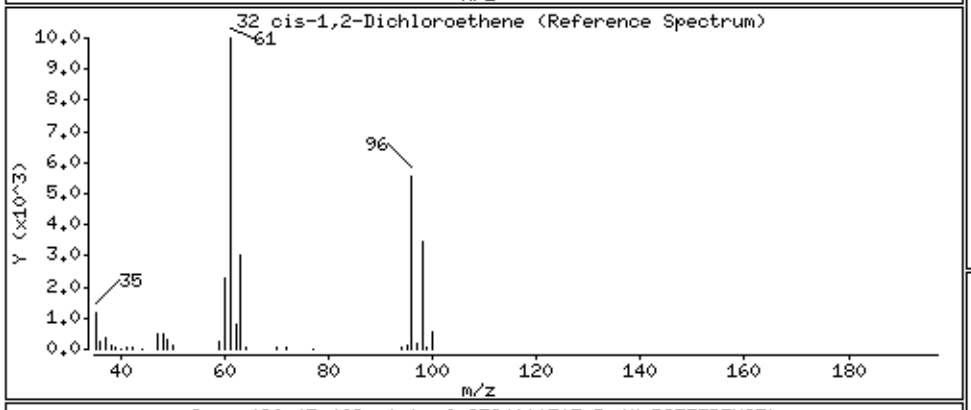
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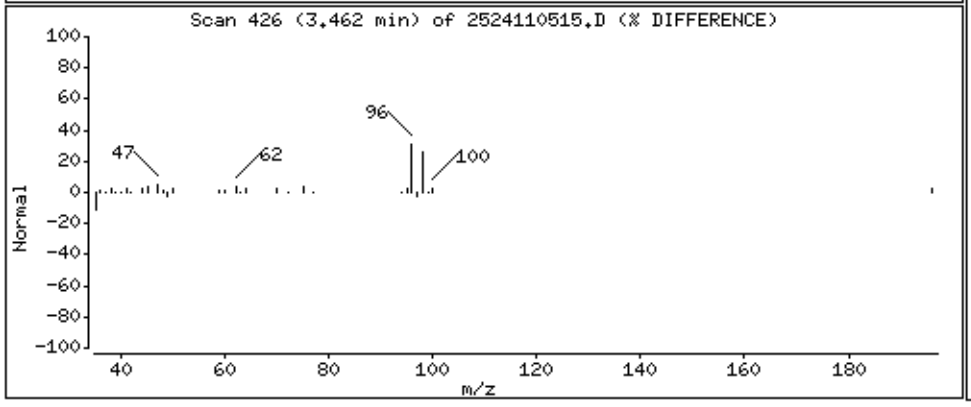
32 cis-1,2-Dichloroethene

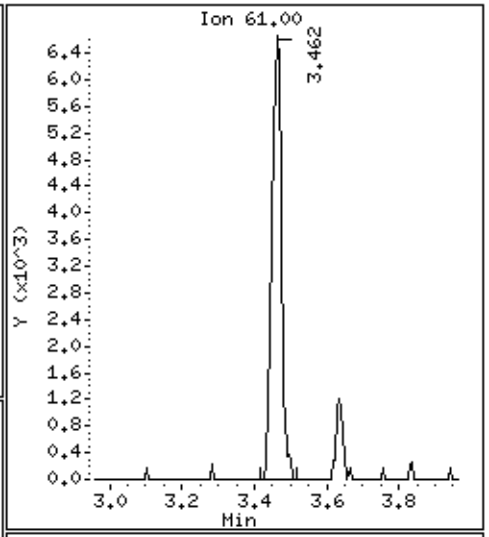
Concentration: 1.09111 ug/L

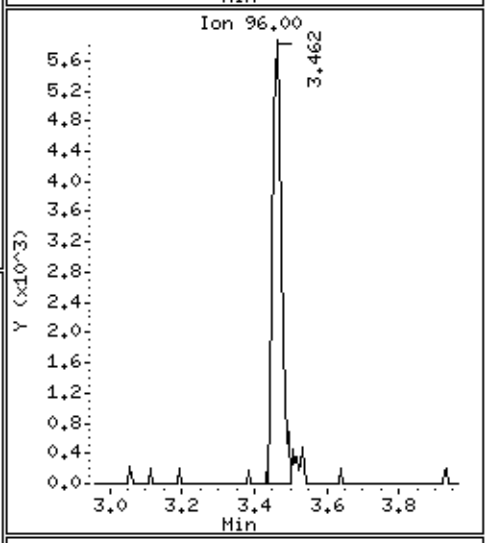


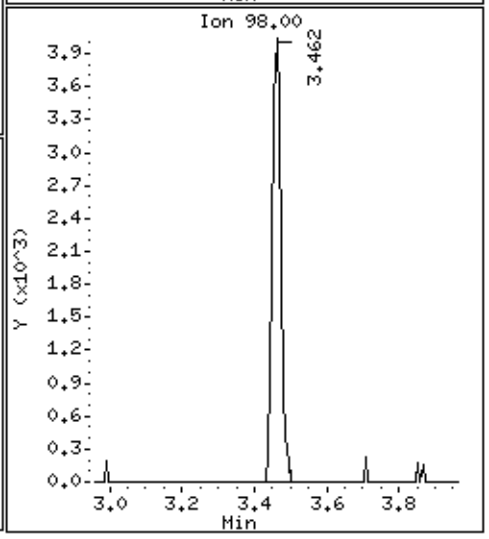












Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110515.D

Date : 05-NOV-2024 15:10

Client ID: PW13-1

Instrument: ms25.i

Sample Info: 3385043010;;1;;;;;

Purge Volume: 5.0

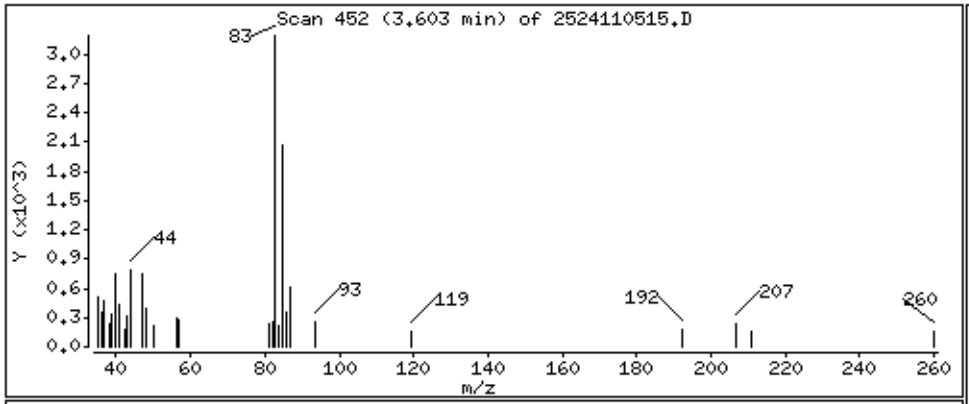
Operator: ILY

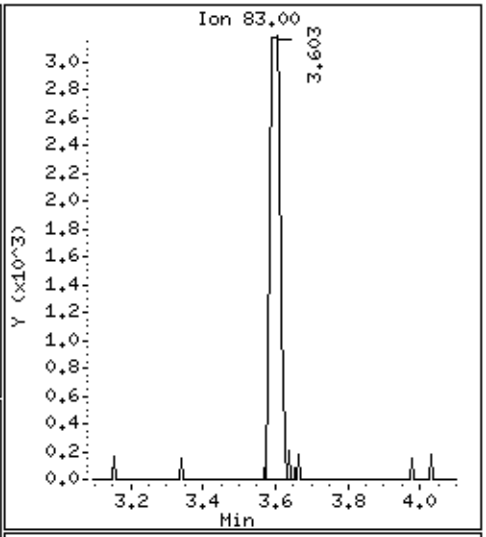
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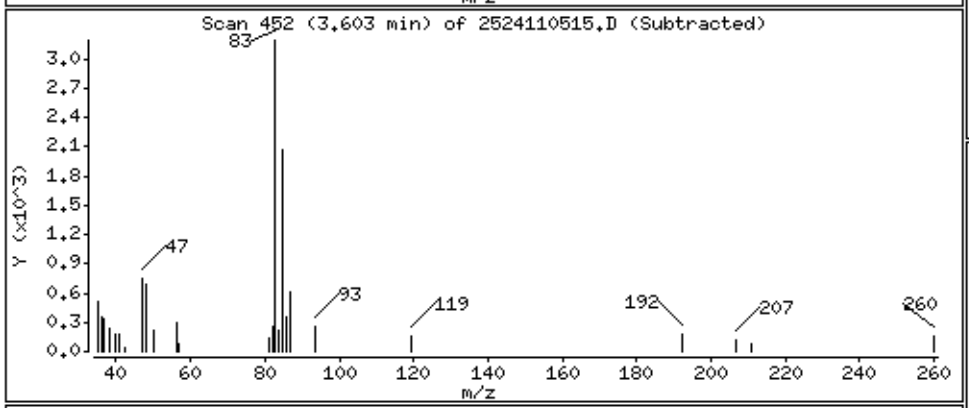
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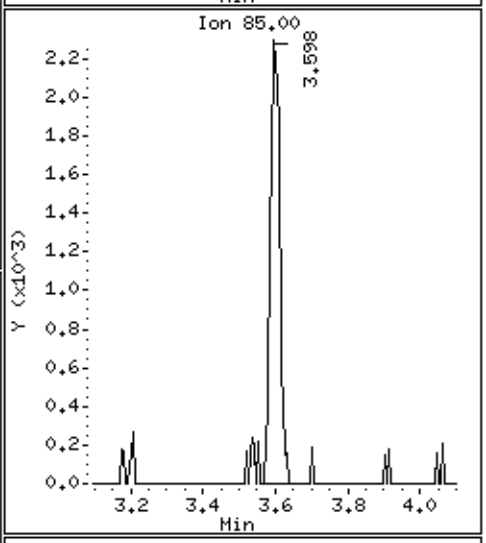
36 Chloroform

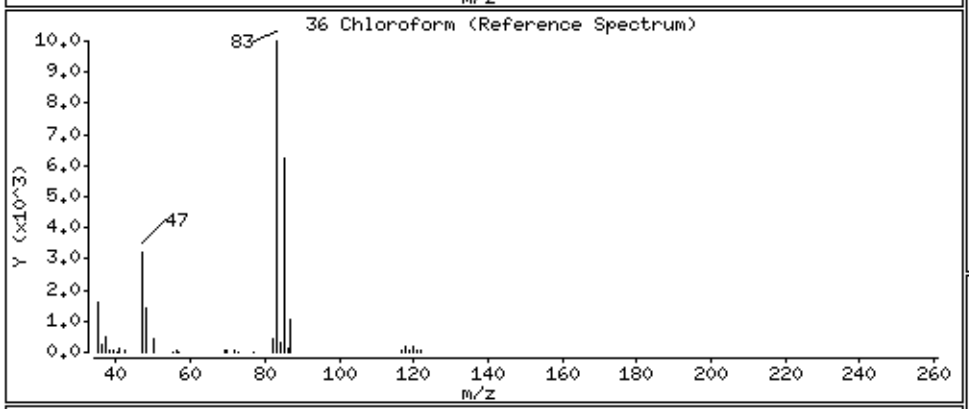
Concentration: 0.398179 ug/L

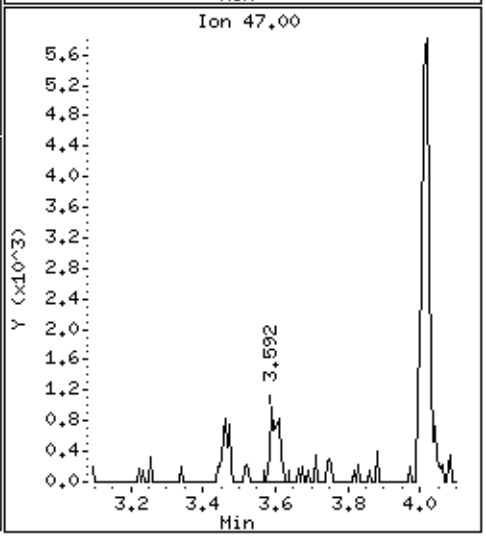


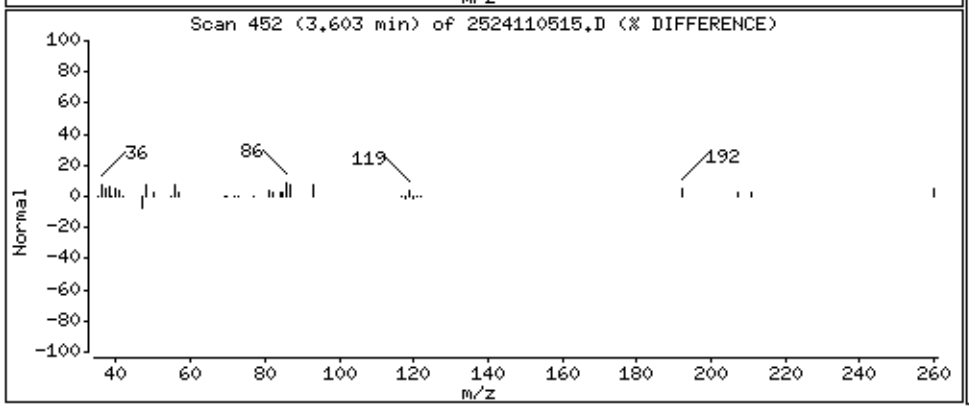












Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110515.D

Date : 05-NOV-2024 15:10

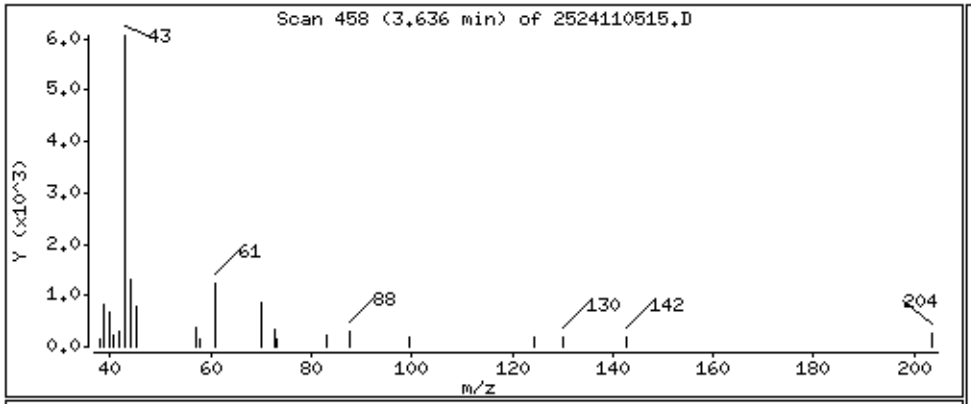
Client ID: PW13-1 Instrument: ms25.i

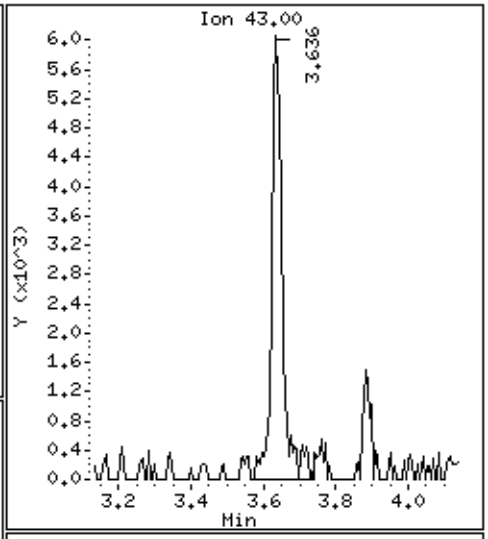
Sample Info: 3385043010;;1;;;;;

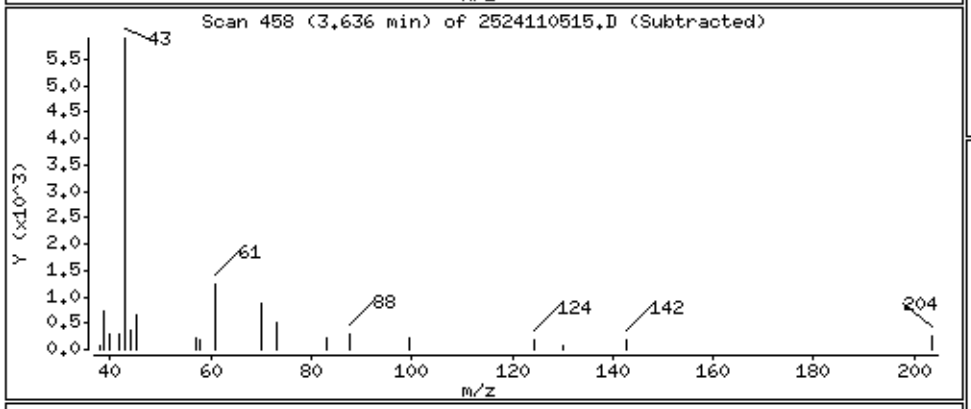
Purge Volume: 5.0 Operator: ILY

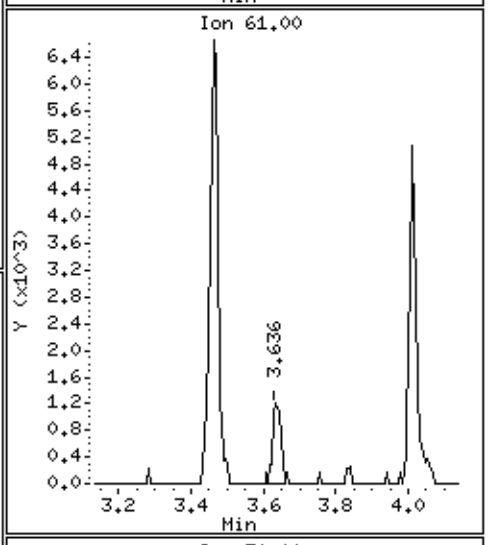
Column phase: DB-VRX Column diameter: 0.25

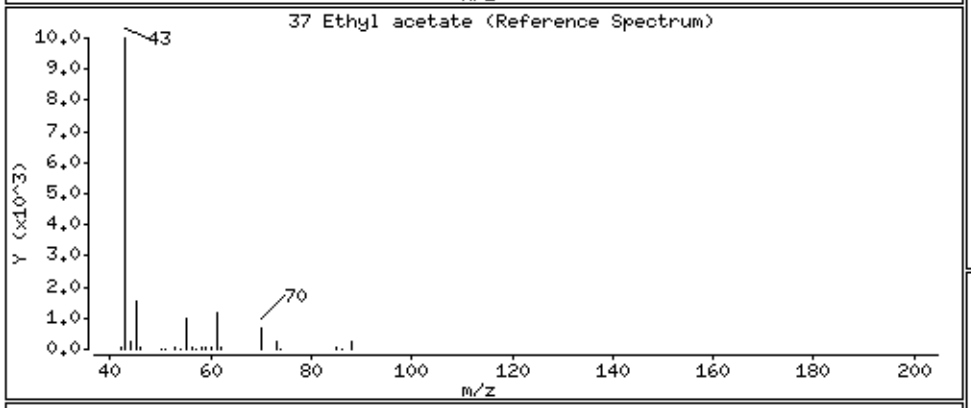
37 Ethyl acetate Concentration: 1.54528 ug/L

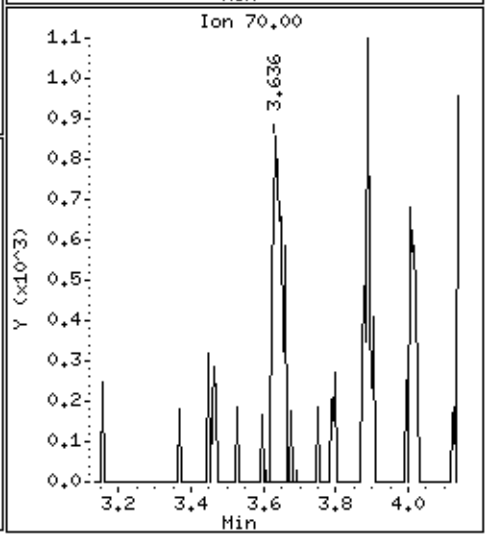


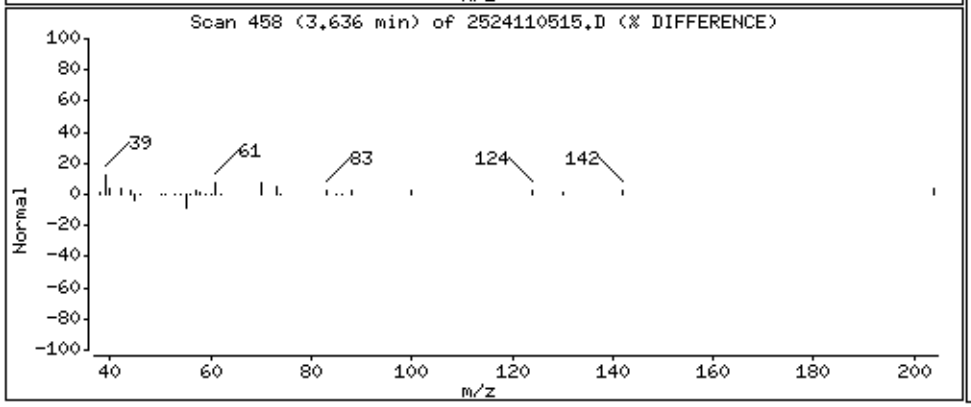












Data File : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110515.D
Inj Date : 05-NOV-2024 15:10
InstruID : ms25.i
LabSampID : 3385043010

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 11/06/2024 14:32
Client ID: PW13-1
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241105.b/252411051
Inj Date: 05-NOV-2024 15:10
Operator: ILY

Analytes listed below were unassigned due to not meeting one or more of the following qualitative criteria (retention time, mass spectral match, extracted ion ratios)
Rationale other than qualitative criteria are noted on the quantitation report.:

Bromoform
1-Chlorobutane
Chloromethane
1,3-Dichlorobenzene
1,2-Dichloroethane
Ethyl methacrylate
Methacrylonitrile
Pentane
Chloroethane
1-Chlorohexane
1,2-Dichlorobenzene
1,4-Dichlorobenzene
trans-1,3-Dichloropropene
Heptane
2-Nitropropane
Trichloroethene

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110516.D
Lab Smp Id: 3385043011 Client Smp ID: PW13-4D
Inj Date : 05-NOV-2024 15:31
Operator : ILY Inst ID: ms25.i
Smp Info : 3385043011;;1;;;;;
Misc Info : ZZ VOMS 75367 D8260W
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\25-8260b09D.m
Meth Date : 05-Nov-2024 10:11 ily Quant Type: ISTD
Cal Date : 04-NOV-2024 14:15 Cal File: 2524110404.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	1.704	1.704	(0.409)	5561	0.48095	0.480948(aQ)	
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Pentane	41	Compound Not Detected.						
7 Trichlorofluoromethane	101	Compound Not Detected.						
8 Dichlorofluoromethane	67	Compound Not Detected.						
9 Ethyl Ether	74	Compound Not Detected.						
10 1,1-Dichloroethene	61	Compound Not Detected.						
12 Carbon Disulfide	76	Compound Not Detected.						
11 Freon 113	101	Compound Not Detected.						
13 Iodomethane	127	Compound Not Detected.						
14 Acrolein	56	Compound Not Detected.						
16 3-Chloro-1-propene	41	Compound Not Detected.						
15 Isopropyl Alcohol	45	Compound Not Detected.						
17 Methylene Chloride	84	Compound Not Detected.						
18 Acetone	58	2.757	2.752	(0.662)	3487	3.87731	3.87731(aQ)	
19 Methyl acetate	74	Compound Not Detected.						
20 trans-1,2-Dichloroethene	61	Compound Not Detected.						
21 Hexane	57	Compound Not Detected.						
22 Methyl t-Butyl Ether	73	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	Compound Not Detected.						
	24 Acetonitrile	41	Compound Not Detected.						
	25 Diisopropyl ether	45	Compound Not Detected.						
	26 Chloroprene	53	Compound Not Detected.						
	27 1,1-Dichloroethane	63	Compound Not Detected.						
	28 Acrylonitrile	53	Compound Not Detected.						
	30 n-Propanol	41	Compound Not Detected.						
	29 Ethyl tert-butyl ether	59	Compound Not Detected.						
	31 Vinyl acetate	86	Compound Not Detected.						
	32 cis-1,2-Dichloroethene	61	3.461	3.461	(0.831)	45538	4.41573	4.41573	
	33 2,2-Dichloropropane	77	Compound Not Detected.						
M	100 1,2-Dichloroethene, Total	61				45538	4.41573	4.41573	
	34 Bromochloromethane	128	Compound Not Detected.						
	35 Cyclohexane	84	Compound Not Detected.						
	36 Chloroform	83	3.598	3.597	(0.864)	6204	0.41828	0.418284(a)	
	37 Ethyl acetate	43	3.636	3.636	(0.873)	13853	1.82546	1.82546(a)	
	38 Methyl acrylate	55	Compound Not Detected.						
	39 Carbon Tetrachloride	117	Compound Not Detected.						
	40 Tetrahydrofuran	42	Compound Not Detected.						
$	41 Dibromofluoromethane	113	3.701	3.701	(0.889)	260924	28.5857	28.5857	
	42 1,1,1-Trichloroethane	97	Compound Not Detected.						
	43 2-Butanone	72	Compound Not Detected.						
	44 1,1-Dichloropropene	75	Compound Not Detected.						
	45 1-Chlorobutane	41	Compound Not Detected.						
	46 Heptane	71	Compound Not Detected.						
	48 Propionitrile	54	Compound Not Detected.						
	47 Benzene	78	Compound Not Detected.						
	49 Methacrylonitrile	67	Compound Not Detected.						
	50 tert-amyl methyl Ether	73	Compound Not Detected.						
$	51 1,2-Dichloroethane-d4	65	4.012	4.012	(0.963)	296517	28.7972	28.7972	
	54 Isobutyl alcohol	42	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
*	55 Fluorobenzene	96	4.165	4.165	(1.000)	1039745	30.0000		
	56 Diisobutylene	57	Compound Not Detected.						
	57 Trichloroethene	95	Compound Not Detected.						
	58 Methyl cyclohexane	83	Compound Not Detected.						
	59 tert-Amyl Ethylether	59	Compound Not Detected.						
	60 Dibromomethane	93	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	62 Bromodichloromethane	83	Compound Not Detected.						
	63 Methyl methacrylate	41	Compound Not Detected.						
	65 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	66 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	67 Octane	85	Compound Not Detected.						
$	68 Toluene-d8	98	5.114	5.114	(0.829)	998231	29.0425	29.0425	
	69 Toluene	92	Compound Not Detected.						
	70 Chloroacetonitrile	75	Compound Not Detected.						
	71 2-Nitropropane	41	Compound Not Detected.						
	72 1,1-Dichloro-2-propanone	63	Compound Not Detected.						
	73 4-Methyl-2-Pentanone(MIBK)	43	Compound Not Detected.						
	75 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	74 Tetrachloroethene	164	Compound Not Detected.						
	76 Ethyl methacrylate	69	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
77	1,1,2-Trichloroethane	83	Compound Not Detected.						
78	Chlorodibromomethane	129	Compound Not Detected.						
79	1,3-Dichloropropane	76	Compound Not Detected.						
80	1,2-Dibromoethane	107	Compound Not Detected.						
81	2-Hexanone	43	Compound Not Detected.						
82	1-Chlorohexane	91	Compound Not Detected.						
* 83	Chlorobenzene-d5	82	6.173	6.167	(1.000)	416010	30.0000		
85	Ethylbenzene	106	Compound Not Detected.						
84	Chlorobenzene	112	Compound Not Detected.						
86	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
87	mp-Xylene	106	Compound Not Detected.						
M 120	1,3-Dichloropropene, Total	75	Compound Not Detected.						
88	o-Xylene	106	Compound Not Detected.						
89	Styrene	104	Compound Not Detected.						
90	Bromoform	173	Compound Not Detected.						
91	Isopropylbenzene	105	Compound Not Detected.						
$ 92	4-Bromofluorobenzene	174	7.062	7.062	(0.889)	274742	29.1159	29.1159	
M 121	TOTAL XYLENES	106	Compound Not Detected.						
94	n-Propylbenzene	120	Compound Not Detected.						
93	Bromobenzene	156	Compound Not Detected.						
95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
97	1,3,5-Trimethylbenzene	105	Compound Not Detected.						
96	o-Chlorotoluene	91	Compound Not Detected.						
98	1,2,3-Trichloropropane	110	Compound Not Detected.						
99	trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
101	p-Chlorotoluene	91	Compound Not Detected.						
102	tert-Butylbenzene	134	Compound Not Detected.						
103	Pentachloroethane	117	Compound Not Detected.						
104	1,2,4-Trimethylbenzene	105	Compound Not Detected.						
105	sec-Butylbenzene	105	Compound Not Detected.						
106	p-Isopropyltoluene	134	Compound Not Detected.						
107	1,3-Dichlorobenzene	146	Compound Not Detected.						
* 108	1,4-Dichlorobenzene-d4	152	7.946	7.946	(1.000)	358621	30.0000		(Q)
109	1,4-Dichlorobenzene	146	Compound Not Detected.						
111	n-Butylbenzene	134	Compound Not Detected.						
110	Benzyl Chloride	126	Compound Not Detected.						
112	Hexachloroethane	117	Compound Not Detected.						
113	1,2-Dichlorobenzene	146	Compound Not Detected.						
114	1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
115	Nitrobenzene	77	Compound Not Detected.						
116	Hexachlorobutadiene	225	Compound Not Detected.						
117	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
118	Naphthalene	128	Compound Not Detected.						
119	1,2,3-Trichlorobenzene	180	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110516.D

Page 1

Date : 05-NOV-2024 15:31

Client ID: PW13-4D

Instrument: ms25.i

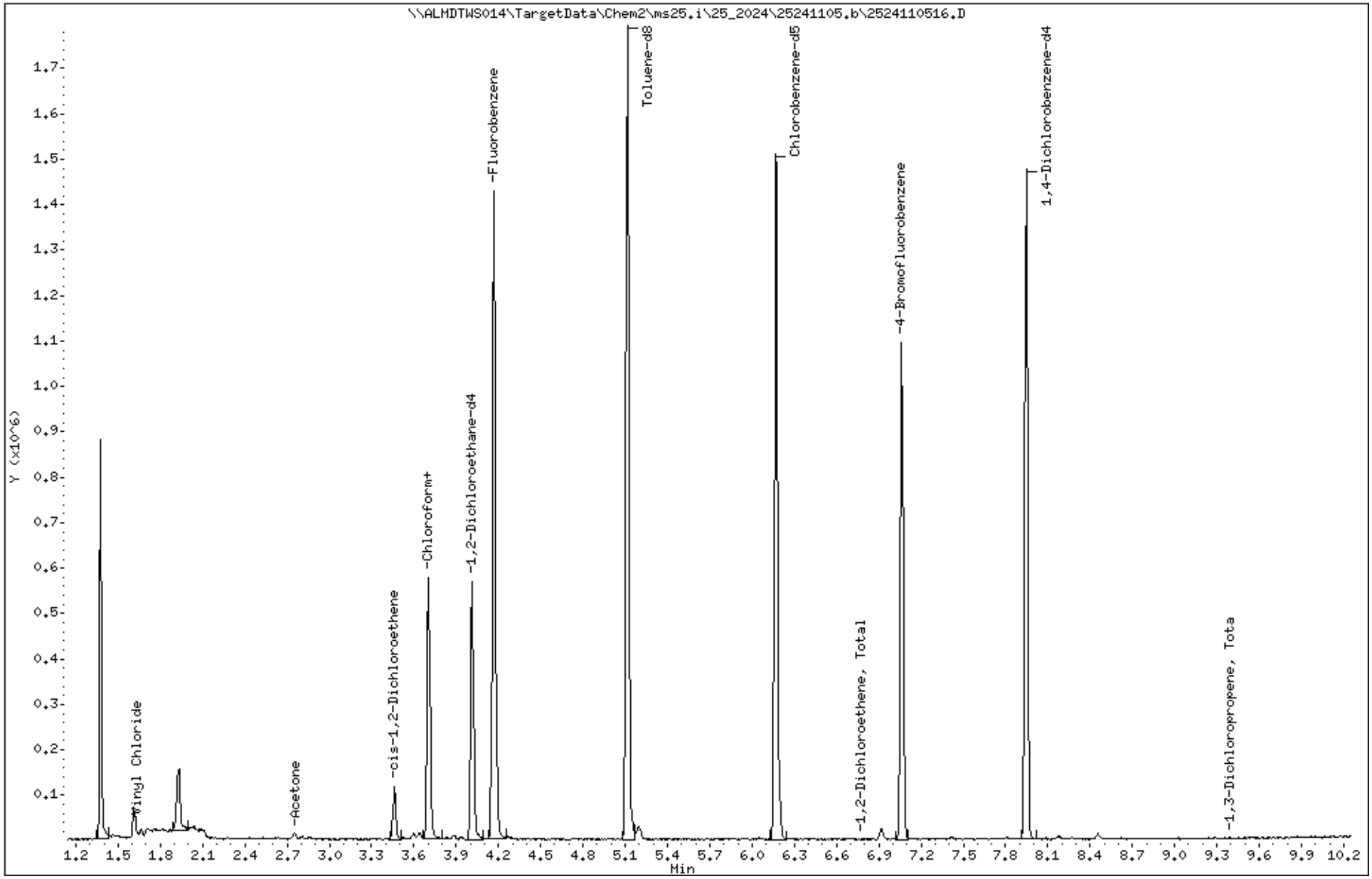
Sample Info: 3385043011;;1;;;;;

Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25



Data File: \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110516.D

Date : 05-NOV-2024 15:31

Client ID: PW13-4D

Instrument: ms25.i

Sample Info: 3385043011;;1;;;;;

Purge Volume: 5.0

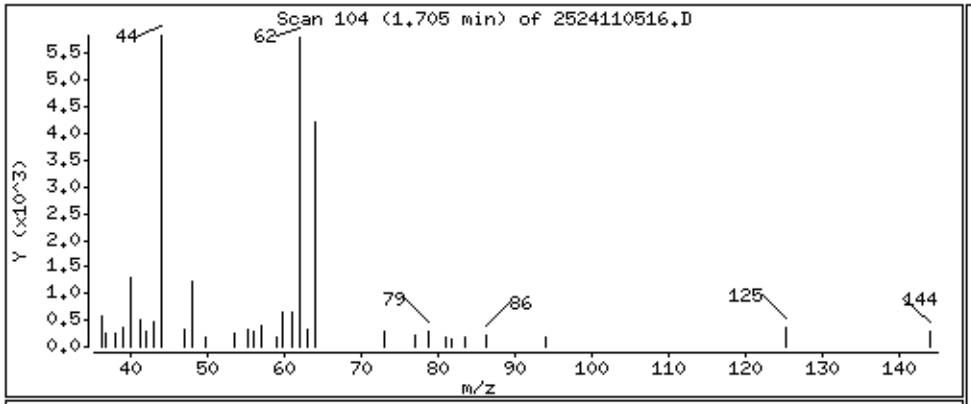
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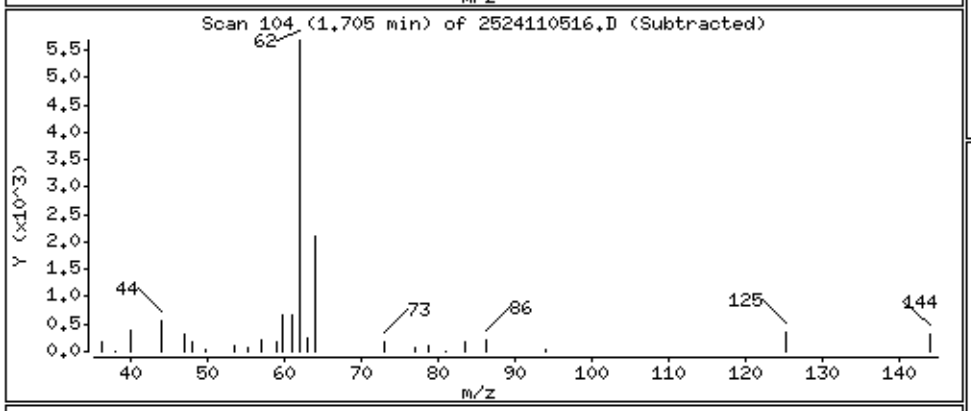
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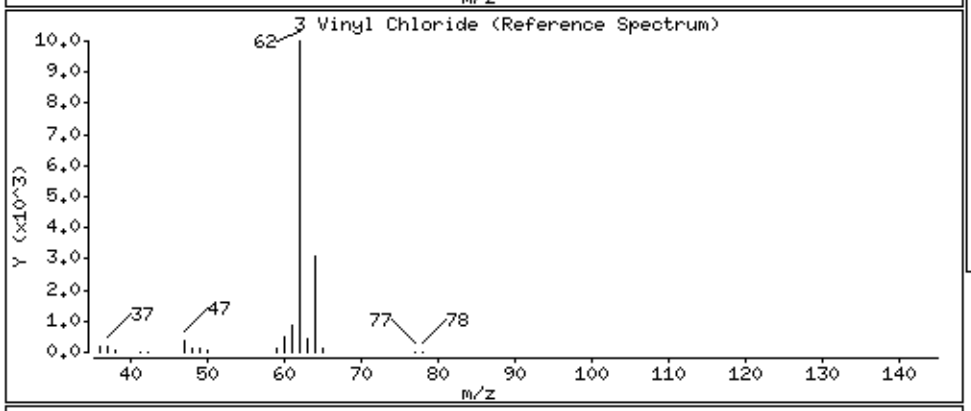
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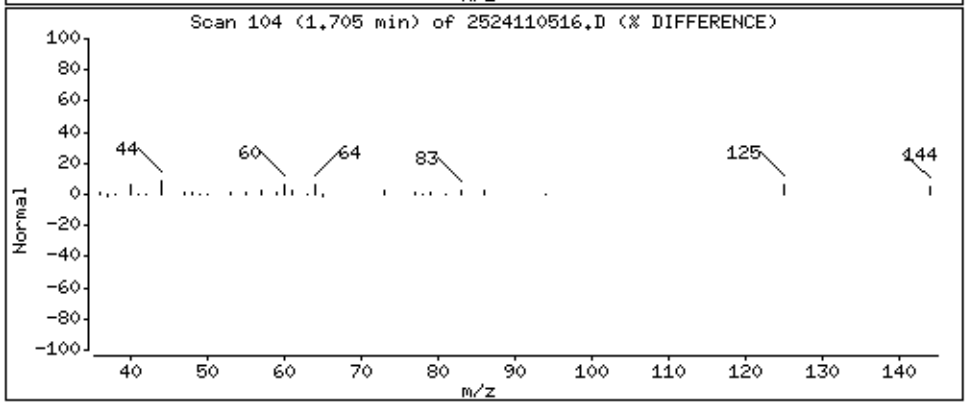
3 Vinyl Chloride

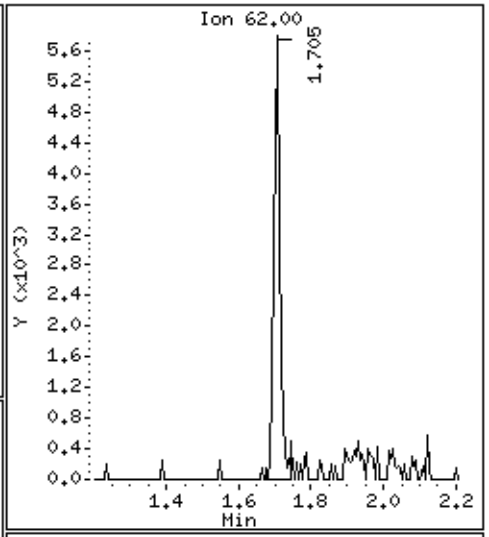
Concentration: 0.480948 ug/L

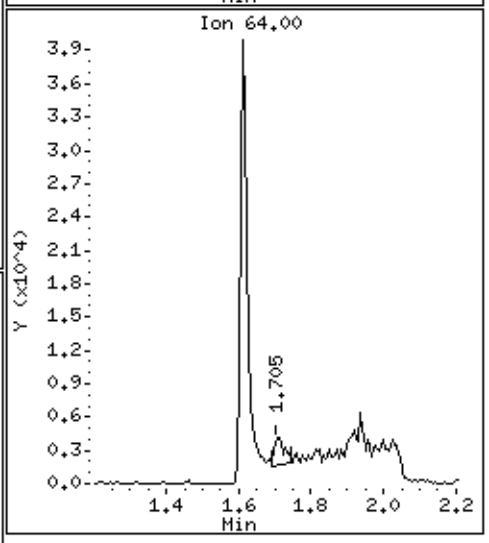












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Date : 05-NOV-2024 15:31

Client ID: PW13-4D

Instrument: ms25.i

Sample Info: 3385043011;;1;;;;;

Purge Volume: 5.0

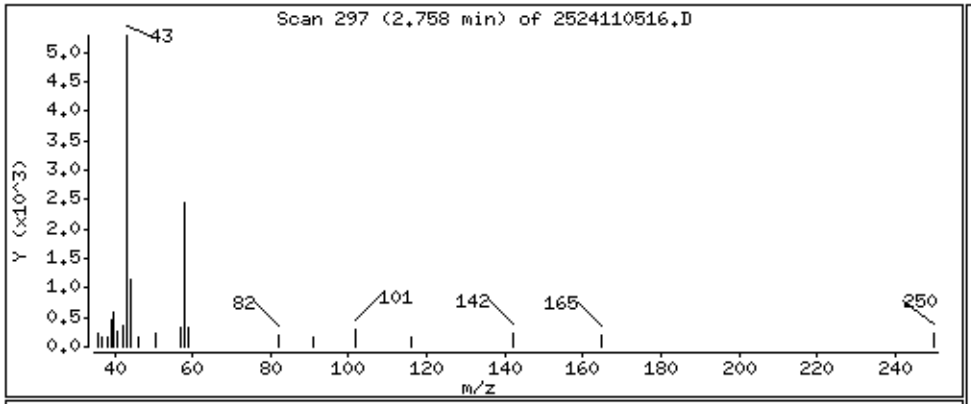
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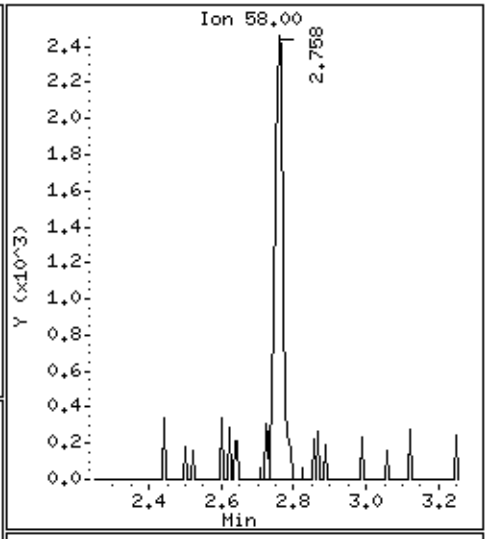
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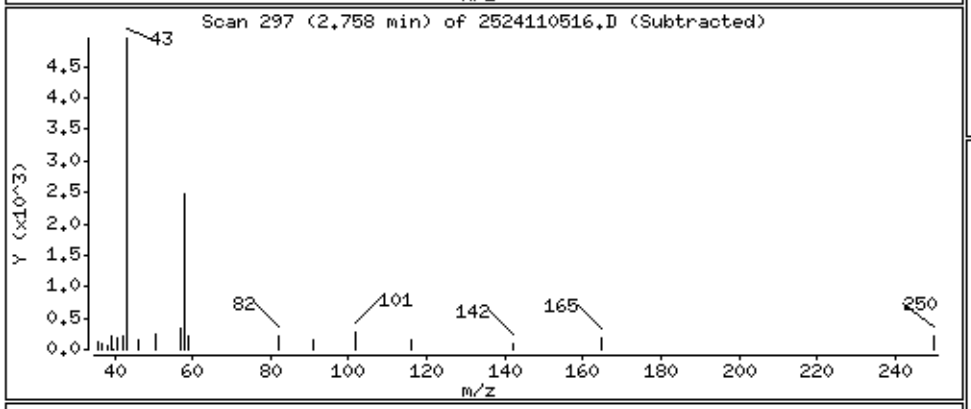
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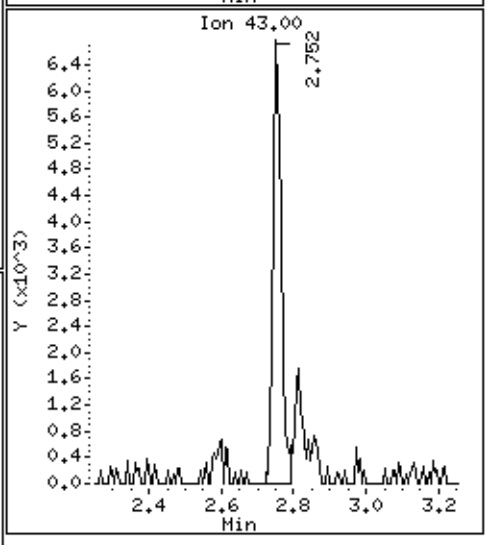
18 Acetone

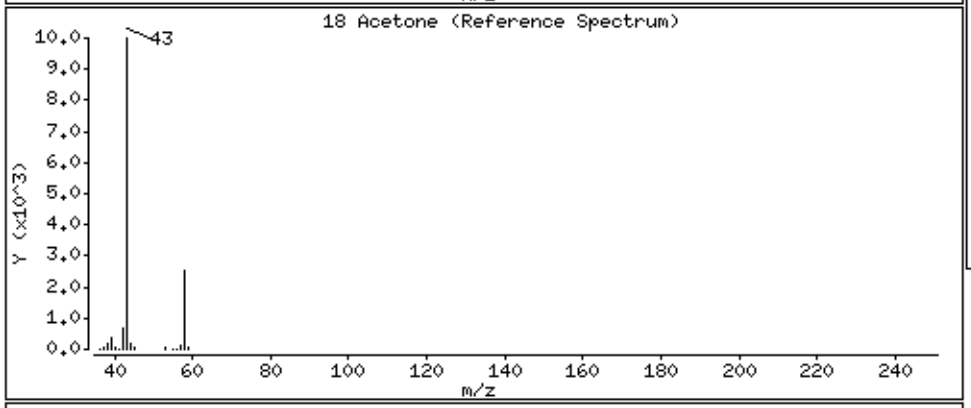
Concentration: 3.87731 ug/L

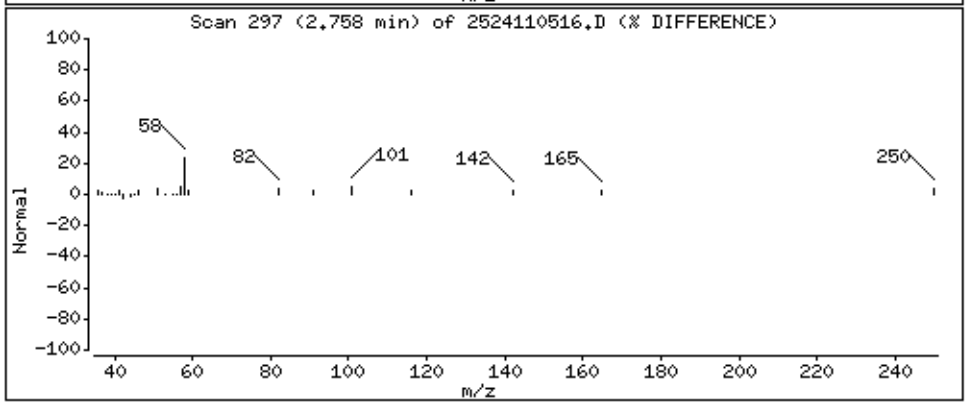












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Date : 05-NOV-2024 15:31

Client ID: PW13-4D

Instrument: ms25.i

Sample Info: 3385043011;;1;;;;;

Purge Volume: 5.0

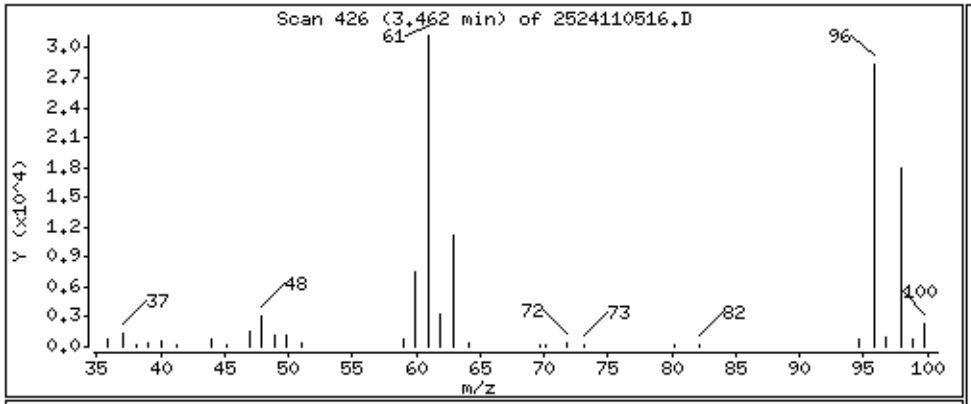
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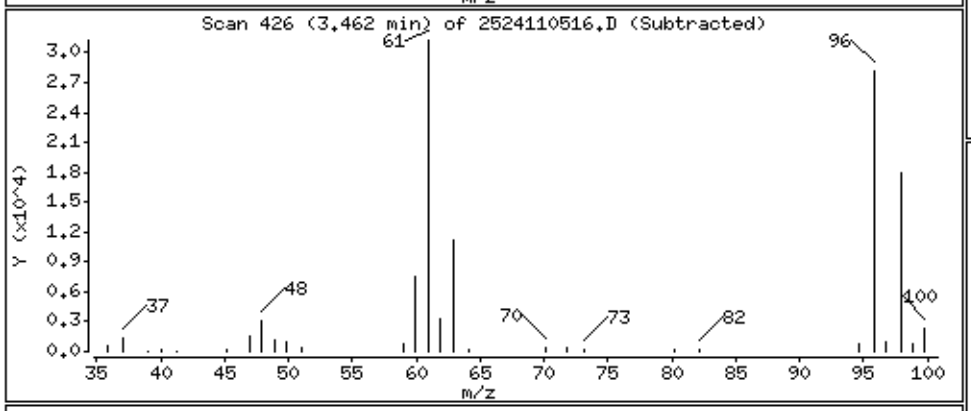
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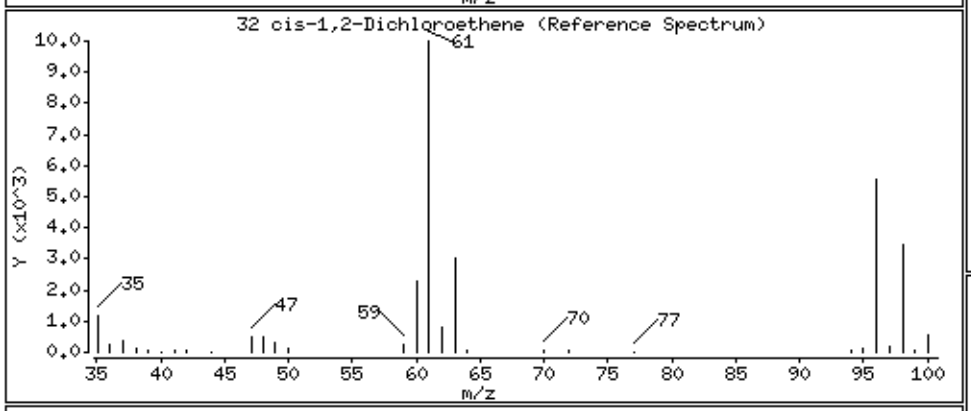
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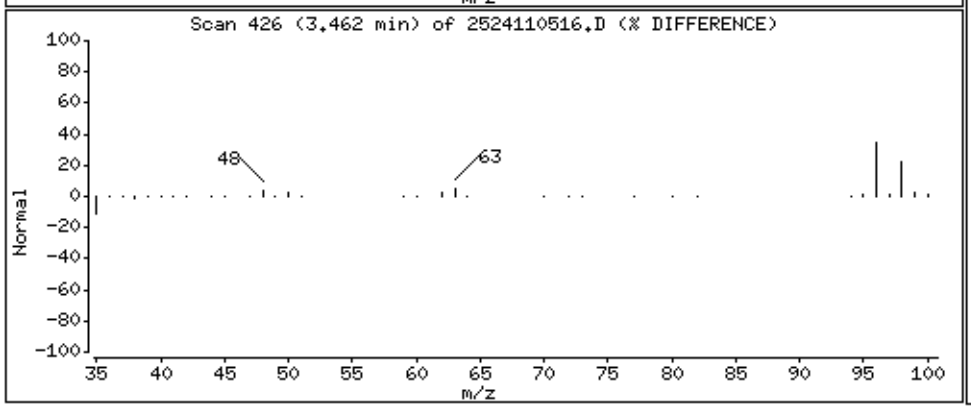
32 cis-1,2-Dichloroethene

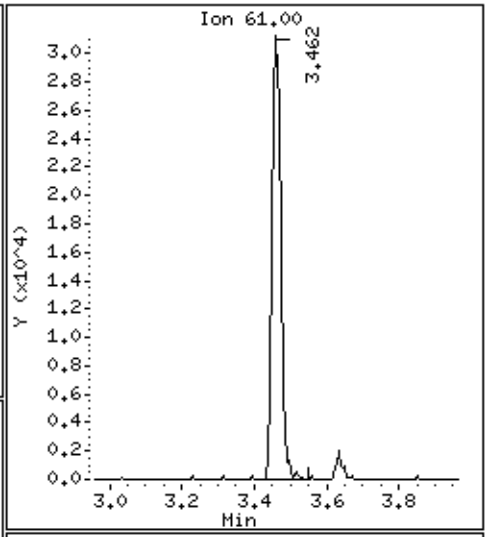
Concentration: 4.41573 ug/L

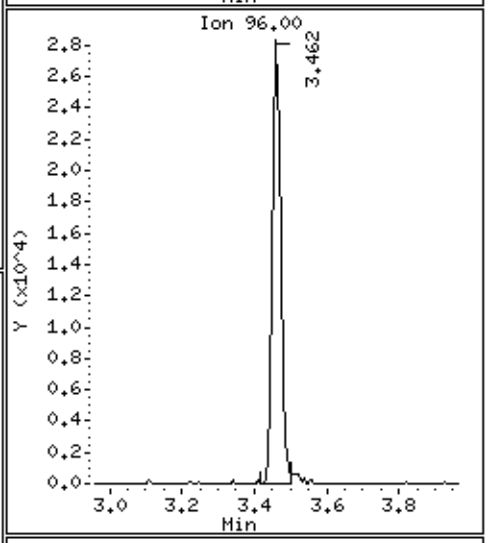


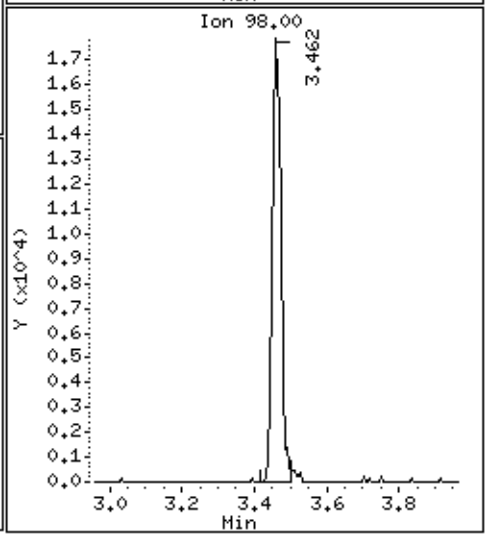












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Date : 05-NOV-2024 15:31

Client ID: PW13-4D

Instrument: ms25.i

Sample Info: 3385043011;;1;;;;;

