New York State Department of Environmental Conservation Division of Environmental Remediation

Periodic Review Report 2024

Keywell L.L.C. Vac-Air Division Site

300 Falconer Street, Frewsburg, NY

NYSDEC Site No. 907016

December 12, 2025

Periodic Review Report 2024

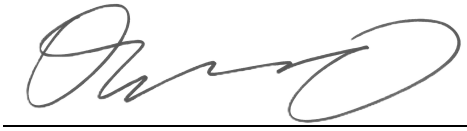
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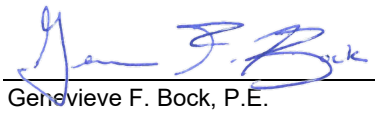
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Table of Contents

Executive Summary 1
1 Site Overview 3
1.1 Site Background 3
1.2 Historical Site Activities 4
1.3 Recent Project Activities 6
2 Site Operation, Maintenance & Monitoring Plan Compliance Report 7
3 Remedy Performance, Effectiveness, and Protectiveness Evaluation 10
3.1 Site Inspections 11
3.2 Groundwater Quality Monitoring 11
3.3 Remedial System Summary 15
3.4 Outfall Monitoring 16
3.5 Remedial Evaluation 16
4 Institutional Control/Engineering Control Compliance Report 17
5 Summary, Conclusions, and Recommendations 18
5.1 Compliance with OM&M Plan 18
5.2 Performance and Effectiveness of the Remedies 18
5.3 Upcoming work 19
5.4 Recommendations 20

Figures

Figure 1 Site Location Map
Figure 2 Site Map
Figure 3 Groundwater Contour Map – May 20, 2024
Figure 4 Groundwater Contour Map – October 22, 2024

Tables

Within Report

Table 2.1 Monitoring Well Network Summary
Table 2.2 Media Monitoring Schedule For 2024

Attached

Table 1 Extraction Well Construction Details
Table 2 Groundwater Gauging Data
Table 3 Groundwater Analytical Data April and October/November 2024
Table 4 Remedial System Operation Data 2024
Table 5 Monthly Treatment Effluent Data
Table 6 System VOC Summary
Table 7 Monthly Outfall Analytical Data

Appendices

Appendix A – Groundwater Sampling Logs
Appendix B – Laboratory Analytical Reports
Appendix C – Annual System Inspection Form

Acronyms

AWQS	Ambient Water Quality Standards
bgs	below ground surface
CCU	Catalytic Combustion Unit
Class GA	Groundwater class
DTP	Depth to Product
DTW	Depth to Water
EC	engineering control
GES	Groundwater & Environmental Services, Inc.
gpm	gallons per minute
GWE	Groundwater Extraction
HDPE	high-density polyethylene
”Hg	inches of mercury
IC	institutional control
Keywell	Keywell LLC
LNAPL	light non-aqueous phase liquid
µg/L	micrograms per liter
mg/L	milligrams per liter
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ng/L	nanograms per liter
OM&M	Post-Remedial Operation, Maintenance, & Monitoring
OWS	oil water separator
P.E.	Professional Engineer
PFAS	per-and polyfluoroalkyl substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
Site	Keywell L.L.C. Vac-Air Division Site
SMP	Site Management Plan
stormceptor	precast concrete oil/sediment/water separation unit
SVE	Soil Vapor Extraction
TCE	Trichloroethene
TCL	Target Compound List
TOGS 1.1.1	Technical and Operational Guidance Series 1.1.1
TPE	total-phase extraction
TSS	total suspended solids
USEPA	United States Environmental Protection Agency
VFD	Variable-Frequency Drive
VLS	vapor/liquid separator
VOCs	Volatile Organic Compounds

Executive Summary

Keywell LLC (Keywell) Vac-Air Division (Site) is located at 300 Falconer Street in the Town of Carroll immediately north of the Village of Frewsburg, New York (**Figure 1**). The property is bound by Conewango Creek to the north; open fields, wooded, and low-lying areas to the east; commercial and residential properties to the south; and Falconer Street and Frewsburg Water District Supply Well 2A to the west (**Figure 2**). An unnamed, intermittent drainage way consisting of sections of buried culvert and open swale transverses the property and discharges to a low-lying wetland area at the north end of the Site. This low-lying area drains to Conewango Creek.