Purge Volume: 5.0

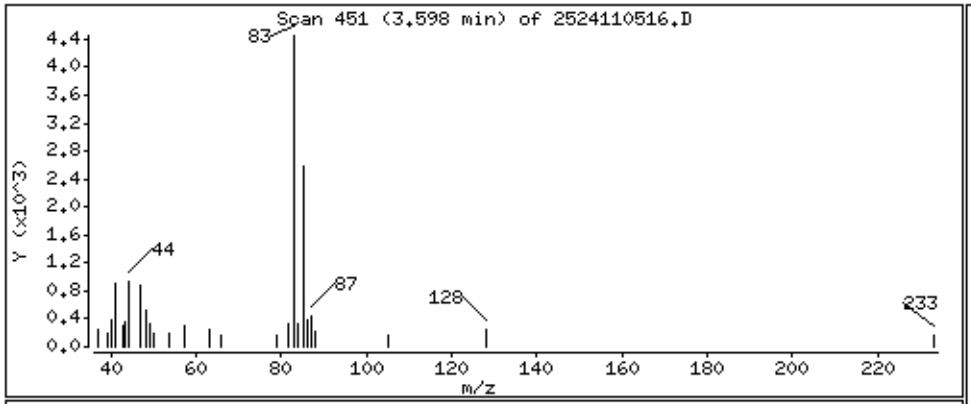
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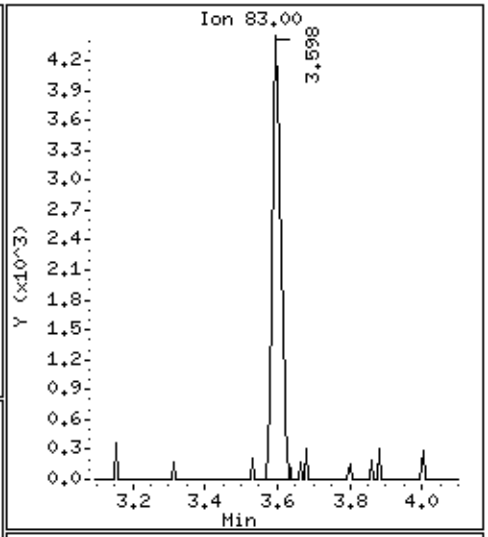
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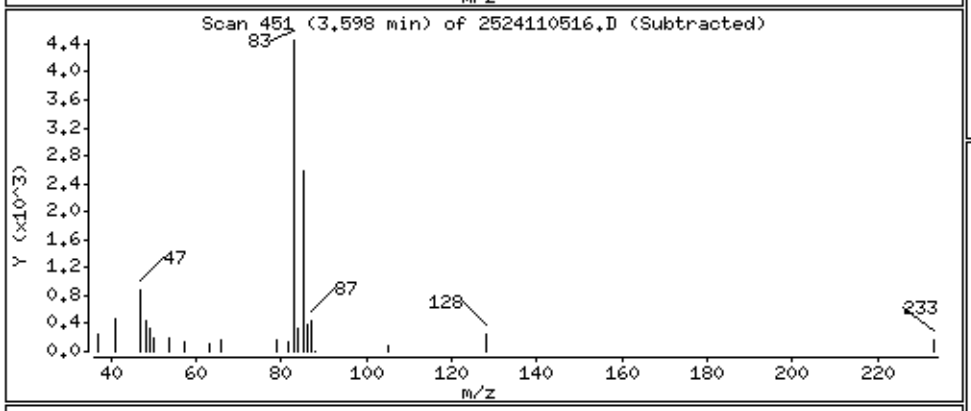
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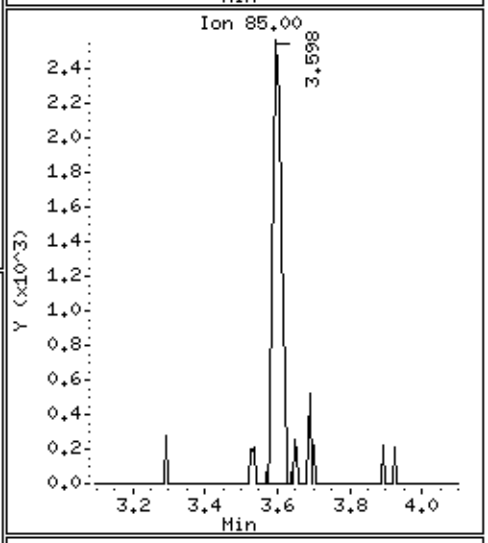
36 Chloroform

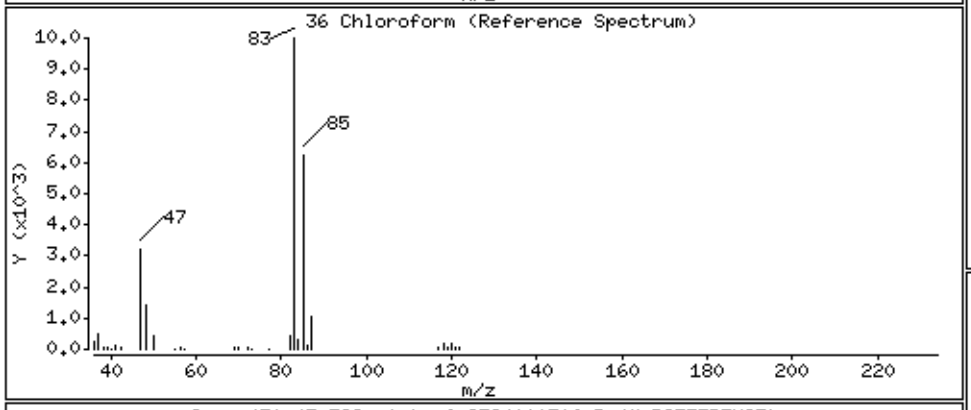
Concentration: 0.418284 ug/L

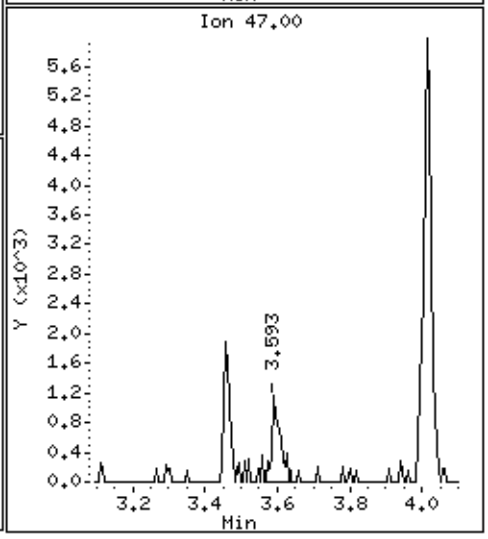


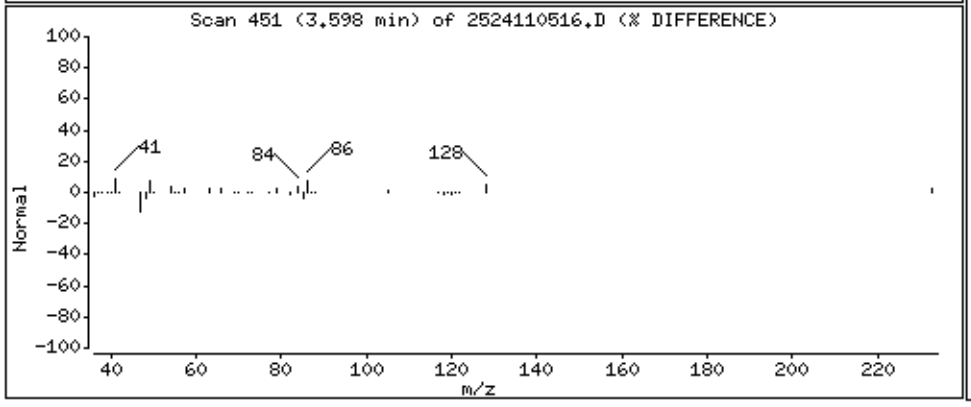












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Date : 05-NOV-2024 15:31

Client ID: PW13-4D

Instrument: ms25.i

Sample Info: 3385043011;;1;;;;;

Purge Volume: 5.0

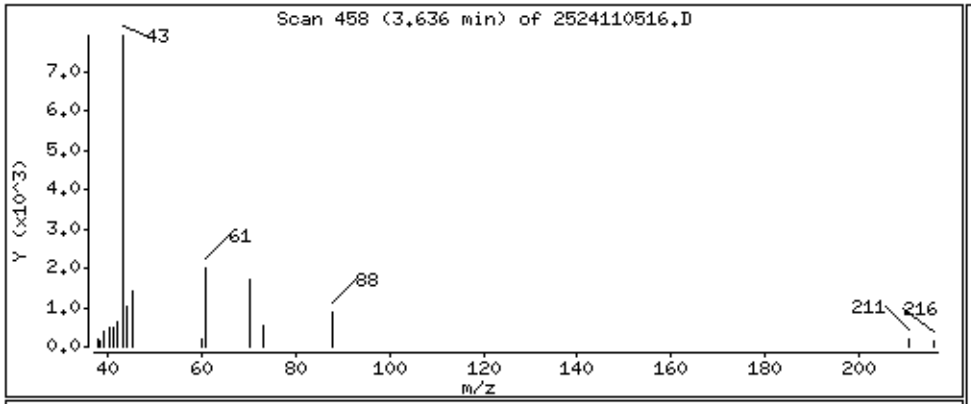
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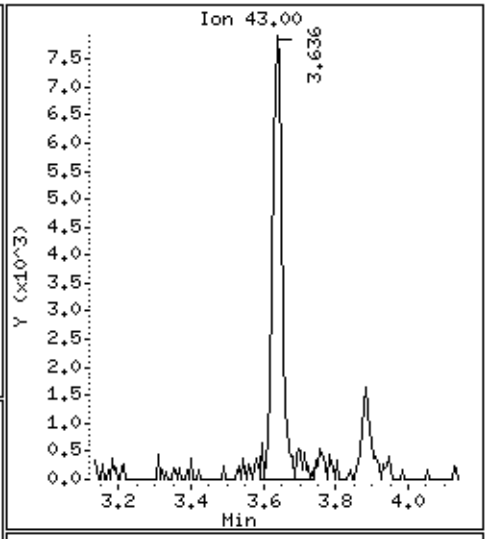
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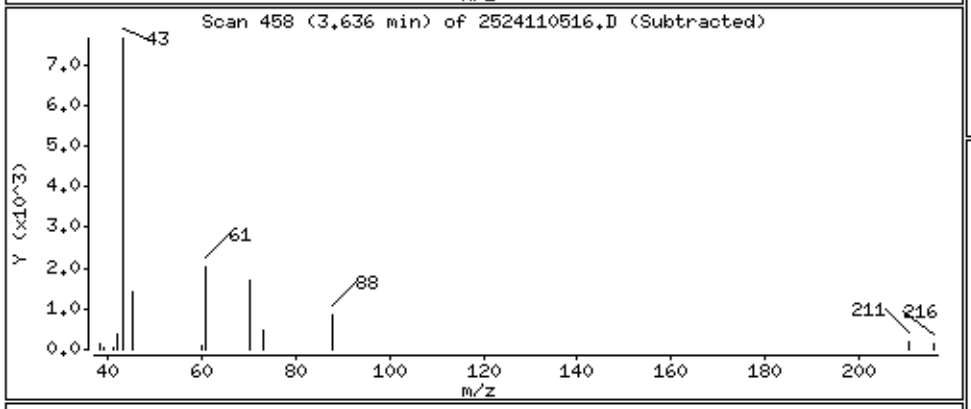
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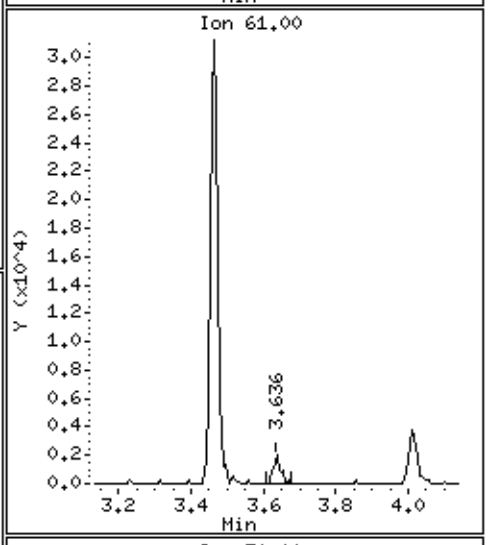
37 Ethyl acetate

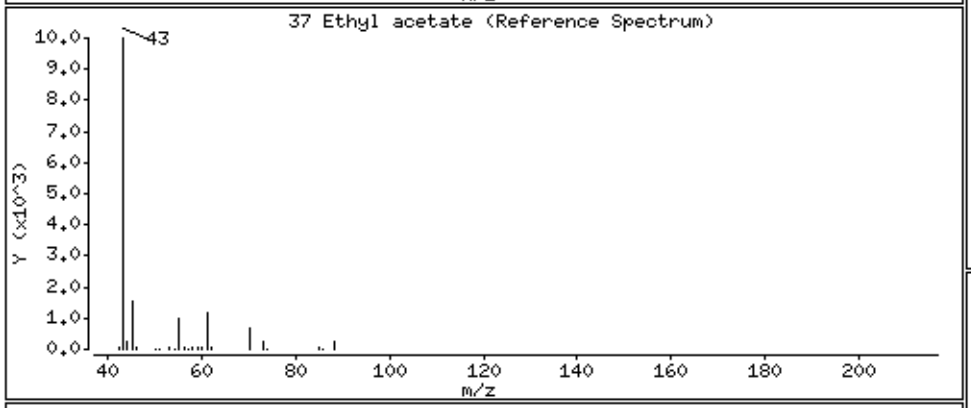
Concentration: 1.82546 ug/L

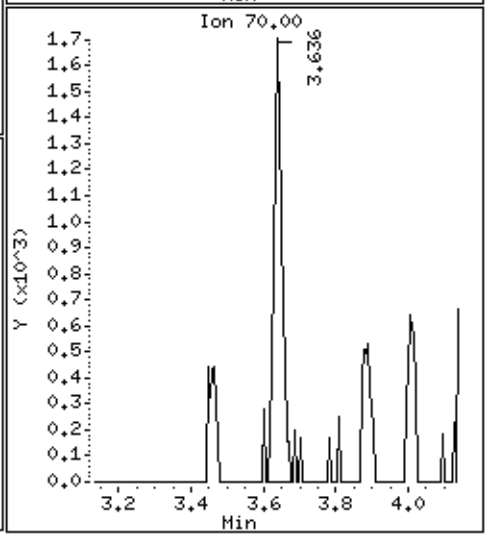


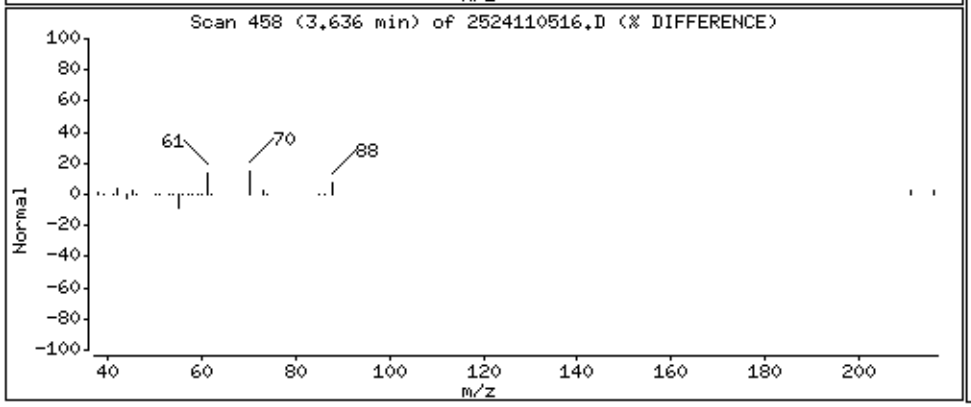












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Inj Date : 05-NOV-2024 15:31
InstruID : ms25.i
LabSampID : 3385043011

NO MANUAL INTEGRATIONS

UNASSIGNED PEAK REPORT

Report Date: 11/06/2024 14:34
Client ID: PW13-4D
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241105.b/252411051
Inj Date: 05-NOV-2024 15:31
Operator: ILY

Analytes listed below were unassigned due to not meeting one or more of the following qualitative criteria (retention time, mass spectral match, extracted ion ratios)
Rationale other than qualitative criteria are noted on the quantitation report.:

Chloroethane	1-Chlorobutane
1-Chlorohexane	Chloromethane
1,2-Dichloroethane	trans-1,3-Dichloropropene
Ethyl methacrylate	Heptane
Methacrylonitrile	2-Nitropropane
Pentane	Trichloroethene

ALS Environmental Services

VOLATILE REPORT SW-846 Method 8260

Data file : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\2524110528.D
Lab Smp Id: 1801
Inj Date : 05-NOV-2024 19:35
Operator : ILY Inst ID: ms25.i
Smp Info : 1801;;1;;;;;
Misc Info :
Comment :
Method : \\ALMDTWS014\TargetData\Chem2\ms25.i\25_2024\25241105.b\25-8260b09D.m
Meth Date : 05-Nov-2024 10:11 ily Quant Type: ISTD
Cal Date : 04-NOV-2024 14:15 Cal File: 2524110404.D
Als bottle: 28 QC Sample: ENDCCV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DODall.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged
DF	1.000	sample dilution factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.497	1.497	(0.359)	496559	50.2330	50.2330	
2 Chloromethane	50	1.644	1.644	(0.395)	389524	41.5522	41.5522	
3 Vinyl Chloride	62	1.704	1.704	(0.409)	538475	48.3364	48.3364	
4 Bromomethane	94	1.922	1.922	(0.462)	319460	27.5817	27.5817	
5 Chloroethane	64	2.004	2.004	(0.481)	470619	54.7818	54.7818	
6 Pentane	41	2.092	2.091	(0.502)	276498	44.0066	44.0066	
7 Trichlorofluoromethane	101	2.097	2.097	(0.504)	730164	49.6661	49.6661	
8 Dichlorofluoromethane	67	2.124	2.124	(0.510)	784503	49.1684	49.1684	
9 Ethyl Ether	74	2.277	2.277	(0.547)	253784	53.6103	53.6103	
10 1,1-Dichloroethene	61	2.414	2.413	(0.580)	441478	50.2492	50.2492	
12 Carbon Disulfide	76	2.446	2.446	(0.587)	977712	53.8871	53.8871	
11 Freon 113	101	2.424	2.424	(0.582)	276434	49.5021	49.5021	
13 Iodomethane	127	2.506	2.506	(0.602)	59017	27.2955	27.2955(Q)	
14 Acrolein	56	2.599	2.599	(0.624)	302972	237.214	237.214	
16 3-Chloro-1-propene	41	2.681	2.675	(0.644)	385606	52.8134	52.8134	
15 Isopropyl Alcohol	45	2.654	2.648	(0.637)	112073	243.716	243.716	
17 Methylene Chloride	84	2.735	2.735	(0.657)	420516	51.7275	51.7275	
18 Acetone	58	2.752	2.752	(0.661)	204145	235.604	235.604	
19 Methyl acetate	74	2.812	2.812	(0.675)	83322	50.9446	50.9446	
20 trans-1,2-Dichloroethene	61	2.828	2.828	(0.679)	468123	51.0825	51.0825	
21 Hexane	57	2.866	2.861	(0.688)	592370	48.2860	48.2860	
22 Methyl t-Butyl Ether	73	2.872	2.872	(0.690)	1196643	55.1352	55.1352	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/L)	REVIEW CODE
	23 tert.- Butyl Alcohol	59	2.894	2.894	(0.695)	199023	252.654	252.654	
	24 Acetonitrile	41	3.019	3.019	(0.725)	237820	244.448	244.448	
	25 Diisopropyl ether	45	3.063	3.063	(0.735)	1122528	54.1644	54.1644	
	26 Chloroprene	53	3.156	3.155	(0.758)	407168	44.4911	44.4911	
	27 1,1-Dichloroethane	63	3.167	3.166	(0.760)	685839	54.3624	54.3624	
	28 Acrylonitrile	53	3.188	3.188	(0.766)	952734	301.990	301.990	
	30 n-Propanol	41	3.259	3.265	(0.783)	220903	487.796	487.796	
	29 Ethyl tert-butyl ether	59	3.265	3.265	(0.784)	1222655	54.2391	54.2391	
	31 Vinyl acetate	86	3.276	3.270	(0.786)	93958	46.3134	46.3134	
	32 cis-1,2-Dichloroethene	61	3.461	3.461	(0.831)	509745	51.3033	51.3033	
	33 2,2-Dichloropropane	77	3.527	3.526	(0.847)	410746	47.5541	47.5541	
M	100 1,2-Dichloroethene, Total	61				977868	102.386	102.386	
	34 Bromochloromethane	128	3.576	3.576	(0.859)	240746	55.0190	55.0190	
	35 Cyclohexane	84	3.587	3.587	(0.861)	486664	51.6222	51.6222	
	36 Chloroform	83	3.598	3.597	(0.864)	764101	53.4705	53.4705	
	37 Ethyl acetate	43	3.636	3.636	(0.873)	376686	51.5196	51.5196	
	38 Methyl acrylate	55	3.652	3.652	(0.877)	383078	55.0523	55.0523(Q)	
	39 Carbon Tetrachloride	117	3.696	3.696	(0.887)	443922	47.6599	47.6599(M)	
	40 Tetrahydrofuran	42	3.696	3.696	(0.887)	564888	257.597	257.597	
$	41 Dibromofluoromethane	113	3.701	3.701	(0.889)	271729	30.8983	30.8983	
	42 1,1,1-Trichloroethane	97	3.734	3.734	(0.897)	539572	52.8859	52.8859	
	43 2-Butanone	72	3.761	3.761	(0.903)	288762	268.987	268.987(M)	
	44 1,1-Dichloropropene	75	3.799	3.794	(0.912)	481566	51.5181	51.5181	
	45 1-Chlorobutane	41	3.816	3.816	(0.916)	309826	50.2760	50.2760	
	46 Heptane	71	3.881	3.881	(0.932)	191287	42.9216	42.9216	
	48 Propionitrile	54	3.941	3.936	(0.946)	324207	257.970	257.970	
	47 Benzene	78	3.941	3.941	(0.946)	1581400	51.7537	51.7537	
	49 Methacrylonitrile	67	3.952	3.952	(0.949)	204989	53.5870	53.5870	
	50 tert-amyl methyl Ether	73	3.974	3.974	(0.954)	1146494	53.4622	53.4622	
$	51 1,2-Dichloroethane-d4	65	4.012	4.012	(0.963)	294037	29.6392	29.6392(M)	MP
	54 Isobutyl alcohol	42	3.985	3.985	(0.957)	128738	654.512	654.512(Q)	
	52 1,2-Dichloroethane	62	4.050	4.050	(0.972)	548002	51.5352	51.5352	
	53 tert-Amyl Alcohol	59	4.056	4.056	(0.974)	140179	217.453	217.453	
*	55 Fluorobenzene	96	4.165	4.165	(1.000)	1001758	30.0000		
	56 Diisobutylene	57	4.176	4.176	(1.003)	736310	46.4043	46.4043	
	57 Trichloroethene	95	4.269	4.269	(1.025)	385797	47.4637	47.4637	
	58 Methyl cyclohexane	83	4.274	4.274	(0.692)	506470	48.9909	48.9909	
	59 tert-Amyl Ethylether	59	4.367	4.367	(1.048)	895631	54.7387	54.7387	
	60 Dibromomethane	93	4.525	4.525	(1.086)	286404	52.2107	52.2107	
	61 1,2-Dichloropropane	63	4.585	4.585	(1.101)	404547	52.5716	52.5716	
	62 Bromodichloromethane	83	4.607	4.607	(1.106)	530040	55.1316	55.1316	
	63 Methyl methacrylate	41	4.667	4.667	(1.121)	322189	52.2811	52.2811	
	65 2-Chloroethylvinyl ether	63	4.929	4.929	(1.183)	85379	34.7474	34.7474	
	66 cis-1,3-Dichloropropene	75	4.994	4.994	(0.809)	644531	53.0536	53.0536	
	67 Octane	85	4.994	4.994	(0.809)	163375	45.6414	45.6414	
$	68 Toluene-d8	98	5.114	5.114	(0.829)	1021241	29.4300	29.4300	
	69 Toluene	92	5.147	5.147	(0.834)	960816	48.6572	48.6572	
	70 Chloroacetonitrile	75	5.207	5.207	(0.844)	120194	234.243	234.243	
	71 2-Nitropropane	41	5.295	5.294	(0.858)	479508	219.474	219.474	
	72 1,1-Dichloro-2-propanone	63	5.311	5.311	(0.860)	42427	209.991	209.991(Q)	
	73 4-Methyl-2-Pentanone(MIBK)	43	5.371	5.371	(0.870)	2003098	263.035	263.035	
	75 trans-1,3-Dichloropropene	75	5.404	5.404	(0.875)	612204	45.4425	45.4425	
	74 Tetrachloroethene	164	5.409	5.409	(0.876)	392455	55.8652	55.8652	
	76 Ethyl methacrylate	69	5.480	5.480	(0.888)	584815	47.0752	47.0752(Q)	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	77 1,1,2-Trichloroethane	83	5.518	5.518	(0.894)	338647	51.6970	51.6970	
	78 Chlorodibromomethane	129	5.649	5.649	(0.915)	440003	47.3824	47.3824	
	79 1,3-Dichloropropane	76	5.709	5.709	(0.925)	681283	52.4148	52.4148	
	80 1,2-Dibromoethane	107	5.829	5.829	(0.944)	418577	54.8983	54.8983	
	81 2-Hexanone	43	5.933	5.933	(0.961)	1327100	256.656	256.656	
	82 1-Chlorohexane	91	6.140	6.140	(0.995)	398024	43.8888	43.8888	
*	83 Chlorobenzene-d5	82	6.173	6.167	(1.000)	419995	30.0000		
	85 Ethylbenzene	106	6.189	6.184	(1.003)	550985	50.2500	50.2500	
	84 Chlorobenzene	112	6.184	6.184	(1.002)	1084117	50.4975	50.4975	
	86 1,1,1,2-Tetrachloroethane	131	6.222	6.222	(1.008)	380177	52.9008	52.9008	
	87 mp-Xylene	106	6.288	6.287	(1.019)	1352454	102.164	102.164	
M	120 1,3-Dichloropropene, Total	75				1256735	98.4961	98.4961	
	88 o-Xylene	106	6.604	6.604	(1.070)	667029	52.2845	52.2845	
	89 Styrene	104	6.642	6.642	(0.836)	1140821	53.6407	53.6407	
	90 Bromoform	173	6.680	6.680	(0.841)	288149	44.7105	44.7105	
	91 Isopropylbenzene	105	6.833	6.839	(0.860)	1442649	48.4189	48.4189	
$	92 4-Bromofluorobenzene	174	7.062	7.062	(0.889)	297329	29.5741	29.5741	
M	121 TOTAL XYLENES	106				2019483	154.448	154.448	
	94 n-Propylbenzene	120	7.155	7.155	(0.900)	442741	50.6012	50.6012	
	93 Bromobenzene	156	7.155	7.155	(0.900)	463632	50.5101	50.5101	
	95 1,1,2,2-Tetrachloroethane	83	7.199	7.199	(0.906)	488298	49.5180	49.5180	
	97 1,3,5-Trimethylbenzene	105	7.297	7.297	(0.918)	1276985	51.4092	51.4092	
	96 o-Chlorotoluene	91	7.286	7.286	(0.917)	1252887	50.3787	50.3787	
	98 1,2,3-Trichloropropane	110	7.319	7.319	(0.921)	152664	50.0716	50.0716	
	99 trans-1,4-Dichloro-2-butene	53	7.341	7.341	(0.924)	122344	42.2840	42.2840	
	101 p-Chlorotoluene	91	7.417	7.417	(0.933)	1149950	50.1083	50.1083	
	102 tert-Butylbenzene	134	7.559	7.559	(0.951)	305152	51.2270	51.2270(Q)	
	103 Pentachloroethane	117	7.586	7.586	(0.955)	218615	44.2135	44.2135(QM)	
	104 1,2,4-Trimethylbenzene	105	7.608	7.613	(0.957)	1315507	51.5270	51.5270	
	105 sec-Butylbenzene	105	7.701	7.701	(0.969)	1551603	52.3434	52.3434	
	106 p-Isopropyltoluene	134	7.810	7.810	(0.983)	348161	52.1429	52.1429	
	107 1,3-Dichlorobenzene	146	7.892	7.886	(0.993)	776233	51.2511	51.2511	
*	108 1,4-Dichlorobenzene-d4	152	7.946	7.946	(1.000)	382090	30.0000		
	109 1,4-Dichlorobenzene	146	7.957	7.963	(1.001)	803680	49.7441	49.7441	
	111 n-Butylbenzene	134	8.159	8.159	(1.027)	299239	51.7461	51.7461(Q)	
	110 Benzyl Chloride	126	8.159	8.159	(1.027)	111515	39.0623	39.0623(Q)	
	112 Hexachloroethane	117	8.290	8.290	(1.043)	225745	45.2614	45.2614	
	113 1,2-Dichlorobenzene	146	8.306	8.306	(1.045)	761154	51.3697	51.3697	
	114 1,2-Dibromo-3-chloropropane	75	8.978	8.977	(1.130)	74010	45.4466	45.4466	
	115 Nitrobenzene	77	9.463	9.463	(1.191)	199692	468.233	468.233	
	116 Hexachlorobutadiene	225	9.523	9.523	(1.198)	192700	53.6906	53.6906	
	117 1,2,4-Trichlorobenzene	180	9.556	9.556	(1.203)	474929	55.5420	55.5420	
	118 Naphthalene	128	9.823	9.829	(1.236)	1315241	48.9853	48.9853	
	119 1,2,3-Trichlorobenzene	180	9.976	9.981	(1.255)	483599	55.6030	55.6030	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

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Date : 05-NOV-2024 19:35

Client ID:

Instrument: ms25.i

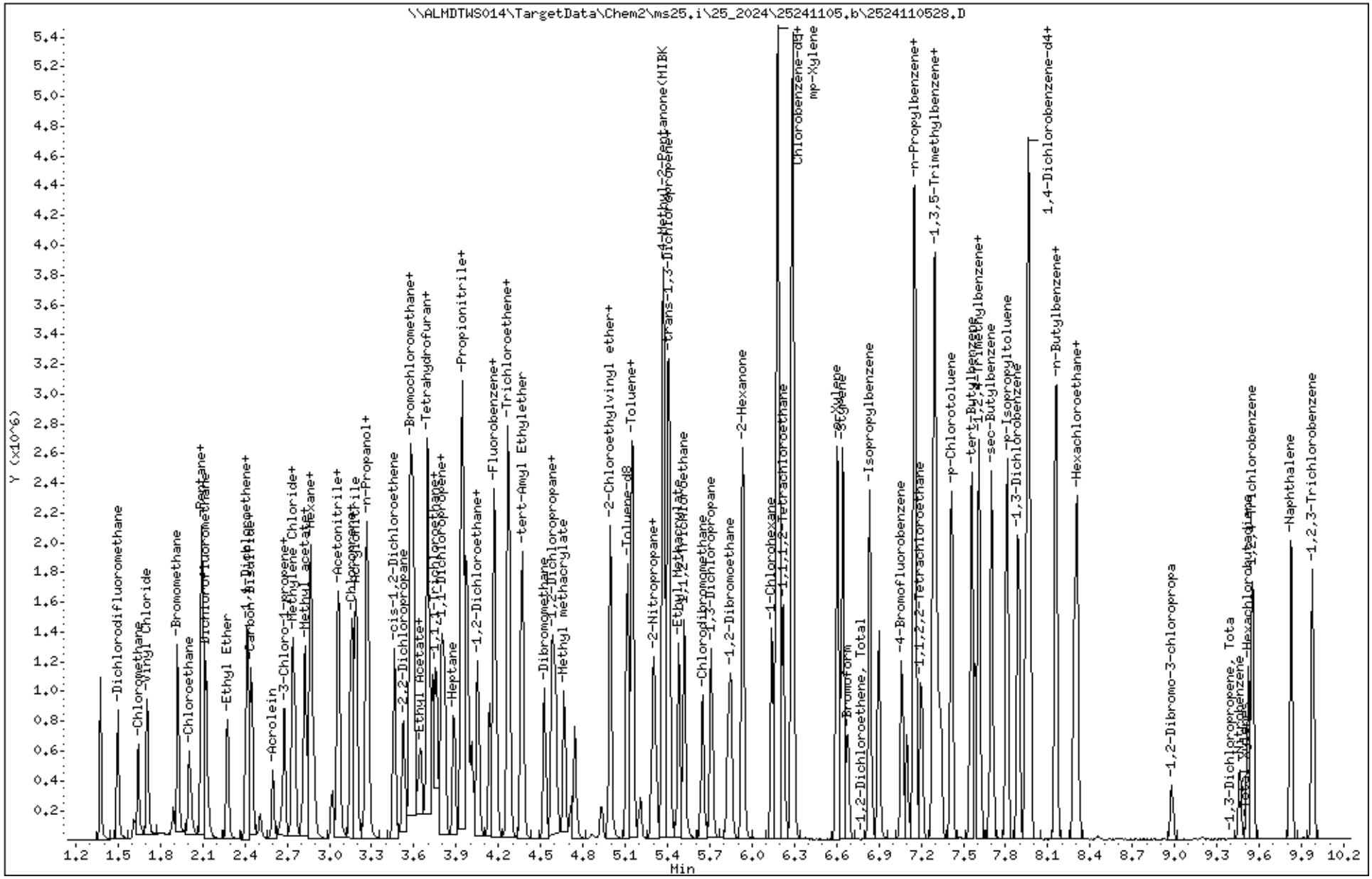
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Purge Volume: 5.0

Operator: ILY

Column phase: DB-VRX

Column diameter: 0.25

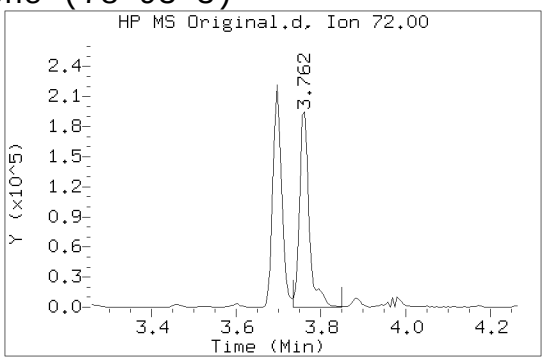


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LabSampID : 1801

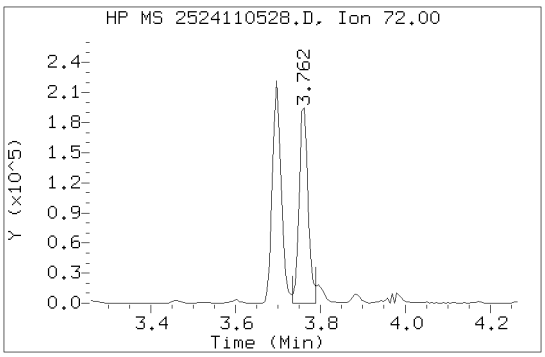
2-Butanone (78-93-3)

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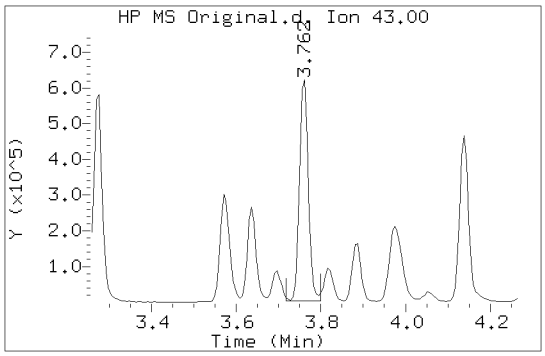
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06-Nov-2024
04:51



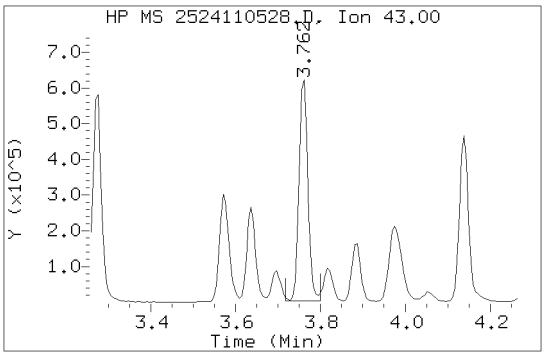
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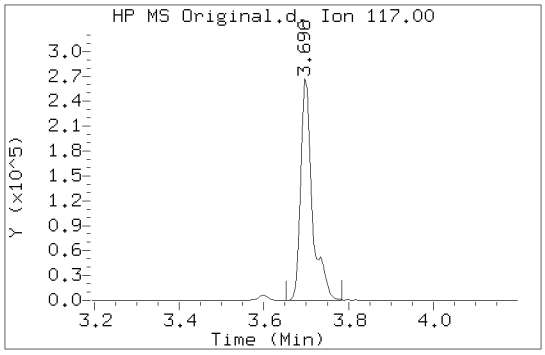
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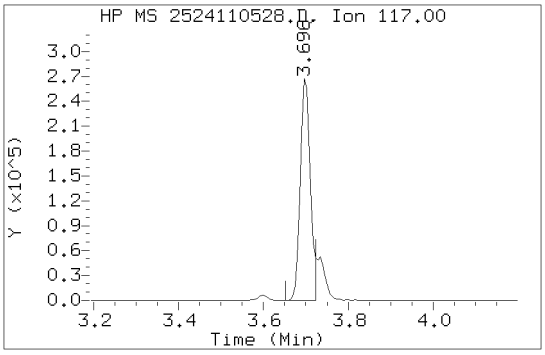
Carbon Tetrachloride (56-23-5)

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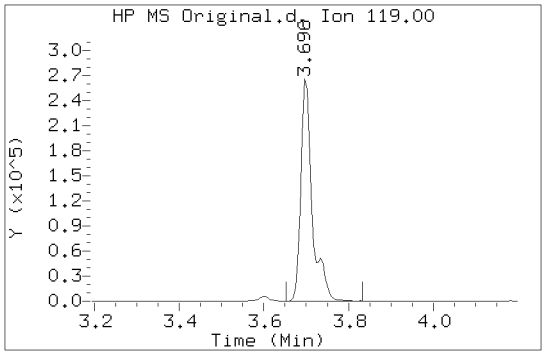
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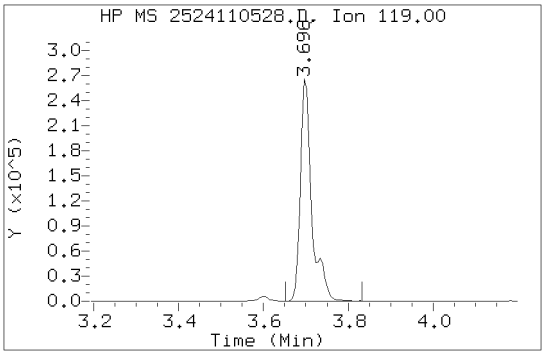
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BEFORE
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AFTER
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06-Nov-2024
14:51



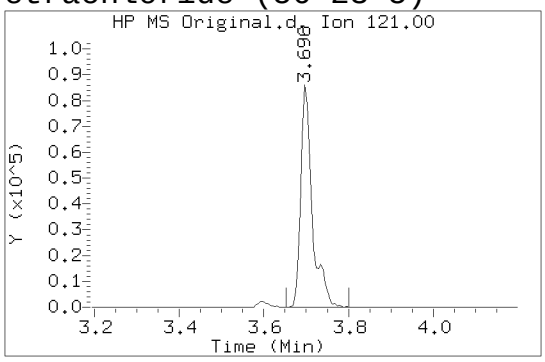
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LabSampID : 1801

Carbon Tetrachloride (56-23-5)

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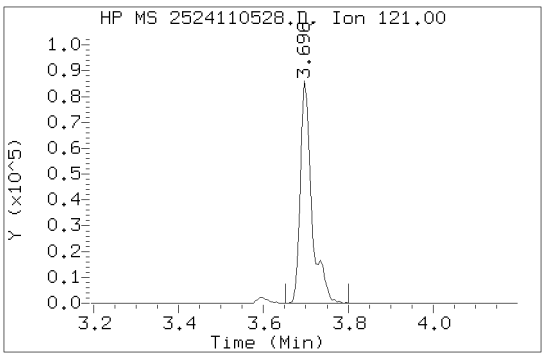
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AFTER

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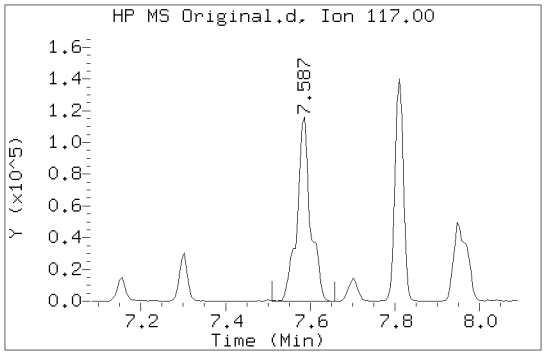


Pentachloroethane (76-01-7)

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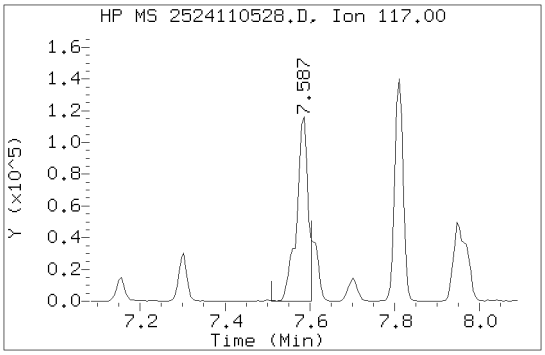
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04:51



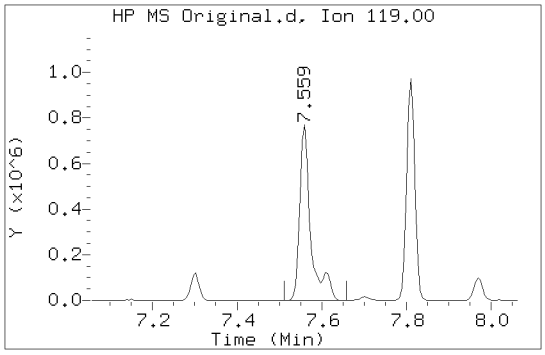
AFTER

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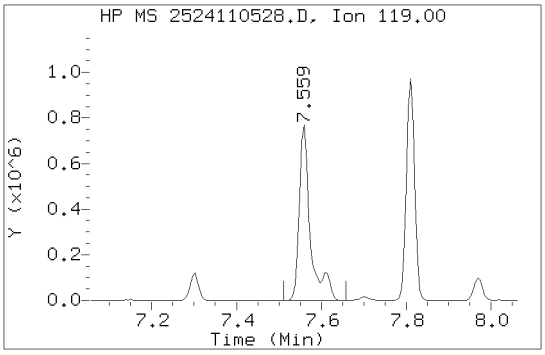
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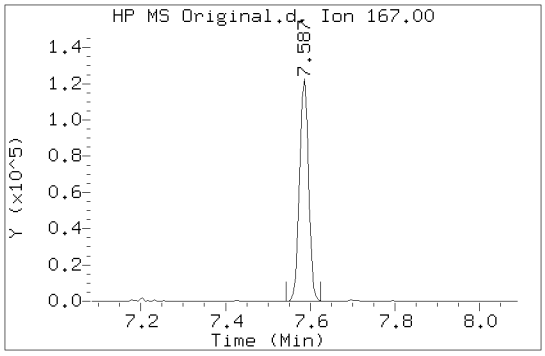
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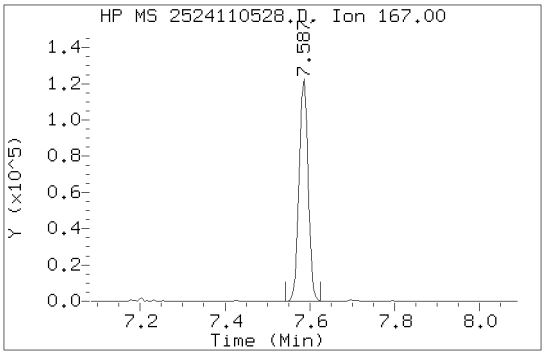
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04:51



AFTER

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HEIGHT
122664
06-Nov-2024
14:51



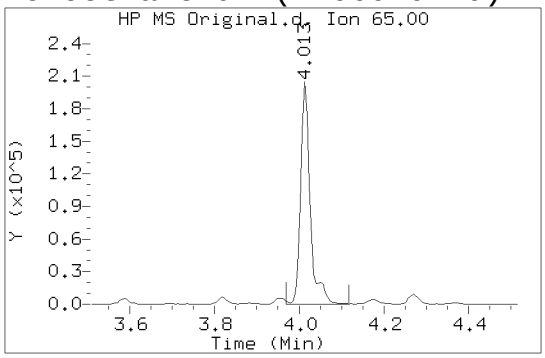
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Inj Date : 05-NOV-2024 19:35
InstruID : ms25.i
LabSampID : 1801

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code: MP

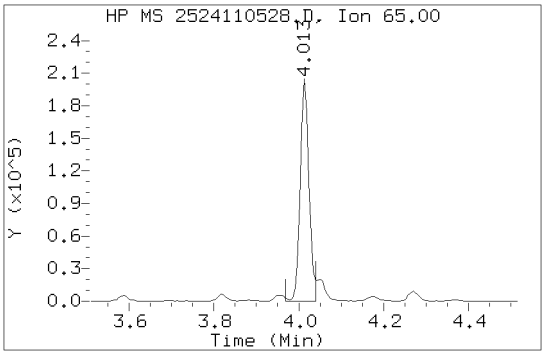
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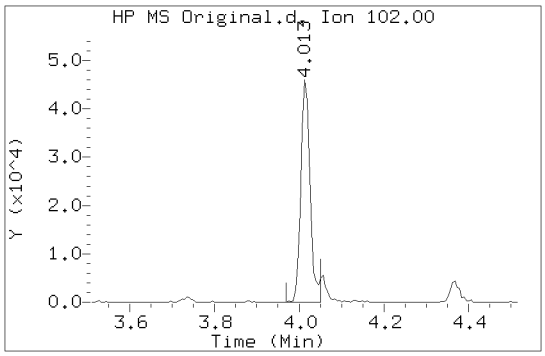
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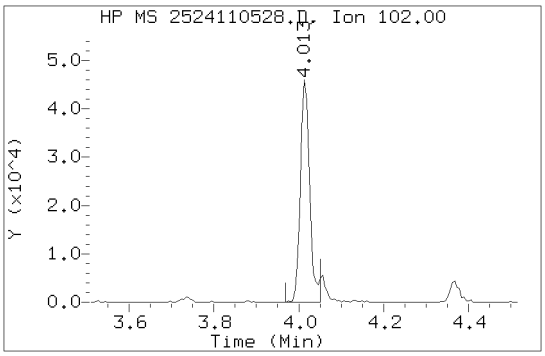
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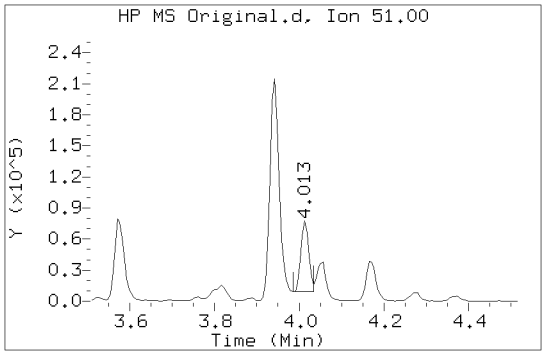
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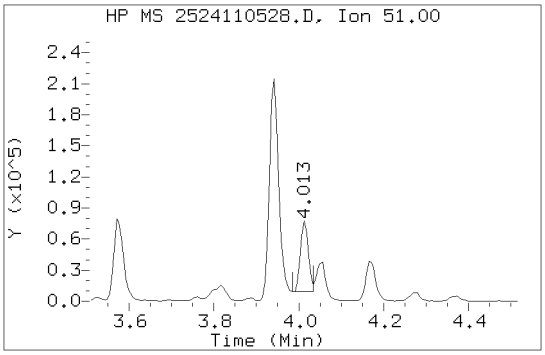
BEFORE

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68306
06-Nov-2024
04:51



AFTER

MASS
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AREA
89276
HEIGHT
68306
06-Nov-2024
14:51



UNASSIGNED PEAK REPORT

Report Date: 11/06/2024 14:51
Client ID:
DataFile: //ALMDTWS014/TargetData/Chem2/ms25.i/25_2024/25241105.b/252411052
Inj Date: 05-NOV-2024 19:35
Operator: ILY

There were no Unassigned peaks in this sample!

Standard Traceability

Volatiles Standard Log

STANDARD NAME: AR 8260 IS

VOA 0340

Prep By: TMP Prep Date: **9/24/2024** Exp Date: 3/24/2025

Final volume: 100 mL	Solvent: MeOH	Chem ID#: 240625002

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
8260A Internal Std. Mix	1200	RESTEK	HS1006	1000	9/24/2024	10/31/2027	230602007	TMP

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use On
the qualitative and/or quantitative determination of the ana

8260A Internal Standard Mix

Opened By/Date
Expiration Date 10/31/2027
Lot Number A0191100
Chem ID 230602007

Catalog No. : 30241 **Lot No.:** A0191100

Description : 8260A Internal Standard Mix

8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Fluorobenzene	2,503.8 µg/mL	+/- 14.5573 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBZ5549)		+/- 140.3856 µg/mL	Unstressed
	Purity 99%		+/- 143.6704 µg/mL	Stressed
2	Chlorobenzene-d5	2,506.8 µg/mL	+/- 14.5748 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-29571)		+/- 140.5538 µg/mL	Unstressed
	Purity 99%		+/- 143.8426 µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,504.4 µg/mL	+/- 14.5608 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-30447)		+/- 140.4192 µg/mL	Unstressed
	Purity 99%		+/- 143.7049 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

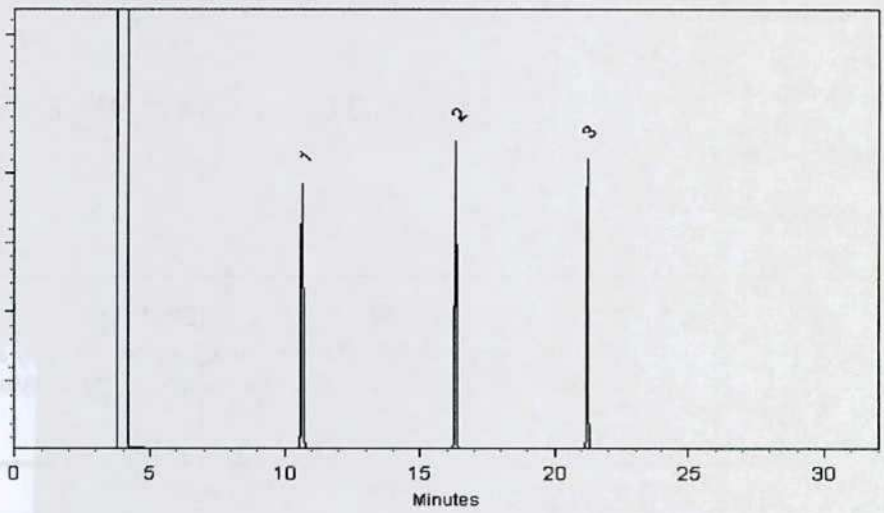
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Amanda Miller - Operations Tech III - ARM QC

Date Mixed: 28-Oct-2022 **Balance:** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 01-Nov-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	A453	Quality Test / Release Date	05/30/2024
Lot Number	241219		
Description	METHANOL, PURGE & TRAP GRADE		
Country of Origin	Venezuela	Suggested Retest Date	May/2029
Chemical Origin	Organic - synthetic		
BSE/TSE Comment	This product is derived from petroleum products. It does not contain any materials that are of human or animal origin, nor does it come into contact with such materials during the manufacturing process. Therefore, to the best of our knowledge, there is no potential for BSE or TSE to be present in this product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid free of suspended matter
2-BUTANONE	ppb	<= 50	<50
ACETONE	ppb	<= 50	<50
ALKANES	ppb	<= 50	<50
AROMATIC COMPOUNDS	ppb	<= 10	<10
ASSAY	%	>= 99.9	>99.99
CARBON TETRACHLORIDE	ppb	<= 10	<10
CHLOROFORM	ppb	<= 10	<10
CHLOROHYDROCARBONS (NON-AROMANTIC)	ppb	<= 10	<10
EVAPORATION RESIDUE	ppm	<= 1	<0.3
HEPTANE	ppb	<= 50	<50
HEXANE	ppb	<= 50	<50
IDENTIFICATION	PASS/FAIL	IN PASS TEST	PASS TEST
ISO-OCTANE	ppb	<= 50	<50
METHYL ISO-AMYL KETONE	ppb	<= 50	<50
METHYLENE CHLORIDE	ppb	<= 10	<10
OTHER DETECTABLE ALKANES	ppb	<= 50	<50
OTHER DETECTABLE CHLOROHYDROCARBONS	ppb	<= 10	<10
OTHER DETECTABLE KETONES	ppb	<= 50	<50
OTHER DETECTABLE PEAKS AS HEXANE	ppb	<= 50	<10
PENTANE	ppb	<= 50	<50

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

TITRATABLE ACID	MEQ/G	<= 0.0003	0.0002
TITRATABLE BASE	MEQ/G	<= 0.0002	0.00003
VOLATILE ORGANIC CMPDS (EPA8260B OR EQUIV)	PASS/FAIL	IN PASS TEST	PASS TEST
WATER (KARL FISCHER)	%	<= 0.3	0.0004



Kalyan Paruchuri - Quality Control Supervisor - Bridgewater

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Volatiles Standard Log

STANDARD NAME: AR 8260 SS

VOA 0341

Prep By: TMP Prep Date: **9/24/2024** Exp Date: 3/24/2025

Final volume: 100 mL	Solvent: MeOH	Chem ID#: 240625002

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
8260A Surrogate Mix	1200	RESTEK	HS1006	1000	9/24/2024	2/29/2028	230705001	TMP

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30240 **Lot No.:** A0195060

Description : 8260A Surrogate Mix

8260A Surrogate Mix 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2028 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dibromofluoromethane	1868-53-7	022013	99%	2,508.8 µg/mL	+/- 140.9477
2	1,2-Dichloroethane-d4	17060-07-0	PR-32845	99%	2,504.0 µg/mL	+/- 140.6780
3	Toluene-d8	2037-26-5	PR-33397	99%	2,519.2 µg/mL	+/- 141.5320
4	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	2,507.2 µg/mL	+/- 140.8578

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

8260A Surrogate Mix

Opened By/Date
Expiration Date 02/29/2028
Lot Number A0195060
Chem ID 230705001

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

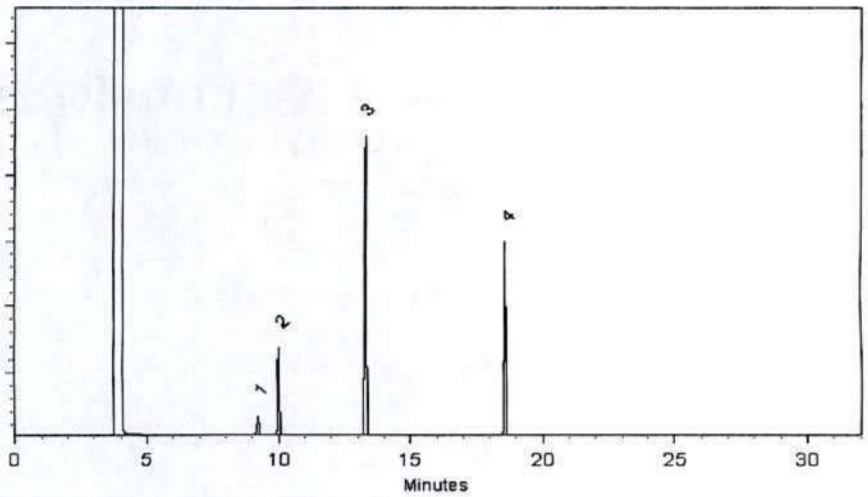
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bryan Snyder - Operations Tech I

Date Mixed: 23-Feb-2023 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 27-Feb-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	A453	Quality Test / Release Date	05/30/2024
Lot Number	241219		
Description	METHANOL, PURGE & TRAP GRADE		
Country of Origin	Venezuela	Suggested Retest Date	May/2029
Chemical Origin	Organic - synthetic		
BSE/TSE Comment	This product is derived from petroleum products. It does not contain any materials that are of human or animal origin, nor does it come into contact with such materials during the manufacturing process. Therefore, to the best of our knowledge, there is no potential for BSE or TSE to be present in this product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid free of suspended matter
2-BUTANONE	ppb	<= 50	<50
ACETONE	ppb	<= 50	<50
ALKANES	ppb	<= 50	<50
AROMATIC COMPOUNDS	ppb	<= 10	<10
ASSAY	%	>= 99.9	>99.99
CARBON TETRACHLORIDE	ppb	<= 10	<10
CHLOROFORM	ppb	<= 10	<10
CHLOROHYDROCARBONS (NON-AROMANTIC)	ppb	<= 10	<10
EVAPORATION RESIDUE	ppm	<= 1	<0.3
HEPTANE	ppb	<= 50	<50
HEXANE	ppb	<= 50	<50
IDENTIFICATION	PASS/FAIL	IN PASS TEST	PASS TEST
ISO-OCTANE	ppb	<= 50	<50
METHYL ISO-AMYL KETONE	ppb	<= 50	<50
METHYLENE CHLORIDE	ppb	<= 10	<10
OTHER DETECTABLE ALKANES	ppb	<= 50	<50
OTHER DETECTABLE CHLOROHYDROCARBONS	ppb	<= 10	<10
OTHER DETECTABLE KETONES	ppb	<= 50	<50
OTHER DETECTABLE PEAKS AS HEXANE	ppb	<= 50	<10
PENTANE	ppb	<= 50	<50

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Certificate of Analysis

1 Reagent Lane
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201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

TITRATABLE ACID	MEQ/G	<= 0.0003	0.0002
TITRATABLE BASE	MEQ/G	<= 0.0002	0.00003
VOLATILE ORGANIC CMPDS (EPA8260B OR EQUIV)	PASS/FAIL	IN PASS TEST	PASS TEST
WATER (KARL FISCHER)	%	<= 0.3	0.0004



Kalyan Paruchuri - Quality Control Supervisor - Bridgewater

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Volatiles Standard Log

STANDARD NAME: QVOALCS

VOA 0344

Prep By: TMP Prep Date: **9/30/2024** Exp Date: 12/30/2024

Final volume: 50 mL	Solvent: MeOH	Chem ID#: 240625002

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
Q Ketones	500	RESTEK	HS992	500	9/30/2024	5/31/2026	230602014	TMP
Q 1-Bromopropane	500	RESTEK	HS992	500	9/30/2024	5/31/2026	230602018	TMP
Q 2-Chloroethyl vinyl ether	500	RESTEK	HS992	500	9/30/2024	2/28/2025	230602015	TMP
Q Acetates	500	RESTEK	HS992	500	9/30/2024	2/28/2026	240904012	TMP
Q Additions	500	RESTEK	HS992	500	9/30/2024	3/31/2025	231205011	TMP
Q Mega Mix	500	RESTEK	HS992	500	9/30/2024	4/30/2025	240304018	TMP
Q Acrolein	937.5	RESTEK	HS992	500	9/30/2024	8/31/2025	240301003	TMP
			HS995	25				

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 559848.SEC **Lot No.:** A0195189

Description : Custom Ketones Mix

Custom Ketones Mix 10,000µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

Custom Ketones Mix

Opened By/Date

Expiration Date 05/31/2026

Lot Number A0195189

Chem ID 230602014

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,1-Dichloro-2-propanone	513-88-2 *	RD230110	96%	10,028.2 µg/mL	+/- 346.6192
2	2-Butanone (MEK)	78-93-3.SEC	RGZ2A	99%	10,030.0 µg/mL	+/- 346.6828
3	2-Hexanone	591-78-6.SEC	V3NRA	99%	10,044.0 µg/mL	+/- 347.1667
4	4-Methyl-2-pentanone (MIBK)	108-10-1.SEC	E29T040	99%	10,030.0 µg/mL	+/- 346.6828
5	Acetone	67-64-1.SEC	T20G008	99%	10,034.0 µg/mL	+/- 346.8210

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Matt Fragassi - Mix Technician

Date Mixed: 27-Feb-2023 **Balance:** 1127510105

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30265.SEC **Lot No.:** A0157998

2-Chloroethyl vinyl ether Standard

Description : 2-Chloroethyl vinyl ether Standard

2-Chloroethyl vinyl ether Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2025 **Storage:** 0°C or colder

Opened By/Date
Expiration Date 02/28/2025
Lot Number A0157998
Chem ID 230602015

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,005.3 µg/mL	+/- 11.7684	µg/mL	Gravimetric
	CAS # 110-75-8.SEC (Lot BQZ2K-QD)		+/- 42.9642	µg/mL	Unstressed
	Purity 99%		+/- 44.2116	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

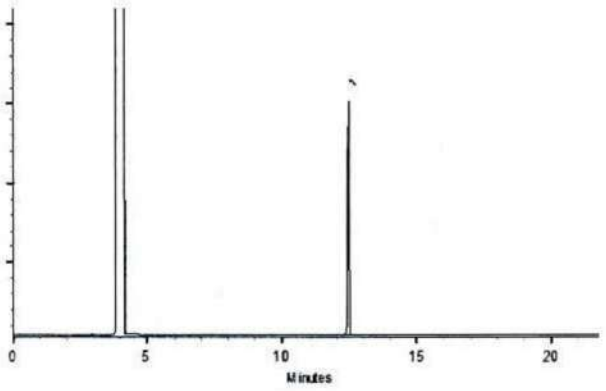
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 20-Feb-2020 **Balance:** 1127510105

Date Passed: 24-Feb-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate of Analysis

chromatographic

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 563565.SEC **Lot No.:** A0198190

Description : Custom 1-Bromopropane Standard

Custom 1-Bromopropane Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromopropane (n-propyl bromide)	106-94-5.SEC	JB2CE	99%	2,015.0 µg/mL	+/- 114.4013

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Custom 1-Bromopropane Standard

Opened By/Date
Expiration Date 05/31/2026
Lot Number A0198190
Chem ID 230602018

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

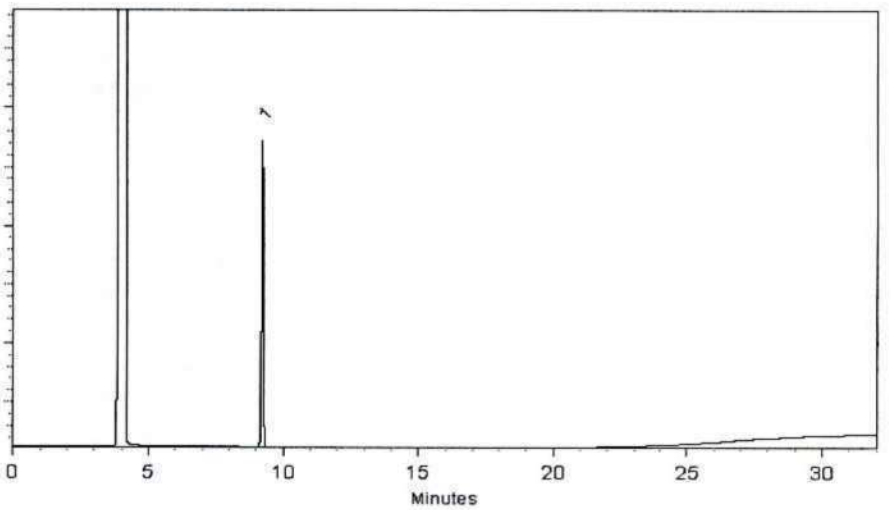
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

John Friedline - Operations Technician I — **Date Mixed:** 17-May-2023 — **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC — **Date Passed:** 19-May-2023

REVIEWED

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 559847.SEC **Lot No.:** A0196255

Description : Custom VOA Additions Mix

Custom VOA Additions Mix 2,000-50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

Custom VOA Additions Mix

Opened By/Date

Expiration Date 03/31/2025

Lot Number A0196255

Chem ID 231205011

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorofluoromethane (CFC-21)	75-43-4 *	14150400	90%	2,000.3 µg/mL	+/- 24.8549
2	n-Pentane (C5)	109-66-0.SEC	FGH02	99%	2,018.5 µg/mL	+/- 25.0816
3	Diethyl ether (ethyl ether)	60-29-7.SEC	F23X068	99%	2,003.8 µg/mL	+/- 24.8983
4	2-Propanol (isopropanol)	67-63-0.SEC	TFT5I	99%	10,021.0 µg/mL	+/- 124.4566
5	1,1,2-Trichlorotrifluoroethane (CFC-113)	76-13-1.SEC	18342	99%	2,004.3 µg/mL	+/- 24.9046
6	tert-Butanol (TBA)	75-65-0.SEC	ZSJ2O	99%	10,047.3 µg/mL	+/- 124.7826
7	Acetonitrile	75-05-8.SEC	3ZDOE	99%	10,023.3 µg/mL	+/- 124.4846
8	Iodomethane (methyl iodide)	74-88-4.SEC	Y25A027	99%	2,000.8 µg/mL	+/- 24.8611
9	Allyl chloride (3-chloropropene)	107-05-1.SEC	RD210329	99%	2,010.0 µg/mL	+/- 24.9760
10	Carbon disulfide	75-15-0.SEC	MKBL1376V	99%	2,003.5 µg/mL	+/- 24.8952
11	Acrylonitrile	107-13-1.SEC	V54AD	99%	10,012.3 µg/mL	+/- 124.3480
12	Methyl acrylate	96-33-3.SEC	UASSF	99%	2,014.3 µg/mL	+/- 25.0288
13	Methyl-tert-butyl ether (MTBE)	1634-04-4.SEC	CDCQG	99%	2,003.8 µg/mL	+/- 24.8983
14	1-Propanol	71-23-8.SEC	F353E	99%	20,008.0 µg/mL	+/- 248.4910
15	n-Hexane (C6)	110-54-3.SEC	10188491	99%	2,009.3 µg/mL	+/- 24.9667
16	Diisopropyl ether (DIPE)	108-20-3.SEC	LL7TN-SH	99%	2,013.5 µg/mL	+/- 25.0195

17	Chloroprene (2-chloro-1,3-butadiene)	126-99-8 *	230308JLM	99%	2,011.3	µg/mL	+/- 24.9915
18	Ethyl-tert-butyl ether (ETBE)	637-92-3.SEC	UCI5B	98%	2,000.4	µg/mL	+/- 24.8570
19	Propionitrile	107-12-0.SEC	B4ZPC	99%	10,010.5	µg/mL	+/- 124.3262
20	Methacrylonitrile	126-98-7 *	1012014	99%	2,007.3	µg/mL	+/- 24.9418
21	Isobutanol (2-Methyl-1-propanol)	78-83-1.SEC	YNG3K	99%	20,022.5	µg/mL	+/- 248.6711
22	tert-Amyl alcohol	75-85-4.SEC	FO4AK	99%	10,011.0	µg/mL	+/- 124.3324
23	Tetrahydrofuran	109-99-9.SEC	3NYHE	99%	10,010.3	µg/mL	+/- 124.3231
24	Cyclohexane	110-82-7.SEC	YADRA	99%	2,009.3	µg/mL	+/- 24.9667
25	1-Chlorobutane (Butyl chloride)	109-69-3.SEC	Y4EUC	99%	2,006.8	µg/mL	+/- 24.9356
26	tert-Amyl methyl ether (TAME)	994-05-8.SEC	12075100	98%	2,004.6	µg/mL	+/- 24.9088
27	n-Heptane (C7)	142-82-5.SEC	TFHUC	99%	2,001.0	µg/mL	+/- 24.8642
28	Diisobutylene (2,4,4-Trimethyl-1-pentene)	107-39-1.SEC	FGJ01	97%	2,004.3	µg/mL	+/- 24.9047
29	2-Chloroethanol	107-07-3.SEC	RD230119RSRA	99%	2,005.5	µg/mL	+/- 24.9201
30	tert-Amyl ethyl ether (TAEE)	919-94-8.SEC	11370700	99%	2,012.5	µg/mL	+/- 25.0071
31	Methylcyclohexane	108-87-2.SEC	Q02QG	99%	2,010.3	µg/mL	+/- 24.9791
32	Methyl methacrylate	80-62-6.SEC	G01X021	99%	2,008.5	µg/mL	+/- 24.9574
33	Chloroacetonitrile	107-14-2.SEC	13293000	99%	10,007.0	µg/mL	+/- 124.2828
34	1,4-Dioxane	123-91-1.SEC	4ZVCG	99%	50,031.3	µg/mL	+/- 621.3601
35	2-Nitropropane	79-46-9.SEC	F43IA	99%	10,016.5	µg/mL	+/- 124.4007
36	n-Octane (C8)	111-65-9.SEC	BHIXJ	99%	2,005.3	µg/mL	+/- 24.9170
37	Ethyl methacrylate	97-63-2.SEC	AQSPO	99%	2,005.5	µg/mL	+/- 24.9201
38	1-Chlorohexane	544-10-5.SEC	13075400	99%	2,016.8	µg/mL	+/- 25.0599
39	cis-1,4-Dichloro-2-butene	1476-11-5.SEC	382409D302	96%	1,999.0	µg/mL	+/- 24.8388
40	trans-1,4-Dichloro-2-butene	110-57-6.SEC	RD230316RSR	96%	2,005.0	µg/mL	+/- 24.9134
41	Pentachloroethane	76-01-7.SEC	815779	99%	2,004.8	µg/mL	+/- 24.9108
42	1,2,3-Trimethylbenzene	526-73-8.SEC	13921700	98%	2,004.1	µg/mL	+/- 24.9027
43	Benzyl chloride	100-44-7.SEC	H29N03	99%	2,008.3	µg/mL	+/- 24.9543
44	Hexachloroethane	67-72-1.SEC	10173016	99%	2,014.3	µg/mL	+/- 25.0288
45	Nitrobenzene	98-95-3.SEC	FLYIG	99%	20,013.8	µg/mL	+/- 248.5624

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

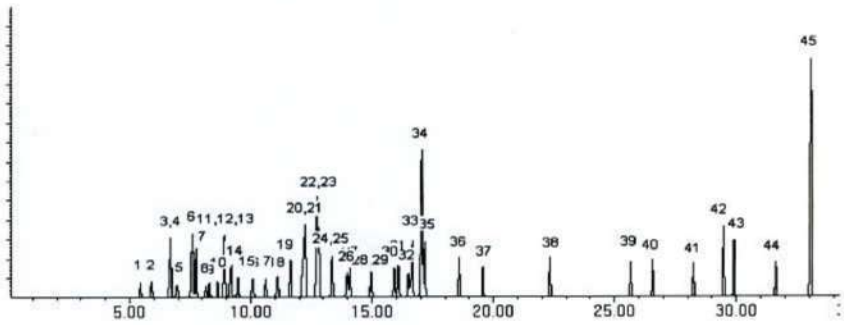
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
20.0 ml/min.

Inj. Vol
0.2µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Matt Fragassi - Mix Technician

Date Mixed: 24-Mar-2023 **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 28-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569529.SEC **Lot No.:** A0208075

Description : Custom Acrolein Standard

Custom Acrolein Standard 8,000µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acrolein	107-02-8.SEC	RD230612S	99%	8,080.0 µg/mL	+/- 244.3344

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Water
CAS # 7732-18-5
Purity 99%

Custom Acrolein Standard

Opened By/Date
Expiration Date 08/31/2025
Lot Number A0208075
Chem ID 240301003

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

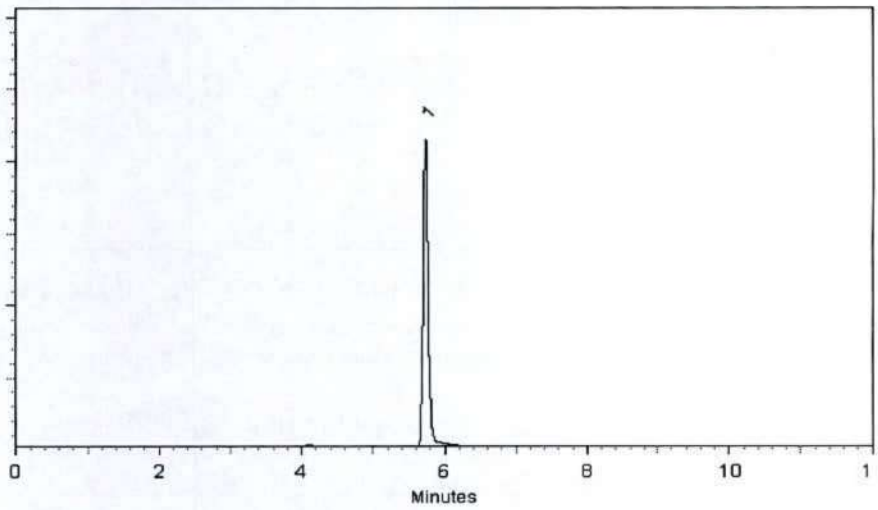
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Jess Hoy - Operations Tech I

Date Mixed: 20-Feb-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 22-Feb-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

502.2 Cal200 Mega Mix

Catalog No. : 30431.SEC **Lot No.:** A0196737

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

Opened By/Date

Expiration Date 04/30/2025

Lot Number A0196737

Chem ID 240304018

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,1-Dichloroethene	75-35-4.SEC	9201700	99%	2,007.5 µg/mL	+/- 105.8075
2	Methylene chloride (dichloromethane)	75-09-2.SEC	FGM02	99%	2,003.5 µg/mL	+/- 105.5967
3	trans-1,2-Dichloroethene	156-60-5.SEC	TS5UB	99%	2,000.6 µg/mL	+/- 105.4439
4	1,1-Dichloroethane	75-34-3.SEC	7482000	99%	2,004.0 µg/mL	+/- 105.6231
5	2,2-Dichloropropane	594-20-7.SEC	I7E8E	99%	2,010.4 µg/mL	+/- 105.9604
6	cis-1,2-Dichloroethene	156-59-2.SEC	YZO5O	99%	2,008.6 µg/mL	+/- 105.8634
7	Chloroform	67-66-3.SEC	1297547	99%	2,001.5 µg/mL	+/- 105.4913
8	Bromochloromethane	74-97-5.SEC	13547000	99%	2,008.9 µg/mL	+/- 105.8803
9	1,1,1-trichloroethane	71-55-6 *	190123CG	98%	2,000.6 µg/mL	+/- 105.4452
10	1,1-Dichloropropene	563-58-6.SEC	556500	99%	2,007.6 µg/mL	+/- 105.8149
11	Carbon tetrachloride	56-23-5.SEC	11466	99%	2,001.5 µg/mL	+/- 105.4913
12	1,2-Dichloroethane	107-06-2.SEC	00016165	99%	2,001.3 µg/mL	+/- 105.4800
13	Benzene	71-43-2.SEC	B28Y008	99%	2,010.0 µg/mL	+/- 105.9393
14	Trichloroethene	79-01-6.SEC	H04X050	99%	2,001.8 µg/mL	+/- 105.5047
15	1,2-Dichloropropane	78-87-5.SEC	ERRBI-RH	99%	2,000.3 µg/mL	+/- 105.4270
16	Bromodichloromethane	75-27-4.SEC	13780	99%	2,001.6 µg/mL	+/- 105.4961
17	Dibromomethane	74-95-3.SEC	MOKKJ	99%	2,009.1 µg/mL	+/- 105.8908

18	cis-1,3-Dichloropropene	10061-01-5.SEC 487OA	98%	2,001.8 µg/mL	+/- 105.5075
19	Toluene	108-88-3.SEC YND2B-BD	99%	2,008.2 µg/mL	+/- 105.8423
20	trans-1,3-Dichloropropene	10061-02-6.SEC ZDMSL	96%	2,004.3 µg/mL	+/- 105.6377
21	1,1,2-Trichloroethane	79-00-5.SEC 7871500	99%	2,002.5 µg/mL	+/- 105.5440
22	1,3-Dichloropropane	142-28-9.SEC IQCON	99%	2,007.1 µg/mL	+/- 105.7875
23	Tetrachloroethene	127-18-4.SEC F09W014	99%	2,000.5 µg/mL	+/- 105.4375
24	Dibromochloromethane	124-48-1.SEC 10206360	97%	2,001.0 µg/mL	+/- 105.4636
25	1,2-Dibromoethane (EDB)	106-93-4.SEC 050675P15E	99%	2,007.5 µg/mL	+/- 105.8065
26	Chlorobenzene	108-90-7.SEC 1161936	99%	2,002.8 µg/mL	+/- 105.5585
27	1,1,1,2-Tetrachloroethane	630-20-6.SEC 13789800	99%	2,006.7 µg/mL	+/- 105.7664
28	Ethylbenzene	100-41-4.SEC XO5UA	99%	2,009.1 µg/mL	+/- 105.8929
29	m-Xylene	108-38-3.SEC 7ZV6F	99%	2,009.5 µg/mL	+/- 105.9140
30	p-Xylene	106-42-3.SEC D6UOA	99%	2,009.2 µg/mL	+/- 105.8971
31	o-Xylene	95-47-6.SEC UJ6RI	99%	2,010.8 µg/mL	+/- 105.9794
32	Styrene	100-42-5.SEC QGQ7F	99%	2,007.6 µg/mL	+/- 105.8128
33	Isopropylbenzene (cumene)	98-82-8.SEC 7P24L	99%	2,010.6 µg/mL	+/- 105.9709
34	Bromoform	75-25-2.SEC 9170700	99%	2,003.5 µg/mL	+/- 105.5957
35	1,1,2,2-Tetrachloroethane	79-34-5.SEC BCCB0724	98%	2,003.3 µg/mL	+/- 105.5855
36	1,2,3-Trichloropropane	96-18-4.SEC 6V2ED	99%	2,006.4 µg/mL	+/- 105.7496
37	n-Propylbenzene	103-65-1.SEC XCGEC	99%	2,008.2 µg/mL	+/- 105.8465
38	Bromobenzene	108-86-1.SEC 8DKWJ	99%	2,008.5 µg/mL	+/- 105.8592
39	1,3,5-Trimethylbenzene	108-67-8.SEC GI2SM	99%	2,008.7 µg/mL	+/- 105.8697
40	2-Chlorotoluene	95-49-8.SEC BRHPM	99%	2,007.4 µg/mL	+/- 105.8002
41	4-Chlorotoluene	106-43-4.SEC S5SKD	99%	2,009.2 µg/mL	+/- 105.8971
42	tert-Butylbenzene	98-06-6.SEC D6OHC	99%	2,008.7 µg/mL	+/- 105.8718
43	1,2,4-Trimethylbenzene	95-63-6.SEC JHZDD	99%	2,009.1 µg/mL	+/- 105.8929
44	sec-Butylbenzene	135-98-8.SEC O4HRF	99%	2,010.2 µg/mL	+/- 105.9520
45	4-Isopropyltoluene (p-cymene)	99-87-6.SEC 13889300	98%	2,008.3 µg/mL	+/- 105.8494
46	1,3-Dichlorobenzene	541-73-1.SEC FMDFD	99%	2,000.1 µg/mL	+/- 105.4191
47	1,4-Dichlorobenzene	106-46-7.SEC YWKDC-MK	99%	2,005.0 µg/mL	+/- 105.6742
48	n-Butylbenzene	104-51-8.SEC MMPGA	99%	2,010.8 µg/mL	+/- 105.9836
49	1,2-Dichlorobenzene	95-50-1.SEC R6QDM	99%	2,003.2 µg/mL	+/- 105.5809
50	1,2-Dibromo-3-chloropropane	96-12-8.SEC Q135-105	99%	2,008.5 µg/mL	+/- 105.8592
51	1,2,4-Trichlorobenzene	120-82-1.SEC 3LYYC	99%	2,009.2 µg/mL	+/- 105.8993
52	Hexachlorobutadiene	87-68-3.SEC 13889400	97%	2,008.5 µg/mL	+/- 105.8593
53	Naphthalene	91-20-3.SEC AM5NG	99%	2,005.4 µg/mL	+/- 105.6969

54	1,2,3-Trichlorobenzene	87-61-6.SEC A0043055	99% 2,009.3 µg/mL	+/- 105.9014

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

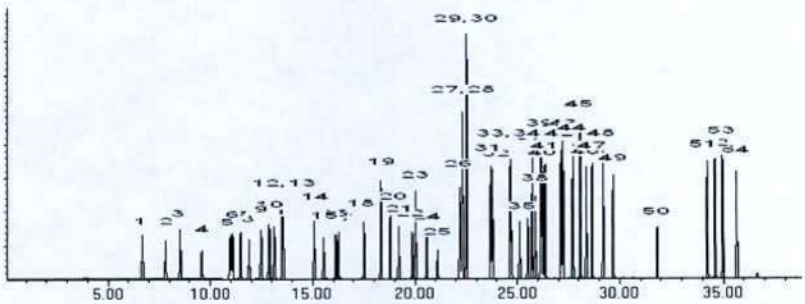
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
20.0 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Daniel Wasson - Operations Tech I **Date Mixed:** 06-Apr-2023 **Balance Serial #** 1128342314

Christie Mills - Operations Tech II - ARM QC **Date Passed:** 10-Apr-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	A453	Quality Test / Release Date	05/30/2024
Lot Number	241219		
Description	METHANOL, PURGE & TRAP GRADE		
Country of Origin	Venezuela	Suggested Retest Date	May/2029
Chemical Origin	Organic - synthetic		
BSE/TSE Comment	This product is derived from petroleum products. It does not contain any materials that are of human or animal origin, nor does it come into contact with such materials during the manufacturing process. Therefore, to the best of our knowledge, there is no potential for BSE or TSE to be present in this product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid free of suspended matter
2-BUTANONE	ppb	<= 50	<50
ACETONE	ppb	<= 50	<50
ALKANES	ppb	<= 50	<50
AROMATIC COMPOUNDS	ppb	<= 10	<10
ASSAY	%	>= 99.9	>99.99
CARBON TETRACHLORIDE	ppb	<= 10	<10
CHLOROFORM	ppb	<= 10	<10
CHLOROHYDROCARBONS (NON-AROMANTIC)	ppb	<= 10	<10
EVAPORATION RESIDUE	ppm	<= 1	<0.3
HEPTANE	ppb	<= 50	<50
HEXANE	ppb	<= 50	<50
IDENTIFICATION	PASS/FAIL	IN PASS TEST	PASS TEST
ISO-OCTANE	ppb	<= 50	<50
METHYL ISO-AMYL KETONE	ppb	<= 50	<50
METHYLENE CHLORIDE	ppb	<= 10	<10
OTHER DETECTABLE ALKANES	ppb	<= 50	<50
OTHER DETECTABLE CHLOROHYDROCARBONS	ppb	<= 10	<10
OTHER DETECTABLE KETONES	ppb	<= 50	<50
OTHER DETECTABLE PEAKS AS HEXANE	ppb	<= 50	<10
PENTANE	ppb	<= 50	<50

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

TITRATABLE ACID	MEQ/G	<= 0.0003	0.0002
TITRATABLE BASE	MEQ/G	<= 0.0002	0.00003
VOLATILE ORGANIC CMPDS (EPA8260B OR EQUIV)	PASS/FAIL	IN PASS TEST	PASS TEST
WATER (KARL FISCHER)	%	<= 0.3	0.0004



Kalyan Paruchuri - Quality Control Supervisor - Bridgewater

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the an 8260B Acetates Mix

Catalog No. : 30489.SEC **Lot No.:** A0215543

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

Opened By/Date

Expiration Date 02/28/2026

Lot Number A0215543

Chem ID 240904012

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9.SEC	LV27M	99%	2,006.0 µg/mL	+/- 69.3609
2	Vinyl acetate	108-05-4.SEC	RD230301RSRA	98%	2,001.2 µg/mL	+/- 69.1936
3	Ethyl acetate	141-78-6.SEC	C386A-GG	99%	2,002.0 µg/mL	+/- 69.2226
4	Isopropyl acetate	108-21-4.SEC	FGL01	99%	2,002.0 µg/mL	+/- 69.2226
5	Propyl acetate	109-60-4.SEC	929400	99%	2,000.0 µg/mL	+/- 69.1535
6	Butyl acetate	123-86-4.SEC	V2L2G-GT	99%	2,000.0 µg/mL	+/- 69.1535
7	Amyl acetate	628-63-7.SEC	OGL01	99%	2,002.0 µg/mL	+/- 69.2226

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

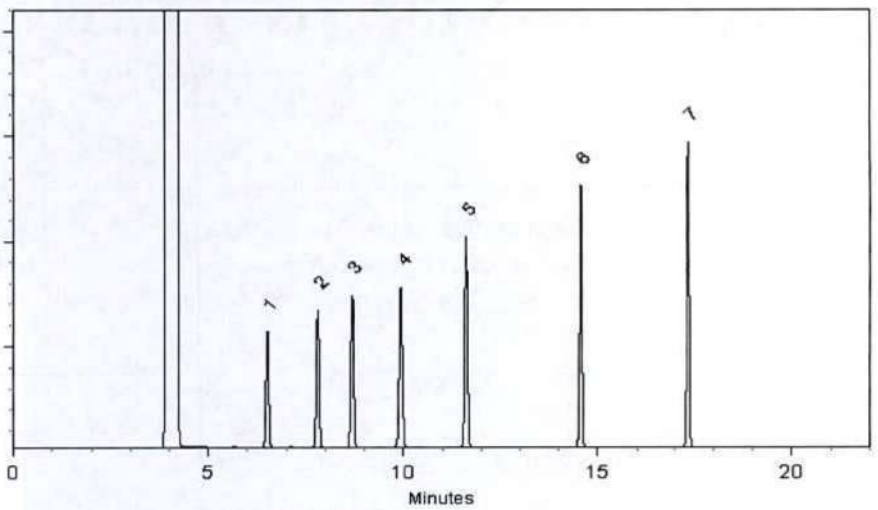
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael S. Maye - Operations Tech III

Date Mixed: 22-Aug-2024 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 26-Aug-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: BFB OCT 17

VOA 0353

Prep By: ILY Prep Date: **10/17/2024** Exp Date: 4/17/2025

Final volume: 50 mL	Solvent: MeOH	Chem ID#: 240917001

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
4-Bromofluorobenzene Mix	1000	RESTEK	HS1006	1000	10/17/2024	4/30/2029	240624004	ILY
	250		HS992	500				

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0209821

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB)	460-00-4	0000194533	99%	2,015.0 µg/mL	+/- 113.2054

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

4-Bromofluorobenzene

Opened By/Date
Expiration Date 04/30/2029
Lot Number A0209821
Chem ID 240624004

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

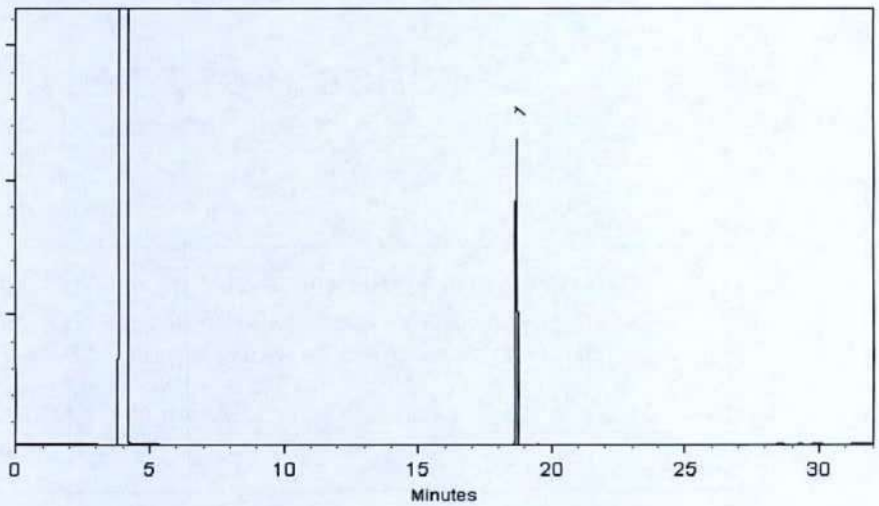
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 04-Apr-2024 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-Apr-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: VOANEW

VOA 0356

Prep By: TMP Prep Date: **10/19/2024** Exp Date: 1/19/2025

Final volume: 10 mL	Solvent: MeOH	Chem ID#: 240917001

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
V Ketones	1000	RESTEK	HS1006	1000	10/19/2024	11/30/2026	231205012	TMP
V 1-Bromopropane	1000	RESTEK	HS1006	1000	10/19/2024	2/28/2026	240604015	TMP
V 2-Chloroethyl vinyl ether	1000	RESTEK	HS1006	1000	10/19/2024	1/31/2029	240904016	TMP
V Acetates	1000	RESTEK	HS1006	1000	10/19/2024	6/30/2025	240604005	TMP
V Additions	1000	RESTEK	HS1006	1000	10/19/2024	3/31/2025	240604010	TMP
V Mega Mix	1000	RESTEK	HS1006	1000	10/19/2024	12/31/2025	240604006	TMP
V Acrolein	1000	RESTEK	HS1006	1000	10/19/2024	8/31/2025	240603011	TMP
	250		HS992	500				

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Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569529 **Lot No.:** A0208150

Description : Custom Acrolein Standard

Custom Acrolein Standard 8,000µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acrolein	107-02-8	RP240118CTH	99%	8,080.0 µg/mL	+/- 244.3344

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Water
CAS # 7732-18-5
Purity 99%

Custom Arcolein Standard

Opened By/Date
Expiration Date 08/31/2025
Lot Number A0208150
Chem ID 240603011

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

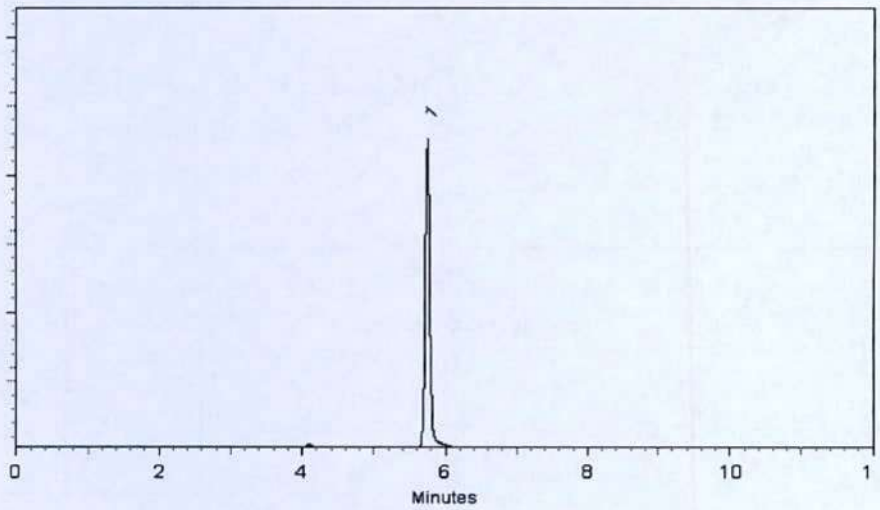
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I **Date Mixed:** 21-Feb-2024 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 23-Feb-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0205013

Description : 8260B Acetates Mix

8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

8260B Acetates Mix

Opened By/Date

Expiration Date 06/30/2025

Lot Number A0205013

Chem ID 240604005

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,012.7 µg/mL	+/- 69.5670
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,017.5 µg/mL	+/- 69.7338
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,020.0 µg/mL	+/- 69.8205
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,018.7 µg/mL	+/- 69.7744
5	Propyl acetate	109-60-4	KLOBM	99%	2,012.0 µg/mL	+/- 69.5439
6	Butyl acetate	123-86-4	SHBP6314	99%	2,020.0 µg/mL	+/- 69.8205
7	Amyl acetate	628-63-7	41325/1	97%	2,019.5 µg/mL	+/- 69.8046

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

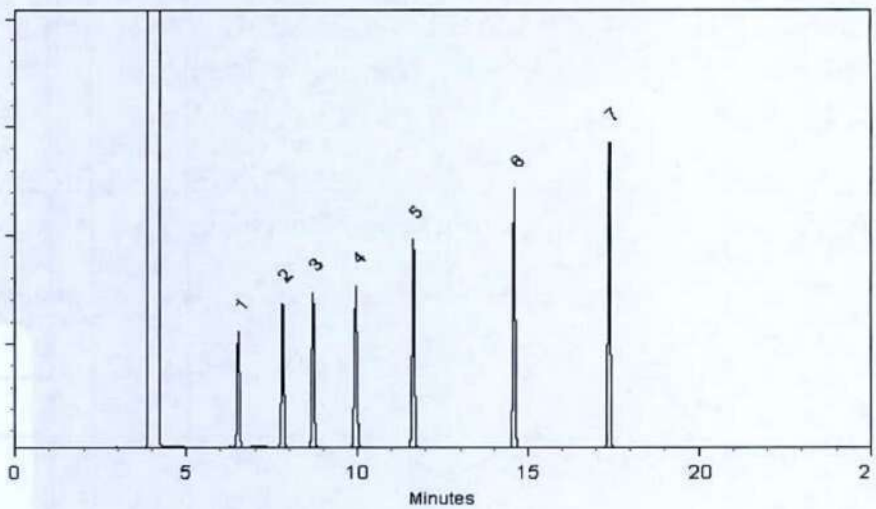
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko - Operations Tech I

Date Mixed: 04-Dec-2023 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 06-Dec-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30431 **Lot No.:** A0205281

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

502.2 Cal2000 Mega-Mix

Opened By/Date

Expiration Date 12/31/2025

Lot Number A0205281

Chem ID 240604006

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,1-dichloroethene	75-35-4	SHBG8609V	99%	2,005.0 µg/mL	+/- 90.4381
2	Methylene chloride (dichloromethane)	75-09-2	SHBQ6376	99%	2,004.2 µg/mL	+/- 90.4020
3	trans-1,2-Dichloroethene	156-60-5	MKCP9516	99%	2,003.5 µg/mL	+/- 90.3704
4	1,1-Dichloroethane	75-34-3	852900	99%	2,004.1 µg/mL	+/- 90.3986
5	2,2-Dichloropropane	594-20-7	RD230426	99%	2,013.2 µg/mL	+/- 90.8205
6	cis-1,2-Dichloroethene	156-59-2	MKCP7830	99%	2,014.0 µg/mL	+/- 90.8529
7	chloroform	67-66-3	SHBN8469	99%	2,003.3 µg/mL	+/- 90.3625
8	Bromochloromethane	74-97-5	230810JLM	99%	2,016.0 µg/mL	+/- 90.9450
9	1,1,1-trichloroethane	71-55-6	RD230728RSR	99%	2,004.6 µg/mL	+/- 90.4189
10	1,1-Dichloropropene	563-58-6	230825JLM	99%	2,018.9 µg/mL	+/- 91.0767
11	carbon tetrachloride	56-23-5	SHBP4875	99%	2,003.6 µg/mL	+/- 90.3727
12	1,2-Dichloroethane	107-06-2	SHBQ5408	99%	2,003.4 µg/mL	+/- 90.3636
13	Benzene	71-43-2	MKCS3357	99%	2,017.4 µg/mL	+/- 91.0081
14	Trichloroethene	79-01-6	SHBN3720	99%	2,003.8 µg/mL	+/- 90.3828
15	1,2-Dichloropropane	78-87-5	BCBR0882V	99%	2,003.6 µg/mL	+/- 90.3738
16	bromodichloromethane	75-27-4	MKCF8470	99%	2,003.5 µg/mL	+/- 90.3693
17	Dibromomethane	74-95-3	10233302	99%	2,014.7 µg/mL	+/- 90.8854

18	cis-1,3-Dichloropropene	10061-01-5	RP231025CTH	99%	2,003.4	µg/mL	+/- 90.3636
19	Toluene	108-88-3	MKCS9989	99%	2,019.0	µg/mL	+/- 91.0785
20	trans-1,3-Dichloropropene	10061-02-6	RD230727RSR	99%	2,003.0	µg/mL	+/- 90.3467
21	1,1,2-Trichloroethane	79-00-5	FGB01	99%	2,003.6	µg/mL	+/- 90.3761
22	1,3-Dichloropropane	142-28-9	BCCH5357	99%	2,017.1	µg/mL	+/- 90.9955
23	Tetrachloroethene	127-18-4	SHBQ0051	99%	2,003.9	µg/mL	+/- 90.3885
24	dibromochloromethane	124-48-1	MKCQ4517	99%	2,002.8	µg/mL	+/- 90.3366
25	1,2-Dibromoethane (EDB)	106-93-4	BCCH7113	99%	2,009.0	µg/mL	+/- 90.6292
26	Chlorobenzene	108-90-7	SHBN6640	99%	2,003.3	µg/mL	+/- 90.3603
27	1,1,1,2-Tetrachloroethane	630-20-6	GC01	99%	2,013.8	µg/mL	+/- 90.8439
28	Ethylbenzene	100-41-4	094632L21G	99%	2,006.8	µg/mL	+/- 90.5299
29	m-Xylene	108-38-3	SHBN6673	99%	2,018.7	µg/mL	+/- 91.0677
30	p-Xylene	106-42-3	SHBP5191	99%	2,008.0	µg/mL	+/- 90.5841
31	o-Xylene	95-47-6	SHBN5105	99%	2,016.3	µg/mL	+/- 90.9594
32	Styrene	100-42-5	MKCQ3390	99%	2,014.8	µg/mL	+/- 90.8926
33	Isopropylbenzene (cumene)	98-82-8	Z20D022	99%	2,011.4	µg/mL	+/- 90.7393
34	bromoform	75-25-2	050494L04R	99%	2,004.6	µg/mL	+/- 90.4200
35	1,1,2,2-Tetrachloroethane	79-34-5	QQJ41	99%	2,004.1	µg/mL	+/- 90.3975
36	1,2,3-Trichloropropane	96-18-4	Q91-34	98%	2,013.8	µg/mL	+/- 90.8449
37	n-Propylbenzene	103-65-1	095067T18C	99%	2,018.4	µg/mL	+/- 91.0514
38	Bromobenzene	108-86-1	MKCQ7174	99%	2,016.9	µg/mL	+/- 90.9847
39	1,3,5-Trimethylbenzene	108-67-8	BCCF4166	99%	2,017.0	µg/mL	+/- 90.9901
40	2-Chlorotoluene	95-49-8	235783M23T	99%	2,017.8	µg/mL	+/- 91.0280
41	4-Chlorotoluene	106-43-4	BCCG9286	99%	2,014.1	µg/mL	+/- 90.8602
42	tert-Butylbenzene	98-06-6	STBJ1937	99%	2,005.2	µg/mL	+/- 90.4596
43	1,2,4-Trimethylbenzene	95-63-6	MKCS3775	99%	2,015.9	µg/mL	+/- 90.9396
44	sec-Butylbenzene	135-98-8	MKCP2266	99%	2,011.0	µg/mL	+/- 90.7194
45	p-Isopropyltoluene (p-Cymene)	99-87-6	MKCR6143	99%	2,014.6	µg/mL	+/- 90.8800
46	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	2,003.4	µg/mL	+/- 90.3670
47	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	2,005.0	µg/mL	+/- 90.4381
48	n-Butylbenzene	104-51-8	09418JJ	99%	2,005.3	µg/mL	+/- 90.4614
49	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	2,003.8	µg/mL	+/- 90.3817
50	1,2-Dibromo-3-chloropropane	96-12-8	HBMVB	97%	2,005.1	µg/mL	+/- 90.4535
51	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	2,015.0	µg/mL	+/- 90.8981
52	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	2,001.7	µg/mL	+/- 90.3003
53	Naphthalene	91-20-3	STBL1057	99%	2,008.9	µg/mL	+/- 90.6256

54	1,2,3-Trichlorobenzene	87-61-6	MKBX7627V	99%	2,012.3 µg/mL	+/- 90.7772

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

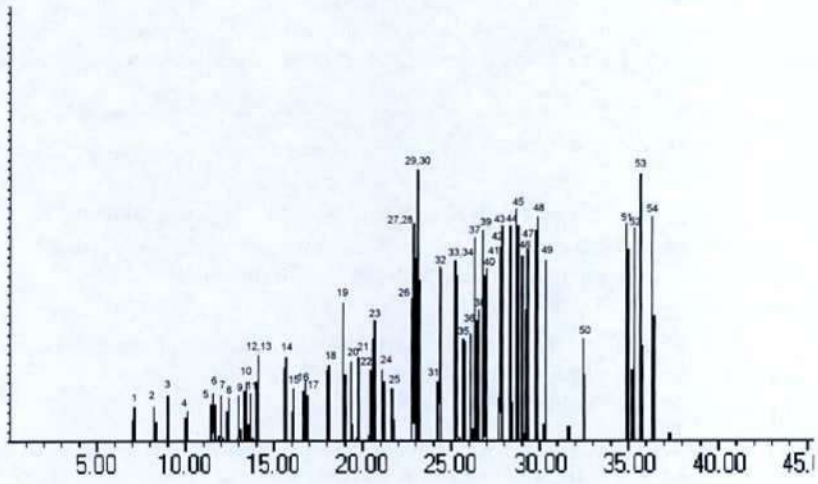
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
20.0 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope Riglin - Operations Tech I

Date Mixed: 10-Dec-2023 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

Date Passed: 13-Dec-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

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ACCREDITED
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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 559847 **Lot No.:** A0196230

Description : Custom VOA Additions Mix

Custom VOA Additions Mix 2,000-50,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

Custom VOA Additions Mix

Opened By/Date

Expiration Date 03/31/2025

Lot Number A0196230

Chem ID 240604010

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorofluoromethane (CFC-21)	75-43-4	14150400	90%	2,000.3 µg/mL	+/- 24.8549
2	n-Pentane (C5)	109-66-0	SHBQ0917	99%	2,019.8 µg/mL	+/- 25.0972
3	Diethyl ether (ethyl ether)	60-29-7	SHBP5008	99%	2,014.3 µg/mL	+/- 25.0288
4	2-Propanol (isopropanol)	67-63-0	SHBP6610	99%	10,097.3 µg/mL	+/- 125.4036
5	1,1,2-Trichlorotrifluoroethane (CFC-113)	76-13-1	00018685	99%	2,007.5 µg/mL	+/- 24.9449
6	tert-Butanol (TBA)	75-65-0	101619K21F-1	99%	10,090.5 µg/mL	+/- 125.3198
7	Acetonitrile	75-05-8	SHBH6233	99%	10,088.8 µg/mL	+/- 125.2981
8	Iodomethane (methyl iodide)	74-88-4	MKCN8012	99%	2,006.3 µg/mL	+/- 24.9294
9	Allyl chloride (3-chloropropene)	107-05-1	RD221118RSR	99%	2,009.3 µg/mL	+/- 24.9667
10	Carbon disulfide	75-15-0	N28F701	99%	2,010.5 µg/mL	+/- 24.9822
11	Acrylonitrile	107-13-1	102466R02E	99%	10,087.8 µg/mL	+/- 125.2856
12	Methyl acrylate	96-33-3	SHBG6616V	99%	2,011.5 µg/mL	+/- 24.9947
13	Methyl-tert-butyl ether (MTBE)	1634-04-4	SHBP0179	99%	2,019.3 µg/mL	+/- 25.0910
14	1-Propanol	71-23-8	098913R02E	99%	20,180.0 µg/mL	+/- 250.6272
15	n-Hexane (C6)	110-54-3	SHBL9879	99%	2,016.3 µg/mL	+/- 25.0537
16	Diisopropyl ether (DIPE)	108-20-3	STBK3450	99%	2,019.8 µg/mL	+/- 25.0972

17	Chloroprene (2-chloro-1,3-butadiene)	126-99-8	230308JLM	99%	2,010.3	µg/mL	+/- 24.9791
18	Ethyl-tert-butyl ether (ETBE)	637-92-3	MKCP5997	99%	2,012.0	µg/mL	+/- 25.0009
19	Propionitrile	107-12-0	BCCF4167	99%	10,072.0	µg/mL	+/- 125.0900
20	Methacrylonitrile	126-98-7	1012014	99%	2,015.5	µg/mL	+/- 25.0444
21	Isobutanol (2-Methyl-1-propanol)	78-83-1	SHBP7066	99%	20,185.0	µg/mL	+/- 250.6892
22	tert-Amyl alcohol	75-85-4	STBB1898V	99%	10,088.8	µg/mL	+/- 125.2981
23	Tetrahydrofuran	109-99-9	SHBQ0910	99%	10,086.0	µg/mL	+/- 125.2639
24	Cyclohexane	110-82-7	MKCQ2001	99%	2,014.5	µg/mL	+/- 25.0319
25	1-Chlorobutane (Butyl chloride)	109-69-3	SHBG2918V	99%	2,010.5	µg/mL	+/- 24.9822
26	tert-Amyl methyl ether (TAME)	994-05-8	HMBJ0825	99%	2,010.3	µg/mL	+/- 24.9791
27	n-Heptane (C7)	142-82-5	044743N07T	99%	2,008.3	µg/mL	+/- 24.9543
28	Diisobutylene (2,4,4-Trimethyl-1-pentene)	107-39-1	MKBD3091	99%	2,011.3	µg/mL	+/- 24.9915
29	2-Chloroethanol	107-07-3	RD230123RSR	99%	2,014.5	µg/mL	+/- 25.0319
30	tert-Amyl ethyl ether (TAEE)	919-94-8	IKVYB	97%	2,014.4	µg/mL	+/- 25.0313
31	Methylcyclohexane	108-87-2	SHBN1699	99%	2,010.3	µg/mL	+/- 24.9791
32	Methyl methacrylate	80-62-6	MKCQ2756	99%	2,014.3	µg/mL	+/- 25.0288
33	Chloroacetonitrile	107-14-2	MKBG6249V	99%	10,091.8	µg/mL	+/- 125.3353
34	1,4-Dioxane	123-91-1	SHBP8653	99%	50,486.3	µg/mL	+/- 627.0109
35	2-Nitropropane	79-46-9	BCCB9352	97%	10,099.4	µg/mL	+/- 125.4303
36	n-Octane (C8)	111-65-9	SHBP9758	99%	2,012.3	µg/mL	+/- 25.0040
37	Ethyl methacrylate	97-63-2	MKCN6206	97%	2,007.7	µg/mL	+/- 24.9469
38	1-Chlorohexane	544-10-5	BCBS3368V	99%	2,009.0	µg/mL	+/- 24.9636
39	cis-1,4-Dichloro-2-butene	1476-11-5	RD220228	97%	2,015.4	µg/mL	+/- 25.0433
40	trans-1,4-dichloro-2-butene	110-57-6	RD221227RSRA	94%	2,015.4	µg/mL	+/- 25.0426
41	Pentachloroethane	76-01-7	13550700	97%	2,010.6	µg/mL	+/- 24.9831
42	1,2,3-Trimethylbenzene	526-73-8	8776.10-36	98%	2,013.4	µg/mL	+/- 25.0184
43	Benzyl chloride	100-44-7	MKCM5986	99%	2,014.8	µg/mL	+/- 25.0350
44	Hexachloroethane	67-72-1	QTORH	99%	2,011.8	µg/mL	+/- 24.9978
45	Nitrobenzene	98-95-3	10224044	99%	20,167.0	µg/mL	+/- 250.4657

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

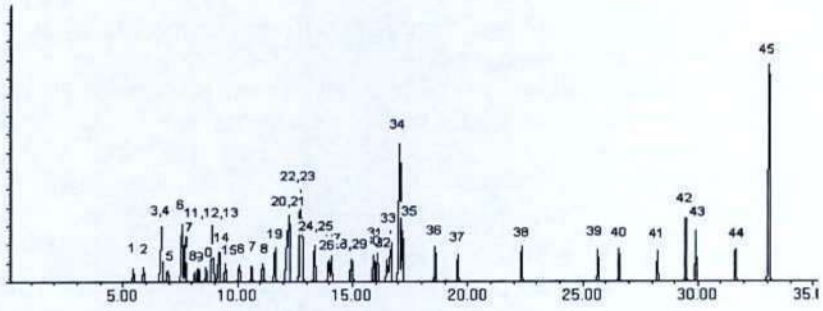
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
20.0 ml/min.