The property was formerly owned by Vac-Air Alloys, which began metal processing operations at the Site in 1969. As part of the facility operations, trichloroethene (TCE) was used to clean and degrease metals. Prior to 1969, the property was used for the manufacture of wafer board. Keywell purchased the facility in 1987, filed a petition for reorganization under Chapter 11 of the bankruptcy laws in 2013, and underwent a name change on January 14, 2014 (to SGK Venture, LLC). SGK Venture, LLC processed stainless steel, titanium, and other high grade scrap metal until March 31, 2015, at which time operations ceased.

As discussed in Section 2.0, remedial measures to address solvent releases by the former owners were undertaken by Keywell beginning in 1997.

The following is a summary of the remedial actions and monitoring performed at the Site in 2024:

- Semi-annual groundwater sampling and groundwater elevation measurements.
    - Per-and polyfluoroalkyl substances (PFAS) sampling was added to the semi-annual groundwater sampling event in 2024.
- Monthly system influent sampling.
- Monthly system discharge effluent sampling.
- Monthly outfall sampling.
- Branch line and waterline repair.
- Weekly Site inspections and overall Site maintenance in accordance with the *Post-Remedial Operation, Maintenance, & Monitoring (OM&M) Plan* (revised April 2015).
    - An annual Site inspection was completed by Groundwater & Environmental Services, Inc. (GES) on December 24, 2024. All engineering controls (ECs) outlined in the OM&M plan were found to be in good condition with no new evidence of damage except as noted below:
        - Portions of the paved cap (e.g., asphalt) covering the Site is cracked and has vegetation growing through cracks.
        - The groundwater extraction wells were inactive due to the TPE pump being down from July 19, 2024 to December 31, 2024.

As outlined in the OM&M Plan, semi-annual groundwater monitoring and sampling events were conducted on May 21 to 24, 2024 and October 21 to 23 and November 12, 2024. Samples were analyzed for volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method 8260D, PFAS via USEPA Method 1633, and total suspended solids (TSS) via USEPA Method 2540D. VOC data was compared to the New York State Department of Environmental Conservation (NYSDEC) TOGS 1.1.1 groundwater (Class GA) Ambient Water Quality Standards (AWQS) and PFAS data was compared to the NYSDEC 2023 Addendum to TOGS 1.1.1 Class GA AWQS. General observations from the groundwater sampling events are detailed below:

- Spring 2024 results:
  - Of the 16 samples collected, eight (8) contained AWQS exceedances for at least one (1) VOC compound (MW-2, MW-3, MW-4, MW-9R, MW-11R, MW-12, MW-13, and MW-14).
  - Of the 16 samples collected, five (5) contained AWQS exceedances for at least one (1) PFAS compound (MW-2, MW-3, MW-6, MW-11R, and MW-14).
- Fall 2024 results:
  - All eight (8) samples collected contained AWQS exceedances for at least one (1) VOC compound (MW-2, MW-3, MW-4, MW-9R, MW-11R, MW-12, MW-13, and MW-14).
  - Of the eight (8) samples collected, six (6) samples collected contained AWQS exceedances for at least one (1) PFAS compound (MW-2, MW-3, MW-4, MW-11R, MW-13, and MW-14).

Based on these concentrations, multiple wells exceed NYSDEC TOGS 1.1.1 Class GA AWQS and/or 2023 Addendum to TOGS 1.1.1 Class GA AWQS. The following action items are recommended:

- Continuance of semi-annual groundwater monitoring activities.
- Continued use of the dual-phase extraction system to treat groundwater on Site.
- See **Section 5** for additional recommendations to increase system effectiveness, increase uptime, and maintain the system and associated building.

1 Site Overview

1.1 Site Background

The Site is located at 300 Falconer Street in the Town of Carroll near the northern boundary of the Village of Frewsburg, New York (**Figure 1**). It is located in a rural-industrial area off Falconer Street. The Site lies within a fenced in scrap metal processing area. It is bordered to the north by the Conewango Creek, and across Falconer Street from the Frewsburg Water District Supply Well 2A (**Figure 2**). There are two (2) large and several small buildings on the parcel, as well as paved, grassy, and wooded areas. An unnamed, intermittent drainage way consisting of sections of buried culvert and open swale transverses the property and discharges to a low-lying wetland area at the north end of the Site. This low-lying area drains to Conewango Creek.