Inj. Vol
0.2µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko - Operations Tech I

Date Mixed: 23-Mar-2023 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 28-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 563565 **Lot No.:** A0194815

Description : Custom 1-Bromopropane Standard

Custom 1-Bromopropane Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromopropane (n-propyl bromide)	106-94-5	STBF3694V	99%	2,010.0 µg/mL	+/- 112.9395

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Custom 1-Bromopropane Standard

Opened By/Date
Expiration Date 02/28/2026
Lot Number A0194815
Chem ID 240604015

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

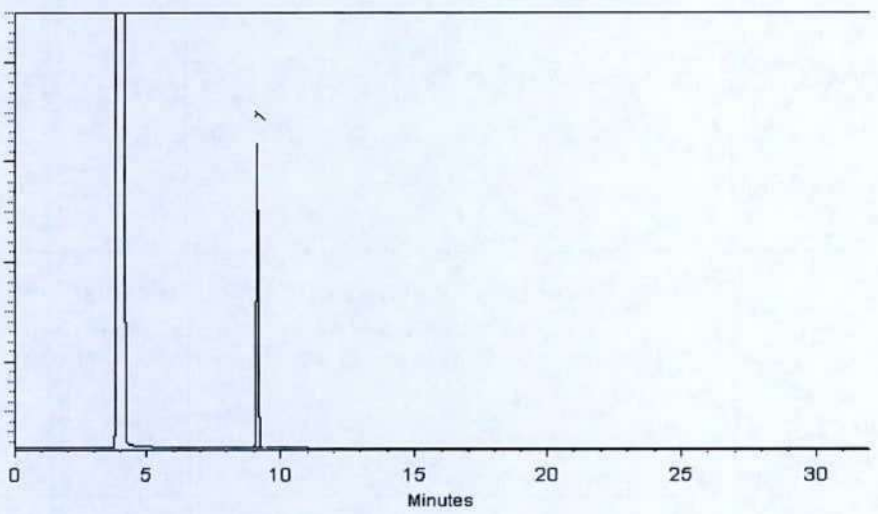
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician **Date Mixed:** 17-Feb-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 23-Feb-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ilac-MRA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

2-Chloroethyl vinyl ether Standard

Catalog No. : 30265 **Lot No.:** A0206207

Description : 2-Chloroethyl vinyl ether Standard

2-Chloroethyl vinyl ether Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2029 **Storage:** 0°C or colder

Ship: Ambient

Opened By/Date

Expiration Date 01/31/2029

Lot Number A0206207

Chem ID 240904016

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Chloroethyl vinyl ether	110-75-8	MKCK6742	99%	2,003.5 µg/mL	+/- 24.8952

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

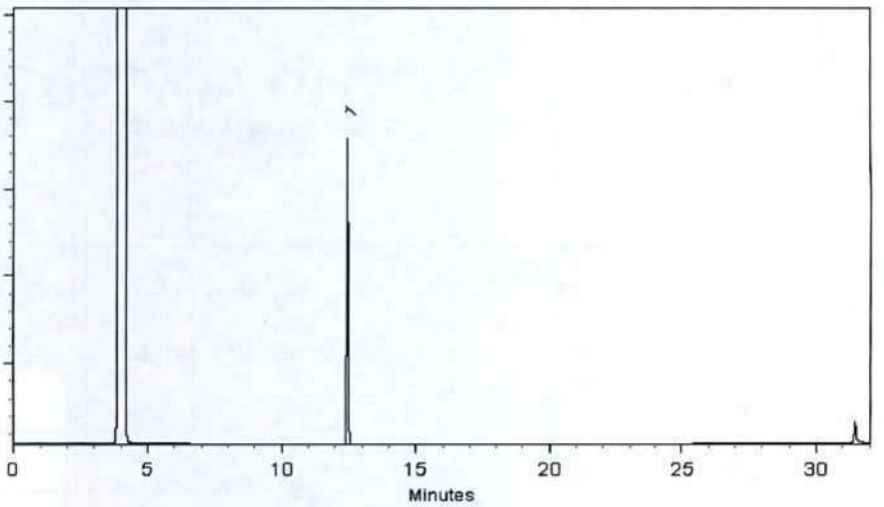
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I **Date Mixed:** 04-Jan-2024 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 05-Jan-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: Antifoam

VOA 0359

Prep By: BST Prep Date: **10/22/2024** Exp Date: 3/22/2025

Final volume: 200 mL	Solvent: DI H2O	Chem ID#: NA

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
Antifoam SE-15	10000	SIGMA	HS1022	10000	7/24/2024	10/31/2028	231009009	ILY

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Antifoam SE-15 - aqueous emulsion for bacterial and mammalian systems

Product Number: **A8582**
Batch Number: **MKCS3097**
Brand: SIGMA
Quality Release Date: 23 SEP 2022

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Emulsion	Emulsion
Suitability Suitable for use in bacterial fermentation	Conforms	Conforms

Larry Coers, Director
Quality Control
Milwaukee, WI US

Antifoam SE-15

Opened By/Date
Expiration Date 10/31/2028
Lot Number MKCS3097
Chem ID 231009009

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Volatiles Standard Log

STANDARD NAME: V-GAS

VOA 0363

Prep By: TMP Prep Date: **11/4/2024** Exp Date: 11/11/2024

Final volume: NA mL	Solvent: NA	Chem ID#: NA

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
502.2 Cal. Mix #1	NA	RESTEK	NA	NA	11/4/2024	10/31/2030	240904009	TMP

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110 Benner Circle
Bellefonte, PA 16823-8812
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Fax: 1-814-353-1309

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ilac-MRA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30439 **Lot No.:** A0207316

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 200µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2030 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	204.5 µg/mL	+/- 13.1012
2	Chloromethane (methyl chloride)	74-87-3	SHBM9611	99%	198.4 µg/mL	+/- 13.1103
3	Vinyl chloride	75-01-4	00015559	99%	200.5 µg/mL	+/- 13.2484
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	205.0 µg/mL	+/- 15.4163
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	202.1 µg/mL	+/- 12.8691
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	204.7 µg/mL	+/- 13.5233

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

502.2 Calibration Mix #1

Opened By/Date
Expiration Date 10/31/2030
Lot Number A0207316
Chem ID 240904009

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

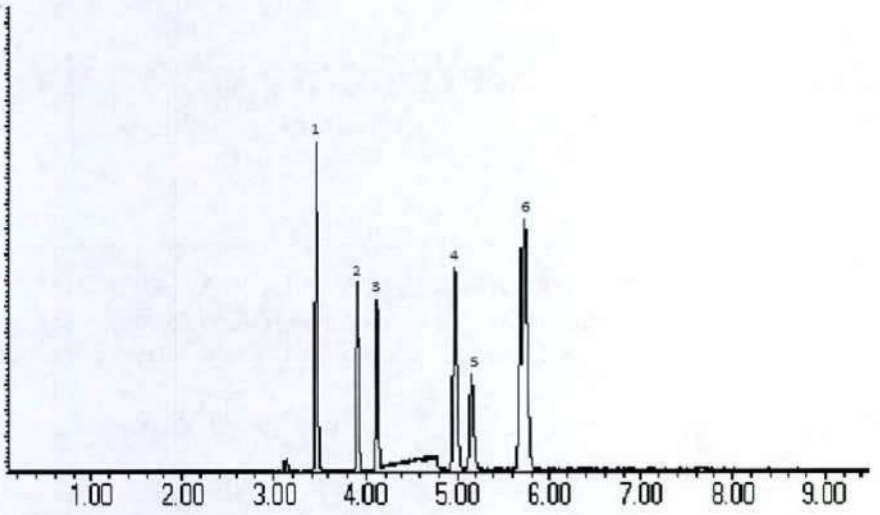
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
Split ratio 10:1

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope Riglin - Operations Tech I

Date Mixed: 01-Feb-2024 **Balance Serial #** B707717271

Dillan Murphy - Operations Technician I

Date Passed: 07-Feb-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Volatiles Standard Log

STANDARD NAME: Q-GAS

VOA 0364

Prep By: TMP Prep Date: **11/4/2024** Exp Date: 11/11/2024

Final volume: 10 mL	Solvent: MeOH	Chem ID#: 240917001

Primary Stock	Volume Primary Used, uL	Supplier	Syringe ID	Syringe Vol. (uL)	Date Opened	Exp. Date	Standard/Chem ID#	Opened by:
502.2 Cal. Mix #1	1000	RESTEK	HS1006	1000	11/4/2024	9/30/2026	240904008	TMP

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

502.2 Calibration Mix #1

Catalog No. : 30439.SEC **Lot No.:** A0157247

Description : 502.2 Calibration Mix #1

502.2 Calibration Mix #1 200µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2026 **Storage:** 0°C or colder

Opened By/Date	
Expiration Date	09/30/2026
Lot Number	A0157247
Chem ID	240904008

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 26165) **Purity** 99%	201.2 µg/mL	+/- 2.6458 +/- 11.5302 +/- 11.7886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	201.2 µg/mL	+/- 2.8139 +/- 11.5650 +/- 11.8225	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	203.9 µg/mL	+/- 4.8113 +/- 12.3458 +/- 12.5939	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	200.4 µg/mL	+/- 4.2746 +/- 11.9627 +/- 12.2098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	202.9 µg/mL	+/- 3.2680 +/- 11.7770 +/- 12.0343	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4.SEC (Lot 253600) **Purity** 99%	200.3 µg/mL	+/- 10.4978 +/- 15.3285 +/- 15.5220	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

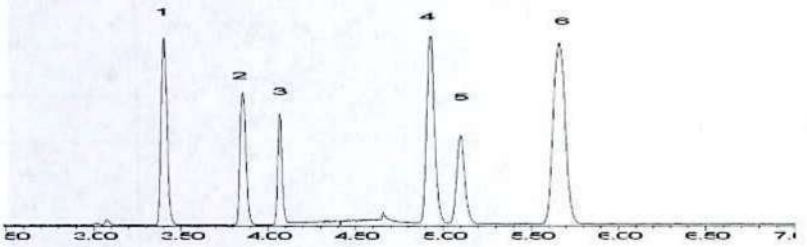
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 30-Jan-2020 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 10-Feb-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

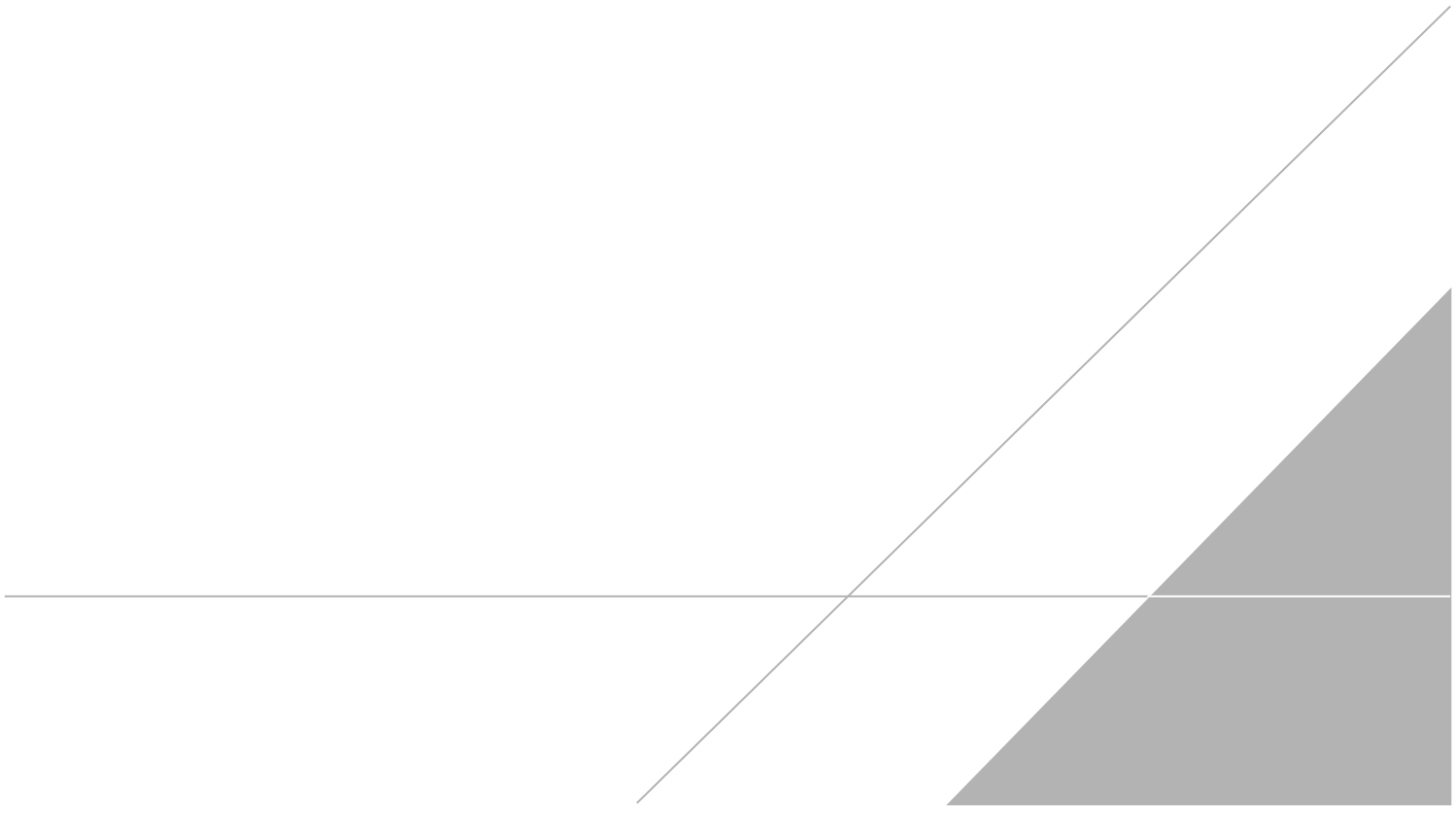
- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Data Validation Reports

February 2024 PM Event



Niagara Falls Air Reserve Station

Data Review

New York

Volatile Organic Compounds (VOCs), Dissolved gas (DG) and General Chemistry Analyses

SDG # 3347404

Analyses Performed By:
ALS Laboratories,
Middletown, Pennsylvania

Report # 58121R
Review Level: Stage 2
Project: 30036646. 34CD

Summary

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #3347404 for samples collected in association with the Niagara Falls Air Reserve Station. The review was conducted as a Stage 2 evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
					VOC	DG	Misc
RW5-5D-20240226	3347404001	Water	02/26/2024		X	X	X
RW5-2-20240226	3347404002	Water	02/26/2024		X	X	X
RW5-1-20240226	3347404003	Water	02/26/2024		X	X	X
MW5-1DA-20240226	3347404004	Water	02/26/2024		X	X	X
PW10-1-20240226	3347404005	Water	02/26/2024		X	X	X
MW10-7-20240226	3347404006	Water	02/26/2024		X	X	X
MW10-1DA-20240226	3347404007	Water	02/26/2024		X	X	X
MW10-10D-20240226	3347404008	Water	02/26/2024		X	X	X
MW10-11D-20240226	3347404009	Water	02/26/2024		X	X	X
DUP-01-20240226	3347404010	Water	02/26/2024	RW5-5D-20240226	X	X	X
Trip Blank	3347404011	Water	02/26/2024		X		

Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

Note:
QA quality assurance

Sample ID for MW5-5D-20240226 was incorrectly captured in the COC, which was corrected in the lab report and validation report as per project team request.

Laboratory ID	Sample ID as per Lab report	Sample ID as per COC
3347404001	MW5-5D-20240226	RW5-5D-20240226

Organic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260C and RSK-175. Data were reviewed in accordance with the Department of Defense (DoD) Environmental Data Quality Workgroup General Data Validation Guidelines, November 2019; DoD Environmental Data Quality Workgroup Data Validation Guidelines Module 1: Data Validation Procedure for Organic Analysis by GC/MS, May 2020; DoD Data Validation Guidelines Modules 1, 2, 3, and 4 Revised Table for Sample Qualification in the Presence of Blank Contamination, February 2022; USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, OSWER 9240.1-05A-P, October 1999, as appropriate); and the Quality Assurance Project Plan, Northeast Group Optimized Remediation Contract, Contract W912DR-19-D-0009.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified, and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Per DoD General Data Validation Guidelines November 2019 Revision 1 Section 4.8 states; “The following provides a brief explanation of the DoD data validation qualifiers assigned to results during the data review process by a data validator. The reviewer should use these qualifiers, as applicable, unless other data qualifiers are specified in a project related document, such as a QAPP. If other qualifiers are used, a complete explanation of those qualifiers should accompany the data validation report.” Below are the qualifier codes that may be applied in this validation report:

- Laboratory Data Qualifiers
  - U Undetected: The analyte/compound was analyzed for, but not detected. The associated value is the limit of detection (LOD).
  - B Blank contamination: The analyte has been found in the field sample as well as its associated blank, its presence in the sample may be suspect.
  - J Estimated: The compound was positively identified; however, the associated numerical value is an estimated concentration greater than the detection limit (DL) but less than the limit of quantitation (LOQ).
- Quantitation Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Data Validation Qualifiers
  - UB Compound is considered non-detect at the listed value due to associated blank contamination.
  - J The reported result was an estimated value with an unknown bias.
  - J+ The reported result was an estimated value, but the result may be biased high.
  - J- The reported result was an estimated value, but the result may be biased low.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

X The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project QC criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which would include a project chemist), but exclusion of the data is recommended.

No compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Volatile Organic Compounds (VOCs) Analyses

1. Holding Times

The specified holding times for the following methods are presented in the table below.

Method	Matrix	Holding Time	Preservation
SW-846 8260D	Water	14 days from collection to analysis (preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank calculated for QA blanks containing concentrations greater than the detection limit (DL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the DL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the DoD QSM 5.3 acceptance limits.

All surrogate recoveries were within control limits.

4. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the mid-point standard in the ICAL for associated standards. On days when ICAL is not performed, the daily initial CCV can be used.

All internal standard responses were within control limits.

5. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the DoD QSM acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the DoD QSM 5.3 acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis performed on sample RW5-1-20240226. The MS/MSD analysis exhibited recoveries and RPDs within the control limits with the exception noted below.

Sample ID	Compounds	MS Recovery	MSD Recovery
RW5-1-20240226	Carbon Disulfide	>UL	>UL
	Chloroethane	>UL	>UL
	Iodomethane	<LL but >10%	<LL but >10%

Notes:

UL Upper control limit

LL Lower control limit

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J+
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J-
< 10%	Non-detect	X
	Detect	J-
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	
MS/MSD diluted below calibration range	Detect	No Action
	Non-detect	
If the MS/MSD was not spiked with all target analytes, qualify parent sample for those analytes in each batch not spiked	Detect	X
	Non-detect	X

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than the control limit are presented in the following table.

Sample ID	Compounds
RW5-1-20240226	Bromomethane

Sample ID	Compounds
	Carbon Disulfide
	Chloromethane

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> 20%	Non-detect	No Action
	Detect	J

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the DoD QSM acceptance limits. The relative percent difference (RPD) between the LCS recoveries within the DoD QSM 5.3 acceptance limits.

The LCS analysis exhibited recoveries within the control limits.

7. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the LOQ is applied for water matrices.

Results for field duplicate samples are summarized in the following table.

Sample ID/ Duplicate ID	Compounds	Sample Result	Duplicate Result	RPD
RW5-5D-20240226 / DUP-01-20240226	Carbon Disulfide	1.5	0.76J	AC
	cis-1,2-Dichloroethene	5.4	5.2	3.8%
	trans-1,2-Dichloroethene	0.57J	0.53J	AC
	Trichloroethene	2.3	2.4	AC
	Vinyl Chloride	4.1	3.9	AC

Note:
AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

8. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

9. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines.

Data Validation Checklist for VOCs

VOCs: SW-846 8260D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Stage 2B Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks	X				X
C. Trip blanks		X		X	
D. Ambient blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X	X		
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%RSD = relative standard deviation

%R = percent recovery

RPD = relative percent difference

%D = percent difference

Dissolved Gases Analysis

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
RSK-175	Water	14 days from collection to analysis	Cool to <6°C; preserved to a pH of greater than 2 s.u.

Note:

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the detection limit (DL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the DL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the DoD QSM-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the DoD QSM-established acceptance limits of 30%.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on samples where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

MS/MSD analysis was not performed on samples from this SDG.

4. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the DoD QSM-established acceptance limits.

The LCS analysis was not reported in the lab report.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
RW5-5D-20240226 / DUP-01-20240226	Ethane	2.2J J	2.4J	AC
	Ethene	3.6U U	1.0J	AC
	Methane	469	553	16.4%

Note:
AC - Acceptable

The calculated RPDs between the parent sample and associated field duplicates were acceptable.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for Dissolved Gases

Dissolved Gases: RSK 175	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/FLAME IONIZATION DETECTOR (GC/FID)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks / Field blanks		X		X	
C. Trip blanks	X				X
Laboratory Control Sample (LCS)	X				X
Laboratory Control Sample Duplicate (LCSD)	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS)	X				X
Matrix Spike Duplicate (MSD)	X				X
MS/MSD Precision (RPD)	X				X
Field/Lab Duplicate (RPD)		X		X	
Dilution Factor		X		X	

Notes:
%RSD = relative standard deviation
%R = percent recovery
RPD = relative percent difference
%D = difference

Inorganic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 9060A. Data were reviewed in accordance with USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA-542-R-20-006 November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45A-P, October 2004, as appropriate); Department of Defense (DoD) Quality Systems Manual (QSM) version 5.3 (May 2019), DoD General Data Validation Guidelines (November 2019), DoD Final Data Validation Guidelines Module 5 Data Validation Procedure for Metals by ICP-MS (November 2022), and the Quality Assurance Project Plan, Northeast Group Optimized Remediation Contract, Contract W912DR-19-D-0009.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified, and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Per DoD General Data Validation Guidelines November 2019 Revision 1 Section 4.8 states; “The following provides a brief explanation of the DoD data validation qualifiers assigned to results during the data review process by a data validator. The reviewer should use these qualifiers, as applicable, unless other data qualifiers are specified in a project related document, such as a QAPP. If other qualifiers are used, a complete explanation of those qualifiers should accompany the data validation report.” Below are the qualifier codes that may be applied in this validation report:

- Concentration (C) Qualifiers
  - U The analyte was not detected and was reported as less than the LOD. The LOD has been adjusted for any dilution or concentration of the sample.
  - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
  - J The reported result is an estimated value; the reported result is greater than the detection limit (DL) and less than the limit of quantitation (LOQ).
  - Q One or more quality control criteria failed (e.g., LCS recovery, or CCV recovery).
- Validation Qualifiers
  - J The reported result was an estimated value with an unknown bias.
  - J+ The result was an estimated quantity, but the result may be biased high.
  - J- The result was an estimated quantity, but the result may be biased low.
  - UJ The analyte was not detected and was reported as less than the LOD. However, the associated numerical value is approximate.

UB Compound is considered non-detect at the listed value due to associated blank contamination.

R The sample results are rejected.

X The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

General Chemistry Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
TOC by SW846 9060A	Water	28 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.

All samples were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the detection limit (DL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the DL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery and RPDs within the DoD QSM-established acceptance limits or in-house limits if the analytes are not listed. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

MS/MSD analysis was not performed on samples from this SDG.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the LOQ. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the LOQ, a control limit of one time the LOQ is applied for water matrices.

The laboratory duplicate analysis was not performed on samples from this SDG.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the LOQ, a control limit of two times the LOQ is applied for water.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
RW5-5D-20240226 / DUP-01-20240226	Total Organic Carbon (TOC)	3.8	5.2	AC

Note:
AC - Acceptable

The calculated RPDs between the parent sample and associated field duplicates were acceptable

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery within the DoD QSM-established acceptance limits or in-house limits if the analytes are not listed.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for General Chemistry

GENERAL CHEMISTRY: SW846 9060A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
MISCELLANEOUS INSTRUMENTATION					
Stage 2B Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Rinse Blanks	X				X
C. Equipment/Field Blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Lab Duplicate (RPD)	X				X
Field Duplicate (RPD)	X				X

Notes:

%D Percent difference

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Amrutha M

SIGNATURE: 

DATE: February 25, 2025

PEER REVIEW: Dennis Capria

DATE: March 2, 2025

Chain of Custody and Corrected Sample Analysis Data Sheets

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

3347404

Logged By: MJE
PM: SJB

COC #:

ALS Quote #:

1 of 2

Client Name: Arcadis

Address: 110 West Fayette St
Syracuse, NY 13202

Contact: Corey Averill

Phone#: 315-415-4394

Project Name/#: NFARS - Niagara Falls AirBase

Bill To:

Purchase Order #: 30036646

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? [ ]

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Container Type	Container Size	Preservative	DOD 8260C	DOD RSK-175	DOD TOC 9060A
							CG	AG	AG			
							40mL	40mL	40mL			
							HCl	HCl	HCl			
							Enter Number of Containers Per Sample or Field Results Below.					
1	RW5-5D-20240226	02/26/24	0925		G	GW	3	2	2			
2	RW5-2-20240226	02/26/24	0935		G	GW	3	2	2			
3	RW5-1-20240226	02/26/24	0830		G	GW	9	6	6			
4	MW5-1DA-20240226	02/26/24	0845		G	GW	3	2	2			
5	PW10-1-20240226	02/26/24	1025		G	GW	3	2	2			
6	MW10-7-20240226	02/26/24	1015		G	GW	3	2	2			
7	MW10-1DA-20240226	02/26/24	1000		G	GW	3	2	2			
8	MW10-10D-20240226	02/26/24	1045		G	GW	3	2	2			
9	MW10-11D-20240226	02/26/24	1035		G	GW	3	2	2			
10	DUP-01-20240226	02/26/24	—		G	GW	3	2	2			

Receipt Information (completed by Receiving Lab)

Temp Taken By: DP Therm ID: 523 WO Temp (°C) 3°

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	(Y)	N	NA
Sample Custody Seal Intact	Y	N	(NA)
Received on Ice	(Y)	N	NA
Coolers & Samples Intact	(Y)	N	
Correct Containers Provided	(Y)	N	
Sample Label/COC Agree	(Y)	N	
Adequate Sample Volumes	(Y)	N	
VOA only: Trip Blank	(Y)	N	NA

NJ ≤ 4 days? Y N

Courier/Tracking # 2714 3218 1023

Deviations? (NO) YES

If YES, list below: 1 TB Broken on arrival DP 2/27/24

Client contact:

Date/Tech:

Sample(s) for Radiation testing? Y N Rad Screen (uCi)

Reportable SDWA Sample(s)? Y N New Source? Y N

SDWA State of Origin? New Source Contact:

PWSID #

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

MS/MSD collected at RW5-1-20240226

Contains Short Hold Testing YES NO

Internal Use: If less than 48 hours - notify lab upon receipt

Circle Sample Collector: ALS Tech / Client

Name: ID:

Comments:

Data Deliverables: [X] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type:

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

Date:	Time		Relinquished By / Company Name		Received By / Company Name
2/26/24	1430	1	Arcadis	2	FEDEX
		3	FEDEX	4	DD/ALS 2/27/24 0918
		5		6	
		7		8	
		9		10	

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 07.06.2023

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3347404 2 of 2
ALS Quote #:

Client Name: Arcadis
Address: 110 West Fayette St, Syracuse, NY 13202
Contact: Corey Averill
Phone#: 315-415-4394
Project Name/#: NFARS - Niagara Falls Air Base
Bill To:
Purchase Order #: 30036646
TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? [ ]

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Container Type	Container Size	Preservative	DOD 8260C	Enter Number of Containers Per Sample or Field Results Below.
1	Trip Blank	—	—		G		CG	40mL	HCl	6 5	one TB Broken on Arrival.
2											DP 2/27/24
3											
4											
5											
6											
7											
8											
9											
10											

Receipt Information (completed by Receiving Lab)
Temp Taken By: Therm ID: WO Temp (°C)
Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA
NJ ≤ 4 days?	Y	N	

Courier/Tracking #

Deviations? NO YES
If YES, list below:

Client contact:
Date/Tech:

Sample(s) for Radiation testing? Y N Rad Screen (uCi)
Reportable SDWA Sample(s)? Y N New Source? Y N
SDWA State of Origin? New Source Contact:
PWSID #
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Circle Sample Collector: ALS Tech / Client
Name: ID:

Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
2/26/24	1430	1	Arcadis	2	FEDEX
		3	FEDEX	4	DD/ALS 2/27/24 0918
		5		6	
		7		8	
		9		10	

Data Deliverables: [X] Standard Lvl 1 [ ] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ] _____

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 07.06.2023

Susan Scherer

From: Averill, Corey <Corey.Averill@arcadis.com>
Sent: Wednesday, March 6, 2024 11:06 AM
To: Susan Scherer; Fiona Adamsky
Cc: Svensson, Adam
Subject: [EXTERNAL] - FW: Letter of Receipt for WO 3347404
Attachments: letter of receipt_3347404_646159.PDF

CAUTION: This email originated from outside of ALS. Do not click links or open attachments unless you recognize the sender and are sure content is relevant to you.

Hi Susan/Fiona,

I reviewed the attached and have one minor edit - please change RW5-5D to MW5-5D.

Thanks,
Corey

-----Original Message-----
From: ALMDT.LIMSAUTOEMAIL@Alsglobal.com <ALMDT.LIMSAUTOEMAIL@Alsglobal.com>
Sent: Tuesday, February 27, 2024 1:58 PM
To: Averill, Corey <Corey.Averill@arcadis.com>
Subject: Letter of Receipt for WO 3347404

The following reports are attached:

WO 3347404 , Work ID NFARS-Niagara Falls Air Base []

--- End Of List ---

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Results

Client Sample ID	MW5-5D-20240226	Collected	02/26/2024 09:25
Lab Sample ID	3347404001	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.2J	J	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 09:29	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 09:29	JTH	E
Methane	469		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 09:29	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 13:01	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:01	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:01	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:01	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:01	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Carbon Disulfide	1.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
cis-1,2-Dichloroethene	5.4		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A

Results

Client Sample ID	MW5-5D-20240226	Collected	02/26/2024 09:25
Lab Sample ID	3347404001	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 13:01	TMP	A
trans-1,2-Dichloroethene	0.57J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Trichloroethene	2.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A
Vinyl Chloride	4.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:01	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	85.2%	81 – 118	03/01/2024 13:01	
4-Bromofluorobenzene	460-00-4	108%	85 – 114	03/01/2024 13:01	
Dibromofluoromethane	1868-53-7	97%	80 – 119	03/01/2024 13:01	
Toluene-d8	2037-26-5	105%	89 – 112	03/01/2024 13:01	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	3.8		mg/L	1.0	0.50	0.27	SW846 9060A	1	03/06/2024 01:33	PAG	G

Results

Client Sample ID	RW5-2-20240226	Collected	02/26/2024 09:35
Lab Sample ID	3347404002	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	28.4		ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 09:42	JTH	E
Ethene	2.7J	J	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 09:42	JTH	E
Methane	5970		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 09:42	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 13:21	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:21	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:21	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:21	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:21	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Chloromethane	0.64J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
cis-1,2-Dichloroethene	0.92J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A

Results

Client Sample ID	RW5-2-20240226	Collected	02/26/2024 09:35
Lab Sample ID	3347404002	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Toluene	0.72J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 13:21	TMP	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A
Vinyl Chloride	10		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:21	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	81.7%	81 – 118	03/01/2024 13:21	
4-Bromofluorobenzene	460-00-4	103%	85 – 114	03/01/2024 13:21	
Dibromofluoromethane	1868-53-7	92.7%	80 – 119	03/01/2024 13:21	
Toluene-d8	2037-26-5	99.4%	89 – 112	03/01/2024 13:21	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	8.8		mg/L	5.0	2.5	1.4	SW846 9060A	5	03/06/2024 01:33	PAG	G

Results

Client Sample ID	RW5-1-20240226	Collected	02/26/2024 08:30
Lab Sample ID	3347404003	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	21.1		ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 12:02	JTH	K
Ethene	71.2		ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 12:02	JTH	K
Methane	6680		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 12:02	JTH	K

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 13:40	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:40	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:40	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:40	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 13:40	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Bromomethane	0.75U	U,~~1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Carbon Disulfide	4.3	J+ ~~2,3,4~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Chloroethane	0.75U	U,~~5,6~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Chloromethane	0.75U	U,~~7~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
cis-1,2-Dichloroethene	218		ug/L	5.0	3.8	1.7	SW846 8260C	5	03/11/2024 19:41	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Iodomethane	0.75U	UJ U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A

Results

Client Sample ID	RW5-1-20240226	Collected	02/26/2024 08:30
Lab Sample ID	3347404003	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Toluene	3.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 13:40	TMP	A
trans-1,2-Dichloroethene	3.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Trichloroethene	1.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A
Vinyl Chloride	189	8	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 13:40	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.2%	81 – 118	03/11/2024 19:41	
1,2-Dichloroethane-d4	17060-07-0	81.9%	81 – 118	03/01/2024 13:40	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	03/11/2024 19:41	
4-Bromofluorobenzene	460-00-4	99.1%	85 – 114	03/01/2024 13:40	
Dibromofluoromethane	1868-53-7	98.9%	80 – 119	03/11/2024 19:41	
Dibromofluoromethane	1868-53-7	92.8%	80 – 119	03/01/2024 13:40	
Toluene-d8	2037-26-5	99.7%	89 – 112	03/11/2024 19:41	
Toluene-d8	2037-26-5	98.5%	89 – 112	03/01/2024 13:40	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	7.3		mg/L	5.0	2.5	1.4	SW846 9060A	5	03/06/2024 01:33	PAG	Q

Results

Client Sample ID	MW5-1DA-20240226	Collected	02/26/2024 08:45
Lab Sample ID	3347404004	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.6U	U	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 09:55	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 09:55	JTH	E
Methane	1.5J	J	ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 09:55	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 14:00	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:00	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:00	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:00	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:00	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
cis-1,2-Dichloroethene	0.76J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A

Results

Client Sample ID	MW5-1DA-20240226	Collected	02/26/2024 08:45
Lab Sample ID	3347404004	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 14:00	TMP	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:00	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	82.3%	81 – 118	03/01/2024 14:00	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	03/01/2024 14:00	
Dibromofluoromethane	1868-53-7	93.1%	80 – 119	03/01/2024 14:00	
Toluene-d8	2037-26-5	100%	89 – 112	03/01/2024 14:00	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	3.0		mg/L	1.0	0.50	0.27	SW846 9060A	1	03/06/2024 01:33	PAG	G

Results

Client Sample ID	PW10-1-20240226	Collected	02/26/2024 10:25
Lab Sample ID	3347404005	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.6U	U	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 10:07	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 10:07	JTH	E
Methane	0.86J	J	ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 10:07	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/11/2024 19:00	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:00	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:00	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:00	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:00	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A

Results

Client Sample ID	PW10-1-20240226	Collected	02/26/2024 10:25
Lab Sample ID	3347404005	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/11/2024 19:00	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:00	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.4%	81 – 118	03/11/2024 19:00	
4-Bromofluorobenzene	460-00-4	104%	85 – 114	03/11/2024 19:00	
Dibromofluoromethane	1868-53-7	97.7%	80 – 119	03/11/2024 19:00	
Toluene-d8	2037-26-5	101%	89 – 112	03/11/2024 19:00	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	6.6		mg/L	1.0	0.50	0.27	SW846 9060A	1	03/06/2024 01:33	PAG	G

Results

Client Sample ID	MW10-7-20240226	Collected	02/26/2024 10:15
Lab Sample ID	3347404006	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.7J	J	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 10:23	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 10:23	JTH	E
Methane	7540		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 10:23	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 14:40	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:40	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:40	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:40	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 14:40	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
cis-1,2-Dichloroethene	0.62J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A

Results

Client Sample ID	MW10-7-20240226	Collected	02/26/2024 10:15
Lab Sample ID	3347404006	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 14:40	TMP	A
trans-1,2-Dichloroethene	0.70J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A
Vinyl Chloride	0.69J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 14:40	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	84.4%	81 – 118	03/01/2024 14:40	
4-Bromofluorobenzene	460-00-4	104%	85 – 114	03/01/2024 14:40	
Dibromofluoromethane	1868-53-7	95.4%	80 – 119	03/01/2024 14:40	
Toluene-d8	2037-26-5	101%	89 – 112	03/01/2024 14:40	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	68.9		mg/L	10.0	5.0	2.7	SW846 9060A	10	03/06/2024 01:33	PAG	G

Results

Client Sample ID	MW10-1DA-20240226	Collected	02/26/2024 10:00
Lab Sample ID	3347404007	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	43.0		ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 10:36	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 10:36	JTH	E
Methane	7190		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 10:36	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 15:00	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:00	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:00	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:00	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:00	TMP	A
Benzene	2.4		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
cis-1,2-Dichloroethene	0.38J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A

Results

Client Sample ID	MW10-1DA-20240226	Collected	02/26/2024 10:00
Lab Sample ID	3347404007	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 15:00	TMP	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A
Vinyl Chloride	1.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:00	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	84.1%	81 – 118	03/01/2024 15:00	
4-Bromofluorobenzene	460-00-4	99.2%	85 – 114	03/01/2024 15:00	
Dibromofluoromethane	1868-53-7	94.7%	80 – 119	03/01/2024 15:00	
Toluene-d8	2037-26-5	100%	89 – 112	03/01/2024 15:00	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	10.2		mg/L	5.0	2.5	1.4	SW846 9060A	5	03/06/2024 01:33	PAG	G

Results

Client Sample ID	MW10-10D-20240226	Collected	02/26/2024 10:45
Lab Sample ID	3347404008	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	14.9		ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 10:51	JTH	E
Ethene	7.7		ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 10:51	JTH	E
Methane	8450		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 10:51	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/11/2024 19:20	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:20	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:20	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:20	ILY	A
Acetone	3.7J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/11/2024 19:20	ILY	A
Benzene	1.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Carbon Disulfide	0.42J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
cis-1,2-Dichloroethene	101		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Ethylbenzene	0.36J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Methyl acetate	3.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Methyl cyclohexane	0.95J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A

Results

Client Sample ID	MW10-10D-20240226	Collected	02/26/2024 10:45
Lab Sample ID	3347404008	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Methylene Chloride	0.87J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Toluene	5.7		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/11/2024 19:20	ILY	A
trans-1,2-Dichloroethene	1.9		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Trichloroethene	8.6		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A
Vinyl Chloride	5.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/11/2024 19:20	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.8%	81 – 118	03/11/2024 19:20	
4-Bromofluorobenzene	460-00-4	94.4%	85 – 114	03/11/2024 19:20	
Dibromofluoromethane	1868-53-7	102%	80 – 119	03/11/2024 19:20	
Toluene-d8	2037-26-5	102%	89 – 112	03/11/2024 19:20	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	2260		mg/L	500	250	135	SW846 9060A	500	03/07/2024 00:00	PAG	G

Results

Client Sample ID	MW10-11D-20240226	Collected	02/26/2024 10:35
Lab Sample ID	3347404009	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.6U	U	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 11:04	JTH	E
Ethene	3.6U	U	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 11:04	JTH	E
Methane	2.9		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 11:04	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 15:20	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:20	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:20	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:20	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:20	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A

Results

Client Sample ID	MW10-11D-20240226	Collected	02/26/2024 10:35
Lab Sample ID	3347404009	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 15:20	TMP	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:20	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	82.9%	81 – 118	03/01/2024 15:20	
4-Bromofluorobenzene	460-00-4	111%	85 – 114	03/01/2024 15:20	
Dibromofluoromethane	1868-53-7	94.5%	80 – 119	03/01/2024 15:20	
Toluene-d8	2037-26-5	103%	89 – 112	03/01/2024 15:20	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	8.8		mg/L	1.0	0.50	0.27	SW846 9060A	1	03/06/2024 01:33	PAG	G

Results

Client Sample ID	DUP-01-20240226	Collected	02/26/2024 00:00
Lab Sample ID	3347404010	Lab Receipt	02/27/2024 09:18

LIGHT HYDROCARBON GASES

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Ethane	2.4J	J	ug/L	5.2	2.6	0.56	RSK 175	1	03/06/2024 11:18	JTH	E
Ethene	1.0J	J	ug/L	7.1	3.6	0.81	RSK 175	1	03/06/2024 11:18	JTH	E
Methane	553		ug/L	2.6	1.6	0.53	RSK 175	1	03/06/2024 11:18	JTH	E

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 15:40	TMP	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:40	TMP	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:40	TMP	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:40	TMP	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 15:40	TMP	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Carbon Disulfide	0.76J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
cis-1,2-Dichloroethene	5.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A

Results

Client Sample ID	DUP-01-20240226	Collected	02/26/2024 00:00
Lab Sample ID	3347404010	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 15:40	TMP	A
trans-1,2-Dichloroethene	0.53J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Trichloroethene	2.4		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A
Vinyl Chloride	3.9		ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 15:40	TMP	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	85.2%	81 – 118	03/01/2024 15:40	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	03/01/2024 15:40	
Dibromofluoromethane	1868-53-7	96.3%	80 – 119	03/01/2024 15:40	
Toluene-d8	2037-26-5	101%	89 – 112	03/01/2024 15:40	

WET CHEMISTRY

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Total Organic Carbon (TOC)	5.2		mg/L	5.0	2.5	1.4	SW846 9060A	5	03/06/2024 01:33	PAG	G

Results

Client Sample ID	Trip Blank	Collected	02/26/2024 00:00
Lab Sample ID	3347404011	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	03/01/2024 12:41	TMP	C
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 12:41	TMP	C
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 12:41	TMP	C
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 12:41	TMP	C
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	03/01/2024 12:41	TMP	C
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Iodomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	03/01/2024 12:41	TMP	C
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C

Results

Client Sample ID	Trip Blank	Collected	02/26/2024 00:00
Lab Sample ID	3347404011	Lab Receipt	02/27/2024 09:18

VOLATILE ORGANICS (cont.)

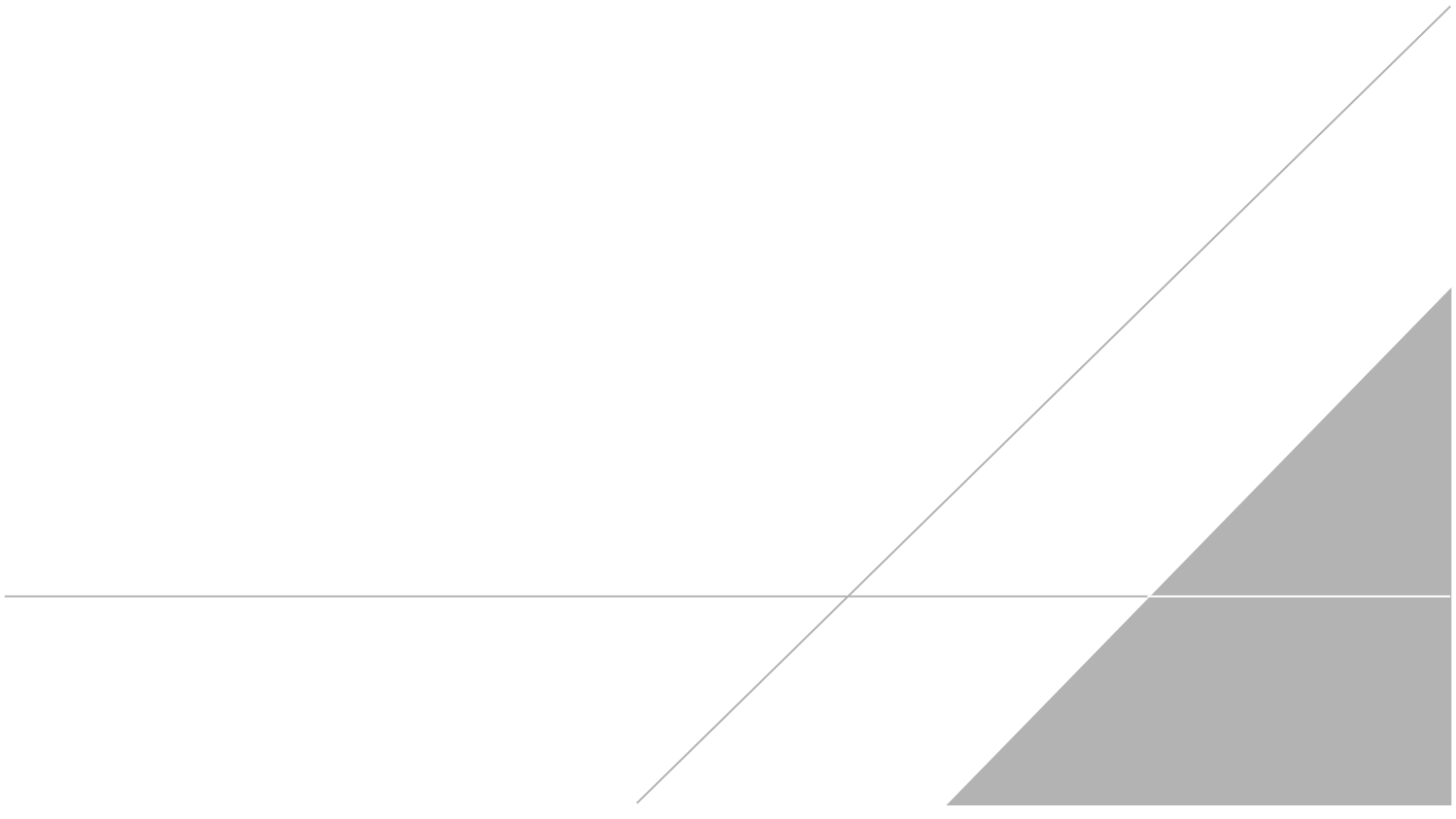
Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	03/01/2024 12:41	TMP	C

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	83.9%	81 – 118	03/01/2024 12:41	
4-Bromofluorobenzene	460-00-4	106%	85 – 114	03/01/2024 12:41	
Dibromofluoromethane	1868-53-7	94.7%	80 – 119	03/01/2024 12:41	
Toluene-d8	2037-26-5	104%	89 – 112	03/01/2024 12:41	

Data Validation Reports

Spring IWGP Event



Niagara Falls Air Reserve Station

Data Review

New York

Volatile Organic Compounds (VOCs) Analyses

SDG # 3369360

Analyses Performed By:
ALS Laboratories,
Middletown, Pennsylvania

Report # 58122R
Review Level: Stage 4
Project: 30036646. 34CD

Summary

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 3369360 for samples collected in association with the Niagara Falls Air Reserve Station. The review was conducted as a Stage 4 evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis
					VOC
SW3-15	3369360001	Water	07/16/2024		X
DUP-01-20240716	3369360002	Water	07/16/2024	SW3-15	X
PZ3-6D	3369360003	Water	07/16/2024		X
MW3-3DA	3369360004	Water	07/16/2024		X
SW3-3	3369360005	Water	07/16/2024		X
PZ3-3A	3369360006	Water	07/16/2024		X
MW3-4DA	3369360007	Water	07/16/2024		X
SW3-2	3369360008	Water	07/16/2024		X
SW99-10	3369360009	Water	07/16/2024		X
SW10-7	3369360010	Water	07/16/2024		X
SW10-6	3369360011	Water	07/16/2024		X
SW10-5	3369360012	Water	07/16/2024		X
MW10-3	3369360013	Water	07/16/2024		X
SW10-8	3369360014	Water	07/16/2024		X
PW10-2	3369360015	Water	07/16/2024		X
MW10-7	3369360016	Water	07/16/2024		X
PW10-1	3369360017	Water	07/16/2024		X
PZ10-7	3369360018	Water	07/16/2024		X
MW8-11D	3369360019	Water	07/16/2024		X
PW13-4D	3369360020	Water	07/16/2024		X
MW13-4D	3369360021	Water	07/16/2024		X
MW13-5D	3369360022	Water	07/16/2024		X
PW13-1	3369360023	Water	07/16/2024		X
RW5-1	3369360024	Water	07/16/2024		X
MW5-1DA	3369360025	Water	07/16/2024		X

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis
					VOC
MW5-6	3369360026	Water	07/16/2024		X
MW5-5D	3369360027	Water	07/16/2024		X
RW5-2	3369360028	Water	07/16/2024		X
RW5-4	3369360029	Water	07/16/2024		X
PZ3-8D	3369360030	Water	07/16/2024		X
PZ3-7D	3369360031	Water	07/16/2024		X
DUP-02-20240716	3369360032	Water	07/16/2024	MW5-6	X
DUP-03-20240716	3369360033	Water	07/16/2024	PZ3-7D	X
Trip Blank	3369360034	Water	07/16/2024		X

Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

Note:
QA quality assurance

Organic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260C. Data were reviewed in accordance with the Department of Defense (DoD) Environmental Data Quality Workgroup General Data Validation Guidelines, November 2019; DoD Environmental Data Quality Workgroup Data Validation Guidelines Module 1: Data Validation Procedure for Organic Analysis by GC/MS, May 2020; DoD Data Validation Guidelines Modules 1, 2, 3, and 4 Revised Table for Sample Qualification in the Presence of Blank Contamination, February 2022; USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, OSWER 9240.1-05A-P, October 1999, as appropriate); and the Quality Assurance Project Plan, Northeast Group Optimized Remediation Contract, Contract W912DR-19-D-0009.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified, and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Per DoD General Data Validation Guidelines November 2019 Revision 1 Section 4.8 states; “The following provides a brief explanation of the DoD data validation qualifiers assigned to results during the data review process by a data validator. The reviewer should use these qualifiers, as applicable, unless other data qualifiers are specified in a project related document, such as a QAPP. If other qualifiers are used, a complete explanation of those qualifiers should accompany the data validation report.” Below are the qualifier codes that may be applied in this validation report:

- Laboratory Data Qualifiers
  - U Undetected: The analyte/compound was analyzed for, but not detected. The associated value is the limit of detection (LOD).
  - B Blank contamination: The analyte has been found in the field sample as well as its associated blank, its presence in the sample may be suspect.
  - J Estimated: The compound was positively identified; however, the associated numerical value is an estimated concentration greater than the detection limit (DL) but less than the limit of quantitation (LOQ).
- Quantitation Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Data Validation Qualifiers
  - UB Compound is considered non-detect at the listed value due to associated blank contamination.
  - J The reported result was an estimated value with an unknown bias.
  - J+ The reported result was an estimated value, but the result may be biased high.

J- The reported result was an estimated value, but the result may be biased low.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

X The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project QC criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which would include a project chemist), but exclusion of the data is recommended.

No compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Volatile Organic Compounds (VOCs) Analyses

1. Holding Times

The specified holding times for the following methods are presented in the table below.

Method	Matrix	Holding Time	Preservation
SW-846 8260D	Water	14 days from collection to analysis (preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank calculated for QA blanks containing concentrations greater than the detection limit (DL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the DL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable, and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05). The initial calibration verification (ICV) must exhibit a percent difference (%D) less than 20%.

All compounds associated with the initial calibration and initial calibration verifications were within the specified control limits except as summarized in Section 4.2.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05). The CCV %D for each target analyte should be ≤ 20% for opening or continuing CCVs and ≤ 50% for closing CCVs.

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds.

Sample ID	Lab file ID	ICAL/ICV	Compounds	%D
SW3-15 DUP-01-20240716 PZ3-6D MW3-3DA SW3-3 PZ3-3A MW3-4DA SW3-2 SW99-10 SW10-7 SW10-6 SW10-5 MW10-3 SW10-8 PW10-2 MW10-7 PW10-1 PZ10-7 MW8-11D PW13-4D MW13-4D MW13-5D PW13-1 RW5-1 MW5-1DA MW5-6 MW5-5D RW5-2 RW5-4 PZ3-8D PZ3-7D DUP-02-20240716 DUP-03-20240716 Trip Blank	2324071816ICVQ.D	ICV D%	Iodomethane	-28.2%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.01	Non-detect	UJ
		Detect	J
	If minimum RRF = 0.01; RRF <0.01	Non-detect	X
		Detect	J
Initial Calibration	%RSD > 15% or a correlation coefficient <0.995 (r^2 <0.99)	Non-detect	UJ
		Detect	J
	%RSD >30%	Non-detect	X
		Detect	X
	Correlation coefficient <0.95 (r^2 <0.90)	Non-detect	X
		Detect	J
Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV)	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J+
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J-
	%D >50% (increase/decrease in sensitivity)	Non-detect	X
		Detect	X

Note:

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the DoD QSM 5.3 acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the mid-

point standard in the ICAL for associated standards. On days when ICAL is not performed, the daily initial CCV can be used.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the DoD QSM acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the DoD QSM 5.3 acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis performed on sample SW3-3, PZ3-3A and MW5-1DA. The MS/MSD analysis exhibited recoveries and RPDs within the control limits with the exception noted below.

Sample ID	Compounds	MS Recovery	MSD Recovery
SW3-3	Bromomethane	<LL but >10%	AC
	Chloroethane	>UL	>UL
	Iodomethane	<LL but >10%	<LL but >10%
PZ3-3A	Chloroethane	>UL	>UL
	Iodomethane	<LL but >10%	<LL but >10%
MW5-1DA	Carbon Tetrachloride	AC	>UL
	Iodomethane	<LL but >10%	<LL but >10%

Notes:

UL	Upper control limit
LL	Lower control limit
AC	Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J+
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J-
< 10%	Non-detect	X
	Detect	J-
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Control Limit	Sample Result	Qualification
MS/MSD diluted below calibration range	Detect	No Action
	Non-detect	
If the MS/MSD was not spiked with all target analytes, qualify parent sample for those analytes in each batch not spiked	Detect	X
	Non-detect	X

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than the control limit are presented in the following table.

Sample ID	Compounds
SW3-3	Bromomethane
MW5-1DA	Bromomethane
	Iodomethane

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> 20%	Non-detect	No Action
	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the DoD QSM acceptance limits. The relative percent difference (RPD) between the LCS recoveries within the DoD QSM 5.3 acceptance limits.

The LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the LOQ is applied for water matrices.

Results for field duplicate samples are summarized in the following table.

Sample ID/ Duplicate ID	Compounds	Sample Result	Duplicate Result	RPD
SW3-15 / DUP-01-20240716	Acetone	4.4J	4.5J	AC
	Iodomethane	1.0 U	0.50J	AC
MW5-6 / DUP-02-20240716	Acetone	3.8J	3.6J	AC

Sample ID/ Duplicate ID	Compounds	Sample Result	Duplicate Result	RPD
	cis-1,2-Dichloroethene	2.6	2.4	AC
	Toluene	2.3	2.3	AC
	Trichloroethene	1.2	1.2	AC
	Vinyl Chloride	1.1	1.0	AC
PZ3-7D / DUP-03-20240716	Acetone	3.8U	9.9	AC
	cis-1,2-Dichloroethene	7.1	7.3	2.8%
	Vinyl Chloride	3.1	3.2	AC

Note:
AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines.

Data Validation Checklist for VOCs

VOCs: SW-846 8260D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Stage 2B Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks	X				X
C. Trip blanks		X		X	
D. Ambient blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X	X		
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Moisture Content	X				X
GC/MS Tune					
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Initial/Continuing calibration verification %Ds		X	X		
Internal standard		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD = relative standard deviation

%R = percent recovery

RPD = relative percent difference

%D = percent difference

VALIDATION PERFORMED BY: Amrutha M

SIGNATURE: 

DATE: February 25, 2025

PEER REVIEW: Dennis Capria

DATE: March 5, 2025

Stage 4
Calibration Standards

SDG #: 3369360
Lab: ALS Laboratories
Project: NFARS

Date: 2/11/2025
Page: 1
Validated by: Amrutha M

Method: EPA method 8260C

18-JUL-2024 1244 Calibration Page 269

Compound: cis-1,2-Dichloroethene Instrument: MS23

Concentration	Std Area	IS Area	IS Conc	RF
0.50	6135	962861	30	0.382298
1.00	11077	937870	30	0.354324
5.0	69381	935332	30	0.445068
20.0	265577	922342	30	0.431906
50.0	613986	916708	30	0.401864
100.0	1328662	935462	30	0.426098
200	2539149	947786	30	0.401855

Reported Avg RF: 0.4060
Reported %RSD: 7.7

Calculated Avg RF: 0.406202
Std Dev: 0.031271758
Calculated % RSD: 7.70

Differences in %RSD may be due to rounding of the true value

Stage 4

ICV CCV Standards

SDG #: 3369360 Date: 2/11/2025

Lab: ALS Laboratories Page: 2

Project: NFARS Validated by: Amrutha M

Method: EPA method 8260C

2324071816ICVQ.D 25-Jul-2024 17:19 Page 413

Spike concentration: 20

Analyte	Analyte Area	IS Area	IS Conc	ICAL RF	Calculated Concentration	%Drift	% recovery	Reported %recovery
cis-1,2-Dichloroethene	262158	920592	30	0.406202	21.031743	5.16	105.2	105

2324071901.D 25-Jul-2024 17:45 Page 483

Analyte	Analyte Area	IS Area	IS Conc	Calculated RF	ICAL RF	%D	Reported %D
cis-1,2-Dichloroethene	634409	938901	30.0	0.405416	0.406202	-0.193	-0.193

Differences in %D may be due to rounding of the true value

Stage 4
LCS

SDG #: 3369360 Date: 2/11/2025
Lab: ALS Laboratories Page: 3
Project: NFARS Validated by: Amrutha M

Method: EPA method 8260C

LCS ID 2324071902.D Page 491
Injection Date: 19-JUL-2024 12:03

Analyte	Analyte Area	IS Area	IS Conc	ICAL RF	Calculated ug/L	Final conc ug/L	Calculated %R	Reported %R	
cis-1,2-Dichloroethene	274627	927355	30	0.406202	21.87	21.87	109.4	109	MATCH

Differences in %R may be due to rounding of the true value

Stage 4
Sample Concentration

SDG #: 3369360
Lab: ALS Laboratories
Project: NFARS

Date: 2/11/2025
Page: 4
Validated by: Amrutha M

Method: EPA method 8260C

Sample ID PW13-4D
Lab ID 3369360020

Injection Date: 19-JUL-2024 16:05
Page: 577

Analyte	Analyte Area	IS Area	IS Conc	Area Ratio	ICAL RF	Calculated ug/L	Final conc ug/L	Reported ug/L	
cis-1,2-Dichloroethene	92054	920279	30	0.100028361	0.406202	7.388	7.4	7.4	MATCH

Sample ID MW13-4D
Lab ID 3369360021

Injection Date: 19-JUL-2024 16:24
Page: 585

Analyte	Analyte Area	IS Area	IS Conc	Area Ratio	ICAL RF	Calculated ug/L	Final conc ug/L	Reported ug/L	
cis-1,2-Dichloroethene	69323	914075	30	0.07583951	0.406202	5.601	5.6	5.5	MATCH

Sample ID MW13-5D
Lab ID 3369360022

Injection Date:19-JUL-2024 16:44
Page: 593

Analyte	Analyte Area	IS Area	IS Conc	Area Ratio	ICAL RF	Calculated ug/L	Final conc ug/L	Reported ug/L	
cis-1,2-Dichloroethene	205281	932600	30	0.220116878	0.406202	16.257	16.3	16.6	MATCH

Stage 4
VOC Surrogate

SDG #: 480-224772-1 Date: 2/11/2025
Lab: ALS Laboratories Page: 5
Project: NFARS Validated by: Amrutha M

Method: EPA method 8260C

Sample ID PW13-4D Injection Date: 19-JUL-2024 16:05
Lab ID 3369360020 Page: 577

Surrogate Toluene-D8

Analyte	Analyte Area	IS Area	IS Conc	Area Ratio	ICAL RF	Calculated Amount	Reported amount	
Toluene-D8	983024	407535	30	2.412122	2.4200	29.9	30.0	MATCH

Surrogate Recovery

sample response µg/L	29.9023
amount added (µg/L)	30
sample dilution	1
%Recovery	99.67

REPORTED %R 99.9% MATCH

Chain of Custody and Corrected Sample Analysis Data Sheets

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3369360
Logged By: MJE
PM: SJB
ALS Quote #:
1 of 4

Name: Arcadis
110 W. Fayette, Suite 300
Syracuse, NY 13202

Corey Averill
315-415-4394
Name/#: NFARS - 30036646

Use Order #:
[X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Required: Approved?
[X] corey.averill@arcadis.com

Container Type: CG
Container Size: 40mL
Preservative: HCl
Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	°G or C	**Matrix (See bottom of COC)	8260 VOCs	Enter Number of Containers Per Sample or Field Results Below.
SW3-15	07/16/24	0730		G	GW	3	
DUP-01-20240716	07/16/24	—		G	GW	3	
PZ3-6D	07/16/24	0740		G	GW	3	
MW3-3DA	07/16/24	0750		G	GW	3	
SW3-3	07/16/24	1015		G	GW	9	
PZ3-3A	07/16/24	1030		G	GW	9	
MW3-4DA	07/16/24	1035		G	GW	3	
SW3-2	07/16/24	1045		G	GW	3	
SW99-10	07/16/24	0840		G	GW	3	
SW10-7	07/16/24	0905		G	GW	3	

Sample Collector: ALS Tech / (Client) ID:
Comments:

	Time		Relinquished By / Company Name		Received By / Company Name
7/24	1530	1	Arcadis	2	Fedex
7/24	925	3	Fedex	4	
		5		6	
		7		8	
		9		10	

Temp Taken By: MJE Therm ID: 569 WO Temp (°C): 2°
Receipt Info completed by: MJE
WV Containers 0-6°C Y N (NA)
Cooler Custody Seals Intact Y N (NA) Deviations? NO YES
Sample Custody Seal Intact Y N (NA) If YES, list below.
Received on Ice (Y) N NA
Coolers & Samples Intact (Y) N
Correct Containers Provided (Y) N
Sample Label/COC Agree (Y) N
Adequate Sample Volumes (Y) N
VOA only: Trip Blank (Y) N NA
NJ ≤ 4 days? Y (N)
Courier/Tracking #: 766393893583/766393893572 Date/Tech:
Client contact:

Sample(s) for Radiation testing? Y (N) Rad Screen (uCi)
Reportable SDWA Sample(s)? Y (N) New Source? Y (N)
SDWA State of Origin?
New Source Contact:
PWSID #
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks
MS/MSD collected @ SW3-3 and PZ3-3A

Contains Short Hold Testing YES (NO)
Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [ ] CLP-like [ ] HSCA; [X] Standard Lvl 2 [ ] DOD [ ] Landfill; [ ] Standard Lvl 3 [ ] NJ RED [ ] NJ GW; [ ] Standard Lvl 4 [ ] NJ Full [ ]
EDDs: [ ] Excel Summary [ ] Equis [ ] Custom
Sample Disposal: Lab [X] Special [ ]
EDDS: Format Type
State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05.01.2024

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 2 of 4

ALS Quote #:

Name: Arcadis

Address: 110 W. Fayette, Suite 300, Syracuse, NY 13202

Project: Corey Averill

Phone #: 315-415-4394

Project Name/#: NFARS - 30036646

P.O.:

Purchase Order #:

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.

Report Required: Approved?

Email? [X] corey.averill@arcadis.com

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Container Type	Container Size	Preservative	8260 VOCs	Enter Number of Containers Per Sample or Field Results Below.
1 SW10-6	07/16/24	0910		G	GW	CG	40mL	HCl	3	
2 SW10-5	07/16/24	0915		G	GW				3	
3 MW10-3	07/16/24	0920		G	GW				3	
4 SW10-8	07/16/24	0930		G	GW				3	
5 PW10-2	07/16/24	0940		G	GW				3	
6 MW10-7	07/16/24	0945		G	GW				3	
7 PW10-1	07/16/24	0950		G	GW				3	
8 PZ10-7	07/16/24	0955		G	GW				3	
9 MW8-11D	07/16/24	1055		G	GW				3	
10 PW13-4D	07/16/24	1120		G	GW				3	

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

Comments:

Circle Sample Collector: ALS Tech / Client

Name: ID:

Date:	Time	Relinquished By / Company Name		Received By / Company Name
7/16/24	1530	1 Arcadis	2	Fedex
7/17/24	925	3 Fedex	4	
		5	6	
		7	8	
		9	10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by:

WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N

Courier/Tracking #

Deviations? NO YES: If YES, list below

Client contact: Date/Tech

Sample(s) for Radiation testing? Y (N) Rad Screen (uCi)

Reportable SDWA Sample(s)? Y (N) New Source? Y (N)

SDWA State of Origin? New Source Contact:

PWSID #

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES (NO)

Internal Use: if less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [X] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ]

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

Rev 05.01 2024

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3 of 4

ALS Quote #:

Name: Arcadis

Address: 110 W. Fayette, Suite 300
Syracuse, NY 13202

Project: Corey Averill

Phone #: 315-415-4394

Project Name/#: NFARS-30036646

PO:

Purchase Order #:

TAT: [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Report Required: Approved?

Email? [X] corey.averill@arcadis.com

Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	8260 VOCs	Container Type	Container Size	Preservative
1 MW13-4D	07/16/24	1125		G	GW	3	GG	40mL	HCl
2 MW13-5D	07/16/24	1130		G	GW	3			
3 PW13-1	07/16/24	1135		G	GW	3			
4 RW5-1	07/16/24	1145		G	GW	3			
5 MW5-1DA	07/16/24	1150		G	GW	9			
6 MW5-6	07/16/24	1215		G	GW	3			
7 MW5-5D	07/16/24	1220		G	GW	3			
8 RW5-2	07/16/24	1230		G	GW	3			
9 RW5-4	07/16/24	1235		G	GW	3			
10 PZ3-8D	07/16/24	1320		G	GW	3			

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

Enter Number of Containers Per Sample or Field Results Below.

Comments:

Circle Sample Collector: ALS Tech / Client

Name: ID:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
7/16/24	1530	1	Arcadis	2	Fedex
7/17/24	925	3	Fedex	4	
		5		6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N

Courier/Tracking #

Deviations? NO YES If YES, list below

Client contact: Date/Tech

Sample(s) for Radiation testing? Y (N) Rad Screen (uCi)

Reportable SDWA Sample(s)? Y (N) New Source? Y (N)

SDWA State of Origin? New Source Contact:

PWSID #

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

MS/MSD collected @ MW5-1DA

Contains Short Hold Testing YES (NO)

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [X] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ]

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

Rev 05.01.2024

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 4 of 4

ALS Quote #:

t Name: Arcadis

ess: 110 W. Fayette, Suite 300
Syracuse, NY 13202

tact: Corey Averill

ne#: 315-415-4394

ject Name/#: NFARS - 30036646

To:

rchase Order #:

TAT [X] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

te Required: Approved?

ail? [X] corey.averill@arcadis.com

Container Type: CG
Container Size: 40mL
Preservative: HCl

Orthophosphate Filtered? Yes (No) Hexavalent Chromium Filtered? Yes (No)

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	8260 VOCs	Enter Number of Containers Per Sample or Field Results Below.
1	PZ3-7D	07/16/24	1325		G	GW	3	
2	DUP-02-20240716	07/16/24	—		G	GW	3	
3	DUP-03-20240716	07/16/24	—		G	GW	3	
4	TRIPBLANK	—	—		G	TB	6	
5								
6								
7								
8								
9								
10								

Circle Sample Collector: ALS Tech / Client
Name: ID:

Comments:

Date:	Time	Relinquished By / Company Name		Received By / Company Name
7/16/24	1530	1 Arcadis	2 Fedex	
7/17/24	925	3 Fedex	4	
		5	6	
		7	8	
		9	10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA
Sample Custody Seal Intact	Y	N	NA
Received on Ice	Y	N	NA
Coolers & Samples Intact	Y	N	
Correct Containers Provided	Y	N	
Sample Label/COC Agree	Y	N	
Adequate Sample Volumes	Y	N	
VOA only: Trip Blank	Y	N	NA

NJ ≤ 4 days? Y N

Courier/Tracking #

Deviations? NO YES
If YES, list below

Client contact:
Date/Tech

Sample(s) for Radiation testing? Y (N)
Reportable SDWA Sample(s)? Y (N)

Rad Screen (uCi)

New Source? Y (N)
New Source Contact:

SDWA State of Origin?

PWSID #

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point
R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES (NO)

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: [ ] Standard Lvl 1 [X] Standard Lvl 2 [ ] Standard Lvl 3 [ ] Standard Lvl 4 [ ] CLP-like [ ] DOD [ ] NJ RED [ ] NJ Full [ ] HSCA [ ] Landfill [ ] NJ GW [ ]

EDDs: [ ] Excel Summary [ ] Equis [ ] Custom

Sample Disposal: Lab [X] Special [ ]

EDDS: Format Type

State Samples Collected In: [X] NY [ ] NJ [ ] PA [ ] WV [ ] FL [ ] other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

Rev 05.01.2024

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Results

Client Sample ID	SW3-15	Collected	07/16/2024 07:30
Lab Sample ID	3369360001	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 21:01	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
Acetone	4.4J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:01	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Iodomethane	0.75U	~~U~~ UJ	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 21:01	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A

Results

Client Sample ID	SW3-15	Collected	07/16/2024 07:30
Lab Sample ID	3369360001	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:01	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	07/18/2024 21:01	
4-Bromofluorobenzene	460-00-4	103%	85 – 114	07/18/2024 21:01	
Dibromofluoromethane	1868-53-7	98.2%	80 – 119	07/18/2024 21:01	
Toluene-d8	2037-26-5	100%	89 – 112	07/18/2024 21:01	

Results

Client Sample ID	DUP-01-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360002	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 21:21	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
Acetone	4.5J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:21	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Iodomethane	0.50J	~~J~~, J-	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 21:21	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A

Results

Client Sample ID	DUP-01-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360002	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:21	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.1%	81 – 118	07/18/2024 21:21	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/18/2024 21:21	
Dibromofluoromethane	1868-53-7	97.7%	80 – 119	07/18/2024 21:21	
Toluene-d8	2037-26-5	101%	89 – 112	07/18/2024 21:21	

Results

Client Sample ID	PZ3-6D	Collected	07/16/2024 07:40
Lab Sample ID	3369360003	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 21:41	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
Acetone	8.5		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 21:41	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Iodomethane	0.43J	~~J,+~~ J-	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 21:41	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A

Results

Client Sample ID	PZ3-6D	Collected	07/16/2024 07:40
Lab Sample ID	3369360003	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 21:41	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.9%	81 – 118	07/18/2024 21:41	
4-Bromofluorobenzene	460-00-4	98.4%	85 – 114	07/18/2024 21:41	
Dibromofluoromethane	1868-53-7	97.3%	80 – 119	07/18/2024 21:41	
Toluene-d8	2037-26-5	99.5%	89 – 112	07/18/2024 21:41	

Results

Client Sample ID	MW3-3DA	Collected	07/16/2024 07:50
Lab Sample ID	3369360004	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/18/2024 22:01	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
Acetone	8.5		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/18/2024 22:01	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
cis-1,2-Dichloroethene	4.8		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Iodomethane	0.75U	~~U,~~ UJ	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/18/2024 22:01	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A

Results

Client Sample ID	MW3-3DA	Collected	07/16/2024 07:50
Lab Sample ID	3369360004	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A
Vinyl Chloride	7.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/18/2024 22:01	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	07/18/2024 22:01	
4-Bromofluorobenzene	460-00-4	93.5%	85 – 114	07/18/2024 22:01	
Dibromofluoromethane	1868-53-7	96.7%	80 – 119	07/18/2024 22:01	
Toluene-d8	2037-26-5	96.3%	89 – 112	07/18/2024 22:01	

Results

Client Sample ID	SW3-3	Collected	07/16/2024 10:15
Lab Sample ID	3369360005	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 19:23	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:23	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Bromomethane	0.75U	UJ ~~U,2,3~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chloroethane	0.75U	~~U,4,5~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Iodomethane	0.75U	UJ ~~U,1,6,7~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 19:23	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A

Results

Client Sample ID	SW3-3	Collected	07/16/2024 10:15
Lab Sample ID	3369360005	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:23	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 19:23	
4-Bromofluorobenzene	460-00-4	96.2%	85 – 114	07/19/2024 19:23	
Dibromofluoromethane	1868-53-7	96%	80 – 119	07/19/2024 19:23	
Toluene-d8	2037-26-5	99.5%	89 – 112	07/19/2024 19:23	

Results

Client Sample ID	PZ3-3A	Collected	07/16/2024 10:30
Lab Sample ID	3369360006	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 17:24	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
Acetone	9.7		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:24	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chloroethane	0.75U	U,~~8,9~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chloroform	0.42J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
cis-1,2-Dichloroethene	14.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Iodomethane	0.75U	UJ U,~~1,10,1~~ 1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 17:24	JTH	A
trans-1,2-Dichloroethene	0.36J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A

Results

Client Sample ID	PZ3-3A	Collected	07/16/2024 10:30
Lab Sample ID	3369360006	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	2.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A
Vinyl Chloride	9.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:24	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	81 – 118	07/19/2024 17:24	
4-Bromofluorobenzene	460-00-4	99.2%	85 – 114	07/19/2024 17:24	
Dibromofluoromethane	1868-53-7	101%	80 – 119	07/19/2024 17:24	
Toluene-d8	2037-26-5	102%	89 – 112	07/19/2024 17:24	

Results

Client Sample ID	MW3-4DA	Collected	07/16/2024 10:35
Lab Sample ID	3369360007	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 13:45	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
Acetone	8.9		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 13:45	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
cis-1,2-Dichloroethene	6.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Iodomethane	0.75U	UJ ~~U,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 13:45	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A

Results

Client Sample ID	MW3-4DA	Collected	07/16/2024 10:35
Lab Sample ID	3369360007	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A
Vinyl Chloride	4.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 13:45	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	07/19/2024 13:45	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 13:45	
Dibromofluoromethane	1868-53-7	97.8%	80 – 119	07/19/2024 13:45	
Toluene-d8	2037-26-5	99.9%	89 – 112	07/19/2024 13:45	

Results

Client Sample ID	SW3-2	Collected	07/16/2024 10:45
Lab Sample ID	3369360008	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 18:24	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:24	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Iodomethane	0.75U	UJ ~~U,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 18:24	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A

Results

Client Sample ID	SW3-2	Collected	07/16/2024 10:45
Lab Sample ID	3369360008	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:24	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.9%	81 – 118	07/19/2024 18:24	
4-Bromofluorobenzene	460-00-4	95.8%	85 – 114	07/19/2024 18:24	
Dibromofluoromethane	1868-53-7	97%	80 – 119	07/19/2024 18:24	
Toluene-d8	2037-26-5	100%	89 – 112	07/19/2024 18:24	

Results

Client Sample ID	SW99-10	Collected	07/16/2024 08:40
Lab Sample ID	3369360009	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 18:04	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:04	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Iodomethane	0.75U	UJ ~~U,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 18:04	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A

Results

Client Sample ID	SW99-10	Collected	07/16/2024 08:40
Lab Sample ID	3369360009	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:04	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 18:04	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 18:04	
Dibromofluoromethane	1868-53-7	98.9%	80 – 119	07/19/2024 18:04	
Toluene-d8	2037-26-5	105%	89 – 112	07/19/2024 18:04	

Results

Client Sample ID	SW10-7	Collected	07/16/2024 09:05
Lab Sample ID	3369360010	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 17:44	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
Acetone	3.6J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:44	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Iodomethane	0.75U	UJ ~~U,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 17:44	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A

Results

Client Sample ID	SW10-7	Collected	07/16/2024 09:05
Lab Sample ID	3369360010	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:44	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 17:44	
4-Bromofluorobenzene	460-00-4	97.4%	85 – 114	07/19/2024 17:44	
Dibromofluoromethane	1868-53-7	96.4%	80 – 119	07/19/2024 17:44	
Toluene-d8	2037-26-5	97.8%	89 – 112	07/19/2024 17:44	

Results

Client Sample ID	SW10-6	Collected	07/16/2024 09:10
Lab Sample ID	3369360011	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 17:04	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 17:04	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
cis-1,2-Dichloroethene	0.51J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Iodomethane	0.75U	UJ ~~U,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 17:04	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A

Results

Client Sample ID	SW10-6	Collected	07/16/2024 09:10
Lab Sample ID	3369360011	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 17:04	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.6%	81 – 118	07/19/2024 17:04	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	07/19/2024 17:04	
Dibromofluoromethane	1868-53-7	93.9%	80 – 119	07/19/2024 17:04	
Toluene-d8	2037-26-5	100%	89 – 112	07/19/2024 17:04	

Results

Client Sample ID	SW10-5	Collected	07/16/2024 09:15
Lab Sample ID	3369360012	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 19:04	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 19:04	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Iodomethane	0.75U	UJ ~~U1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 19:04	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A

Results

Client Sample ID	SW10-5	Collected	07/16/2024 09:15
Lab Sample ID	3369360012	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.90J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 19:04	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.9%	81 – 118	07/19/2024 19:04	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 19:04	
Dibromofluoromethane	1868-53-7	96.4%	80 – 119	07/19/2024 19:04	
Toluene-d8	2037-26-5	99.2%	89 – 112	07/19/2024 19:04	

Results

Client Sample ID	MW10-3	Collected	07/16/2024 09:20
Lab Sample ID	3369360013	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 15:25	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
Acetone	11.0		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:25	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Iodomethane	0.75U	UJ ~~U~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 15:25	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A

Results

Client Sample ID	MW10-3	Collected	07/16/2024 09:20
Lab Sample ID	3369360013	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:25	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	07/19/2024 15:25	
4-Bromofluorobenzene	460-00-4	96.6%	85 – 114	07/19/2024 15:25	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	07/19/2024 15:25	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 15:25	

Results

Client Sample ID	SW10-8	Collected	07/16/2024 09:30
Lab Sample ID	3369360014	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 18:44	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 18:44	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
cis-1,2-Dichloroethene	1.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Iodomethane	0.75U	UJ ~~U,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 18:44	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A

Results

Client Sample ID	SW10-8	Collected	07/16/2024 09:30
Lab Sample ID	3369360014	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 18:44	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	07/19/2024 18:44	
4-Bromofluorobenzene	460-00-4	92.4%	85 – 114	07/19/2024 18:44	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	07/19/2024 18:44	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 18:44	

Results

Client Sample ID	PW10-2	Collected	07/16/2024 09:40
Lab Sample ID	3369360015	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 14:45	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
Acetone	10.7		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:45	JTH	A
Benzene	1.9		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Cyclohexane	0.82J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Iodomethane	0.68J	J- ~~J+~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methyl cyclohexane	0.54J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 14:45	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A

Results

Client Sample ID	PW10-2	Collected	07/16/2024 09:40
Lab Sample ID	3369360015	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:45	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.6%	81 – 118	07/19/2024 14:45	
4-Bromofluorobenzene	460-00-4	93.5%	85 – 114	07/19/2024 14:45	
Dibromofluoromethane	1868-53-7	96.3%	80 – 119	07/19/2024 14:45	
Toluene-d8	2037-26-5	96.1%	89 – 112	07/19/2024 14:45	

Results

Client Sample ID	MW10-7	Collected	07/16/2024 09:45
Lab Sample ID	3369360016	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 15:05	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
2-Butanone	2.4J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
Acetone	11.8		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:05	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
cis-1,2-Dichloroethene	0.49J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Iodomethane	0.75U	UJ ~~U,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Toluene	0.61J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 15:05	JTH	A
trans-1,2-Dichloroethene	1.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A

Results

Client Sample ID	MW10-7	Collected	07/16/2024 09:45
Lab Sample ID	3369360016	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:05	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95%	81 – 118	07/19/2024 15:05	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	07/19/2024 15:05	
Dibromofluoromethane	1868-53-7	94.2%	80 – 119	07/19/2024 15:05	
Toluene-d8	2037-26-5	97.6%	89 – 112	07/19/2024 15:05	

Results

Client Sample ID	PW10-1	Collected	07/16/2024 09:50
Lab Sample ID	3369360017	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 14:25	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
Acetone	10.2		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:25	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Carbon Disulfide	0.50J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
cis-1,2-Dichloroethene	0.42J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Iodomethane	0.75U	UJ ~~U,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 14:25	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A

Results

Client Sample ID	PW10-1	Collected	07/16/2024 09:50
Lab Sample ID	3369360017	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:25	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.4%	81 – 118	07/19/2024 14:25	
4-Bromofluorobenzene	460-00-4	96.8%	85 – 114	07/19/2024 14:25	
Dibromofluoromethane	1868-53-7	96.1%	80 – 119	07/19/2024 14:25	
Toluene-d8	2037-26-5	97.5%	89 – 112	07/19/2024 14:25	

Results

Client Sample ID	PZ10-7	Collected	07/16/2024 09:55
Lab Sample ID	3369360018	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 14:05	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
Acetone	10.9		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 14:05	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Iodomethane	0.42J	J- ~~J,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 14:05	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A

Results

Client Sample ID	PZ10-7	Collected	07/16/2024 09:55
Lab Sample ID	3369360018	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 14:05	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	81 – 118	07/19/2024 14:05	
4-Bromofluorobenzene	460-00-4	99.8%	85 – 114	07/19/2024 14:05	
Dibromofluoromethane	1868-53-7	98.9%	80 – 119	07/19/2024 14:05	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 14:05	

Results

Client Sample ID	MW8-11D	Collected	07/16/2024 10:55
Lab Sample ID	3369360019	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 15:45	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 15:45	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Iodomethane	0.75U	UJ	~~U,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 15:45	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A

Results

Client Sample ID	MW8-11D	Collected	07/16/2024 10:55
Lab Sample ID	3369360019	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 15:45	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96.6%	81 – 118	07/19/2024 15:45	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	07/19/2024 15:45	
Dibromofluoromethane	1868-53-7	95%	80 – 119	07/19/2024 15:45	
Toluene-d8	2037-26-5	98.8%	89 – 112	07/19/2024 15:45	

Results

Client Sample ID	PW13-4D	Collected	07/16/2024 11:20
Lab Sample ID	3369360020	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 16:05	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:05	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
cis-1,2-Dichloroethene	7.4		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Iodomethane	0.75U	UJ ~~U,1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 16:05	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A

Results

Client Sample ID	PW13-4D	Collected	07/16/2024 11:20
Lab Sample ID	3369360020	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:05	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.8%	81 – 118	07/19/2024 16:05	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	07/19/2024 16:05	
Dibromofluoromethane	1868-53-7	97.7%	80 – 119	07/19/2024 16:05	
Toluene-d8	2037-26-5	99.9%	89 – 112	07/19/2024 16:05	

Results

Client Sample ID	MW13-4D	Collected	07/16/2024 11:25
Lab Sample ID	3369360021	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 16:24	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:24	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
cis-1,2-Dichloroethene	5.5		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Iodomethane	0.75U	UJ U,1	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 16:24	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A

Results

Client Sample ID	MW13-4D	Collected	07/16/2024 11:25
Lab Sample ID	3369360021	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:24	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.4%	81 – 118	07/19/2024 16:24	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/19/2024 16:24	
Dibromofluoromethane	1868-53-7	96.5%	80 – 119	07/19/2024 16:24	
Toluene-d8	2037-26-5	101%	89 – 112	07/19/2024 16:24	

Results

Client Sample ID	MW13-5D	Collected	07/16/2024 11:30
Lab Sample ID	3369360022	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/19/2024 16:44	JTH	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/19/2024 16:44	JTH	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
cis-1,2-Dichloroethene	16.6		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Iodomethane	0.75U	UJ ~~U,I~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/19/2024 16:44	JTH	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A

Results

Client Sample ID	MW13-5D	Collected	07/16/2024 11:30
Lab Sample ID	3369360022	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A
Vinyl Chloride	3.7		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/19/2024 16:44	JTH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.1%	81 – 118	07/19/2024 16:44	
4-Bromofluorobenzene	460-00-4	95.7%	85 – 114	07/19/2024 16:44	
Dibromofluoromethane	1868-53-7	96.9%	80 – 119	07/19/2024 16:44	
Toluene-d8	2037-26-5	96%	89 – 112	07/19/2024 16:44	

Results

Client Sample ID	PW13-1	Collected	07/16/2024 11:35
Lab Sample ID	3369360023	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 12:53	ILY	A
1,4-Dichlorobenzene	0.50J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:53	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Iodomethane	0.75U	UJ ~~U,12~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 12:53	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A

Results

Client Sample ID	PW13-1	Collected	07/16/2024 11:35
Lab Sample ID	3369360023	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.53J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A
Vinyl Chloride	5.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:53	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.8%	81 – 118	07/25/2024 12:53	
4-Bromofluorobenzene	460-00-4	94.7%	85 – 114	07/25/2024 12:53	
Dibromofluoromethane	1868-53-7	95.9%	80 – 119	07/25/2024 12:53	
Toluene-d8	2037-26-5	97%	89 – 112	07/25/2024 12:53	

Results

Client Sample ID	RW5-1	Collected	07/16/2024 11:45
Lab Sample ID	3369360024	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 13:13	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
Acetone	3.2J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:13	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Carbon Disulfide	3.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
cis-1,2-Dichloroethene	58.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Iodomethane	0.44J	J- ~~J,I2~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Toluene	6.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 13:13	ILY	A
trans-1,2-Dichloroethene	2.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A

Results

Client Sample ID	RW5-1	Collected	07/16/2024 11:45
Lab Sample ID	3369360024	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.70J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A
Vinyl Chloride	97.9		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:13	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	97.6%	81 – 118	07/25/2024 13:13	
4-Bromofluorobenzene	460-00-4	99.7%	85 – 114	07/25/2024 13:13	
Dibromofluoromethane	1868-53-7	96%	80 – 119	07/25/2024 13:13	
Toluene-d8	2037-26-5	97.6%	89 – 112	07/25/2024 13:13	

Results

Client Sample ID	MW5-1DA	Collected	07/16/2024 11:50
Lab Sample ID	3369360025	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 13:33	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:33	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Bromomethane	0.75U	~~U,13~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Carbon Disulfide	0.34J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Carbon Tetrachloride	0.75U	~~U,14~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
cis-1,2-Dichloroethene	0.45J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Iodomethane	0.75U UJ	~~U,12,15,16,17~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 13:33	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A

Results

Client Sample ID	MW5-1DA	Collected	07/16/2024 11:50
Lab Sample ID	3369360025	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:33	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99%	81 – 118	07/25/2024 13:33	
4-Bromofluorobenzene	460-00-4	96.4%	85 – 114	07/25/2024 13:33	
Dibromofluoromethane	1868-53-7	97.2%	80 – 119	07/25/2024 13:33	
Toluene-d8	2037-26-5	97.2%	89 – 112	07/25/2024 13:33	

Results

Client Sample ID	MW5-6	Collected	07/16/2024 12:15
Lab Sample ID	3369360026	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 13:52	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
Acetone	3.8J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 13:52	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
cis-1,2-Dichloroethene	2.6		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Iodomethane	0.75U UJ	~~U,12~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Toluene	2.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 13:52	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A

Results

Client Sample ID	MW5-6	Collected	07/16/2024 12:15
Lab Sample ID	3369360026	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	1.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A
Vinyl Chloride	1.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 13:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	94.7%	81 – 118	07/25/2024 13:52	
4-Bromofluorobenzene	460-00-4	99.3%	85 – 114	07/25/2024 13:52	
Dibromofluoromethane	1868-53-7	94.2%	80 – 119	07/25/2024 13:52	
Toluene-d8	2037-26-5	96.8%	89 – 112	07/25/2024 13:52	

Results

Client Sample ID	MW5-5D	Collected	07/16/2024 12:20
Lab Sample ID	3369360027	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 14:12	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
2-Butanone	4.8J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
Acetone	4.8J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:12	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
cis-1,2-Dichloroethene	3.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Iodomethane	0.75U	UJ ~~U,12~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Toluene	0.34J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 14:12	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A

Results

Client Sample ID	MW5-5D	Collected	07/16/2024 12:20
Lab Sample ID	3369360027	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	2.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.7%	81 – 118	07/25/2024 14:12	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/25/2024 14:12	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	07/25/2024 14:12	
Toluene-d8	2037-26-5	99.9%	89 – 112	07/25/2024 14:12	

Results

Client Sample ID	RW5-2	Collected	07/16/2024 12:30
Lab Sample ID	3369360028	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 14:32	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:32	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
cis-1,2-Dichloroethene	13.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Iodomethane	0.75U UJ	~~U,12~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Toluene	2.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 14:32	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A

Results

Client Sample ID	RW5-2	Collected	07/16/2024 12:30
Lab Sample ID	3369360028	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A
Vinyl Chloride	26.8		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:32	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.7%	81 – 118	07/25/2024 14:32	
4-Bromofluorobenzene	460-00-4	96.6%	85 – 114	07/25/2024 14:32	
Dibromofluoromethane	1868-53-7	98.3%	80 – 119	07/25/2024 14:32	
Toluene-d8	2037-26-5	98.9%	89 – 112	07/25/2024 14:32	

Results

Client Sample ID	RW5-4	Collected	07/16/2024 12:35
Lab Sample ID	3369360029	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 14:52	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 14:52	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
cis-1,2-Dichloroethene	0.46J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Iodomethane	0.75U	UJ U ~~,12~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Toluene	1.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 14:52	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A

Results

Client Sample ID	RW5-4	Collected	07/16/2024 12:35
Lab Sample ID	3369360029	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A
Vinyl Chloride	0.38J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 14:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.5%	81 – 118	07/25/2024 14:52	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	07/25/2024 14:52	
Dibromofluoromethane	1868-53-7	96.7%	80 – 119	07/25/2024 14:52	
Toluene-d8	2037-26-5	99.2%	89 – 112	07/25/2024 14:52	

Results

Client Sample ID	PZ3-8D	Collected	07/16/2024 13:20
Lab Sample ID	3369360030	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 15:12	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
Acetone	10.1		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:12	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
cis-1,2-Dichloroethene	0.61J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Iodomethane	0.75U UJ	~~U,12~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 15:12	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A

Results

Client Sample ID	PZ3-8D	Collected	07/16/2024 13:20
Lab Sample ID	3369360030	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A
Vinyl Chloride	0.89J	J	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.6%	81 – 118	07/25/2024 15:12	
4-Bromofluorobenzene	460-00-4	96.3%	85 – 114	07/25/2024 15:12	
Dibromofluoromethane	1868-53-7	95.9%	80 – 119	07/25/2024 15:12	
Toluene-d8	2037-26-5	96%	89 – 112	07/25/2024 15:12	

Results

Client Sample ID	PZ3-7D	Collected	07/16/2024 13:25
Lab Sample ID	3369360031	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 15:32	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:32	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
cis-1,2-Dichloroethene	7.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Iodomethane	0.75U	UJ ~~U,12~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 15:32	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A

Results

Client Sample ID	PZ3-7D	Collected	07/16/2024 13:25
Lab Sample ID	3369360031	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A
Vinyl Chloride	3.1		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:32	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	95.2%	81 – 118	07/25/2024 15:32	
4-Bromofluorobenzene	460-00-4	98.8%	85 – 114	07/25/2024 15:32	
Dibromofluoromethane	1868-53-7	93%	80 – 119	07/25/2024 15:32	
Toluene-d8	2037-26-5	95.9%	89 – 112	07/25/2024 15:32	

Results

Client Sample ID	DUP-02-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360032	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 15:52	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
Acetone	3.6J	J	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 15:52	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
cis-1,2-Dichloroethene	2.4		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Iodomethane	0.75U	UJ ~~U,12~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Toluene	2.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 15:52	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A

Results

Client Sample ID	DUP-02-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360032	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	1.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A
Vinyl Chloride	1.0		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 15:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99%	81 – 118	07/25/2024 15:52	
4-Bromofluorobenzene	460-00-4	98.9%	85 – 114	07/25/2024 15:52	
Dibromofluoromethane	1868-53-7	96.6%	80 – 119	07/25/2024 15:52	
Toluene-d8	2037-26-5	98.7%	89 – 112	07/25/2024 15:52	

Results

Client Sample ID	DUP-03-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360033	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 16:12	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
Acetone	9.9		ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 16:12	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Bromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
cis-1,2-Dichloroethene	7.3		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Iodomethane	0.75U	UJ	~~U,12~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 16:12	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A

Results

Client Sample ID	DUP-03-20240716	Collected	07/16/2024 00:00
Lab Sample ID	3369360033	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A
Vinyl Chloride	3.2		ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 16:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96%	81 – 118	07/25/2024 16:12	
4-Bromofluorobenzene	460-00-4	99.9%	85 – 114	07/25/2024 16:12	
Dibromofluoromethane	1868-53-7	94%	80 – 119	07/25/2024 16:12	
Toluene-d8	2037-26-5	98.9%	89 – 112	07/25/2024 16:12	

Results

Client Sample ID	Trip Blank	Collected	07/16/2024 00:00
Lab Sample ID	3369360034	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1,2-Trichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,1-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2,3-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2,4-Trichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U	ug/L	5.0	2.5	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dibromoethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dichloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,2-Dichloropropane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,3-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,3-Dichloropropene, Total	1.5U	U	ug/L	2.0	1.5	0.66	SW846 8260C	1	07/25/2024 12:33	ILY	A
1,4-Dichlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
2-Butanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
2-Hexanone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
Acetone	3.8U	U	ug/L	5.0	3.8	1.6	SW846 8260C	1	07/25/2024 12:33	ILY	A
Benzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromochloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromodichloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromoform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Bromomethane	0.75U	UJ	~~U~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Carbon Disulfide	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Carbon Tetrachloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chlorobenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chlorodibromomethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chloroethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chloroform	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Chloromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
cis-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Dichlorodifluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Ethylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Freon 113	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Iodomethane	0.75U	UJ	~~U,12~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Isopropylbenzene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methyl acetate	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methyl cyclohexane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methyl t-Butyl Ether	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Methylene Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Styrene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Tetrachloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Toluene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Total Xylenes	2.3U	U	ug/L	3.0	2.3	1.0	SW846 8260C	1	07/25/2024 12:33	ILY	A
trans-1,2-Dichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A

Results

Client Sample ID	Trip Blank	Collected	07/16/2024 00:00
Lab Sample ID	3369360034	Lab Receipt	07/17/2024 09:25

VOLATILE ORGANICS (cont.)

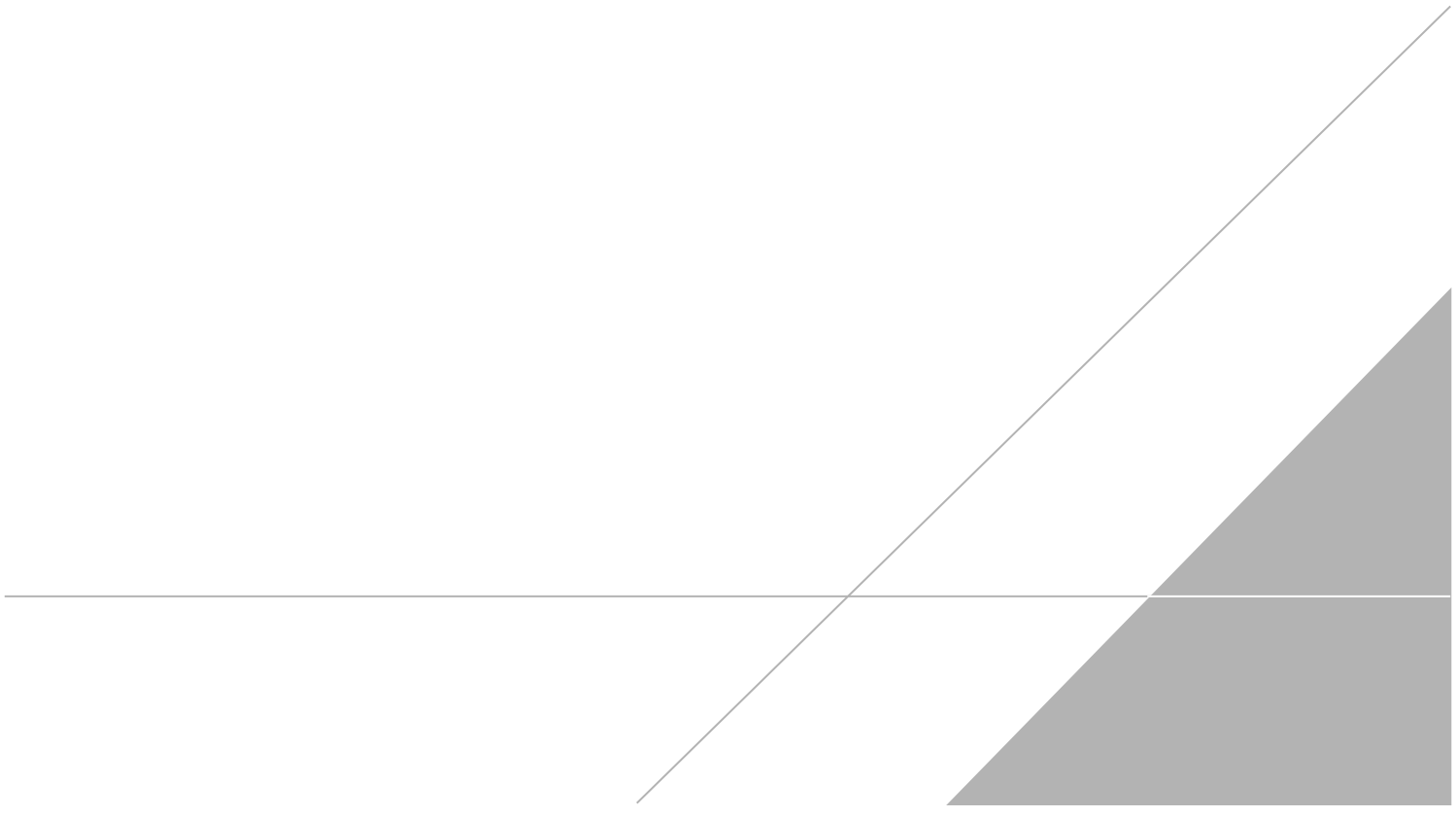
Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Trichlorofluoromethane	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A
Vinyl Chloride	0.75U	U	ug/L	1.0	0.75	0.33	SW846 8260C	1	07/25/2024 12:33	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.6%	81 – 118	07/25/2024 12:33	
4-Bromofluorobenzene	460-00-4	104%	85 – 114	07/25/2024 12:33	
Dibromofluoromethane	1868-53-7	96.9%	80 – 119	07/25/2024 12:33	
Toluene-d8	2037-26-5	101%	89 – 112	07/25/2024 12:33	

Data Validation Reports

Fall IWGP Event



Niagara Falls Air Reserve Station

Data Review

New York

Volatile Organic Compounds (VOCs) Analyses

SDG # 3385043

Analyses Performed By:
ALS Laboratories,
Middletown, Pennsylvania

Report # 58123R
Review Level: Stage 4
Project: 30036646. 34CD

Summary

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 3385043 for samples collected in association with the Niagara Falls Air Reserve Station. The review was conducted as a Stage 4 evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis
					VOC
MW5-1DA	3385043001	Water	10/28/2024		X
MW5-6	3385043002	Water	10/28/2024		X
RW5-2	3385043003	Water	10/28/2024		X
MW5-5D	3385043004	Water	10/28/2024		X
RW5-1	3385043005	Water	10/28/2024		X
RW5-4	3385043006	Water	10/28/2024		X
DUP	3385043007	Water	10/28/2024	RW5-1	X
MW13-4D	3385043008	Water	10/28/2024		X
MW13-5D	3385043009	Water	10/28/2024		X
PW13-1	3385043010	Water	10/28/2024		X
PW13-4D	3385043011	Water	10/28/2024		X
SW99-10	3385043012	Water	10/28/2024		X
SW10-7	3385043013	Water	10/28/2024		X
SW10-8	3385043014	Water	10/28/2024		X
MW10-4D	3385043015	Water	10/28/2024		X
MW10-1DA	3385043016	Water	10/28/2024		X
MW10-10D	3385043017	Water	10/28/2024		X
PW10-2	3385043018	Water	10/28/2024		X
MW10-4E	3385043019	Water	10/28/2024		X
PW10-1	3385043020	Water	10/28/2024		X
MW10-9D	3385043021	Water	10/28/2024		X
MW10-3D	3385043022	Water	10/28/2024		X
MW1-1DA	3385043023	Water	10/28/2024		X
SW3-2	3385043024	Water	10/28/2024		X
SW3-3	3385043025	Water	10/28/2024		X

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis
					VOC
SW3-15	3385043026	Water	10/28/2024		X
DUP-SW	3385043027	Water	10/28/2024	SW3-15	X
TRIP BLANK	3385043028	Water	10/28/2024		X

Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

Note:
QA quality assurance

Organic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260C. Data were reviewed in accordance with the Department of Defense (DoD) Environmental Data Quality Workgroup General Data Validation Guidelines, November 2019; DoD Environmental Data Quality Workgroup Data Validation Guidelines Module 1: Data Validation Procedure for Organic Analysis by GC/MS, May 2020; DoD Data Validation Guidelines Modules 1, 2, 3, and 4 Revised Table for Sample Qualification in the Presence of Blank Contamination, February 2022; USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, OSWER 9240.1-05A-P, October 1999, as appropriate); and the Quality Assurance Project Plan, Northeast Group Optimized Remediation Contract, Contract W912DR-19-D-0009.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified, and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Per DoD General Data Validation Guidelines November 2019 Revision 1 Section 4.8 states; “The following provides a brief explanation of the DoD data validation qualifiers assigned to results during the data review process by a data validator. The reviewer should use these qualifiers, as applicable, unless other data qualifiers are specified in a project related document, such as a QAPP. If other qualifiers are used, a complete explanation of those qualifiers should accompany the data validation report.” Below are the qualifier codes that may be applied in this validation report:

- Laboratory Data Qualifiers
  - U Undetected: The analyte/compound was analyzed for, but not detected. The associated value is the limit of detection (LOD).
  - B Blank contamination: The analyte has been found in the field sample as well as its associated blank, its presence in the sample may be suspect.
  - J Estimated: The compound was positively identified; however, the associated numerical value is an estimated concentration greater than the detection limit (DL) but less than the limit of quantitation (LOQ).
- Quantitation Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Data Validation Qualifiers
  - UB Compound is considered non-detect at the listed value due to associated blank contamination.
  - J The reported result was an estimated value with an unknown bias.
  - J+ The reported result was an estimated value, but the result may be biased high.
  - J- The reported result was an estimated value, but the result may be biased low.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

X The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project QC criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which would include a project chemist), but exclusion of the data is recommended.

No compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Volatile Organic Compounds (VOCs) Analyses

1. Holding Times

The specified holding times for the following methods are presented in the table below.

Method	Matrix	Holding Time	Preservation
SW-846 8260D	Water	14 days from collection to analysis (preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank calculated for QA blanks containing concentrations greater than the detection limit (DL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the DL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable, and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05). The initial calibration verification (ICV) must exhibit a percent difference (%D) less than 20%.

All compounds associated with the initial calibration and initial calibration verifications were within the specified control limits except as summarized in Section 4.2.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05). The CCV %D for each target analyte should be ≤ 20% for opening or continuing CCVs and ≤ 50% for closing CCVs.

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the DoD QSM 5.3 acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the mid-point standard in the ICAL for associated standards. On days when ICAL is not performed, the daily initial CCV can be used.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the DoD QSM acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the DoD QSM 5.3 acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis performed on sample RW5-1 and SW3-15. The MS/MSD analysis exhibited recoveries and RPDs within the control limits with the exception noted below.

Sample ID	Compounds	MS Recovery	MSD Recovery
RW5-1	Bromomethane	AC	<LL but >10%
SW3-15	Bromomethane	<LL but >10%	AC

Sample ID	Compounds	MS Recovery	MSD Recovery
	Iodomethane	<LL but >10%	<LL but >10%

Notes:
LL Lower control limit
AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J+
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J-
< 10%	Non-detect	X
	Detect	J-
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	
MS/MSD diluted below calibration range	Detect	No Action
	Non-detect	
If the MS/MSD was not spiked with all target analytes, qualify parent sample for those analytes in each batch not spiked	Detect	X
	Non-detect	X

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than the control limit are presented in the following table.

Sample ID	Compounds
SW3-15	Iodomethane

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> 20%	Non-detect	No Action
	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the DoD QSM acceptance limits. The relative percent difference (RPD) between the LCS recoveries within the DoD QSM 5.3 acceptance limits.

The LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the LOQ is applied for water matrices.

Results for field duplicate samples are summarized in the following table.

Sample ID/ Duplicate ID	Compounds	Sample Result	Duplicate Result	RPD
RW5-1/ DUP	Acetone	4.5J	4.6J	AC
	Carbon Disulfide	0.89J	0.75U	AC
	Chloroform	0.49J	0.44J	AC
	cis-1,2-Dichloroethene	1.1	0.98J	AC
	Toluene	3.8	4.1	AC
	trans-1,2-Dichloroethene	0.47J	0.55J	AC
	Trichloroethene	0.89J	.81J	AC
	Vinyl Chloride	1.5	1.3	AC
SW3-15 / DUP-SW	Acetone	4.9J	4.6J	AC
	Carbon Disulfide	0.75U	0.47J	AC
	Chloroform	0.51J	0.57J	AC

Note:
AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines.

Data Validation Checklist for VOCs

VOCs: SW-846 8260D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Stage 2B Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment/Field blanks	X				X
C. Trip blanks		X		X	
D. Ambient blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X	X		
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Moisture Content	X				X
GC/MS Tune					
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Initial/Continuing calibration verification %Ds		X		X	
Internal standard		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD = relative standard deviation

%R = percent recovery

RPD = relative percent difference

%D = percent difference

VALIDATION PERFORMED BY: Amrutha M

SIGNATURE: 

DATE: February 25, 2025

PEER REVIEW: Dennis Capria

DATE: March 2, 2025

Stage 4
Calibration Standards

SDG #: 3369360
Lab: ALS Laboratories
Project: NFARS

Date: 2/11/2025
Page: 1
Validated by: Amrutha M

Method: EPA method 8260C

18-JUL-2024 1244 Calibration Page 269

Compound: cis-1,2-Dichloroethene Instrument: MS23

Concentration	Std Area	IS Area	IS Conc	RF
0.50	6135	962861	30	0.382298
1.00	11077	937870	30	0.354324
5.0	69381	935332	30	0.445068
20.0	265577	922342	30	0.431906
50.0	613986	916708	30	0.401864
100.0	1328662	935462	30	0.426098
200	2539149	947786	30	0.401855

Reported Avg RF: 0.4060
Reported %RSD: 7.7

Calculated Avg RF: 0.406202
Std Dev: 0.031271758
Calculated % RSD: 7.70

Differences in %RSD may be due to rounding of the true value

Stage 4

ICV CCV Standards

SDG #: 3369360 Date: 2/11/2025

Lab: ALS Laboratories Page: 2

Project: NFARS Validated by: Amrutha M

Method: EPA method 8260C

2324071816ICVQ.D 25-Jul-2024 17:19 Page 413

Spike concentration: 20

Analyte	Analyte Area	IS Area	IS Conc	ICAL RF	Calculated Concentration	%Drift	% recovery	Reported %recovery
cis-1,2-Dichloroethene	262158	920592	30	0.406202	21.031743	5.16	105.2	105

2324071901.D 25-Jul-2024 17:45 Page 483

Analyte	Analyte Area	IS Area	IS Conc	Calculated RF	ICAL RF	%D	Reported %D
cis-1,2-Dichloroethene	634409	938901	30.0	0.405416	0.406202	-0.193	-0.193

Differences in %D may be due to rounding of the true value

Stage 4
LCS

SDG #: 3369360 Date: 2/11/2025
Lab: ALS Laboratories Page: 3
Project: NFARS Validated by: Amrutha M

Method: EPA method 8260C

LCS ID 2324071902.D Page 491
Injection Date: 19-JUL-2024 12:03

Analyte	Analyte Area	IS Area	IS Conc	ICAL RF	Calculated ug/L	Final conc ug/L	Calculated %R	Reported %R	
cis-1,2-Dichloroethene	274627	927355	30	0.406202	21.87	21.87	109.4	109	MATCH

Differences in %R may be due to rounding of the true value

Stage 4
Sample Concentration

SDG #: 3369360
Lab: ALS Laboratories
Project: NFARS

Date: 2/11/2025
Page: 4
Validated by: Amrutha M

Method: EPA method 8260C

Sample ID PW13-4D
Lab ID 3369360020

Injection Date: 19-JUL-2024 16:05
Page: 577

Analyte	Analyte Area	IS Area	IS Conc	Area Ratio	ICAL RF	Calculated ug/L	Final conc ug/L	Reported ug/L	
cis-1,2-Dichloroethene	92054	920279	30	0.100028361	0.406202	7.388	7.4	7.4	MATCH

Sample ID MW13-4D
Lab ID 3369360021

Injection Date: 19-JUL-2024 16:24
Page: 585

Analyte	Analyte Area	IS Area	IS Conc	Area Ratio	ICAL RF	Calculated ug/L	Final conc ug/L	Reported ug/L	
cis-1,2-Dichloroethene	69323	914075	30	0.07583951	0.406202	5.601	5.6	5.5	MATCH

Sample ID MW13-5D
Lab ID 3369360022

Injection Date:19-JUL-2024 16:44
Page: 593

Analyte	Analyte Area	IS Area	IS Conc	Area Ratio	ICAL RF	Calculated ug/L	Final conc ug/L	Reported ug/L	
cis-1,2-Dichloroethene	205281	932600	30	0.220116878	0.406202	16.257	16.3	16.6	MATCH

Stage 4
VOC Surrogate

SDG #: 480-224772-1 Date: 2/11/2025
Lab: ALS Laboratories Page: 5
Project: NFARS Validated by: Amrutha M

Method: EPA method 8260C

Sample ID PW13-4D Injection Date: 19-JUL-2024 16:05
Lab ID 3369360020 Page: 577

Surrogate Toluene-D8

Analyte	Analyte Area	IS Area	IS Conc	Area Ratio	ICAL RF	Calculated Amount	Reported amount	
Toluene-D8	983024	407535	30	2.412122	2.4200	29.9	30.0	MATCH

Surrogate Recovery

sample response µg/L	29.9023
amount added (µg/L)	30
sample dilution	1
%Recovery	99.67

REPORTED %R 99.9% MATCH

Chain of Custody and Corrected Sample Analysis Data Sheets

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3385043
Logged By: GRD
PM: SJB
ALS Quote
1 of 3

Client Name: Arcadis
Address: 10405 Lockport Rd
Niagara Falls, NY 14304
Contact: Cory Averill
Phone#: 716-249-9880
Project Name/#: 30036646.34CD
Bill To:
Purchase Order #:
TAT ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.
Date Required: Approved?
Email? ☐

Temp Taken By: GRD Therm ID: 352 WO Temp (°C) 3
Receipt Info completed by: GRD WV Containers 0-6°C Y N NA

Container Type	G											
Container Size	40 mL	GRD 10/29/24										
Preservative	HCl											

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	8260D									
	Enter Number of Containers Per Sample or Field Results Below.															
1	MW5-1DA	10/28/24	905		G	GW	3									
2	MW5-6		925		G	GW	3									
3	PW5-2 RW5-2		945		G	GW	3									
4	MW5-5D		830		G	GW	3									
5	RW5-1		700		G	GW	3									
6	RW5-4		850		G	GW	3									
7	DUP		—		G	GW	3									
8	MS/MSD		900		G	GW	6									
9	MW13-4D		810		G	GW	3									
10	MW13-5D		755		G	GW	3									

Cooler Custody Seals Intact	Y N NA
Sample Custody Seal Intact	Y N NA
Received on Ice	Y N NA
Coolers & Samples Intact	Y N
Correct Containers Provided	Y N
Sample Label/COC Agree	Y N
Adequate Sample Volumes	Y N
VOA only: Trip Blank	Y N NA
NJ ≤ 4 days? Y N	

Deviations? NO YES
If YES, list below
bottle info
no sampler name legibility
GRD 10/29/24

Client contact:
Data/Tech:

Courier/Tracking # 7467 3851 7698

Sample(s) for Radiation testing? Y N
Reportable SDWA Sample(s)? Y N
SDWA State of Origin?
PWSID #
Rad Screen (uCi)
New Source? Y N
New Source Contact:
PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

MS/MSD collected at RW5-1

Contains Short Hold Testing YES NO
Internal Use: If less than 48 hours - notify lab upon receipt

Circle Sample Collector: ALS Tech / Client
Name: ID:
Comments:

Date:	Time		Relinquished By / Company Name		Received By / Company Name
		1		2	
10/28/24	1300	3	Shawn Pred / Arcadis	4	Fedex
10/29/24	0916	5	Fedex	6	to ALS
		7		8	
		9		10	

Data Deliverables: ☐ Standard Lvl 1 ☐ Standard Lvl 2 ☐ Standard Lvl 3 ☐ Standard Lvl 4 ☐ CLP-like ☐ DOD ☐ NJ RED ☐ NJ Full ☐ HSCA ☐ Landfill ☐ NJ GW

EDDs: ☐ Excel Summary ☐ Equis ☐ Custom

Sample Disposal: ☐ Lab ☐ Special

EDDS: Format Type:

State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ WV ☐ FL ☐ other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

Rev 05.01.2024

301 Fulling Mill Rd, Suite A
Middletown, PA 17057
P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3385043 2 of 3

ALS Quote #:

Client Name: Arcadis

Address: 6405 Lockport Rd Niagara Falls, NY 1302

Contact: (Corey Averill)

Phone#: 716-248-8886

Project Name/#: 30036646.3400

Bill To:

Purchase Order #:

TAT ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? ☐

Container Type: G

Container Size: 40 mL GRD 10 Taken

Preservative: HCl

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Enter Number of Containers Per Sample or Field Results Below.
1	PW13-1	10/28/24	750		G	SW	3
2	PW13-4D		805		G	SW	3
3	SW99-10		955		G	SW	3
4	SW10-7		1010		G	SW	3
5	SW10-8		1100		G	SW	3
6	MW10-4D		1032		G	GW	3
7	MW10-1DA		1040		G	GW	3
8	MW10-10D		1050		G	GW	3
9	PW10-2		1045		G	GW	3
10	MW10-4E		1035		G	SW	3

Circle Sample Collector: ALS Tech / Client

Name: ID:

Comments:

Date	Time		Relinquished By / Company Name		Received By / Company Name
		1		2	
10/28/24	1300	3	Shawn Reed / Arcadis	4	Fedex
10/29/24	0916	5	Fedex	6	
		7		8	
		9		10	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA	Deviations? NO YES
Sample Custody Seal Intact	Y	N	NA	If YES, list below:
Received on Ice	Y	N	NA	
Coolers & Samples Intact	Y	N		
Correct Containers Provided	Y	N		
Sample Label/COC Agree	Y	N		
Adequate Sample Volumes	Y	N		
VOA only: Trip Blank	Y	N	NA	
NJ ≤ 4 days?	Y	N		Client contact:

Courier/Tracking # Date/Tech:

Sample(s) for Radiation testing? Y N Rad Screen (uCi)

Reportable SDWA Sample(s)? Y N New Source? Y N

SDWA State of Origin? New Source Contact:

PWSID #

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

Contains Short Hold Testing YES NO

Internal Use: If less than 48 hours - notify lab upon receipt

Data Deliverables: ☐ Standard Lvl 1 ☐ Standard Lvl 2 ☐ Standard Lvl 3 ☐ Standard Lvl 4 ☐ CLP-like ☐ DOD ☐ NJ RED ☐ NJ Full ☐ HSCA ☐ Landfill ☐ NJ GW ☐ _____

EDDs: ☐ Excel Summary ☐ Equis ☐ Custom

Sample Disposal: ☐ Lab ☐ Special

EDDS: Format Type

State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ WV ☐ FL ☐ other

* G=Grab; C=Composite **Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

ALS SHIPPING ADDRESS: 301 Fulling Mill Road, Suite A, Middletown, PA 17057

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P. 717-944-5541

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 33850473 3 of 3

ALS Quote #:

Client Name: Arcadis

Address: 10405 Lockport Rd Niagara Falls, NY 14304

Contact: Corey Averill

Phone#: 716-248-8886

Project Name/#: 30036646.3420

Bill To:

Purchase Order #:

TAT ☐ Normal-Standard TAT is 10-12 business days. ☐ Rush-Subject to ALS approval and surcharges.

Date Required: Approved?

Email? ☐

Orthophosphate Filtered? Yes No Hexavalent Chromium Filtered? Yes No

ANALYSIS / METHOD REQUESTED

	Sample Description/Location (as it will appear on the lab report)	Date Collected mm/dd/yy	Time hh:mm	SDWA Sample Type (see key)	*G or C	**Matrix (See bottom of COC)	Container Type	Container Size	Preservative	8260C	Enter Number of Containers Per Sample or Field Results Below.
1	PW 10-1	10/28/24	1020		G	SW	G	40 mL	HCl	3	
2	MW10-9D		1030		G	SW		GRD 10/29/24		3	
3	MW10-3D		1015		G	SW				3	
4	MWHDA MW1-1DA		1115		G	SW				3	
5	SW 3-2		1135		G	SW				3	
6	SW 3-3		1140		G	SW				3	
7	SW 3-15		1125		G	SW				3	
8	MS/MSD -SW		1125		G	SW				6	
9	DUP -SW		—		G	SW				3	
10	TRIP BLANK		—		G	GW				3	

Receipt Information (completed by Receiving Lab)

Temp Taken By: Therm ID: WO Temp (°C)

Receipt Info completed by: WV Containers 0-6°C Y N NA

Cooler Custody Seals Intact	Y	N	NA	Deviations? NO YES
Sample Custody Seal Intact	Y	N	NA	If YES, list below:
Received on Ice	Y	N	NA	
Coolers & Samples Intact	Y	N		
Correct Containers Provided	Y	N		
Sample Label/COC Agree	Y	N		
Adequate Sample Volumes	Y	N		
VOA only: Trip Blank	Y	N	NA	

NJ ≤ 4 days? Y N

Courier/Tracking #

Client contact: Date/Tech

Sample(s) for Radiation testing? Y N Rad Screen (uCi)

Reportable SDWA Sample(s)? Y N New Source? Y N

SDWA State of Origin? New Source Contact:

PWSID #

PWS Contact: PWS Phone #:

SDWA Sample Type Key: D=Distribution E=Entry Point R=Raw P=Plant C=Check S=Special A=Annual Startup

Sample/COC Remarks

MS/MSD-SW collected @ SW3-15

Contains Short Hold Testing YES NO

Internal Use: If less than 48 hours - notify lab upon receipt

Circle Sample Collector: ALS Tech / Client

Name: ID:

Comments:

Data Deliverables: ☐ Standard Lvl 1 ☐ Standard Lvl 2 ☐ Standard Lvl 3 ☐ Standard Lvl 4 ☐ CLP-like ☐ DOD ☐ NJ RED ☐ NJ Full ☐ HSCA ☐ Landfill ☐ NJ GW

EDDs: ☐ Excel Summary ☐ Equis ☐ Custom

Sample Disposal: ☐ Lab ☐ Special

EDDS: Format Type

State Samples Collected In: ☐ NY ☐ NJ ☐ PA ☐ WV ☐ FL ☐ other

Date:	Time		Relinquished By / Company Name		Received By / Company Name
		1		2	
10/28/24	1300	3	Shaun Ford / Arcadis	4	Fedex
10/29/24	0916	5	Fedex	6	
		7		8	
		9		10	

* G=Grab; C=Composite

**Matrix - A=Air; D=Drinking Water; GW=Groundwater; O=Oil; LW=Liquid Waste; S=Solid/Soil/Sludge; SW=Surface Water; WP=Wipe; WW=Wastewater

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Rev 05.01 2024

Results

Client Sample ID	MW5-1DA	Collected	10/28/2024 09:05
Lab Sample ID	3385043001	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 12:07	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:07	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:07	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:07	ILY	A
Acetone	3.4J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:07	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Chloroform	0.42J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
cis-1,2-Dichloroethene	0.56J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 12:07	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A

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Results

Client Sample ID	MW5-1DA	Collected	10/28/2024 09:05
Lab Sample ID	3385043001	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:07	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	104%	81 – 118	11/05/2024 12:07	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/05/2024 12:07	
Dibromofluoromethane	1868-53-7	99.8%	80 – 119	11/05/2024 12:07	
Toluene-d8	2037-26-5	104%	89 – 112	11/05/2024 12:07	

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Results

Client Sample ID	MW5-6	Collected	10/28/2024 08:35
Lab Sample ID	3385043002	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 12:27	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:27	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:27	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:27	ILY	A
Acetone	3.8J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:27	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Carbon Disulfide	1.7	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Chloroform	0.47J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Chloromethane	0.34J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
cis-1,2-Dichloroethene	3.3	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Methyl acetate	0.41J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Toluene	2.3	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 12:27	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A

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Results

Client Sample ID	MW5-6	Collected	10/28/2024 08:35
Lab Sample ID	3385043002	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	1.6	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:27	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	81 – 118	11/05/2024 12:27	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	11/05/2024 12:27	
Dibromofluoromethane	1868-53-7	100%	80 – 119	11/05/2024 12:27	
Toluene-d8	2037-26-5	102%	89 – 112	11/05/2024 12:27	

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Results

Client Sample ID	RW5-2	Collected	10/28/2024 08:45
Lab Sample ID	3385043003	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 12:47	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:47	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:47	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:47	ILY	A
Acetone	3.7J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 12:47	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Carbon Disulfide	0.79J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Chloroform	0.42J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
cis-1,2-Dichloroethene	0.67J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Toluene	0.73J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 12:47	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A

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Results

Client Sample ID	RW5-2	Collected	10/28/2024 08:45
Lab Sample ID	3385043003	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 12:47	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/05/2024 12:47	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/05/2024 12:47	
Dibromofluoromethane	1868-53-7	98.5%	80 – 119	11/05/2024 12:47	
Toluene-d8	2037-26-5	100%	89 – 112	11/05/2024 12:47	

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Results

Client Sample ID	MW5-5D	Collected	10/28/2024 08:30
Lab Sample ID	3385043004	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 13:08	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:08	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:08	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:08	ILY	A
Acetone	3.8J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:08	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Carbon Disulfide	0.54J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Chloroform	0.43J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Chloromethane	0.52J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
cis-1,2-Dichloroethene	8.4	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 13:08	ILY	A
trans-1,2-Dichloroethene	0.52J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A

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Results

Client Sample ID	MW5-5D	Collected	10/28/2024 08:30
Lab Sample ID	3385043004	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	6.4	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A
Vinyl Chloride	6.8	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:08	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	11/05/2024 13:08	
4-Bromofluorobenzene	460-00-4	99.7%	85 – 114	11/05/2024 13:08	
Dibromofluoromethane	1868-53-7	99.6%	80 – 119	11/05/2024 13:08	
Toluene-d8	2037-26-5	103%	89 – 112	11/05/2024 13:08	

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Results

Client Sample ID	RW5-1	Collected	10/28/2024 09:00
Lab Sample ID	3385043005	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 13:28	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:28	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:28	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:28	ILY	A
Acetone	4.5J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:28	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Bromomethane	0.75U UJ	~~U,1,P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Carbon Disulfide	0.89J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Chloroform	0.49J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
cis-1,2-Dichloroethene	1.1	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Toluene	3.8	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 13:28	ILY	A
trans-1,2-Dichloroethene	0.47J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A

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Results

Client Sample ID	RW5-1	Collected	10/28/2024 09:00
Lab Sample ID	3385043005	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.89J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A
Vinyl Chloride	1.5	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:28	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	81 – 118	11/05/2024 13:28	
4-Bromofluorobenzene	460-00-4	104%	85 – 114	11/05/2024 13:28	
Dibromofluoromethane	1868-53-7	104%	80 – 119	11/05/2024 13:28	
Toluene-d8	2037-26-5	101%	89 – 112	11/05/2024 13:28	

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Results

Client Sample ID	RW5-4	Collected	10/28/2024 08:50
Lab Sample ID	3385043006	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 13:49	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:49	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:49	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:49	ILY	A
Acetone	3.7J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 13:49	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Chloroform	0.48J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
cis-1,2-Dichloroethene	0.43J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Toluene	0.55J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 13:49	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A

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Results

Client Sample ID	RW5-4	Collected	10/28/2024 08:50
Lab Sample ID	3385043006	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A
Vinyl Chloride	0.49J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 13:49	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	11/05/2024 13:49	
4-Bromofluorobenzene	460-00-4	105%	85 – 114	11/05/2024 13:49	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/05/2024 13:49	
Toluene-d8	2037-26-5	102%	89 – 112	11/05/2024 13:49	

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Results

Client Sample ID	DUP	Collected	10/28/2024 00:00
Lab Sample ID	3385043007	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 14:09	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:09	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:09	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:09	ILY	A
Acetone	4.6J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:09	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Chloroform	0.44J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
cis-1,2-Dichloroethene	0.98J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Toluene	4.1	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 14:09	ILY	A
trans-1,2-Dichloroethene	0.55J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A

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Results

Client Sample ID	DUP	Collected	10/28/2024 00:00
Lab Sample ID	3385043007	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.81J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A
Vinyl Chloride	1.3	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:09	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	11/05/2024 14:09	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/05/2024 14:09	
Dibromofluoromethane	1868-53-7	103%	80 – 119	11/05/2024 14:09	
Toluene-d8	2037-26-5	101%	89 – 112	11/05/2024 14:09	

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Results

Client Sample ID	MW13-4D	Collected	10/28/2024 08:10
Lab Sample ID	3385043008	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 14:29	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:29	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:29	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:29	ILY	A
Acetone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:29	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Chloroform	0.50J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
cis-1,2-Dichloroethene	7.5	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 14:29	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A

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Results

Client Sample ID	MW13-4D	Collected	10/28/2024 08:10
Lab Sample ID	3385043008	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A
Vinyl Chloride	3.9	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:29	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.8%	81 – 118	11/05/2024 14:29	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/05/2024 14:29	
Dibromofluoromethane	1868-53-7	99.9%	80 – 119	11/05/2024 14:29	
Toluene-d8	2037-26-5	101%	89 – 112	11/05/2024 14:29	

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Results

Client Sample ID	MW13-5D	Collected	10/28/2024 07:55
Lab Sample ID	3385043009	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 14:50	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:50	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:50	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:50	ILY	A
Acetone	3.4J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 14:50	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Chloroform	0.43J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
cis-1,2-Dichloroethene	13.6	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 14:50	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A

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Results

Client Sample ID	MW13-5D	Collected	10/28/2024 07:55
Lab Sample ID	3385043009	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A
Vinyl Chloride	1.0	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 14:50	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	11/05/2024 14:50	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	11/05/2024 14:50	
Dibromofluoromethane	1868-53-7	99.8%	80 – 119	11/05/2024 14:50	
Toluene-d8	2037-26-5	102%	89 – 112	11/05/2024 14:50	

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Results

Client Sample ID	PW13-1	Collected	10/28/2024 07:50
Lab Sample ID	3385043010	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 15:10	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:10	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:10	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:10	ILY	A
Acetone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:10	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Chloroform	0.40J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
cis-1,2-Dichloroethene	1.1	P1	~~ug/L~~	~~1.0~~	~~0.75~~	~~0.33~~	~~SW846 8260C~~	~~1~~	~~11/05/2024 15:10~~	~~ILY~~	~~A~~
~~Cyclohexane~~	~~0.75U~~	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 15:10	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A

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Results

Client Sample ID	PW13-1	Collected	10/28/2024 07:50
Lab Sample ID	3385043010	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:10	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	105%	81 – 118	11/05/2024 15:10	
4-Bromofluorobenzene	460-00-4	99.8%	85 – 114	11/05/2024 15:10	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/05/2024 15:10	
Toluene-d8	2037-26-5	104%	89 – 112	11/05/2024 15:10	

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Results

Client Sample ID	PW13-4D	Collected	10/28/2024 08:05
Lab Sample ID	3385043011	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 15:31	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:31	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:31	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:31	ILY	A
Acetone	3.9J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:31	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Chloroform	0.42J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
cis-1,2-Dichloroethene	4.4	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 15:31	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A

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Results

Client Sample ID	PW13-4D	Collected	10/28/2024 08:05
Lab Sample ID	3385043011	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A
Vinyl Chloride	0.48J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:31	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	96%	81 – 118	11/05/2024 15:31	
4-Bromofluorobenzene	460-00-4	97.1%	85 – 114	11/05/2024 15:31	
Dibromofluoromethane	1868-53-7	95.3%	80 – 119	11/05/2024 15:31	
Toluene-d8	2037-26-5	96.8%	89 – 112	11/05/2024 15:31	

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Results

Client Sample ID	SW99-10	Collected	10/28/2024 09:55
Lab Sample ID	3385043012	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 15:51	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:51	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:51	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:51	ILY	A
Acetone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 15:51	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Chloroform	0.52J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
cis-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 15:51	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A

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Results

Client Sample ID	SW99-10	Collected	10/28/2024 09:55
Lab Sample ID	3385043012	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 15:51	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	11/05/2024 15:51	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	11/05/2024 15:51	
Dibromofluoromethane	1868-53-7	99.2%	80 – 119	11/05/2024 15:51	
Toluene-d8	2037-26-5	100%	89 – 112	11/05/2024 15:51	

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Results

Client Sample ID	SW10-7	Collected	10/28/2024 10:10
Lab Sample ID	3385043013	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 16:11	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:11	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:11	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:11	ILY	A
Acetone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:11	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Chloroform	0.57J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
cis-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 16:11	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A

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Results

Client Sample ID	SW10-7	Collected	10/28/2024 10:10
Lab Sample ID	3385043013	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:11	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	98.9%	81 – 118	11/05/2024 16:11	
4-Bromofluorobenzene	460-00-4	98.7%	85 – 114	11/05/2024 16:11	
Dibromofluoromethane	1868-53-7	99.3%	80 – 119	11/05/2024 16:11	
Toluene-d8	2037-26-5	101%	89 – 112	11/05/2024 16:11	

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Results

Client Sample ID	SW10-8	Collected	10/28/2024 11:00
Lab Sample ID	3385043014	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 16:32	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:32	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:32	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:32	ILY	A
Acetone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:32	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Chloroform	0.68J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
cis-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 16:32	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A

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Results

Client Sample ID	SW10-8	Collected	10/28/2024 11:00
Lab Sample ID	3385043014	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:32	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	11/05/2024 16:32	
4-Bromofluorobenzene	460-00-4	97.3%	85 – 114	11/05/2024 16:32	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/05/2024 16:32	
Toluene-d8	2037-26-5	102%	89 – 112	11/05/2024 16:32	

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Results

Client Sample ID	MW10-4D	Collected	10/28/2024 10:32
Lab Sample ID	3385043015	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 16:52	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:52	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:52	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:52	ILY	A
Acetone	3.3J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 16:52	ILY	A
Benzene	0.99J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Chloroform	0.42J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
cis-1,2-Dichloroethene	2.5	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 16:52	ILY	A
trans-1,2-Dichloroethene	0.34J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A

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Results

Client Sample ID	MW10-4D	Collected	10/28/2024 10:32
Lab Sample ID	3385043015	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A
Vinyl Chloride	8.0	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 16:52	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/05/2024 16:52	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/05/2024 16:52	
Dibromofluoromethane	1868-53-7	101%	80 – 119	11/05/2024 16:52	
Toluene-d8	2037-26-5	102%	89 – 112	11/05/2024 16:52	

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Results

Client Sample ID	MW10-1DA	Collected	10/28/2024 10:40
Lab Sample ID	3385043016	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 17:12	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:12	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:12	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:12	ILY	A
Acetone	3.4J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:12	ILY	A
Benzene	3.6	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Chloroform	0.47J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
cis-1,2-Dichloroethene	1.5	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Methyl acetate	0.52J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 17:12	ILY	A
trans-1,2-Dichloroethene	0.33J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A

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Results

Client Sample ID	MW10-1DA	Collected	10/28/2024 10:40
Lab Sample ID	3385043016	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A
Vinyl Chloride	3.4	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:12	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	11/05/2024 17:12	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/05/2024 17:12	
Dibromofluoromethane	1868-53-7	99.3%	80 – 119	11/05/2024 17:12	
Toluene-d8	2037-26-5	99.7%	89 – 112	11/05/2024 17:12	

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Results

Client Sample ID	MW10-10D	Collected	10/28/2024 10:50
Lab Sample ID	3385043017	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 17:33	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
2-Butanone	10.1	~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:33	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:33	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:33	ILY	A
Acetone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:33	ILY	A
Benzene	2.0	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Carbon Disulfide	0.35J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Chloroform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
cis-1,2-Dichloroethene	120	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Methyl acetate	15.1	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Methyl t-Butyl Ether	1.0	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Methylene Chloride	0.69J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Toluene	8.4	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 17:33	ILY	A
trans-1,2-Dichloroethene	2.3	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A

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Results

Client Sample ID	MW10-10D	Collected	10/28/2024 10:50
Lab Sample ID	3385043017	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	13.6	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A
Vinyl Chloride	6.0	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:33	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.4%	81 – 118	11/05/2024 17:33	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/05/2024 17:33	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/05/2024 17:33	
Toluene-d8	2037-26-5	99.6%	89 – 112	11/05/2024 17:33	

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Results

Client Sample ID	PW10-2	Collected	10/28/2024 10:45
Lab Sample ID	3385043018	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,1,2-Trichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,1-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,1-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,P1	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2-Dibromoethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2-Dichloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,2-Dichloropropane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,3-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,3-Dichloropropene, Total	1.5U	U,P1	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/05/2024 17:53	ILY	A
1,4-Dichlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
2-Butanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:53	ILY	A
2-Hexanone	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:53	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:53	ILY	A
Acetone	3.7J	J,P1	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/05/2024 17:53	ILY	A
Benzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Bromochloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Bromodichloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Bromoform	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Bromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Carbon Disulfide	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Carbon Tetrachloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Chlorobenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Chlorodibromomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Chloroethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Chloroform	0.42J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Chloromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
cis-1,2-Dichloroethene	0.34J	J,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Dichlorodifluoromethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Ethylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Freon 113	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Iodomethane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Isopropylbenzene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Methyl acetate	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Methyl cyclohexane	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Methyl t-Butyl Ether	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Methylene Chloride	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Styrene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Tetrachloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Toluene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Total Xylenes	2.3U	U,P1	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/05/2024 17:53	ILY	A
trans-1,2-Dichloroethene	0.75U	U,P1	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A

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Results

Client Sample ID	PW10-2	Collected	10/28/2024 10:45
Lab Sample ID	3385043018	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/05/2024 17:53	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/05/2024 17:53	
4-Bromofluorobenzene	460-00-4	103%	85 – 114	11/05/2024 17:53	
Dibromofluoromethane	1868-53-7	98%	80 – 119	11/05/2024 17:53	
Toluene-d8	2037-26-5	99.9%	89 – 112	11/05/2024 17:53	

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Results

Client Sample ID	MW10-4E	Collected	10/28/2024 10:35
Lab Sample ID	3385043019	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 14:19	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:19	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:19	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:19	ILY	A
Acetone	3.6J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:19	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Carbon Disulfide	0.98J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Chloroform	0.38J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
cis-1,2-Dichloroethene	6.3	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 14:19	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A

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Results

Client Sample ID	MW10-4E	Collected	10/28/2024 10:35
Lab Sample ID	3385043019	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A
Vinyl Chloride	1.2	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:19	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.9%	81 – 118	11/06/2024 14:19	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/06/2024 14:19	
Dibromofluoromethane	1868-53-7	97.9%	80 – 119	11/06/2024 14:19	
Toluene-d8	2037-26-5	103%	89 – 112	11/06/2024 14:19	

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Results

Client Sample ID	PW10-1	Collected	10/28/2024 10:20
Lab Sample ID	3385043020	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 14:40	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:40	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:40	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:40	ILY	A
Acetone	3.9J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 14:40	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Carbon Disulfide	0.41J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Chloroform	0.35J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
cis-1,2-Dichloroethene	0.80J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Iodomethane	1.1	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Methyl acetate	0.40J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 14:40	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A

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Results

Client Sample ID	PW10-1	Collected	10/28/2024 10:20
Lab Sample ID	3385043020	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A
Vinyl Chloride	1.2	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 14:40	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/06/2024 14:40	
4-Bromofluorobenzene	460-00-4	99.4%	85 – 114	11/06/2024 14:40	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/06/2024 14:40	
Toluene-d8	2037-26-5	103%	89 – 112	11/06/2024 14:40	

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Results

Client Sample ID	MW10-9D	Collected	10/28/2024 10:30
Lab Sample ID	3385043021	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 15:00	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:00	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:00	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:00	ILY	A
Acetone	3.3J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:00	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Chloroform	0.36J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
cis-1,2-Dichloroethene	5.4	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Methyl acetate	0.42J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 15:00	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A

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Results

Client Sample ID	MW10-9D	Collected	10/28/2024 10:30
Lab Sample ID	3385043021	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A
Vinyl Chloride	6.2	~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:00	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	100%	81 – 118	11/06/2024 15:00	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/06/2024 15:00	
Dibromofluoromethane	1868-53-7	98.6%	80 – 119	11/06/2024 15:00	
Toluene-d8	2037-26-5	103%	89 – 112	11/06/2024 15:00	

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Results

Client Sample ID	MW10-3D	Collected	10/28/2024 10:15
Lab Sample ID	3385043022	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 15:20	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:20	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:20	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:20	ILY	A
Acetone	4.7J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:20	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Chloroform	0.34J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
cis-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 15:20	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A

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Results

Client Sample ID	MW10-3D	Collected	10/28/2024 10:15
Lab Sample ID	3385043022	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:20	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	102%	81 – 118	11/06/2024 15:20	
4-Bromofluorobenzene	460-00-4	99.3%	85 – 114	11/06/2024 15:20	
Dibromofluoromethane	1868-53-7	103%	80 – 119	11/06/2024 15:20	
Toluene-d8	2037-26-5	102%	89 – 112	11/06/2024 15:20	

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Results

Client Sample ID	MW1-1DA	Collected	10/28/2024 11:15
Lab Sample ID	3385043023	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 15:41	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:41	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:41	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:41	ILY	A
Acetone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 15:41	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Chloroform	0.33J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
cis-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Iodomethane	0.48J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 15:41	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A

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Results

Client Sample ID	MW1-1DA	Collected	10/28/2024 11:15
Lab Sample ID	3385043023	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 15:41	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	103%	81 – 118	11/06/2024 15:41	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/06/2024 15:41	
Dibromofluoromethane	1868-53-7	100%	80 – 119	11/06/2024 15:41	
Toluene-d8	2037-26-5	102%	89 – 112	11/06/2024 15:41	

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Results

Client Sample ID	SW3-2	Collected	10/28/2024 11:35
Lab Sample ID	3385043024	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 16:01	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:01	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:01	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:01	ILY	A
Acetone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:01	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Chloroform	0.93J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
cis-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 16:01	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A

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Results

Client Sample ID	SW3-2	Collected	10/28/2024 11:35
Lab Sample ID	3385043024	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:01	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.2%	81 – 118	11/06/2024 16:01	
4-Bromofluorobenzene	460-00-4	101%	85 – 114	11/06/2024 16:01	
Dibromofluoromethane	1868-53-7	103%	80 – 119	11/06/2024 16:01	
Toluene-d8	2037-26-5	102%	89 – 112	11/06/2024 16:01	

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Results

Client Sample ID	SW3-3	Collected	10/28/2024 11:40
Lab Sample ID	3385043025	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 16:22	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:22	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:22	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:22	ILY	A
Acetone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:22	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Chloroform	0.74J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
cis-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 16:22	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A

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Results

Client Sample ID	SW3-3	Collected	10/28/2024 11:40
Lab Sample ID	3385043025	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:22	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/06/2024 16:22	
4-Bromofluorobenzene	460-00-4	103%	85 – 114	11/06/2024 16:22	
Dibromofluoromethane	1868-53-7	98.4%	80 – 119	11/06/2024 16:22	
Toluene-d8	2037-26-5	104%	89 – 112	11/06/2024 16:22	

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Results

Client Sample ID	SW3-15	Collected	10/28/2024 11:25
Lab Sample ID	3385043026	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 16:42	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:42	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:42	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:42	ILY	A
Acetone	4.9J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 16:42	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Bromomethane	0.75U	UJ ~~U,2,P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Chloroform	0.51J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
cis-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Iodomethane	0.75U	UJ ~~U,3,4,5,P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 16:42	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A

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Results

Client Sample ID	SW3-15	Collected	10/28/2024 11:25
Lab Sample ID	3385043026	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 16:42	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	101%	81 – 118	11/06/2024 16:42	
4-Bromofluorobenzene	460-00-4	102%	85 – 114	11/06/2024 16:42	
Dibromofluoromethane	1868-53-7	102%	80 – 119	11/06/2024 16:42	
Toluene-d8	2037-26-5	106%	89 – 112	11/06/2024 16:42	

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Results

Client Sample ID	DUP-SW	Collected	10/28/2024 00:00
Lab Sample ID	3385043027	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 17:02	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 17:02	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 17:02	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 17:02	ILY	A
Acetone	4.6J	J,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 17:02	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Carbon Disulfide	0.47J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Chloroform	0.57J	J,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
cis-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 17:02	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A

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Results

Client Sample ID	DUP-SW	Collected	10/28/2024 00:00
Lab Sample ID	3385043027	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 17:02	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.3%	81 – 118	11/06/2024 17:02	
4-Bromofluorobenzene	460-00-4	99.7%	85 – 114	11/06/2024 17:02	
Dibromofluoromethane	1868-53-7	98.9%	80 – 119	11/06/2024 17:02	
Toluene-d8	2037-26-5	105%	89 – 112	11/06/2024 17:02	

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Results

Client Sample ID	TRIP BLANK	Collected	10/28/2024 00:00
Lab Sample ID	3385043028	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS

Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
1,1,1-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,1,2,2-Tetrachloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,1,2-Trichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,1-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,1-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2,3-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2,4-Trichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2-Dibromo-3-chloropropane	2.5U	U,~~P1~~	ug/L	5.0	2.5	1.6	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2-Dibromoethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2-Dichloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,2-Dichloropropane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,3-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,3-Dichloropropene, Total	1.5U	U,~~P1~~	ug/L	2.0	1.5	0.66	SW846 8260C	1	11/06/2024 13:18	ILY	A
1,4-Dichlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
2-Butanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 13:18	ILY	A
2-Hexanone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 13:18	ILY	A
4-Methyl-2-Pentanone(MIBK)	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 13:18	ILY	A
Acetone	3.8U	U,~~P1~~	ug/L	5.0	3.8	1.6	SW846 8260C	1	11/06/2024 13:18	ILY	A
Benzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Bromochloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Bromodichloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Bromoform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Bromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Carbon Disulfide	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Carbon Tetrachloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Chlorobenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Chlorodibromomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Chloroethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Chloroform	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Chloromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
cis-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Dichlorodifluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Ethylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Freon 113	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Iodomethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Isopropylbenzene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Methyl acetate	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Methyl cyclohexane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Methyl t-Butyl Ether	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Methylene Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Styrene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Tetrachloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Toluene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Total Xylenes	2.3U	U,~~P1~~	ug/L	3.0	2.3	1.0	SW846 8260C	1	11/06/2024 13:18	ILY	A
trans-1,2-Dichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A

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Results

Client Sample ID	TRIP BLANK	Collected	10/28/2024 00:00
Lab Sample ID	3385043028	Lab Receipt	10/29/2024 09:16

VOLATILE ORGANICS (cont.)

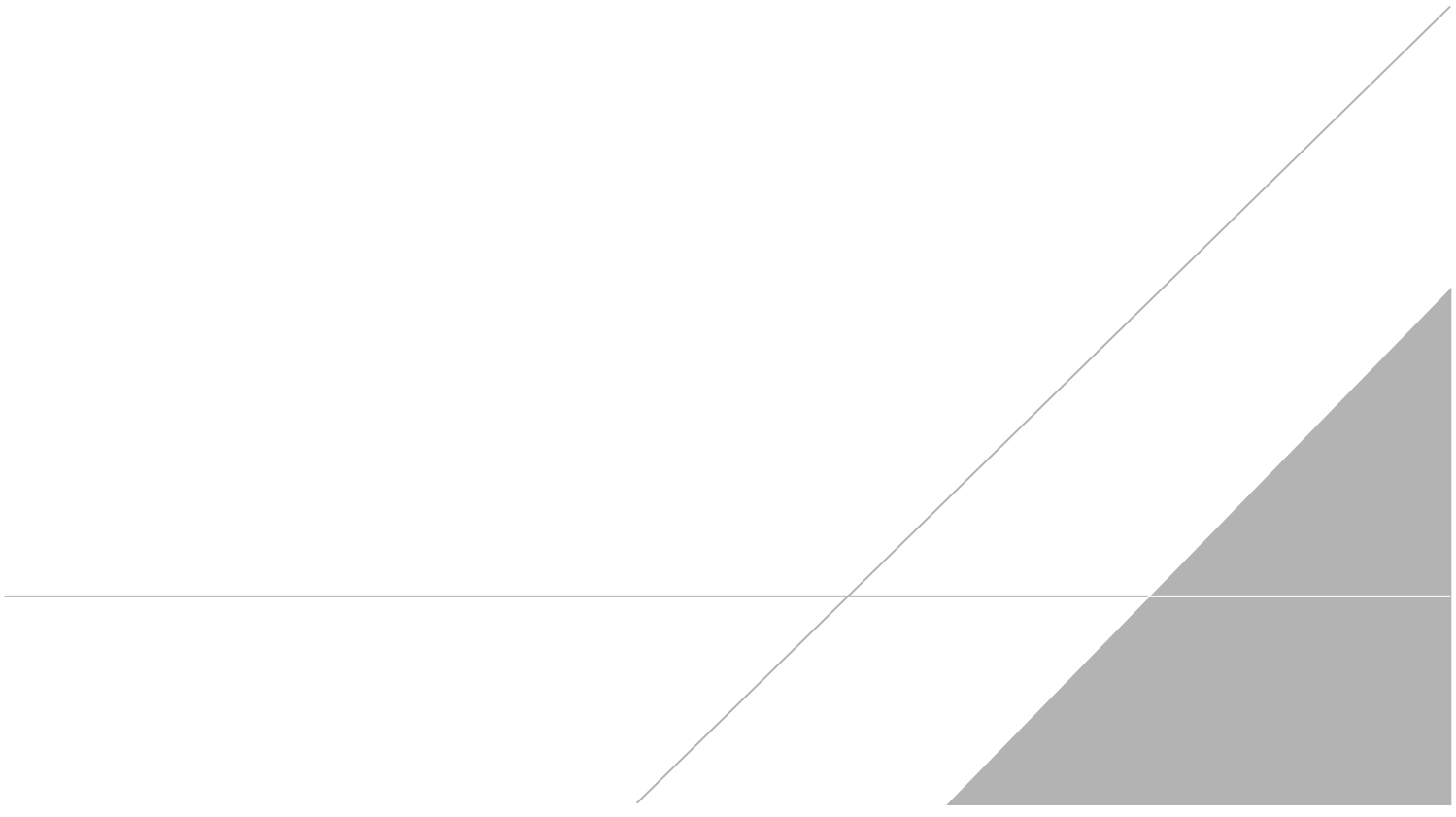
Compound	Result	Flag	Units	LOQ	LOD	DL	Method	Dilution	Analysis Date/Time	By	Cntr
Trichloroethene	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Trichlorofluoromethane	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A
Vinyl Chloride	0.75U	U,~~P1~~	ug/L	1.0	0.75	0.33	SW846 8260C	1	11/06/2024 13:18	ILY	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
1,2-Dichloroethane-d4	17060-07-0	99.5%	81 – 118	11/06/2024 13:18	
4-Bromofluorobenzene	460-00-4	100%	85 – 114	11/06/2024 13:18	
Dibromofluoromethane	1868-53-7	97%	80 – 119	11/06/2024 13:18	
Toluene-d8	2037-26-5	104%	89 – 112	11/06/2024 13:18	

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Data Usability Report



Northeast Group Optimized Remediation Contract

Niagara Falls Air Reserve Station, New York

DATA USABILITY ASSESSMENT REPORT

August 2025

DATA USABILITY ASSESSMENT REPORT

2024 Sampling Event

Prepared for:

U.S. ARMY Corps of Engineers
Air Force Civil Engineer Center,

Environmental Operations Division

(AFCEC/CZO)

Prepared by:

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Date: August 2025

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Dennis K Capria

Principal Data Quality Specialist

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Table 2. List of Samples and SDGs

ACRONYMS AND ABBREVIATIONS

%D	percent difference
%R	percent recovery
DoD	Department of Defense
DUA	data usability assessment
EIS	extracted internal standards
ICV/CCV	initial calibration verification/continuing calibration verification
LCS/LCSD	laboratory control sample/laboratory control sample duplicate
LOQ	limit of quantitation
MS/MSD	matrix spike/matrix spike duplicate
NIS	non-extracted internal standards
PFAS	perfluoro- and polyfluoroalkyl substances
PQL	practical quantitation limit
QAPP	Quality Assurance Project Plan
QC	quality control
QSM	Quality System Manual
RPD	relative percent difference
SDG	sample delivery group
USEPA	United States Environmental Protection Agency
USDOD	United States Department of Defense

EXECUTIVE SUMMARY

This Data Usability Assessment (DUA) for Niagara Falls Air Reserve Station (ARS) located in New York for the 2024 sampling event describes the findings of the data review and validation and is provided to document the quality of the analytical data used for project decisions. A Data Usability Assessment Table at the end of this DUA lists the data that was qualified and the reason for qualification. Only the sample locations associated with this site and sampling events in the associated laboratory data packages and data validation reports are addressed in this report. The text below adds details where further discussion is warranted. The project-specific sampling and analysis, overall quality control (QC), and quality assurance protocols are presented in the Draft Final Quality Assurance Project Plan, Northeast Group Optimized Remediation Contract, Niagara Falls Air Reserve Station, New York (May 2022).

Samples were shipped to ALS Environmental (ALS), Middletown, Pennsylvania for analysis. ALS is a United States Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) and National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory. The analytical sample delivery groups (SDGs) and associated Arcadis validation reports are listed in the table below. Summaries of the sample IDs and their associated laboratory IDs, SDGs, sampling dates, and analyses performed are provided in the laboratory reports and data validation reports (DVRs).

In accordance with the project QAPP data review requirements, Stage 2b, and 10 percent Stage 4 validation of the analytical data was performed by Arcadis. The validation was performed in accordance with the guidelines and control criteria specified in the following documents:

USDOD. Quality Systems Manual (QSM) for Environmental Laboratories, Version 6.0 December 2023.

USDOD. DoD General Data Validation Guidelines, November 2019.

USDOD. DoD Data Validation Guidelines Module 1: Data Validation Procedures for Organic Analysis by GC/MS, May 2020.

Draft Final Quality Assurance Project Plan, Northeast Group Optimized Remediation Contract, Niagara Falls Air Reserve Station, New York (May 2022).

The laboratory data packages and validation reports that were reviewed for this DUA are listed below.

SDG	ARCADIS Validation Report	Method/Analysis
3347404	581212R	VOCs, DG and Gen Chem
3369360	58122R	VOCs
3385043	58123R	VOCs

PRECISION

Precision is expressed as a relative percent difference (RPD) between the results of replicate sample analyses: sample duplicates, laboratory control sample duplicates (LCSD), and matrix spike duplicates (MSD). Field duplicates were collected at a frequency of 5 percent. The RPDs between the replicate sample analyses and field duplicates were within acceptable limits unless noted in the table below.

- All MS/MSD RPDs were within control limits.
- The following table is a summary of the parent samples and field duplicates. The RPDs between the parent sample and field duplicate were within the control limits.

SDG	Sample ID	Lab Sample ID	Matrix	Sample Date	Parent Sample
3347404	3347404010	DUP-01-20240226	Water	2/26/2024	MW5-5D-20240226
3369360	3369360002	DUP-01-20240716	Water	7/16/2024	SW3-15_20240716
3369360	3369360032	DUP-02-20240716	Water	7/16/2024	MW5-6_20240716
3369360	3369360033	DUP-03-20240716	Water	7/16/2024	PZ3-7D_20240716
3385043	3385043007	DUP_20241028	Water	10/28/2024	RW5-1_20241028
3385043	3385043027	DUP-SW_20241028	Water	10/28/2024	SW3-15_20241028

ACCURACY

- Accuracy is demonstrated by recovery of target analytes from fortified blank and sample matrices, LCS/LCSDs and MS/MSDs. The recovery of target analytes from fortified samples is compared to DoD QSM 6.0 and QAPP acceptance criteria. In addition, Stage 4 validation of initial and continuing calibration results provide information on analytical accuracy. Unless documented below or in the Data Usability Summary table, the recoveries of LCS, MS/MSD, and surrogates, and calibration criteria, were within acceptable limits.
- 34 results were qualified as estimated with high low (J/UJ) due to ICV/CCV recoveries.
- Eight results were qualified as estimated (J/UJ) due to the MS/MSD recovery with a low bias.
- One result was qualified as estimated (J) due to the MS/MSD recovery with a high bias.

REPRESENTATIVENESS

Representativeness is the degree to which sample data accurately and precisely represents site conditions and is dependent on sampling and analytical variability and the variability (or homogeneity) of the site itself. The use of the prescribed field and laboratory analytical methods with associated holding times and preservation requirements are intended to provide representative data.

All samples were collected and submitted for analysis in accordance with the procedures and sampling plan specified in the site QAPP and field SOPs. Analysis of samples was in accordance with the QAPP, DoD QSM, analytical methods, and laboratory SOPs.

COMPARABILITY

Comparability is the confidence with which one data set can be compared to another. Comparability was controlled using Standard Operating Procedures (SOPs) that have been developed to standardize the collection of field measurements, samples and laboratory analytical techniques with defined QC criteria. USEPA and DoD approved methodologies were used by the analytical laboratory contracted for this project. Laboratory SOPs were developed from these methods. Consistent and proper calibration of equipment throughout the field exercises, as described in the QAPP, assist in the comparability of measurements. Field documentation and audits were used to establish that protocols for sampling and measurement follow appropriate SOPs and meet pre-defined goals.

SENSITIVITY

Sensitivity describes the relationship between the laboratory quantitation limits and the project action limits. Reported laboratory quantitation limits are compared to the project action limits to ensure that the analytical methods are capable of quantifying target analytes to a level that would satisfy DQOs.

The reported detection limits met the project required detection limits as listed in the QAPP.

COMPLETENESS

3 SDGs were validated at 100% Stage 2b and 10% Stage 4. Of the 73 results reported none of the results were rejected. Therefore, the overall completeness of this data set is 100%.

CONCLUSION

No data were qualified as X, indicating that it is unusable. Therefore, it is still recommended for its intended use, considering the qualifications mentioned above.

All 3 SDGs were validated at 100% Stage 2b and 10% Stage 4. All data associated with the sampling event are valid and usable with the applied laboratory qualifiers. The qualifiers that were added to results during the process of data validation are listed in the Data Usability Assessment Table. The results that are qualified as estimated are usable with caution. The detections are valid, but the reported concentration may be biased. If the data is evaluated against screening criteria, qualified results at or near the screening criteria should be evaluated considering the possible bias in the reported results.

TABLES

Table 1
Data Usability Summary Table
Niagara Falls ARS; 2024 Sampling Events

SDG	sys sample code	analytic method	Sample Date	Analyte	CAS Number	Result	Unit	MDL	RDL	Lab Qualifiers	Validator qualifiers	Interpret. Qualifiers	Reason Code
3347404	RW5-1-20240226	SW8260B	2/26/2024	Carbon Disulfide	75-15-0	4.3	ug/l	0.33	1.0		J+	J+	M2
3347404	RW5-1-20240226	SW8260B	2/26/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	M3
3369360	DUP-01-20240716	SW8260B	7/16/2024	Iodomethane	74-88-4	0.50	ug/l	0.33	1.0	J	J-	J-	C4
3369360	DUP-02-20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	DUP-03-20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	MW10-3_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	MW10-7_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	MW13-4D_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	MW13-5D_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	MW3-3DA_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	MW3-4DA_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	MW5-1DA_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4,M3
3369360	MW5-5D_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	MW5-6_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	MW8-11D_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	PW10-1_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	PW10-2_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4	0.68	ug/l	0.33	1.0	J	J-	J-	C4
3369360	PW13-1_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	PW13-4D_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	PZ10-7_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4	0.42	ug/l	0.33	1.0	J	J-	J-	C4
3369360	PZ3-3A_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4,M3
3369360	PZ3-6D_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4	0.43	ug/l	0.33	1.0	J	J-	J-	C4
3369360	PZ3-7D_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	PZ3-8D_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	RW5-1_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4	0.44	ug/l	0.33	1.0	J	J-	J-	C4
3369360	RW5-2_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	RW5-4_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	SW10-5_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	SW10-6_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	SW10-7_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	SW10-8_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	SW3-15_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	SW3-2_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	SW3-3_20240716	SW8260B	7/16/2024	Bromomethane	74-83-9		ug/l	0.33	1.0	U	UJ	UJ	M3
3369360	SW3-3_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4,M3
3369360	SW99-10_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3369360	TRIP BLANK_20240716	SW8260B	7/16/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	C4
3385043	RW5-1_20241028	SW8260B	10/28/2024	Bromomethane	74-83-9		ug/l	0.33	1.0	U	UJ	UJ	M3
3385043	SW3-15_20241028	SW8260B	10/28/2024	Bromomethane	74-83-9		ug/l	0.33	1.0	U	UJ	UJ	M3
3385043	SW3-15_20241028	SW8260B	10/28/2024	Iodomethane	74-88-4		ug/l	0.33	1.0	U	UJ	UJ	M3

Table 2
List of Samples and SDGs
Niagara Falls ARS; 2024 Sampling Events

SDG	Sample ID	Lab Sample ID	Matrix	Sample Date	Parent Sample
3347404	3347404001	MW5-5D-20240226	Water	2/26/2024	
3347404	3347404002	RW5-2-20240226	Water	2/26/2024	
3347404	3347404003	RW5-1-20240226	Water	2/26/2024	
3347404	3347404004	MW5-1DA-20240226	Water	2/26/2024	
3347404	3347404005	PW10-1-20240226	Water	2/26/2024	
3347404	3347404006	MW10-7-20240226	Water	2/26/2024	
3347404	3347404007	MW10-1DA-20240226	Water	2/26/2024	
3347404	3347404008	MW10-10D-20240226	Water	2/26/2024	
3347404	3347404009	MW10-11D-20240226	Water	2/26/2024	
3347404	3347404010	DUP-01-20240226	Water	2/26/2024	MW5-5D-20240226
3347404	3347404011	TRIP BLANK	Water	2/26/2024	
3369360	3369360001	SW3-15_20240716	Water	7/16/2024	
3369360	3369360002	DUP-01-20240716	Water	7/16/2024	SW3-15_20240716
3369360	3369360003	PZ3-6D_20240716	Water	7/16/2024	
3369360	3369360004	MW3-3DA_20240716	Water	7/16/2024	
3369360	3369360005	SW3-3_20240716	Water	7/16/2024	
3369360	3369360006	PZ3-3A_20240716	Water	7/16/2024	
3369360	3369360007	MW3-4DA_20240716	Water	7/16/2024	
3369360	3369360008	SW3-2_20240716	Water	7/16/2024	
3369360	3369360009	SW99-10_20240716	Water	7/16/2024	
3369360	3369360010	SW10-7_20240716	Water	7/16/2024	
3369360	3369360011	SW10-6_20240716	Water	7/16/2024	
3369360	3369360012	SW10-5_20240716	Water	7/16/2024	
3369360	3369360013	MW10-3_20240716	Water	7/16/2024	
3369360	3369360014	SW10-8_20240716	Water	7/16/2024	
3369360	3369360015	PW10-2_20240716	Water	7/16/2024	
3369360	3369360016	MW10-7_20240716	Water	7/16/2024	
3369360	3369360017	PW10-1_20240716	Water	7/16/2024	
3369360	3369360018	PZ10-7_20240716	Water	7/16/2024	
3369360	3369360019	MW8-11D_20240716	Water	7/16/2024	
3369360	3369360020	PW13-4D_20240716	Water	7/16/2024	
3369360	3369360021	MW13-4D_20240716	Water	7/16/2024	
3369360	3369360022	MW13-5D_20240716	Water	7/16/2024	
3369360	3369360023	PW13-1_20240716	Water	7/16/2024	
3369360	3369360024	RW5-1_20240716	Water	7/16/2024	
3369360	3369360025	MW5-1DA_20240716	Water	7/16/2024	
3369360	3369360026	MW5-6_20240716	Water	7/16/2024	
3369360	3369360027	MW5-5D_20240716	Water	7/16/2024	
3369360	3369360028	RW5-2_20240716	Water	7/16/2024	
3369360	3369360029	RW5-4_20240716	Water	7/16/2024	
3369360	3369360030	PZ3-8D_20240716	Water	7/16/2024	
3369360	3369360031	PZ3-7D_20240716	Water	7/16/2024	
3369360	3369360032	DUP-02-20240716	Water	7/16/2024	MW5-6_20240716
3369360	3369360033	DUP-03-20240716	Water	7/16/2024	PZ3-7D_20240716
3369360	3369360034	TRIP BLANK_20240716	Water	7/16/2024	
3385043	3385043001	MW5-1DA_20241028	Water	10/28/2024	
3385043	3385043002	MW5-6_20241028	Water	10/28/2024	
3385043	3385043003	RW5-2_20241028	Water	10/28/2024	

Table 2
List of Samples and SDGs
Niagara Falls ARS; 2024 Sampling Events

SDG	Sample ID	Lab Sample ID	Matrix	Sample Date	Parent Sample
3385043	3385043004	MW5-5D_20241028	Water	10/28/2024	
3385043	3385043005	RW5-1_20241028	Water	10/28/2024	
3385043	3385043006	RW5-4_20241028	Water	10/28/2024	
3385043	3385043007	DUP_20241028	Water	10/28/2024	RW5-1_20241028
3385043	3385043008	MW13-4D_20241028	Water	10/28/2024	
3385043	3385043009	MW13-5D_20241028	Water	10/28/2024	
3385043	3385043010	PW13-1_20241028	Water	10/28/2024	
3385043	3385043011	PW13-4D_20241028	Water	10/28/2024	
3385043	3385043012	SW99-10_20241028	Water	10/28/2024	
3385043	3385043013	SW10-7_20241028	Water	10/28/2024	
3385043	3385043014	SW10-8_20241028	Water	10/28/2024	
3385043	3385043015	MW10-4D_20241028	Water	10/28/2024	
3385043	3385043016	MW10-1DA_20241028	Water	10/28/2024	
3385043	3385043017	MW10-10D_20241028	Water	10/28/2024	
3385043	3385043018	PW10-2_20241028	Water	10/28/2024	
3385043	3385043019	MW10-4E_20241028	Water	10/28/2024	
3385043	3385043020	PW10-1_20241028	Water	10/28/2024	
3385043	3385043021	MW10-9D_20241028	Water	10/28/2024	
3385043	3385043022	MW10-3D_20241028	Water	10/28/2024	
3385043	3385043023	MW1-1DA_20241028	Water	10/28/2024	
3385043	3385043024	SW3-2_20241028	Water	10/28/2024	
3385043	3385043025	SW3-3_20241028	Water	10/28/2024	
3385043	3385043026	SW3-15_20241028	Water	10/28/2024	
3385043	3385043027	DUP-SW_20241028	Water	10/28/2024	SW3-15_20241028
3385043	3385043028	TRIP BLANK_20241028	Water	10/28/2024	

Appendix D

Monitoring Well Checklists and Landfill Inspection and Maintenance Logs

Appendix D
Well Inspection Checklist - Spring 2024
2024 Annual Comprehensive Sampling/Monitoring Report
Niagara Falls Air Reserve Station, New York

Well Number	TOIC Current Depth (ft)	TOIC Water Level (ft)	Water Column Length	Concrete Pad (G/F/P)	Well Paint (G/F/P)	Well Label (G/F/P)	Casing Lock (G/F/P/)	Protective Cover (G/F/P/)	Inner Well Cap (G/F/P)	PDB Deployed?	Equipment in Well (Y/N)	Obstructions in Well (Y/N)	Water in Annulus (Y/N)	Inspection Date	Comments
Site 3															
MW3-1A	13.55	5.82	7.73	G	G	G	P	G	G	N	Y	N	N	6/6/2024	
MW3-1DA	16.2	5.27	10.93	G	F	G	F	G	G	N	Y	N	N	6/6/2024	
MW3-1E	44.33	1.31	43.02	G	G	G	P	G	G	N	Y	N	N	6/6/2024	
MW3-2	10.18	5.85	4.33	G	F	G	G	G	G	N	N	N	N	6/6/2024	
MW3-2DA	22.21	8.92	13.29	G	F	G	G	G	G	N	Y	N	N	6/6/2024	
MW3-3A	5.3	2.05	3.25	G	N/A	G	G	F	G	N	N	N	N	6/6/2024	
MW3-3DA	17.15	0.20	16.95	G	N/A	G	G	F	G	Y	Y	N	N	6/6/2024	
MW3-4DA	15.82	0.98	14.84	G	G	G	P	G	G	Y	Y	N	N	6/6/2024	
MW3-5D	25.78	4.94	20.84	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW3-6A	11.13	6.93	4.2	G	G	G	G	G	G	N	N	N	N	6/6/2024	
MW3-6D	19.2	6.53	12.67	G	G	G	G	G	G	N	N	N	N	6/6/2024	
MW3-7	7.58	6.02	1.56	G	F	G	G	G	G	N	N	N	N	6/6/2024	
MW3-8	12.94	6.85	6.09	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW3-8D	23.9	12.41	11.49	G	G	G	G	G	G	N	N	N	N	6/6/2024	
MW3-8E	46.56	12.81	33.75	G	G	G	P	G	G	N	N	N	N	6/6/2024	
PW3-3A	13.83	1.74	12.09	G	G	G	G	G	G	Y	Y	N	N	6/6/2024	
PZ3-1	12.14	2.38	9.76	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
PZ3-1D	5.91	2.57	3.34	G	G	G	G	G	G	N	N	N	N	6/6/2024	
PZ3-2	4.18	1.62	2.56	G	G	G	F	G	G	N	N	N	N	6/6/2024	
PZ3-2D	12.54	1.70	10.84	G	G	G	G	G	G	N	N	N	N	6/6/2024	
PZ3-3	2.45	0.00	2.45	G	N/A	G	G	F	F	N	N	N	N	6/6/2024	
PZ3-3D	9.53	0.25	9.28	G	F	G	P	G	G	N	N	N	N	6/6/2024	
PZ3-4	3.5	2.58	0.92	G	G	G	G	G	G	N	N	N	N	6/6/2024	
PZ3-4D	11.66	1.36	10.3	G	N/A	G	G	G	G	N	N	N	N	6/6/2024	
PZ3-5	2.85	0.36	2.49	G	N/A	G	G	G	G	N	N	N	N	6/6/2024	
PZ3-5D	9.61	0.22	9.39	G	G	G	G	G	G	N	N	N	N	6/6/2024	
PZ3-6	3.48	0.00	3.48	G	N/A	NONE	NONE	G	G	N	N	N	N	6/6/2024	
PZ3-6D	4.48	1.83	2.65	G	G	G	G	G	G	N	N	N	N	6/6/2024	
PZ3-7D	21.72	3.08	18.64	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	
PZ3-8D	18.38	3.64	14.74	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	
PZ3-9	3.99	2.44	1.55	G	G	G	G	G	G	N	N	N	N	6/6/2024	
PZ3-9D	23.77	1.00	22.77	G	G	G	P	P	G	N	N	N	Y	6/6/2024	

Well Number	TOIC Current Depth (ft)	TOIC Water Level (ft)	Water Column Length	Concrete Pad (G/F/P)	Well Paint (G/F/P)	Well Label (G/F/P)	Casing Lock (G/F/P/)	Protective Cover (G/F/P/)	Inner Well Cap (G/F/P)	PDB Deployed?	Equipment in Well (Y/N)	Obstructions in Well (Y/N)	Water in Annulus (Y/N)	Inspection Date	Comments
Site 5															
CH5-01	29.96	9.62	20.34	G	G	P	P	P	P	N	N	N	N	6/6/2024	
CH5-02	32.33	9.40	22.93	G	G	P	G	G	G	N	N	N	N	6/6/2024	
CH5-03	31.68	9.73	21.95	G	G	G	G	G	G	N	N	N	N	6/6/2024	
CH5-04	32.44	8.48	23.96	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW5-1A	16.19	11.00	5.19	G	G	G	P	G	G	N	N	N	N	6/6/2024	
MW5-1DA	28.9	12.34	16.56	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	
MW5-1E	57.37	11.87	45.5	G	G	G	G	G	G	N	N	N	N	6/6/2024	
MW5-2D	26.55	12.51	14.04	G	G	G	G	G	G	N	N	N	N	6/6/2024	
MW5-3D	Well Not Located													6/6/2024	
MW5-4	15.76	11.27	4.49	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW5-4D	26.1	10.13	15.97	G	G	G	G	G	G	N	N	N	N	6/6/2024	
MW5-5A	20.12	13.11	7.01	G	G	G	G	G	G	N	N	N	N	6/6/2024	
MW5-5D	27.33	9.53	17.8	G	G	G	G	G	G	Y	Y	N	N	6/6/2024	
MW5-6	13.66	7.38	6.28	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	
MW5-6D	23.08	5.83	17.25	G	G	G	G	G	G	N	N	N	N	6/6/2024	
MW5-7	13.1	7.92	5.18	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW5-7D	22.35	6.07	16.28	G	G	G	G	G	G	N	N	N	Y	6/6/2024	
MW5-8	10.67	6.41	4.26	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW5-8D	20.53	7.63	12.9	G	G	G	G	G	G	N	Y	N	Y	6/6/2024	
RW5-1	14.69	7.12	7.57	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	
RW5-2	11.23	6.07	5.16	G	G	G	G	G	G	Y	Y	N	N	6/6/2024	
RW5-3	14.3	8.70	5.6	G	G	P	G	G	G	N	N	N	N	6/6/2024	
RW5-4	14.78	8.22	6.56	G	G	G	G	G	G	Y	Y	N	N	6/6/2024	
Site 8															
CH8-01	31.11	Gauging not required[1]		G	G	P	G	G	G	N	Y	N	N	6/6/2024	
MW8-1	13.79	Gauging not required[1]		G	G	P	G	G	G	N	Y	N	N	6/6/2024	
MW8-1E	50.79	Gauging not required[1]		G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW8-2D	30.18	Gauging not required[1]		G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW8-3	14.27	Gauging not required[1]		G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW8-3DA	26.81	Gauging not required[1]		G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW8-4A	15.13	Gauging not required[1]		G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW8-4D	22.62	Gauging not required[1]		G	G	P	G	G	G	N	N	N	N	6/6/2024	
MW8-5A	15.2	Gauging not required[1]		G	G	G	P	G	G	N	Y	N	N	6/6/2024	
MW8-8	14.08	Gauging not required[1]		G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW8-10D	24.78	Gauging not required[1]		G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW8-11	16.82	Gauging not required[1]		G	G	G	P	G	G	N	N	N	N	6/6/2024	
MW8-11D	27.41	12.02	15.39	G	G	G	G	G	G	Y	Y	N	N	6/6/2024	
MW8-11E	49.77	Gauging not required[1]		G	G	G	P	G	G	N	Y	N	N	6/6/2024	

Well Number	TOIC Current Depth (ft)	TOIC Water Level (ft)	Water Column Length	Concrete Pad (G/F/P)	Well Paint (G/F/P)	Well Label (G/F/P)	Casing Lock (G/F/P/)	Protective Cover (G/F/P/)	Inner Well Cap (G/F/P)	PDB Deployed?	Equipment in Well (Y/N)	Obstructions in Well (Y/N)	Water in Annulus (Y/N)	Inspection Date	Comments
Site 10															
MW10-1DA	23.05	4.19	18.86	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	
MW10-1EA	39.88	5.68	34.2	G	N/A	G	G	G	G	N	N	N	N	6/6/2024	
MW10-1F	59.24	5.84	53.4	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-2	8.96	4.69	4.27	G	N/A	G	G	G	G	N	N	N	N	6/6/2024	
MW10-2E	47.26	5.02	42.24	G	N/A	G	P	P	G	N	N	N	N	6/6/2024	Broken cap
MW10-3	9.59	4.59	5	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	
MW10-3D	25.97	3.70	22.27	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-3E	43.46	5.79	37.67	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-4	8.19	4.01	4.18	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-4D	20.11	3.63	16.48	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-4E	19.22	4.62	14.6	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-5D	19.83	5.53	14.3	G	N/A	G	G	G	G	N	N	N	N	6/6/2024	
MW10-6	9.79	3.16	6.63	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-7	9.14	3.74	5.4	G	N/A	G	G	P	G	Y	Y	N	N	6/6/2024	Broken cap
MW10-8	9.63	4.54	5.09	G	N/A	G	G	G	G	N	N	N	N	6/6/2024	
MW10-8D	24.61	5.24	19.37	F	N/A	NONE	G	G	G	N	Y	N	N	6/6/2024	
MW10-9D	19.89	4.50	15.39	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-10D	11.09	1.23	9.86	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	Broken cap
MW10-11	7.33	3.68	3.65	P	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-11D	17.55	3.74	13.81	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	
MW10-12	19	5.61	13.39	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-12D	8.55	5.72	2.83	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MW10-13	17.01	4.65	12.36	G	N/A	G	P	G	G	N	Y	N	N	6/6/2024	
MW10-13D	7.15	4.51	2.64	G	N/A	P	G	G	G	N	N	N	Y	6/6/2024	
PW10-1	14	4.48	9.52	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	
PW10-2	16.58	4.57	12.01	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	
PZ10-7	10.23	4.67	5.56	G	N/A	G	G	G	G	Y	Y	N	N	6/6/2024	

Well Number	TOIC Current Depth (ft)	TOIC Water Level (ft)	Water Column Length	Concrete Pad (G/F/P)	Well Paint (G/F/P)	Well Label (G/F/P)	Casing Lock (G/F/P/)	Protective Cover (G/F/P/)	Inner Well Cap (G/F/P)	PDB Deployed?	Equipment in Well (Y/N)	Obstructions in Well (Y/N)	Water in Annulus (Y/N)	Inspection Date	Comments
Site 13															
MW13-1	10.25	8.00	2.25	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW13-1D	17.25	7.40	9.85	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW13-1E	44.02	11.81	32.21	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW13-2D	23.81	10.97	12.84	G	G	G	G	G	G	N	N	N	N	6/6/2024	
MW13-3	11.01	7.63	3.38	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW13-3D	15.55	5.98	9.57	G	G	G	G	G	G	N	Y	N	Y	6/6/2024	
MW13-4	10.72	8.81	1.91	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW13-4D	23.07	8.82	14.25	G	G	G	G	G	G	Y	Y	N	N	6/6/2024	
MW13-5A	8	7.23	0.77	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MW13-5D	20.9	7.01	13.89	G	G	G	G	G	G	Y	Y	N	N	6/6/2024	
MW13-6	Well Not Located													6/6/2024	
MW13-6D	Well Not Located													6/6/2024	
PW13-1	29.25	6.16	23.09	G	G	G	G	G	N/A	Y	Y	Y	N	6/6/2024	
PW13-4D	18.91	8.33	10.58	G	G	G	G	G	G	Y	N	N	N	6/6/2024	
PZ13-1	4.49	4.05	0.44	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
PZ13-1D	17.08	3.99	13.09	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
PZ13-2	6.07	2.67	3.4	G	G	G	G	G	G	N	N	N	N	6/6/2024	
PZ13-2D	17.39	6.26	11.13	G	G	G	G	G	G	N	N	N	N	6/6/2024	
PZ13-3D	17.75	5.59	12.16	G	G	G	G	G	G	N	N	N	N	6/6/2024	
PZ13-4	9.79	5.53	4.26	G	G	G	G	G	G	N	N	N	N	6/6/2024	
PZ13-4D	22.51	5.03	17.48	G	G	G	G	G	G	N	N	N	N	6/6/2024	
Site Various															
MW1-1DA	24.23	9.96	14.27	G	G	G	G	G	G	N	N	N	N	6/6/2024	
MW1-7A	13.18	8.25	4.93	G	G	G	P	G	G	N	N	N	N	6/6/2024	
MPL2-1A	13.62	5.71	7.91	G	G	NONE	G	P	G	N	Y	N	N	6/6/2024	
MW2-1DA	14.67	3.03	11.64	G	N/A	G	G	G	G	N	Y	N	N	6/6/2024	
MPL6-2A	14.42	8.15	6.27	G	G	G	G	G	G	N	Y	N	N	6/6/2024	
MPL6-3	15.8	7.68	8.12	G	G	G	G	G	G	N	Y	N	N	6/6/2024	

Abbreviations:

G = Good
F = Fair
P = Poor
Y = Yes
N = No

Notes:

1. As discussed with NYSDEC, the collection of surface water and groundwater elevations at Site 8 was discontinued starting with the Spring 2024 monitoring event until such time that groundwater sampling is resumed at Site 8 to confirm that groundwater at that site achieves the GPS, leading to Site Closure. In the interim, the core hole and monitoring wells at Site 8 will continue to be inspected and maintained until Site Closure (similar to the monitoring wells at Site 7).
2. Items highlighted in red indicate maintenance items to be addressed during current event or prior to next monitoring event. Items highlighted in yellow indicate items to be specifically reviewed during future monitoring events to determine if the condition has deteriorated and if maintenance is required.

Appendix D
Well Inspection Checklist - Fall 2024
2024 Annual Comprehensive Sampling/Monitoring Report
Niagara Falls Air Reserve Station, New York

SERES Engineering & Services, LLC
ARCADIS
a joint venture

Well Number	TOIC Current Depth (ft)	TOIC Water Level (ft)	Water Column Length	Concrete Pad (G/F/P)	Well Paint (G/F/P)	Well Label (G/F/P)	Casing Lock (G/F/P/)	Protective Cover (G/F/P/)	Inner Well Cap (G/F/P)	PDB Deployed?	Equipment in Well (Y/N)	Obstructions in Well (Y/N)	Water in Annulus (Y/N)	Inspection Date	Comments
Site 3															
MW3-1A	9.65	7.65	2.00	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-1DA	15.95	6.48	9.47	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-1E	35.58	1.65	33.93	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-2	10.20	7.32	2.88	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-2DA	22.21	19.40	2.81	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-3A	5.37	2.95	2.42	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-3DA	16.95	0.50	16.45	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-4DA	3.17	13.50	-10.33	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-5D	23.95	5.35	18.60	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-6A	11.50	7.81	3.69	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-6D	19.13	7.45	11.68	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-7	6.75	6.71	0.04	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-8	12.70	8.62	4.08	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-8D	23.74	13.13	10.61	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW3-8E	46.63	13.30	33.33	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PW3-3A	22.38	1.30	21.08	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-1	5.10	2.25	2.85	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-1D	5.60	2.92	2.68	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-2	4.15	2.08	2.07	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-2D	7.00	2.05	4.95	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-3	2.55	1.10	1.45	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-3D	4.00	0.80	3.20	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-4	3.60	3.10	0.50	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-4D	11.63	1.75	9.88	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-5	2.90	0.80	2.10	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-5D	1.90	0.30	1.60	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-6	13.09	0.10	12.99	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-6D	3.51	2.71	0.80	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-7D	21.75	4.52	17.23	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ-8D	18.40	4.30	14.10	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-9	4.00	2.98	1.02	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ3-9D	5.60	2.70	2.90	G	G	G	G	G	G	N	N	N	N	10/8/2024	

SERES Engineering & Services, LLC
ARCADIS
a joint venture

Well Number	TOIC Current Depth (ft)	TOIC Water Level (ft)	Water Column Length	Concrete Pad (G/F/P)	Well Paint (G/F/P)	Well Label (G/F/P)	Casing Lock (G/F/P/)	Protective Cover (G/F/P/)	Inner Well Cap (G/F/P)	PDB Deployed?	Equipment in Well (Y/N)	Obstructions in Well (Y/N)	Water in Annulus (Y/N)	Inspection Date	Comments
Site 5															
CH5-01	17.55	11.86	5.69	G	G	G	G	G	G	N	N	N	N	10/9/2024	
CH5-02	12.45	10.60	1.85	G	G	G	G	G	G	N	N	N	N	10/9/2024	
CH5-03	17.50	12.98	4.52	G	G	G	G	G	G	N	N	N	N	10/9/2024	
CH5-04	19.84	10.21	9.63	G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW5-1A	16.25	13.02	3.23	G	G	G	G	G	G	Y	Y	N	N	10/9/2024	
MW5-1DA	28.84	14.87	13.97	G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW5-1E	58.02	13.54	44.48	G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW5-2D	26.68	15.20	11.48	G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW5-3D	Well Not Located														
MW5-4	15.32	13.73	1.59	G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW5-4D	25.96	12.38	13.58	G	G	G	G	G	G	N	N	N	Y	10/9/2024	
MW5-5A	20.05	16.43	3.62	G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW5-5D	27.24	4.82	22.42	G	G	G	G	G	G	Y	Y	N	N	10/9/2024	
MW5-6	13.60	8.35	5.25	G	G	G	G	G	G	Y	Y	N	N	10/9/2024	
MW5-6D	23.18	7.50	15.68	G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW5-7	13.20	7.91	5.29	G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW5-7D	Well Not Located														
MW5-8	10.48	8.17	2.31	G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW5-8D	15.69	10.35	5.34	G	G	G	G	G	G	N	N	N	Y	10/9/2024	
RW5-1	14.76	9.77	4.99	G	G	G	G	G	G	Y	Y	N	N	10/9/2024	
RW5-2	11.25	7.65	3.60	G	G	G	G	G	G	Y	Y	N	N	10/9/2024	
RW5-3	10.65	10.60	0.05	G	G	G	G	G	G	N	N	N	N	10/9/2024	
RW5-4	10.31	9.70	0.61	G	G	G	G	G	G	Y	Y	N	N	10/9/2024	
Site 8															
CH8-01	31.11	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-1	13.79	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-1E	50.79	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-2D	30.18	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-3	14.27	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-3DA	26.81	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-4A	15.13	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-4D	22.62	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-5A	15.2	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-8	14.08	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-10D	24.78	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-11	16.82	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-11D	27.41	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	
MW8-11E	49.77	Gauging not required(1)		G	G	G	G	G	G	N	N	N	N	10/9/2024	

Well Number	TOIC Current Depth (ft)	TOIC Water Level (ft)	Water Column Length	Concrete Pad (G/F/P)	Well Paint (G/F/P)	Well Label (G/F/P)	Casing Lock (G/F/P/)	Protective Cover (G/F/P/)	Inner Well Cap (G/F/P)	PDB Deployed?	Equipment in Well (Y/N)	Obstructions in Well (Y/N)	Water in Annulus (Y/N)	Inspection Date	Comments
Site 10															
MW10-1DA	23.10	6.40	2.10	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
MW10-1EA	40.00	6.50	1.60	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-1F	59.43	6.70	12.99	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-2	8.45	7.35	0.80	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-2E	47.30	5.75	17.23	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-3	9.80	6.70	14.10	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-3D	20.93	5.79	1.02	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
MW10-3E	40.25	6.50	2.90	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-4	8.20	7.80	0.40	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
MW10-4D	20.09	6.00	5.69	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
MW10-4E	40.84	5.41	1.85	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
MW10-5D	19.85	7.43	4.52	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-6	9.56	5.72	9.63	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-7	9.10	6.05	3.23	G	G	G	G	P	G	N	N	N	N	10/8/2024	
MW10-8	9.64	6.30	13.97	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-8D	23.94	6.05	44.48	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-9D	14.90	5.90	11.48	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
MW10-10D	--	2.50	--	G	G	G	G	P	G	Y	Y	N	N	10/8/2024	
MW10-11	7.40	6.18	1.59	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-11D	15.46	5.98	13.58	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-12	16.85	5.15	3.62	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-12D	18.55	7.10	22.42	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-13	17.09	6.40	5.25	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW10-13D	7.18	6.30	15.68	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PW10-1	14.40	6.50	5.29	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
PW10-2	3.30	3.25	0.05	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
PZ10-7	10.30	6.45	2.31	G	G	G	G	G	G	N	N	N	N	10/8/2024	

Well Number	TOIC Current Depth (ft)	TOIC Water Level (ft)	Water Column Length	Concrete Pad (G/F/P)	Well Paint (G/F/P)	Well Label (G/F/P)	Casing Lock (G/F/P/)	Protective Cover (G/F/P/)	Inner Well Cap (G/F/P)	PDB Deployed?	Equipment in Well (Y/N)	Obstructions in Well (Y/N)	Water in Annulus (Y/N)	Inspection Date	Comments
Site 13															
MW13-1	10.34	8.92	2.10	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW13-1D	16.72	8.25	1.60	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW13-1E	43.90	14.35	12.99	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW13-2D	23.94	11.98	0.80	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW13-3	11.00	8.70	17.23	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW13-3D	14.45	4.78	14.10	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW13-4	9.95	9.05	1.02	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW13-4D	18.85	9.85	2.90	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
MW13-5A	8.10	Well dry	0.00	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW13-5D	20.11	7.12	5.69	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
MW13-6	7.05	5.20	1.85	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW13-6D	4.75	Well dry	4.52	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PW13-1	10.00	7.00	9.63	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
PW13-4D	14.20	9.30	3.23	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
PZ13-1	4.60	Well dry	13.97	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ13-1D	9..40	5.50	44.48	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ13-2	6.20	3.83	11.48	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ13-2D	10.05	7.23	2.82	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ13-3D	11.73	6.73	1.59	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ13-4	9.90	4.20	13.58	G	G	G	G	G	G	N	N	N	N	10/8/2024	
PZ13-4D	10.80	5.50	3.62	G	G	G	G	G	G	N	N	N	N	10/8/2024	
Site Various															
MW1-1DA	24.00	10.78	2.10	G	G	G	G	G	G	Y	Y	N	N	10/8/2024	
MW1-7A	13.30	10.32	1.60	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MPL2-1A	13.75	7.10	12.99	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MW2-1DA	14.68	3.80	0.80	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MPL6-2A	14.38	8.90	17.23	G	G	G	G	G	G	N	N	N	N	10/8/2024	
MPL6-3	15.75	8.05	14.10	G	G	G	G	G	G	N	N	N	N	10/8/2024	

Abbreviations:

G = Good
F = Fair
P = Poor
Y = Yes
N = No

Notes:

1. As discussed with NYSDEC, the collection of surface water and groundwater elevations at Site 8 was discontinued starting with the Spring 2024 monitoring event until such time that groundwater sampling is resumed at Site 8 to confirm that groundwater at that site achieves the GPS, leading to Site Closure. In the interim, the core hole and monitoring wells at Site 8 will continue to be inspected and maintained until Site Closure (similar to the monitoring wells at Site 7).
2. Items highlighted in red indicate maintenance items to be addressed during current event or prior to next monitoring event. Items highlighted in yellow indicate items to be specifically reviewed during future monitoring events to determine if the condition has deteriorated and if maintenance is required.

SITE 3 LANDFILL – CAP INSPECTION LOG

Inspection Date	Inspector	Maintenance Required?
9/23/2011	Kim Powell (RPM)	Yes – Five low spots observed on landfill cap.
10/26/2012	Kim Powell (RPM)	No deficiencies observed; no maintenance required
9/20/2013	Robert Peterson (EA Engineering)	No deficiencies observed; no maintenance required
9/24/2014	Frank DeSantis (EA Engineering)	No deficiencies observed; no maintenance required
9/23/2015	Nate Kranes (EA Engineering)	No deficiencies observed; no maintenance required
9/29/2016	Nate Kranes (EA Engineering)	No deficiencies observed; no maintenance required
10/11/2017	Nate Kranes (EA Engineering)	No deficiencies observed; no maintenance required
9/27/2018	Nate Kranes (EA Engineering)	No deficiencies observed (however, two minor ruts were repaired in 2018.)
10/02/2019	Lindsay Mairs (EA Engineering)	No deficiencies observed; No Maintenance Required
12/09/2020	Lindsay Mairs (NFARS RPM)	No deficiencies observed; No Maintenance Required
6/29/2021	Lindsay Mairs (NFARS RPM)	No deficiencies observed; No Maintenance Required
February 2022	Lindsay Mairs (NFARS RPM)	Two trees were toppled by wind; arrangements made to remove trees and restore disturbed areas.
22 April 2022	Lindsay Mairs (NFARS RPM)	Wheel ruts were observed in landfill cap near intersection of Kinross Street and Utzig Drive; arrangements made to restore disturbed areas.
29 June 2022	Lindsay Mairs (NFARS RPM)	No deficiencies observed; no maintenance required
10 June 2023	Lindsay Mairs (NFARS RPM)	No deficiencies observed; no maintenance required
6 June 2024	Lindsay Mairs (NFARS RPM)	No deficiencies observed; no maintenance required

SITE 3 – LANDFILL MAINTENANCE ACTIONS PERFORMED

Maintenance Date	Comments
9/28/2011	Kim Powell called in WO# H1003 to fill in 5 holes on landfill cap with clay, topsoil, and grass seed. Repairs completed in October 2011.
6/13/2018	Work order for repairs to two locations (rake and level minor ruts).
April 2022	Downed trees were cut up and loaded in dumpster for transportation to offsite disposal facility. Disturbed areas were backfilled with topsoil and restored with grass seed.
12/18/2023	Approximately 50 trees were removed from the landfill cover between 18 Dec 2023 to 21 Dec 2023, no soil was disturbed for this portion of work.
May 2024	As a follow up to the 12/18/2023 tree removal activities, stump grinding and site restoration activities were performed between May 14 and 16, 2024. Each location was backfilled to its original grade with NYSDEC-approved topsoil and seeded with a mix of 40% Kentucky bluegrass, 40% tall fescue, and 20% annual ryegrass. HydroCover™ was applied to stabilize and promote grass growth in the seeded areas. The tree removal and restoration activities were documented in detail in the Fieldwork Completion Report (Tree Removal and Stump Grinding), Tidewater, January 15, 2025.

Appendix E

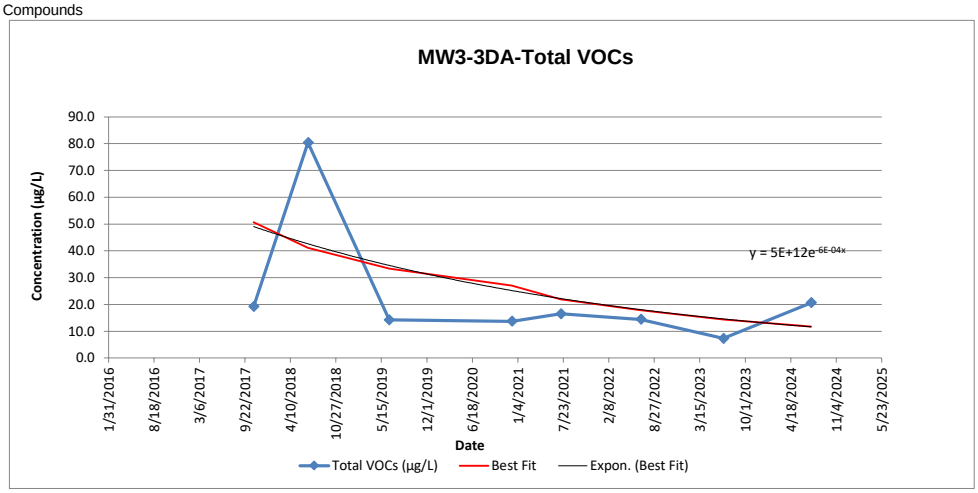
Well Trend Graphs

Site 3

Appendix E
Analytical Data for Well Termination
Site 3
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW3-3DA							
Sample Date			10/30/2017	6/26/2018	6/18/2019	12/9/2020	7/12/2021	6/29/2022	6/27/2023	7/16/2024
Parameter										
1,4-Dioxane	µg/L	NS	U	61.4 J	U	--	--	U	--	--
2-Butanone (MEK)	µg/L	50	U	U	U	U	R	U	U	U
Acetone	µg/L	50	U	U	U	U	R	U	3.3 J	8.5
Benzene	µg/L	1	U	U	U	U	R	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	R	U	U	U
Chloroform	µg/L	7	U	U	U	U	R	U	U	U
cis-1,2-Dichloroethene	µg/L	5	5.1	5.4	4.9	5.0	5.4 J-	5.3	3.5	4.8
Cyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Methylcyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Toluene	µg/L	5	U	U	U	U	R	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Vinyl Chloride	µg/L	2	14.1	13.6	9.3	8.7	11.1 J-	9.1	0.47 J	7.3
Total VOCs	µg/L		19.2	80.4	14.2	13.7	16.5	14.4	7.27	20.6

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. R = Rejected
6. U = Non Detect
7. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **No**

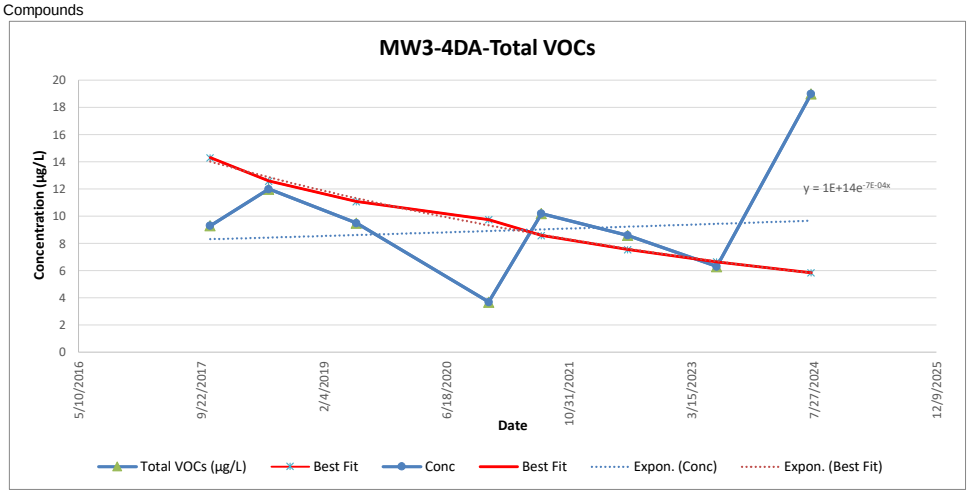
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 3
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW3-4DA							
Sample Date			10/30/2017	6/26/2018	6/18/2019	12/9/2020	7/12/2021	6/29/2022	6/27/2023	7/16/2024
Parameter										
1,4-Dioxane	µg/L	NS	U	U	U	--	--	U	--	--
2-Butanone (MEK)	µg/L	50	U	U	U	U	R	U	U	U
Acetone	µg/L	50	U	U	U	U	R	U	U	8.9
Benzene	µg/L	1	U	U	U	U	R	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	R	U	U	U
Chloroform	µg/L	7	U	U	U	U	R	U	U	U
cis-1,2-Dichloroethene	µg/L	5	4.8	5.25	4.45	3.7	5.05 J-	5.1	4.4	6.0
Cyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Methylcyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Toluene	µg/L	5	U	U	U	U	R	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Vinyl Chloride	µg/L	2	4.5	6.75	5.05	U	5.15 J-	3.5	1.9	4.1
Total VOCs	µg/L		**9.3**	**12**	**9.5**	**3.7**	**10.2**	**8.6**	**6.3**	**19**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J- = Estimated value that may be biased low
5. R = Rejected
6. U = Non Detect
7. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

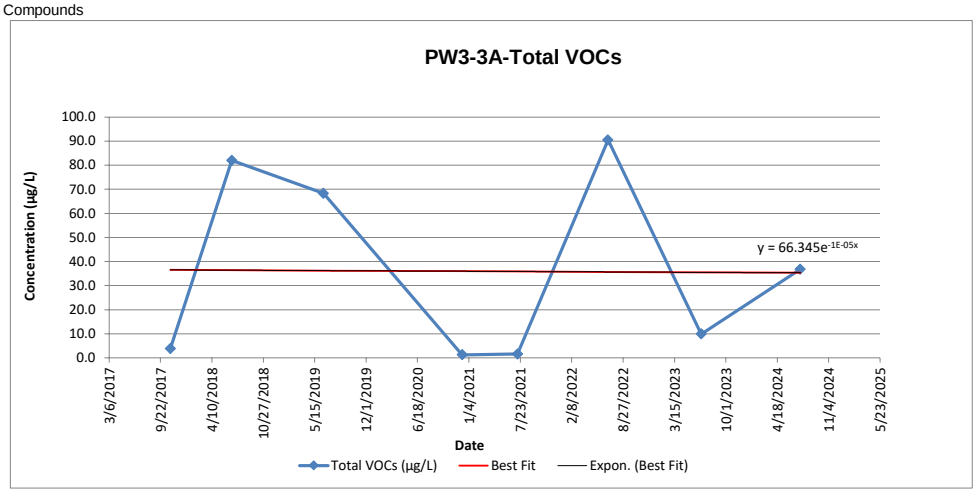
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 3
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	PW3-3A							
Sample Date			10/30/2017	6/26/2018	6/18/2019	12/9/2020	7/12/2021	6/29/2022	6/27/2023	7/16/2024
Parameter										
1,4-Dioxane	µg/L	NS	U	U	U	--	--	U	--	--
2-Butanone (MEK)	µg/L	50	U	U	U	U	R	U	U	U
Acetone	µg/L	50	U	45.3	U	U	R	U	U	9.7
Benzene	µg/L	1	U	0.2 J	U	U	R	0.43	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	R	U	U	U
Chloroform	µg/L	7	U	U	U	U	R	U	U	0.42 J
cis-1,2-Dichloroethene	µg/L	5	2.6	17.6 J	34.2	0.55 J	1.6 J-	40.9	5.1	14.5
Cyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Methylcyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Toluene	µg/L	5	U	U	U	U	R	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	0.43 J	0.71 J	U	R	0.72	U	0.36 J
Trichloroethene	µg/L	5	U	0.64 J	6.2	U	R	10.8	0.78 J	2.3
Vinyl Chloride	µg/L	2	1.2	17.8	27.2	0.7 J	R	37.6	4.0	9.5
Total VOCs	µg/L		**3.8**	**81.97**	**68.31**	**1.25**	**1.6**	**90.45**	**9.88**	**36.78**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value that may be biased low
6. R = Rejected
7. U = Non Detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

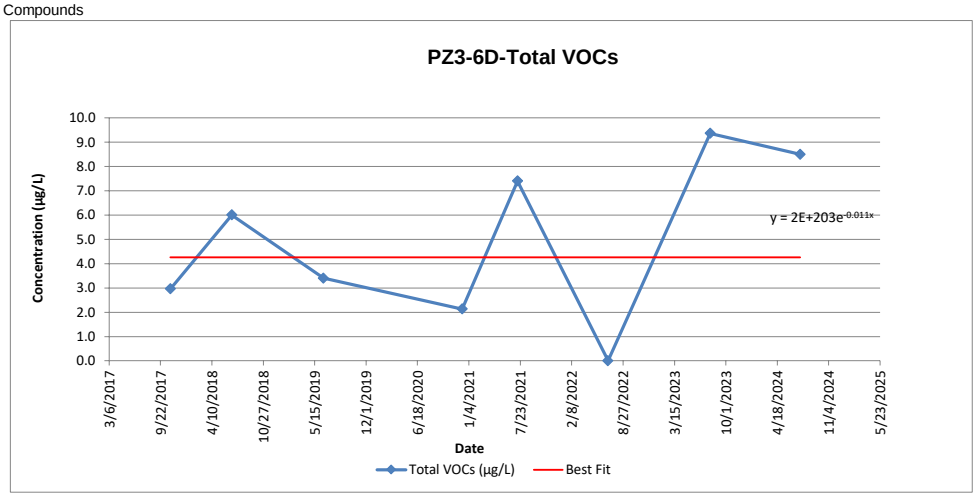
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 3
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	PZ3-6D							
Sample Date			10/30/2017	6/26/2018	6/18/2019	12/9/2020	7/12/2021	6/29/2022	8/1/2023	7/16/2024
Parameter										
1,4-Dioxane	µg/L	NS	U	U	U	--	--	U	--	--
2-Butanone (MEK)	µg/L	50	U	U	U	U	R	U	U	U
Acetone	µg/L	50	U	U	U	U	4.3 J-	U	6.3	8.5
Benzene	µg/L	1	U	U	U	U	R	U	U	U
Carbon Disulfide	µg/L	60	0.66 J	U	U	U	R	U	U	U
Chloroform	µg/L	7	U	U	U	U	R	U	U	U
cis-1,2-Dichloroethene	µg/L	5	1.2	3.3	2	1.3	2.0 J-	U	2.2	U
Cyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Methylcyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Toluene	µg/L	5	U	U	U	U	R	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Vinyl Chloride	µg/L	2	1.1	2.7	1.4	0.83 J	1.1 J-	U	0.86 J	U
Total VOCs	µg/L		**2.96**	**6**	**3.4**	**2.13**	**7.4**	**0**	**9.36**	**8.5**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value that may be biased low
6. R = Rejected
7. U = Non Detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):

1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters?	**No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):

1. Does this well achieve "Zero Slope Condition" as defined in the permit?	
1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters	See above
1.b. Fit a trendline (either linear or exponential) using least squares regression model.	See above
1.c. The slope is less than or equal to zero.	**Yes**
2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?	
2.a. Is the total concentration of COCs less than 100 ug/L?	**Yes***
2.b. Are single COCs less than 50 ug/L?	**Yes***

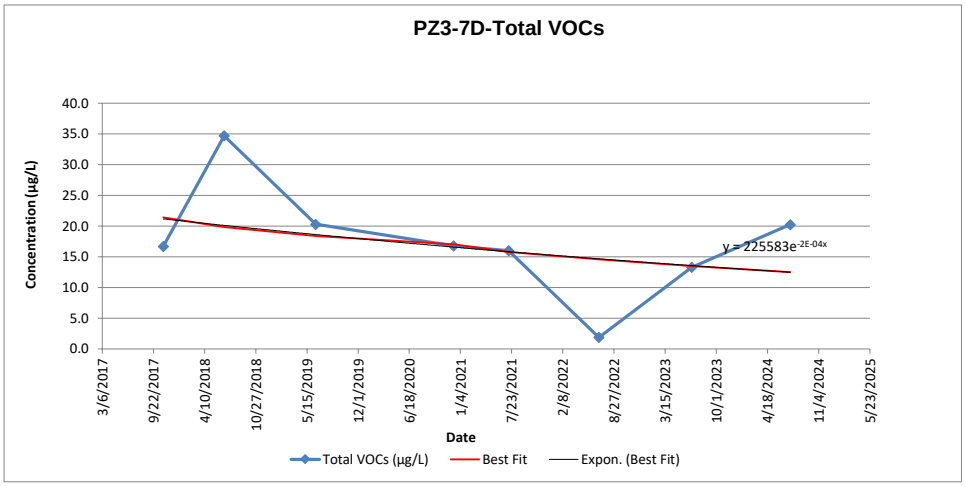
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 3
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	PZ3-7D							
Sample Date			10/31/2017	6/26/2018	6/18/2019	12/9/2020	7/12/2021	6/29/2022	6/27/2023	7/16/2024
Parameter										
1,4-Dioxane	µg/L	NS	U	U	U	--	--	U	--	--
2-Butanone (MEK)	µg/L	50	U	U	U	U	R	U	U	U
Acetone	µg/L	50	U	U	U	U	R	U	3.3 J	9.9
Benzene	µg/L	1	U	U	U	U	R	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	R	U	U	--
Chloroform	µg/L	7	U	U	U	U	R	U	U	U
cis-1,2-Dichloroethene	µg/L	5	6.5	13.4	11.1	11.2	10.5 J-	1.9	7.3	7.2
Cyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Methylcyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Toluene	µg/L	5	U	U	U	U	R	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Vinyl Chloride	µg/L	2	10.2	21.3	9.2	5.6	5.5 J-	U	2.7	3.15
Total VOCs	µg/L		**16.7**	**34.7**	**20.3**	**16.8**	**16**	**1.9**	**13.3**	**20.25**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value that may be biased low
6. R = Rejected
7. U = Non Detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

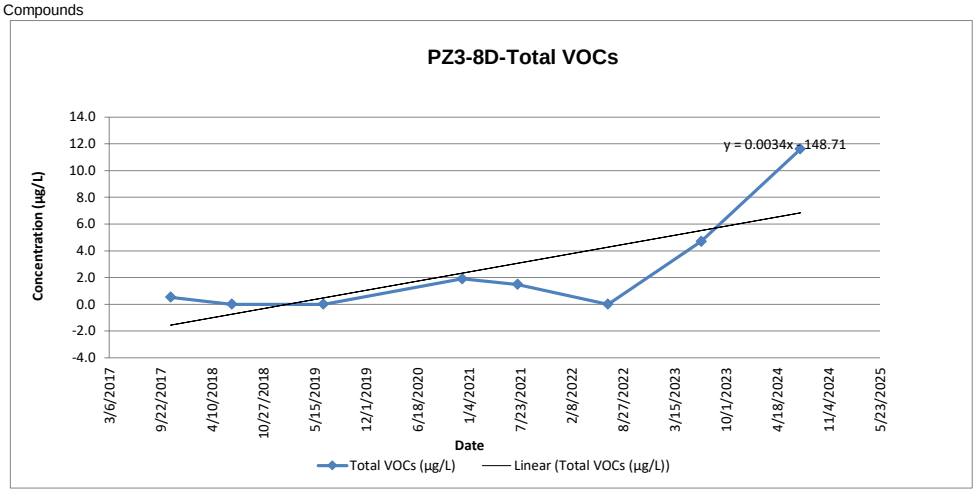
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 3
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	PZ3-8D							
Sample Date			10/31/2017	6/26/2018	6/18/2019	12/9/2020	7/12/2021	6/29/2022	6/27/2023	7/16/2024
Parameter										
1,4-Dioxane	µg/L	NS	U	U	U	--	--	--	--	--
2-Butanone (MEK)	µg/L	50	U	U	U	U	R	U	U	U
Acetone	µg/L	50	U	U	U	U	R	U	4.7 J	10.1
Benzene	µg/L	1	U	U	U	U	R	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	R	U	U	U
Chloroform	µg/L	7	U	U	U	U	R	U	U	U
cis-1,2-Dichloroethene	µg/L	5	U	U	U	0.61 J	0.51 J-	U	U	0.61 J
Cyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Methylcyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Toluene	µg/L	5	U	U	U	U	R	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Vinyl Chloride	µg/L	2	0.53 J	U	U	1.3	0.97 J-	U	U	0.89 J
Total VOCs	µg/L		**0.53**	**0**	**0**	**1.91**	**1.48**	**0**	**4.7**	**11.6**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value that may be biased low
6. R = Rejected
7. U = Non Detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **Yes***

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **No**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

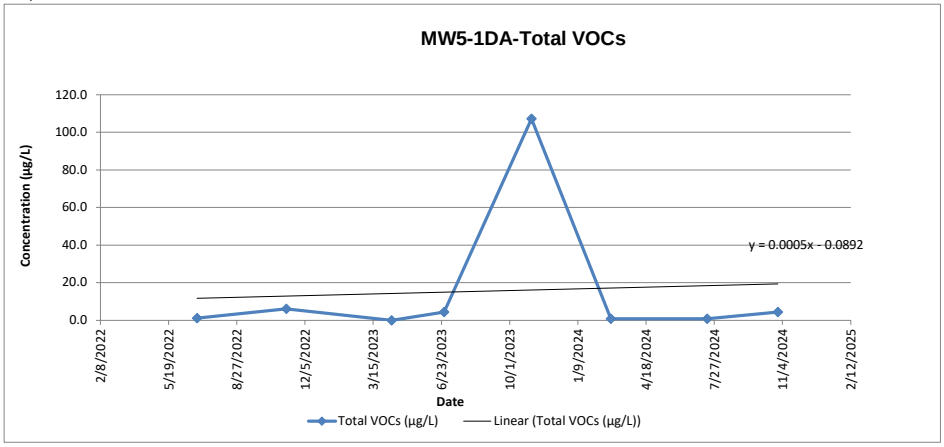
* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Site 5

Appendix E
Analytical Data for Well Termination
Site 5
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW5-1DA							
Sample Date			6/29/2022	11/7/2022	4/11/2023	6/27/2023	11/2/2023	2/26/2024	7/16/2024	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
1,4-Dioxane	µg/L	NS	U	U	--	--	--	--	--	--
2-Butanone (MEK)	µg/L	50	U	3.3 J	U	U	U	U	U	U
Acetone	µg/L	50	U	U	U	3.6 J	10.3	U	U	3.4 J
Benzene	µg/L	1	U	U	U	U	U	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	U	U	0.34 J	U
Chloroethane	µg/L	5	U	0.73 J	U	U	U	U	U	U
Chloroform	µg/L	7	U	U	U	U	U	U	U	0.42 J
cis-1,2-Dichloroethene	µg/L	5	1.2	2	U	0.74 J	88.1	0.76 J	0.45 J	0.56 J
Dichloromethane	µg/L	5	U	U	U	U	U	U	U	U
Iodomethane	µg/L	5	U	U	UJ	U	UJ	U	UJ	U
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	50	U	U	U	U	U	U	U	U
Toluene	µg/L	5	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	0.43 J	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	U	U	U	U	8.3	U	U	U
Total VOCs	µg/L		**1.2**	**6.03**	**0**	**4.34**	**107.13**	**0.76**	**0.79**	**4.38**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value that may be biased low
6. R = Rejected
7. U = Non Detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **No**

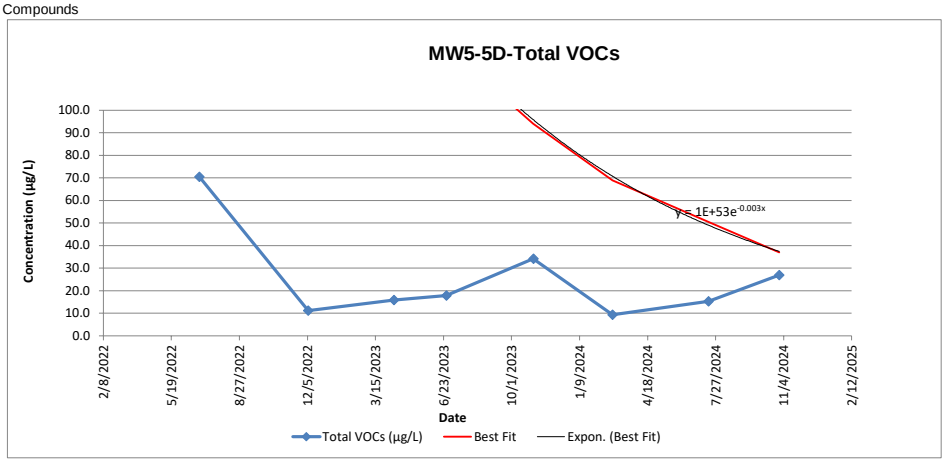
2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **No**
   2.b. Are single COCs less than 50 ug/L? — **No**

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

Appendix E
Analytical Data for Well Termination
Site 5
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW5-5D							
Sample Date			6/29/2022	12/6/2022	4/11/2023	6/27/2023	11/2/2023	2/26/2024	7/16/2024	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
1,4-Dioxane	µg/L	NS	U	--	--	--	--	--	--	--
2-Butanone (MEK)	µg/L	50	U	U	U	U	2.5 J	U	4.8 J	U
Acetone	µg/L	50	4.8 J	6.9	6	4.25	10.8	U	4.8 J	3.8 J
Benzene	µg/L	1	U	U	U	U	U	U	U	U
Carbon Disulfide	µg/L	60	0.54 J	U	U	U	U	1.13 J	U	0.54 J
Chloroethane	µg/L	5	U	U	U	U	U	U	U	U
Chloroform	µg/L	7	U	U	U	U	U	U	U	0.43 J
cis-1,2-Dichloroethene	µg/L	5	31.2	1.3	4.25	3.95	7.2	5.3	3.2	8.4
Dichloromethane	µg/L	5	U	U	U	U	U	U	U	U
Iodomethane	µg/L	5	U	0.87 J	UJ	U	U	U	UJ	U
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	50	U	U	U	U	U	U	U	U
Toluene	µg/L	5	U	U	U	0.65	U	U	0.34	U
trans-1,2-Dichloroethene	µg/L	5	2	U	0.405	0.445	1.3	0.55 J	U	0.52 J
Trichloroethene	µg/L	5	3	1.6	1.5	1.65	1.8	2.35	2.1	6.4
Vinyl chloride	µg/L	2	28.9	0.48 J	3.7	6.9	10.6	4	U	6.8
Total VOCs	µg/L		**70.44**	**11.15**	**15.855**	**17.845**	**34.2**	**9.33**	**15.24**	**26.89**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value that may be biased low
6. J+ = Estimated value that may be biased high
7. R = Rejected
8. U = Non Detect
9. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

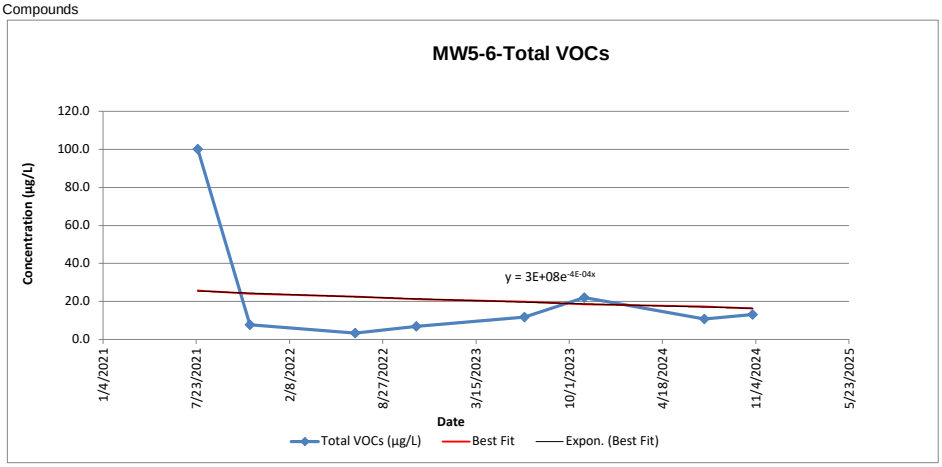
2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

Appendix E
Analytical Data for Well Termination
Site 5
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW5-6							
Sample Date			7/26/2021	11/15/2021	6/29/2022	11/7/2022	6/27/2023	11/2/2023	7/16/2024	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
1,4-Dioxane	µg/L	NS	--	--	--	--	--	--	--	--
2-Butanone (MEK)	µg/L	50	U	U	U	U	U	U	U	U
Acetone	µg/L	50	95.85	U	U	U	4.1 J	10.7	3.7 J	3.8 J
Benzene	µg/L	1	U	U	U	U	U	U	U	U
Carbon Disulfide	µg/L	60	0.34	0.93 J	U	U	U	0.66 J	U	1.7
Chloroethane	µg/L	5	U	U	U	U	U	U	U	U
Chloroform	µg/L	7	U	U	U	U	U	U	U	0.47 J
cis-1,2-Dichloroethene	µg/L	5	2.7	2.9	1.7	2.4	1.9	3.4	2.5 J	3.3
Dichloromethane	µg/L	5	U	U	U	U	U	U	U	U
Iodomethane	µg/L	5	U	1.6 J+	U	U	U	U	UJ	U
Methyl N-Butyl Ketone (2-Hexanone	µg/L	50	U	U	U	U	U	U	U	U
Toluene	µg/L	5	0.63	1.4	0.585	3.1	2.7	4.5	2.3 J	2.3
trans-1,2-Dichloroethene	µg/L	5	U	0.85 J	U	0.73 J	U	0.38 J	U	U
Trichloroethene	µg/L	5	0.615	U	0.58	U	1.2	1.6	1.2	1.6
Vinyl chloride	µg/L	2	U	U	0.435	0.7 J	1.9	0.72 J	1.05	U
Total VOCs	µg/L		**100.135**	**7.68**	**3.3**	**6.93**	**11.8**	**21.96**	**10.75**	**13.17**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. B = Constituent detected in method blank, trip blank, or both
5. J = Estimated value
6. J+ = Estimated value that may be biased high
7. U = Non Detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

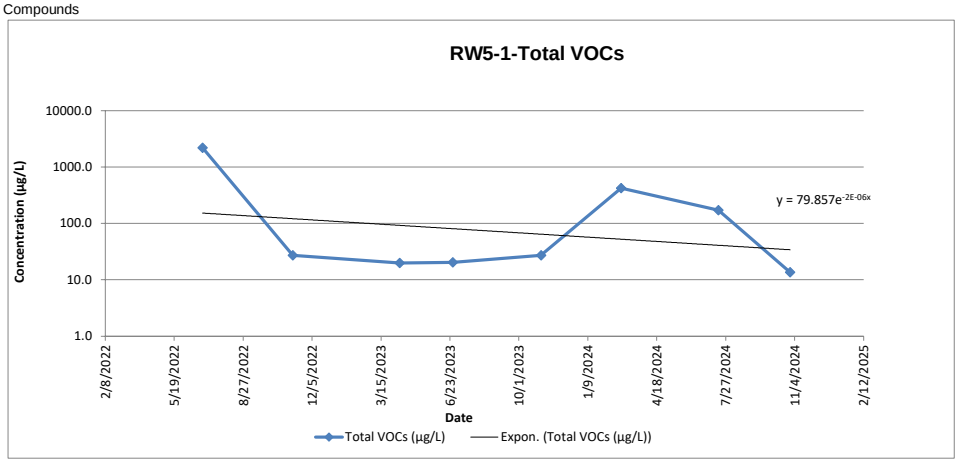
2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **No**
   2.b. Are single COCs less than 50 ug/L? — **No**

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

Appendix E
Analytical Data for Well Termination
Site 5
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	RW5-1							
Sample Date			6/29/2022	11/7/2022	4/11/2023	6/27/2023	11/2/2023	2/26/2024	7/16/2024	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	1.4	U	U	U	U	U	U	U
1,4-Dioxane	µg/L	NS	--	--	--	--	--	--	--	--
2-Butanone (MEK)	µg/L	50	U	U	U	U	U	U	U	U
Acetone	µg/L	50	U	11.95	U	4.1 J	11.95	U	3.2 J	4.55 J
Benzene	µg/L	1	U	U	U	U	U	U	U	U
Carbon Disulfide	µg/L	60	0.7 J	0.5 J	U	U	0.5 J	4.3 J+	3	0.89 J
Chloroethane	µg/L	5	26.2	U	5.8	5.6	U	U	U	U
Chloroform	µg/L	7	U	U	U	U	U	U	U	0.465 J
cis-1,2-Dichloroethene	µg/L	5	1,390	1.05	2.6	1.6	1.05	218	58.3	1.04 J
Dichloromethane	µg/L	5	U	U	0.52 J	U	U	U	U	U
Iodomethane	µg/L	5	U	UJ	UJ	U	UJ	UJ	0.44 J-	U
Methyl N-Butyl Ketone (2-Hexanone)	µg/L	50	U	U	U	U	U	U	U	U
Toluene	µg/L	5	2.8	11.55	5.6	6.3	11.55	3.1	6.0	3.95
trans-1,2-Dichloroethene	µg/L	5	7.6	0.37 J	0.56 J	0.47 J	0.37 J	3.5	2.0	0.51 J
Trichloroethene	µg/L	5	2.8	0.715 J	0.82 J	1.0	0.715 J	1.1	0.7 J	0.85 J
Vinyl chloride	µg/L	2	767	0.97 J	3.9	1.3 J+	0.97 J	189	97.9	1.4
Total VOCs	µg/L		**2198.5**	**27.11**	**19.8**	**20.37**	**27.11**	**419**	**171.54**	**13.66**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value that may be biased low
6. R = Rejected
7. U = Non Detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

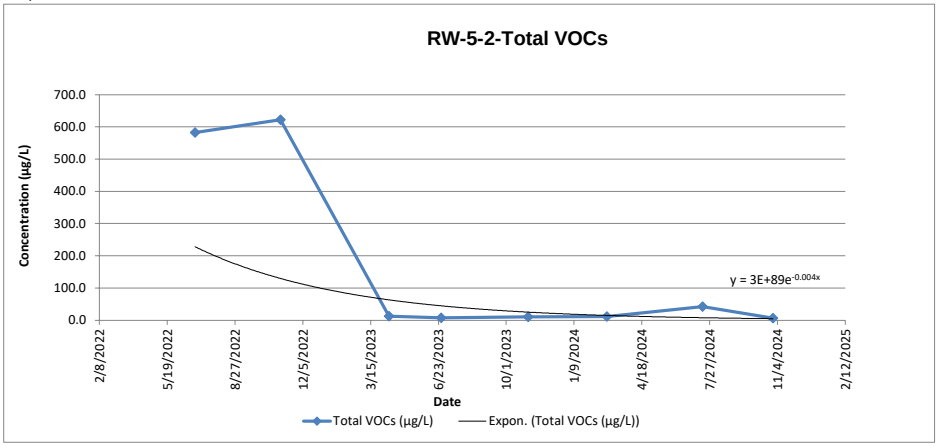
2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **No**
   2.b. Are single COCs less than 50 ug/L? — **No**

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

Appendix E
Analytical Data for Well Termination
Site 5
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	RW-5-2							
Sample Date			6/29/2022	11/2/2022	4/11/2023	6/27/2023	11/2/2023	2/26/2024	7/16/2024	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
1,4-Dioxane	µg/L	NS	--	--	--	--	--	--	--	--
2-Butanone (MEK)	µg/L	50	U	U	U	U	U	U	U	U
Acetone	µg/L	50	U	U	7.3	4.95 J	8.9	U	U	3.7 J
Benzene	µg/L	1	U	U	U	U	U	U	U	U
Carbon Disulfide	µg/L	60	0.39 J	U	U	U	0.55 J	U	U	0.79 J
Chloroethane	µg/L	5	U	U	U	U	U	U	U	U
Chloroform	µg/L	7	U	U	U	U	U	U	U	0.42 J
cis-1,2-Dichloroethene	µg/L	5	358	106	2.4	1.6	0.74 J	0.92 J	13.3	0.67 J
Dichloromethane	µg/L	5	U	U	U	U	U	U	U	U
Iodomethane	µg/L	5	U	U	UJ	U	U	U	UJ	U
Methyl N-Butyl Ketone (2-Hexanone	µg/L	50	U	U	U	U	U	U	U	U
Toluene	µg/L	5	U	U	U	0.75 J	0.88 J	0.72 J	2.2	0.73 J
trans-1,2-Dichloroethene	µg/L	5	0.71 J	U	U	U	U	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	223	516	3.0	0.805 J+	U	10	26.8	U
Total VOCs	µg/L		**582.1**	**622**	**12.7**	**8.11**	**11.07**	**11.64**	**42.3**	**6.31**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value that may be biased low
6. R = Rejected
7. U = Non Detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

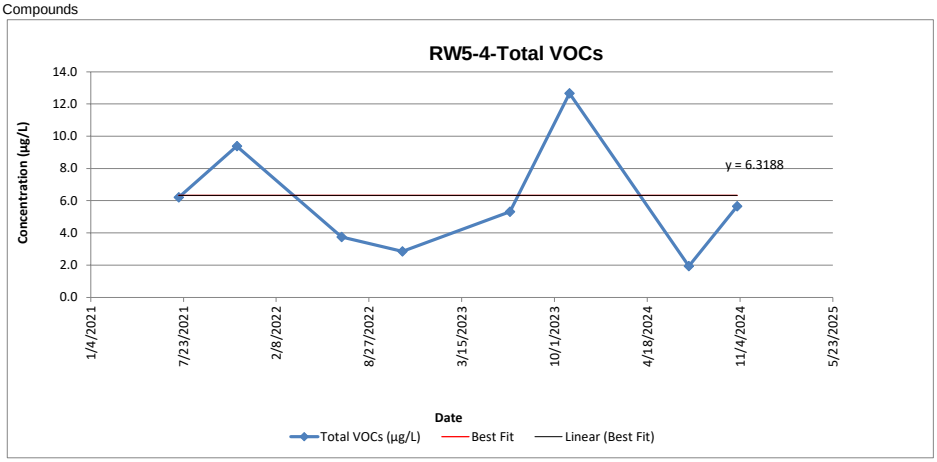
2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **No**
   2.b. Are single COCs less than 50 ug/L? — **No**

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

Appendix E
Analytical Data for Well Termination
Site 5
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	RW5-4							
Sample Date			7/13/2021	11/15/2021	6/29/2022	11/7/2022	6/27/2023	11/2/2023	7/16/2024	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	R	U	U	U	U	U	U	U
1,4-Dioxane	µg/L	NS	--	--	--	--	--	--	--	--
2-Butanone (MEK)	µg/L	50	R	U	U	U	U	U	U	U
Acetone	µg/L	50	3.5 J-	3.2 J	U	U	3.9 J	11.8	U	3.7
Benzene	µg/L	1	R	0.54 J	0.38 J	U	U	U	U	U
Carbon Disulfide	µg/L	60	R	0.35 J	0.68 J	U	U	U	--	U
Chloroethane	µg/L	5	R	U	U	U	U	U	U	U
Chloroform	µg/L	7	R	U	U	U	U	U	U	0.48
cis-1,2-Dichloroethene	µg/L	5	1.2 J-	1.2	0.89 J	1	0.39 J	0.37 J	0.46 J	0.43
Dichloromethane	µg/L	5	R	U	U	U	U	U	U	U
Iodomethane	µg/L	5	R	1.8 J+	U	U	U	U	UJ	U
Methyl N-Butyl Ketone (2-Hexanone	µg/L	50	R	U	U	U	U	U	U	U
Toluene	µg/L	5	1.5 J-	2.3	1.8	1.5	0.65 J	0.50 J	1.1	0.55
trans-1,2-Dichloroethene	µg/L	5	R	U	U	U	U	U	U	U
Trichloroethene	µg/L	5	R	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	R	U	U	0.35 J	0.38 J	U	0.38 J	0.49
Total VOCs	µg/L		**6.2**	**9.39**	**3.75**	**2.85**	**5.32**	**12.67**	**1.94**	**5.65**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value that may be biased low
6. J+ = Estimated value that may be biased high
7. R = Rejected
8. U = Non Detect
9. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **Yes**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

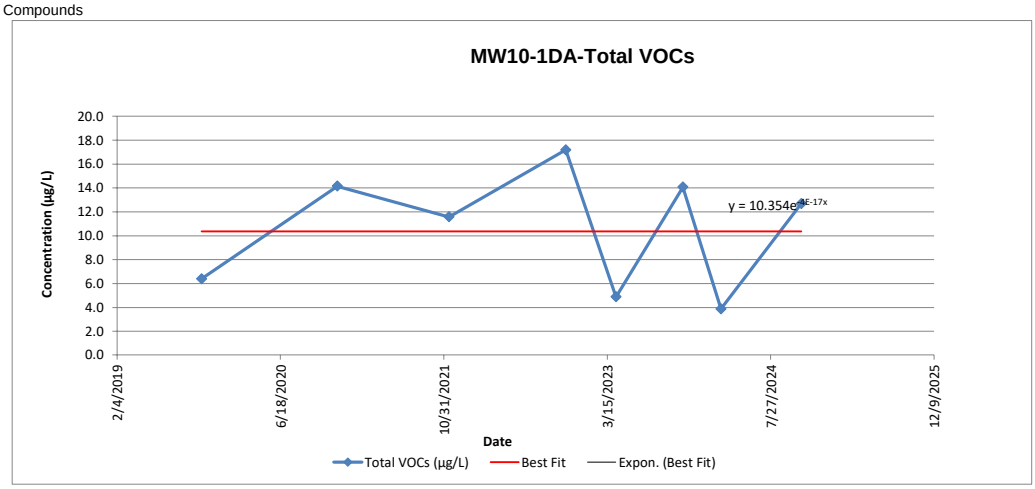
* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Site 10

Appendix E
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW10-1DA							
Sample Date			10/21/2019	12/9/2020	11/16/2021	11/8/2022	4/11/2023	11/2/2023	2/26/2024	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	U	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	U	U	U	U	U	U	U	U
Acetone	µg/L	50	U	U	U	U	U	9.3	U	3.4
Benzene	µg/L	1	3.5	3.8	4.4	3.2	2.7	3.1	2.4	3.6
Carbon Disulfide	µg/L	60	U	U	U	U	U	U	U	U
Chloroform	µg/L	7	U	U	U	U	U	U	U	0.47
Chloromethane	µg/L	5	U	U	U	U	UJ	U	U	U
cis-1,2-Dichloroethene	µg/L	5	U	0.9 J	0.71 J	3.2	0.48 J	1.3	0.38	1.5
Cyclohexane	µg/L	NS	U	0.33 J	0.425 J	U	U	U	U	U
Dichloromethane	µg/L	5	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	5	U	0.4 J	U	U	U	U	U	U
Iodomethane	µg/L	5	U	U	0.345 J	U	UJ	U	U	U
Methylcyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Toluene	µg/L	5	U	0.44 J	U	U	U	U	U	U
Total Xylenes	µg/L	5	U	3.7	1.65 J	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	0.48 J	U	U	U	0.37 J	U	0.33
Trichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	2.9	4.1	4.05	10.8	1.7	3.8	1.1	3.4
Total VOCs	µg/L		**6.4**	**14.15**	**11.58**	**17.2**	**4.88**	**14.07**	**3.88**	**12.7**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. U = Non-detect
6. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

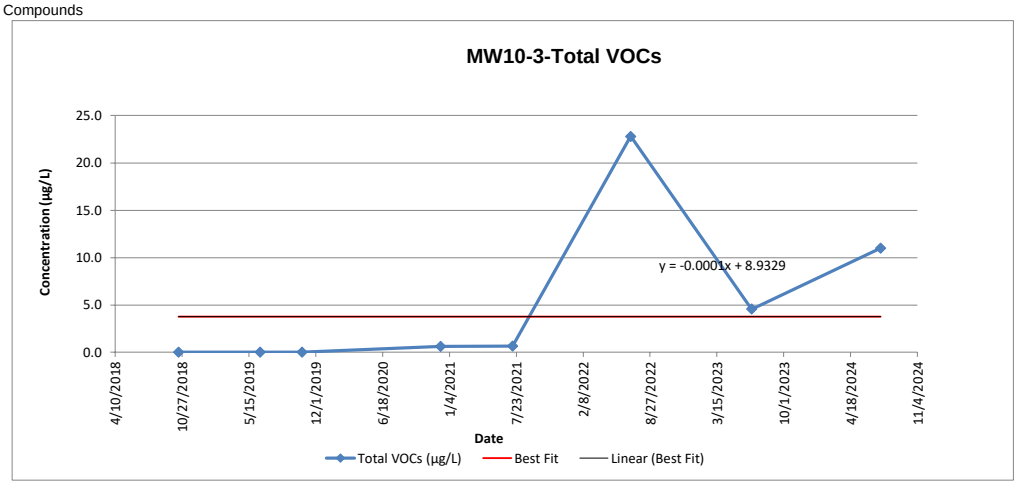
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW10-3							
Sample Date			10/17/2018	6/18/2019	10/21/2019	12/9/2020	7/12/2021	6/30/2022	6/27/2023	7/16/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	R	U	U	U
2-Butanone (MEK)	µg/L	50	U	U	U	U	R	U	U	U
2-Hexanone (MBK)	µg/L	50	U	U	U	U	R	U	U	U
Acetone	µg/L	50	U	U	U	U	R	22.2	4.2 J	11
Benzene	µg/L	1	U	U	U	U	R	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	R	U	U	--
Chloroform	µg/L	7	U	U	U	U	R	U	U	U
Chloromethane	µg/L	5	U	U	U	U	R	U	U	--
cis-1,2-Dichloroethene	µg/L	5	U	U	U	U	R	0.6 J	U	U
Cyclohexane	µg/L	NS	U	U	U	U	R	U	U	--
Dichloromethane	µg/L	5	U	U	U	U	R	U	U	--
Ethylbenzene	µg/L	5	U	U	U	U	R	U	U	U
Iodomethane	µg/L	5	U	U	U	U	R	U	U	--
Methylcyclohexane	µg/L	NS	U	U	U	U	R	U	U	--
Toluene	µg/L	5	U	U	U	U	R	U	U	U
Total Xylenes	µg/L	5	U	U	U	U	R	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Trichloroethene	µg/L	5	U	U	U	0.61 J	0.65 J-	U	U	U
Vinyl chloride	µg/L	2	U	U	U	U	R	U	0.35 J	U
Total VOCs	µg/L		**0**	**0**	**0**	**0.61**	**0.65**	**22.8**	**4.55**	**11**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value, result may be biased low
6. R = Rejected
7. U = Non-detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **Yes**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

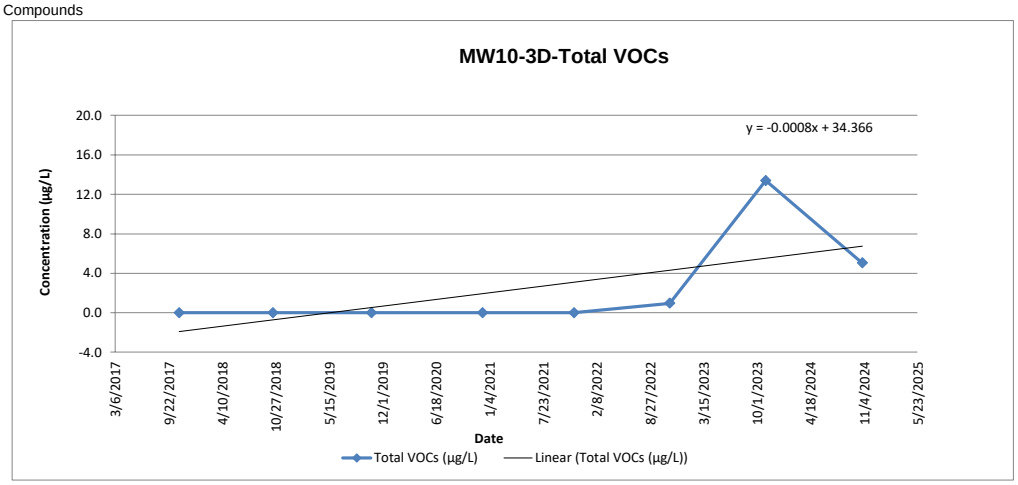
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW10-3D							
Sample Date			10/31/2017	10/17/2018	10/21/2019	12/9/2020	11/16/2021	11/8/2022	11/2/2023	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	U	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	U	U	U	U	U	U	U	U
Acetone	µg/L	50	U	U	U	U	U	U	13.4	4.7
Benzene	µg/L	1	U	U	U	U	U	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	U	U	U	U
Chloroform	µg/L	7	U	U	U	U	U	U	U	0.34
Chloromethane	µg/L	5	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Cyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Dichloromethane	µg/L	5	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	5	U	U	U	U	U	U	U	U
Iodomethane	µg/L	5	U	U	U	U	U	0.96 J	UJ	U
Methylcyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Toluene	µg/L	5	U	U	U	U	U	U	U	U
Total Xylenes	µg/L	5	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	U	U	U	U	U	U	U	U
Total VOCs	µg/L		**0**	**0**	**0**	**0**	**0**	**0.96**	**13.4**	**5.04**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. U = Non-detect
6. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **Yes**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **No**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

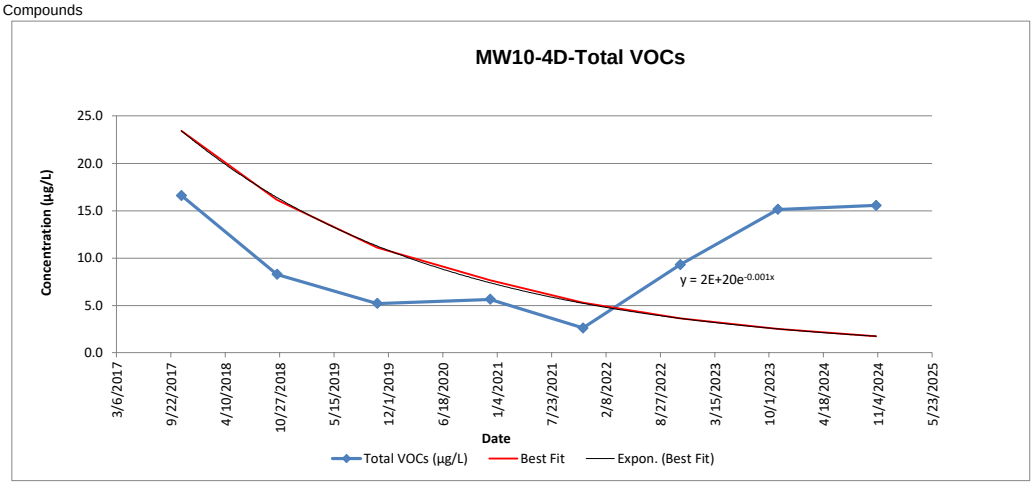
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix e
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW10-4D							
Sample Date			10/31/2017	10/17/2018	10/21/2019	12/9/2020	11/16/2021	11/8/2022	11/2/2023	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	U	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	U	U	U	U	U	U	U	U
Acetone	µg/L	50	14.3 J	U	U	U	U	U	10.5	3.3
Benzene	µg/L	1	0.56 J	0.47 J	U	1.3	0.97 J	1.3	0.45 J	0.99
Carbon Disulfide	µg/L	60	U	U	U	U	U	U	U	U
Chloroform	µg/L	7	U	U	U	U	U	U	U	0.42
Chloromethane	µg/L	5	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	1.3	2.6	1.5	0.83 J	0.44 J	3.7	0.68 J	2.5
Cyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Dichloromethane	µg/L	5	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	5	U	U	U	U	U	U	U	U
Iodomethane	µg/L	5	U	U	U	U	U	U	U	U
Methylcyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Toluene	µg/L	5	0.44 J	U	U	U	U	U	U	U
Total Xylenes	µg/L	5	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	0.34
Trichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	U	5.2	3.7	3.5	1.2	4.3	3.5	8
Total VOCs	µg/L		**16.6**	**8.27**	**5.2**	**5.63**	**2.61**	**9.3**	**15.13**	**15.55**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. B = Method and/or trip blank contamination
5. J = Estimated value
6. U = Non-detect
7. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

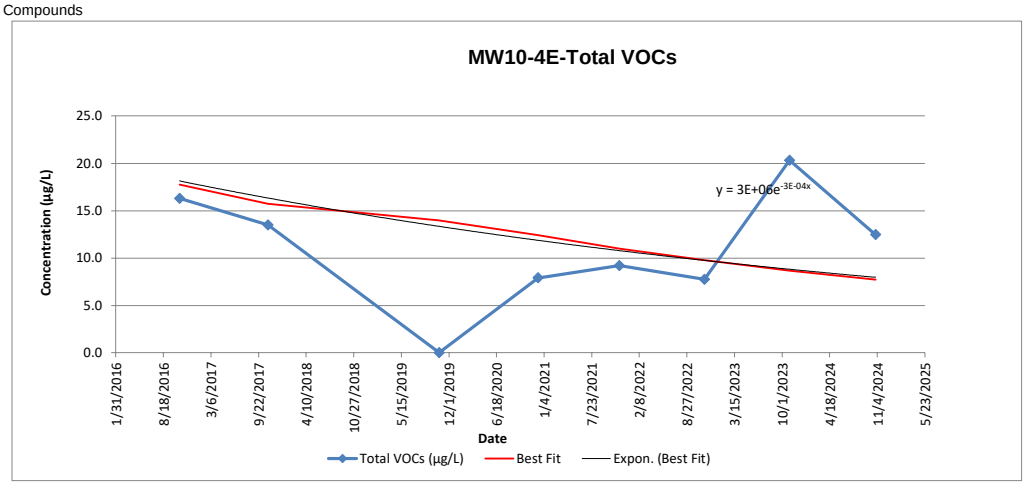
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW10-4E							
Sample Date			10/25/2016	10/31/2017	10/21/2019	12/9/2020	11/16/2021	11/8/2022	11/2/2023	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	U	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	U	U	U	U	U	U	U	U
Acetone	µg/L	50	U	U	U	U	U	U	12.9	3.6
Benzene	µg/L	1	U	U	U	U	U	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	U	U	U	0.98
Chloroform	µg/L	7	U	U	U	U	U	U	U	0.38
Chloromethane	µg/L	5	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	13.2	10.6	U	6.7	7.8	7.2	7.4	6.3
Cyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Dichloromethane	µg/L	5	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	5	U	U	U	U	U	U	U	U
Iodomethane	µg/L	5	U	U	U	U	U	U	UJ	U
Methylcyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Toluene	µg/L	5	U	U	U	U	U	U	U	U
Total Xylenes	µg/L	5	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	3.1	2.9	U	1.2	1.4	0.55 J	U	1.2
Total VOCs	µg/L		**16.3**	**13.5**	**0**	**7.9**	**9.2**	**7.75**	**20.3**	**12.46**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. B = Method and/or trip blank contamination
5. J = Estimated value
6. U = Non-detect
7. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

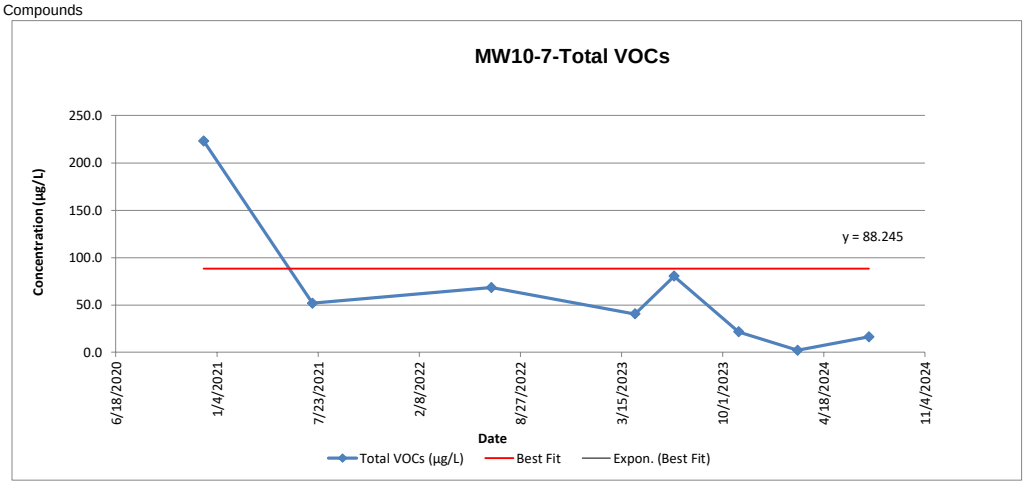
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW10-7							
Sample Date			12/9/2020	7/12/2021	6/30/2022	4/11/2023	6/27/2023	11/2/2023	2/26/2024	7/16/2024
Parameter										
1,1-Dichloroethene	µg/L	5	1.3	R	0.65 J	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	U	R	U	U	8.5	U	U	2.4
2-Hexanone (MBK)	µg/L	50	U	R	U	U	U	U	U	U
Acetone	µg/L	50	U	5.0 J-	22.8	U	21.0	13.3	U	11.8
Benzene	µg/L	1	1.3	R	U	U	0.37 J	U	U	U
Carbon Disulfide	µg/L	60	0.58 J	R	U	U	U	U	U	U
Chloroform	µg/L	7	U	R	U	U	U	U	U	U
Chloromethane	µg/L	5	U	R	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	174	33.2 J-	32.9	30.7	28.9	1.7	0.62	0.49
Cyclohexane	µg/L	NS	0.61 J	R	U	U	U	U	U	U
Dichloromethane	µg/L	5	U	R	U	1.8	U	U	U	U
Ethylbenzene	µg/L	5	U	R	U	U	U	U	U	U
Iodomethane	µg/L	5	U	R	U	U	U	UJ	U	U
Methylcyclohexane	µg/L	NS	1.2	R	U	U	U	U	U	U
Toluene	µg/L	5	1	R	U	U	1.1	U	U	0.61
Total Xylenes	µg/L	5	U	R	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	5	0.37 J	0.82 J-	2.1	0.52 J	0.43 J	0.49 J	0.7	1
Trichloroethene	µg/L	5	1.5	12.8 J-	1.7	3.5	U	1.7	U	U
Vinyl chloride	µg/L	2	41.2	R	8.3	3.9	20.0	4.3	0.69	U
Total VOCs	µg/L		**223.06**	**51.82**	**68.45**	**40.42**	**80.3**	**21.49**	**2.01**	**16.3**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value, result may be biased low
6. R = Rejected
7. U = Non-detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **No**

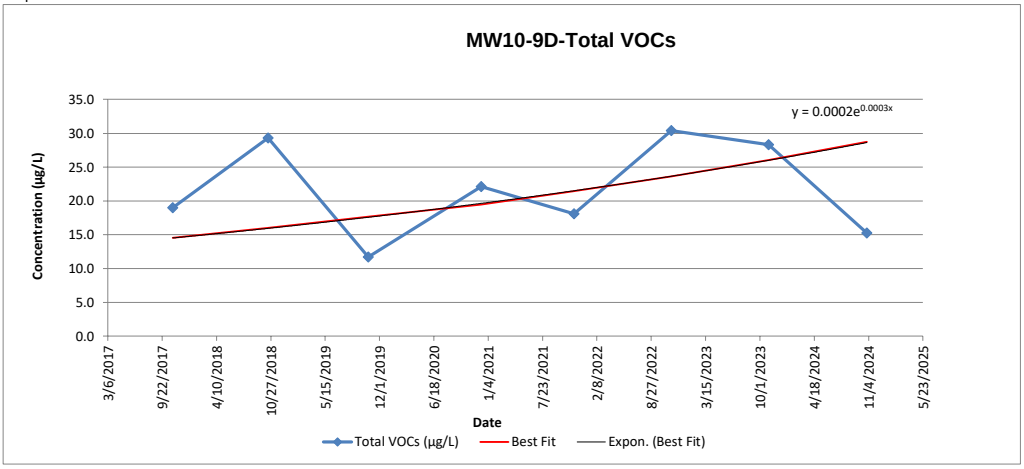
2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **No**
   2.b. Are single COCs less than 50 ug/L? — **No**

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

Appendix E
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW10-9D							
Sample Date			10/31/2017	10/17/2018	10/21/2019	12/9/2020	11/16/2021	11/8/2022	11/2/2023	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	U	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	U	U	U	U	U	U	U	U
Acetone	µg/L	50	10.4 J	U	U	U	U	U	11.9	3.3
Benzene	µg/L	1	U	U	U	U	U	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	U	U	U	U
Chloroform	µg/L	7	U	U	U	U	U	U	U	0.36
Chloromethane	µg/L	5	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	10.2	6.1	10.2	7.2	10.9	6.6	4.1	5.4
Cyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Dichloromethane	µg/L	5	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	5	U	U	U	U	U	U	U	U
Iodomethane	µg/L	5	U	U	U	U	U	U	UJ	U
Methylcyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Toluene	µg/L	5	U	U	U	U	U	U	U	U
Total Xylenes	µg/L	5	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	8.7	5.6	11.9	10.9	19.5	16.6	12.3	6.2
Total VOCs	µg/L		**19**	**29.3**	**11.7**	**22.1**	**18.1**	**30.4**	**28.3**	**15.26**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. U = Non-detect
6. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **No**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

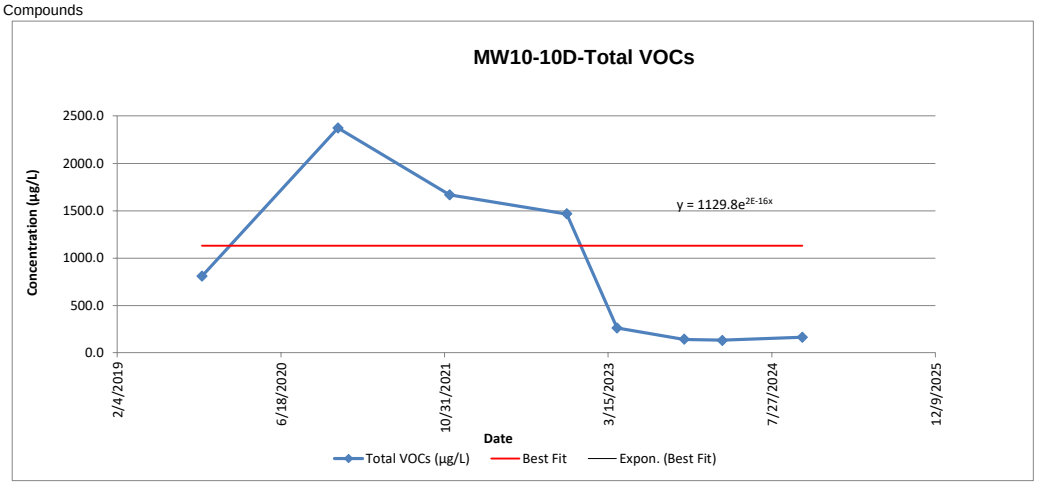
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW10-10D							
Sample Date			10/21/2019	12/9/2020	11/16/2021	11/8/2022	4/11/2023	11/2/2023	2/26/2024	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	U	37.7 J	U	U	U	U	U	10.1
2-Hexanone (MBK)	µg/L	50	U	381	73.6 J	819	U	U	U	U
Acetone	µg/L	50	20.7 J	U	U	U	U	U	3.7	U
Benzene	µg/L	1	1.9	U	U	U	U	U	1.5	2.0
Carbon Disulfide	µg/L	60	U	U	U	U	U	U	0.42	0.35
Chloroform	µg/L	7	U	U	U	29.2	U	U	U	U
Chloromethane	µg/L	5	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	638	1580 J+	1320	534	171	141	101	120
Cyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Dichloromethane	µg/L	5	U	U	U	U	U	U	0.87	0.69
Ethylbenzene	µg/L	5	U	U	U	U	U	U	0.36	U
Iodomethane	µg/L	5	U	U	U	U	U	U	U	U
Methylcyclohexane	µg/L	NS	U	U	U	U	90.6 J	U	0.95	U
Toluene	µg/L	5	3.6	14.5 J	19.1 J	16.5 J	U	U	5.7	8.4
Total Xylenes	µg/L	5	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	5	3.2	16 J	11.7 J	U	U	U	1.9	2.3
Trichloroethene	µg/L	5	9.4	47.6	45.2	24.8	U	U	8.6	13.6
Vinyl chloride	µg/L	2	132	296	197	42.2	U	U	5.3	6.0
Total VOCs	µg/L		**808.8**	**2372.8**	**1666.6**	**1465.7**	**261.6**	**141**	**130.3**	**163.44**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J+ = Estimated value, result may be biased high
6. U = Non-detect
7. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **No**

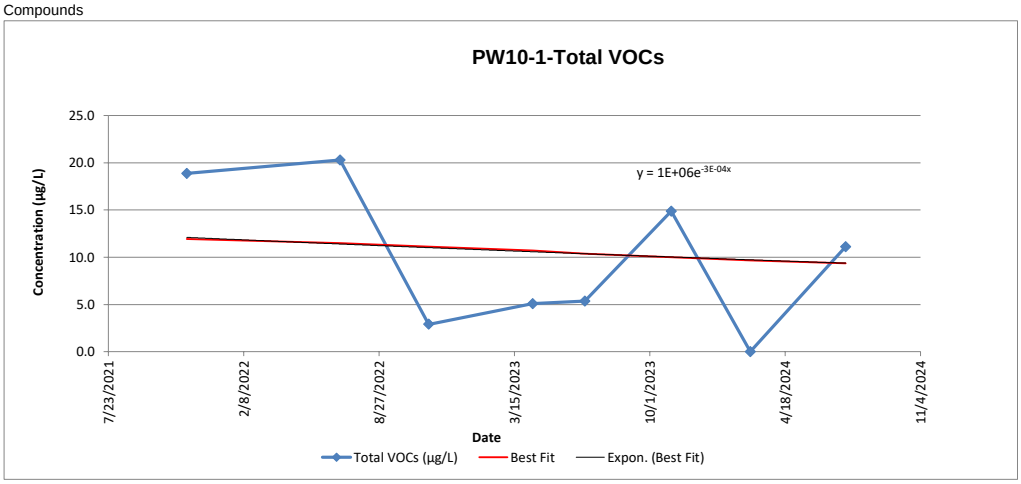
2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **No**
   2.b. Are single COCs less than 50 ug/L? — **No**

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

Appendix E
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	PW10-1							
Sample Date			11/16/2021	6/30/2022	11/8/2022	4/11/2023	6/27/2023	11/2/2023	2/26/2024	7/16/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	U	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	U	U	U	U	U	U	U	U
Acetone	µg/L	50	U	15.8	U	3.2 J	3.5 J	13.5	U	10.2
Benzene	µg/L	1	0.36 J	U	U	U	U	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	U	U	U	0.5
Chloroform	µg/L	7	U	U	U	U	U	U	U	U
Chloromethane	µg/L	5	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	4.5	2.1	1.1	1.5	1.1	0.77 J	U	0.42
Cyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Dichloromethane	µg/L	5	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	5	U	U	U	U	U	U	U	U
Iodomethane	µg/L	5	3.6	U	U	U	U	UJ	U	U
Methylcyclohexane	µg/L	NS	U	U	U	U	U	U	U	U
Toluene	µg/L	5	U	U	U	U	U	U	U	U
Total Xylenes	µg/L	5	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	10.4	2.4	1.8	0.38 J	0.75 J	0.61 J	U	U
Total VOCs	µg/L		**18.86**	**20.3**	**2.9**	**5.08**	**5.35**	**14.88**	**0**	**11.12**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. B = Method and/or trip blank contamination
5. J = Estimated value
6. J- = Estimated value, result may be biased low
7. J+ = Estimated value, result may be biased high
8. R = Rejected
9. U = Non-detect
10. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

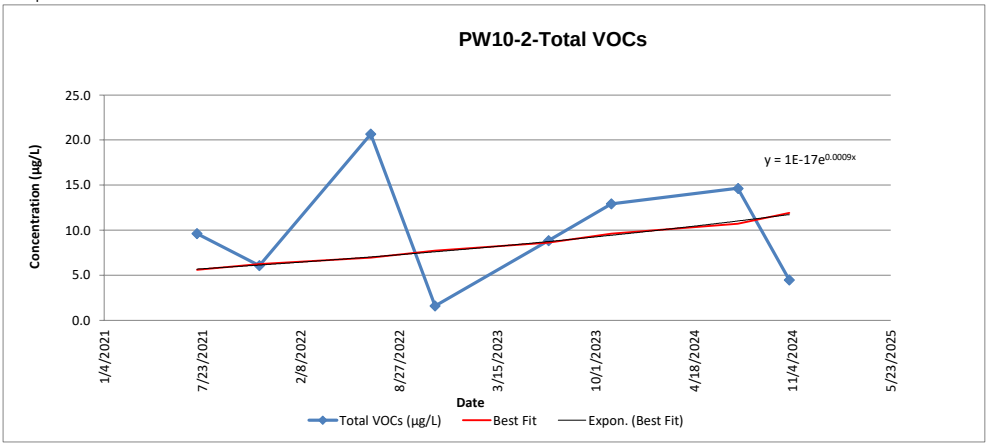
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	PW10-2							
Sample Date			7/12/2021	11/16/2021	6/30/2022	11/8/2022	6/27/2023	11/2/2023	7/16/2024	10/28/2024
Parameter										
1,1-Dichloroethene	µg/L	5	R	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	R	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	R	U	U	U	U	U	U	U
Acetone	µg/L	50	3.7 J-	U	20.2	U	4.4 J	10.4	10.7	3.7
Benzene	µg/L	1	3.9 J-	2.8	0.48 J	1.6	2.4	1.6	1.9	U
Carbon Disulfide	µg/L	60	R	U	U	U	U	U	U	U
Chloroform	µg/L	7	R	U	U	U	U	U	U	0.42
Chloromethane	µg/L	5	R	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	R	U	U	U	U	U	U	0.34
Cyclohexane	µg/L	NS	0.51 J-	0.50 J	U	U	0.53 J	0.42 J	0.82	U
Dichloromethane	µg/L	5	R	U	U	U	U	U	U	U
Ethylbenzene	µg/L	5	0.61 J-	0.45 J	U	U	U	U	U	U
Iodomethane	µg/L	5	R	0.87 J	U	U	U	U	0.68	U
Methylcyclohexane	µg/L	NS	R	U	U	U	0.33 J	U	0.54	U
Toluene	µg/L	5	0.88 J-	0.43 J	U	U	0.68 J	0.49 J	U	U
Total Xylenes	µg/L	5	R	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	5	R	U	U	U	U	U	U	U
Trichloroethene	µg/L	5	R	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	R	1.0	U	U	0.50 J	U	U	U
Total VOCs	µg/L		**9.6**	**6.05**	**20.68**	**1.6**	**8.84**	**12.91**	**14.64**	**4.46**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. B = Method and/or trip blank contamination
5. J = Estimated value
6. J- = Estimated value, result may be biased low
7. J+ = Estimated value, result may be biased high
8. R = Rejected
9. U = Non-detect
10. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **No**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

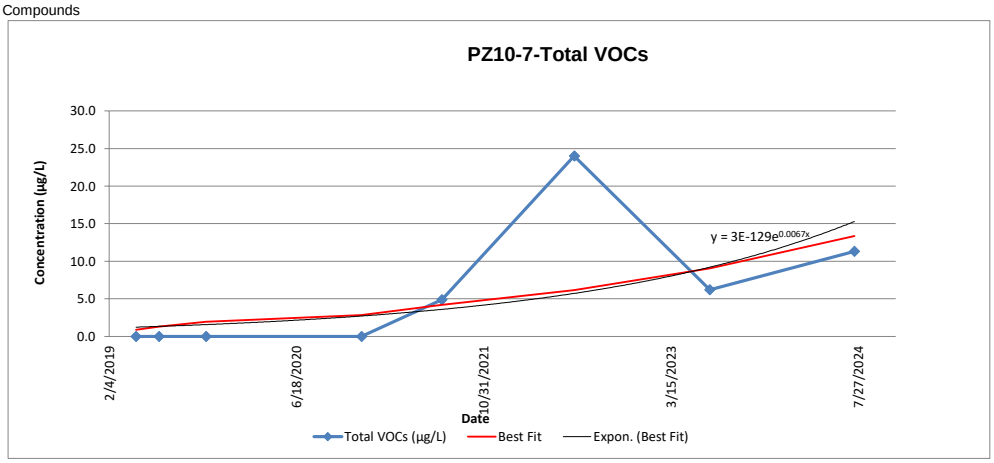
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 10
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	PZ10-7							
Sample Date			4/17/2019	6/18/2019	10/21/2019	12/9/2020	7/12/2021	6/30/2022	6/27/2023	7/16/2024
Parameter										
1,1-Dichloroethene	µg/L	5	U	U	U	U	R	U	U	U
2-Butanone (MEK)	µg/L	50	U	U	U	U	R	U	U	U
2-Hexanone (MBK)	µg/L	50	U	U	U	U	R	U	U	U
Acetone	µg/L	50	U	U	U	U	4.9 J-	24	6.2	10.9
Benzene	µg/L	1	U	U	U	U	R	U	U	U
Carbon Disulfide	µg/L	60	U	U	U	U	R	U	U	U
Chloroform	µg/L	7	U	U	U	U	R	U	U	U
Chloromethane	µg/L	5	U	U	U	U	R	U	U	U
cis-1,2-Dichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Cyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Dichloromethane	µg/L	5	U	U	U	U	R	U	U	U
Ethylbenzene	µg/L	5	U	U	U	U	R	U	U	U
Iodomethane	µg/L	5	U	U	U	U	R	U	U	0.42
Methylcyclohexane	µg/L	NS	U	U	U	U	R	U	U	U
Toluene	µg/L	5	U	U	U	U	R	U	U	U
Total Xylenes	µg/L	5	U	U	U	U	R	U	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Trichloroethene	µg/L	5	U	U	U	U	R	U	U	U
Vinyl chloride	µg/L	2	U	U	U	U	R	U	U	U
Total VOCs	µg/L		**0**	**0**	**0**	**0**	**4.9**	**24**	**6.2**	**11.32**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value, result may be biased low
6. R = Rejected
7. U = Non-detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **Yes**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **No**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

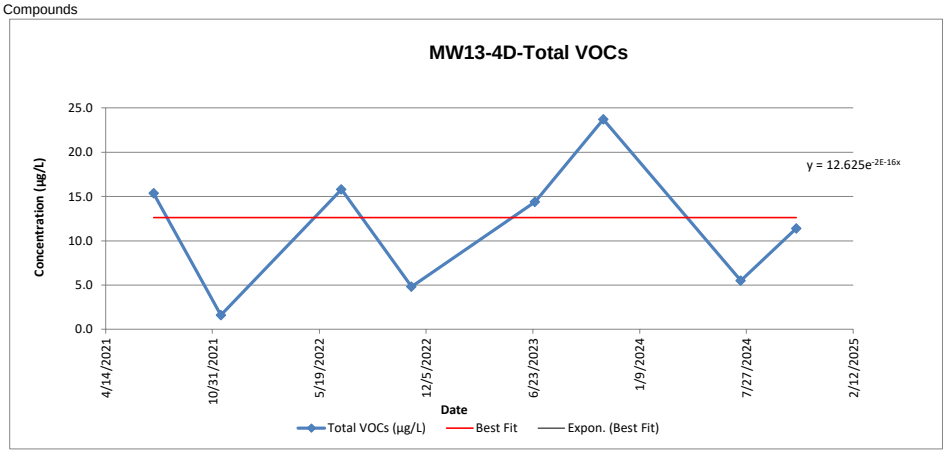
* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Site 13

Appendix E
Analytical Data for Well Termination
Site 13
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW13-4D							
Sample Date			7/13/2021	11/16/2021	6/29/2022	11/7/2022	6/27/2023	11/2/2023	7/16/2024	10/28/2024
Parameter										
1,2-Dichlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
1,3-Dichlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
1,4-Dichlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	R	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	R	U	U	U	U	U	U	U
Acetone	µg/L	50	4.35 J-	U	U	U	4.3 J	12.6	U	U
Benzene	µg/L	1	R	U	U	U	U	U	U	U
Chlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	6.1 J-	U	10.1	4.8	6.2	6.3	5.5	7.5
Iodomethane	µg/L	5	R	U	U	U	U	UJ	UJ	U
trans-1,2-Dichloroethene	µg/L	5	R	U	U	U	U	U	U	U
Trichloroethene	µg/L	5	R	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	4.9 J-	1.6	5.7	U	3.9	4.8	U	3.9
Total VOCs	µg/L		**15.35**	**1.6**	**15.8**	**4.8**	**14.4**	**23.7**	**5.5**	**11.4**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value, result may be biased low
6. R = Rejected
7. U = Non-detect
8. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **Yes**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

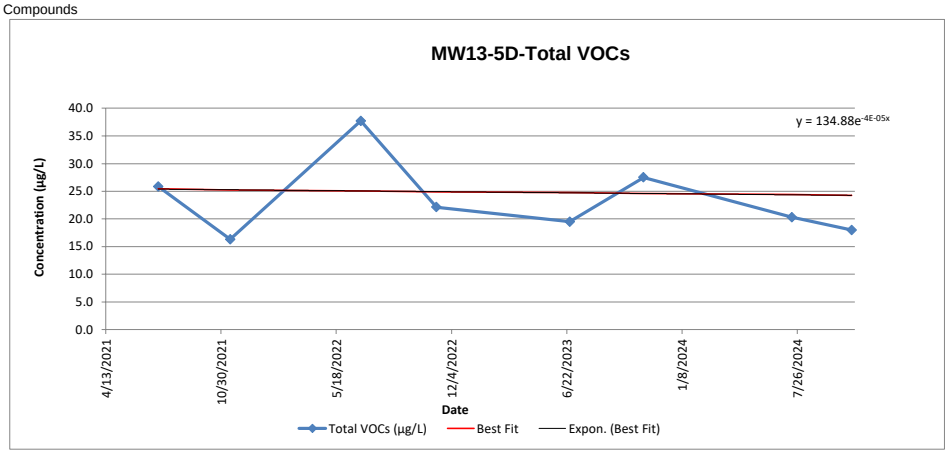
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 13
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	MW13-5D							
Sample Date			7/13/2021	11/15/2021	6/29/2022	11/7/2022	6/27/2023	11/2/2023	7/16/2024	10/28/2024
Parameter										
1,2-Dichlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
1,3-Dichlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
1,4-Dichlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	R	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	R	U	U	U	U	U	U	U
Acetone	µg/L	50	R	U	U	U	4.9 J	13.8	U	3.4 J
Benzene	µg/L	1	R	U	U	U	U	U	U	U
Chlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	23.9 J-	14.6	36	21.6	14.0	12.3	16.6	13.6
Iodomethane	µg/L	5	R	1.7 J+	U	U	U	UJ	UJ	U
trans-1,2-Dichloroethene	µg/L	5	0.45 J-	U	0.39 J	U	U	U	U	U
Trichloroethene	µg/L	5	0.53 J-	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	0.99 J-	U	1.3	0.52 J	0.58 J	1.4	3.7	1
Total VOCs	µg/L		**25.87**	**16.3**	**37.69**	**22.12**	**19.48**	**27.5**	**20.3**	**18**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value, result may be biased low
6. J+ = Estimated value, result may be biased high
7. R = Rejected
8. U = Non-detect
9. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):

1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters?	**No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):

1. Does this well achieve "Zero Slope Condition" as defined in the permit?	
1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters	See above
1.b. Fit a trendline (either linear or exponential) using least squares regression model.	See above
1.c. The slope is less than or equal to zero.	**Yes**
2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?	
2.a. Is the total concentration of COCs less than 100 ug/L?	**Yes***
2.b. Are single COCs less than 50 ug/L?	**Yes***

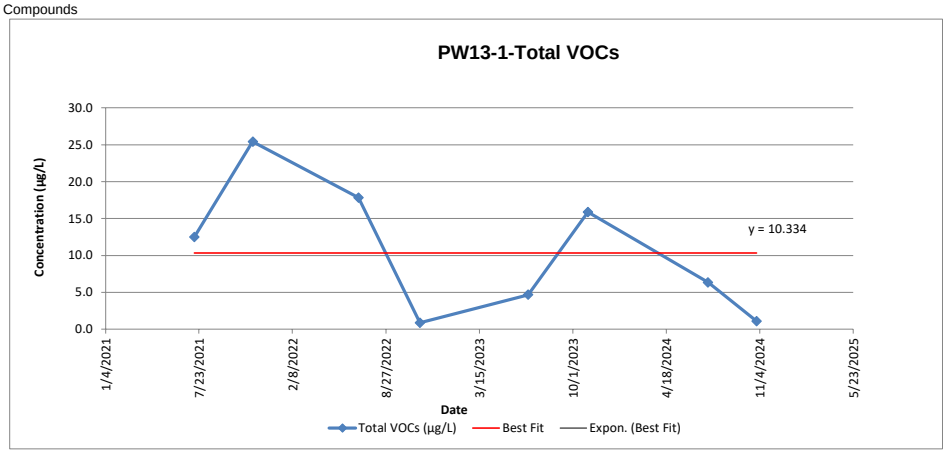
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 13
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	PW13-1							
Sample Date			7/13/2021	11/15/2021	6/29/2022	11/7/2022	6/27/2023	11/2/2023	7/16/2024	10/28/2024
Parameter										
1,2-Dichlorobenzene	µg/L	5	R	U	U	U	U	0.41 J	U	U
1,3-Dichlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
1,4-Dichlorobenzene	µg/L	5	R	U	U	U	0.49 J	0.51 J	0.5 J	U
2-Butanone (MEK)	µg/L	50	R	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	R	U	U	U	U	U	U	U
Acetone	µg/L	50	4.4 J-	U	U	U	U	12.7	U	U
Benzene	µg/L	1	R	U	U	U	U	0.39 J	U	U
Chlorobenzene	µg/L	5	R	U	U	U	U	0.37 J	U	U
cis-1,2-Dichloroethene	µg/L	5	5.3 J-	10.2	11.7	0.85 J	3.6	1.5	U	1.1
Iodomethane	µg/L	5	R	1.1 J+	U	U	U	UJ	UJ	U
trans-1,2-Dichloroethene	µg/L	5	R	U	0.45 J	U	U	U	U	U
Trichloroethene	µg/L	5	R	U	0.97 J	U	U	U	0.53 J	U
Vinyl chloride	µg/L	2	2.8 J-	14.1	4.7	U	0.58 J	U	5.3	U
Total VOCs	µg/L		**12.5**	**25.4**	**17.82**	**0.85**	**4.67**	**15.88**	**6.33**	**1.1**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J = Estimated value
5. J- = Estimated value, result may be biased low
6. J+ = Estimated value, result may be biased high
7. R = Rejected
8. U = Non-detect
9. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):

1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters?	**No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):

1. Does this well achieve "Zero Slope Condition" as defined in the permit?	
1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters	See above
1.b. Fit a trendline (either linear or exponential) using least squares regression model.	See above
1.c. The slope is less than or equal to zero.	**No**
2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?	
2.a. Is the total concentration of COCs less than 100 ug/L?	**Yes***
2.b. Are single COCs less than 50 ug/L?	**Yes***

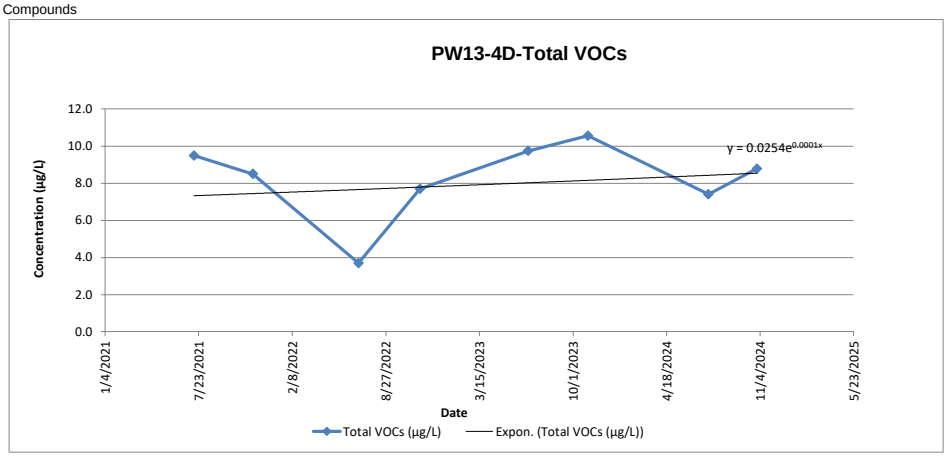
3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.

Appendix E
Analytical Data for Well Termination
Site 13
Niagara Falls Air Reserve Station, Niagara Falls, NY

Location ID	Unit	GPS	PW13-4D							
Sample Date			7/13/2021	11/16/2021	6/29/2022	11/7/2022	6/27/2023	11/2/2023	7/16/2024	10/28/2024
Parameter										
1,2-Dichlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
1,3-Dichlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
1,4-Dichlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
2-Butanone (MEK)	µg/L	50	R	U	U	U	U	U	U	U
2-Hexanone (MBK)	µg/L	50	R	U	U	U	U	U	U	U
Acetone	µg/L	50	5.6 J-	U	U	U	4.4 J	10.0	U	3.9 J
Benzene	µg/L	1	R	U	U	U	U	U	U	U
Chlorobenzene	µg/L	5	R	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	5	3.5 J-	7.2	3.7	6.7	5.0	0.55 J	7.4	4.4
Iodomethane	µg/L	5	R	U	U	U	U	UJ	UJ	U
trans-1,2-Dichloroethene	µg/L	5	R	U	U	U	U	U	U	U
Trichloroethene	µg/L	5	R	U	U	U	U	U	U	U
Vinyl chloride	µg/L	2	0.39 J-	1.3	U	1	0.34 J	U	U	0.48 J
Total VOCs	µg/L		**9.49**	**8.5**	**3.7**	**7.7**	**9.74**	**10.55**	**7.4**	**8.78**

Notes:
1. Shaded Cells indicate exceedence of NYSDEC GPS for contaminants of concern as defined in the Site Management Plan
2. GPS = Groundwater Protection Standard
3. µg/L = micrograms per liter
4. J- = Estimated value, result may be biased low
5. R = Rejected
6. U = Non-detect
7. VOCs = Volatile Organic Compounds



Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well meet the termination criteria by achieving the GPSs for an equivalent of 8 quarters? **No**

Alternative Termination Criteria (Section 5.1.2 of the Site Management Plan):
1. Does this well achieve "Zero Slope Condition" as defined in the permit?
   1.a. Plot sum of concentration of hazardous waste constituents from an equivalent of 8 quarters — See above
   1.b. Fit a trendline (either linear or exponential) using least squares regression model. — See above
   1.c. The slope is less than or equal to zero. — **No**

2. Does this well achieve the analytical concentration criteria for a minimum of eight quarters?
   2.a. Is the total concentration of COCs less than 100 ug/L? — **Yes***
   2.b. Are single COCs less than 50 ug/L? — **Yes***

3. Will the residual groundwater contamination result in an unacceptable risk to human health and the environment? Provide analysis

* - While the well achieves this critieria for the last eight monitoring events, these events do not include monitoring over four consecutive quarterly sampling events per Section 5.1.2 of the SMP.