The Site is currently vacant and zoned for industrial-manufacturing and processing. Prior to 1969, the property was used for the manufacture of wafer board. Vac-Air started operations at this Site in 1969. The facility operations consisted of sorting, cleaning and packaging of high-grade scrap metal. The metal was cleaned by shot blasting, and degreased with solvents, mainly TCE. Waste produced from process operations included TCE sludge, spent TCE, and waste lubricating and hydraulic oils. Keywell purchased the facility in 1987 and processed stainless steel, titanium, and other high grade scrap metal. In December 1990, the company signed a Consent Order to conduct the Remedial Investigation/Feasibility Study (RI/FS) and remedial action at the Site. Based upon the RI/FS a Record of Decision (ROD) was signed in 1996. A remedial design was completed, and construction began in 1997. The Site remediation included solvent recovery, construction of a barrier wall, air sparging/soil vacuum extraction (SVE), groundwater extraction (GWE) and treatment, sediment excavation, storm water controls, capping, and long-term monitoring. The remedial construction was completed in 1998. Keywell filed a petition for reorganization under Chapter 11 of the bankruptcy laws in 2013, and underwent a name change on January 14, 2014 (to SGK Venture, LLC). SGK Venture, LLC continued operations until March 31, 2015. NYSDEC took over operation of the onsite remedial systems in 2016. The site property does not currently have an owner.

The Site is located in the Allegany Plateau physiographic province of New York State. Geology is highly varied and multi-layered. Generally, the geology is composed of a Surficial Overburden Unit over the Upper Sand and Gravel Unit and a Confining Unit of lacustrine sediments which contains a channeled, meandering Lower Sand and Gravel Unit overlying a layer of glacial outwash till and bedrock. The total depth of the surficial overburden unit ranges from 0 to 6 feet below ground surface (bgs) and the Upper Sand and Gravel Unit varies in thickness from 3 feet (north) to 22 feet (south). The Confining Unit varies in thickness from 106 feet to 13.5 feet where it separates the Upper Sand and Lower Sand and Gravel Units below which is another 50 feet of glacial outwash sand gravel and clay over Upper Devonian, Conewango Group gray shale and fine-grained sandstones located at 156 feet bgs. Groundwater is found in two stratigraphic units, the Water Table Aquifer (shallow) and the Frewsburg Aquifer (deep), separated by the Confining Unit whose presence allows the Frewsburg Aquifer to normally exhibit

artesian conditions. Depth to water (DTW) in the Water Table Aquifer varies from 3 to 6 feet bgs flowing northward toward Conewango Creek.

1.2 Historical Site Activities

In December 1990, Keywell signed a Consent Order to conduct the RI/FS. In March 1996, a ROD was issued selecting remedial actions for the Site. Following the ROD, remedial measures began in 1997 in accordance with the ROD and *Evaluation of North Soil Area Remedial Alternatives* dated May 1996. Majority of the remedial construction activities were completed by January 1998. The remedial measures included:

- Installation of a slurry wall along the downgradient boundary of the North Soil Area.
- Installation of a 12-well groundwater extraction system.
- Construction of a groundwater treatment system consisting of two bag filters, an air stripper, and a catalytic combustion unit (CCU) for vapor treatment, with treated effluent discharge to the surface water of Conewango Creek.
- Installation of a six (6) well SVE collection and treatment system within the Center Soil Area.
- Installation of two (2) monitoring wells (MW-13 and MW-14) and two (2) piezometers (PZ2 and PZ3).
- Installation of a new storm sewer along the west side of the Main Building, replacement of the 36-inch corrugated metal pipe storm sewer that traversed the property with a 28-inch high-density polyethylene (HDPE) sewer and installation of a precast concrete oil/sediment/water separation unit (stormceptor) in-line, and other controls to isolate runoff from potentially contaminated groundwater.
- Excavation and off-site disposal of contaminated sediments from the low-lying wet area.
- Asphalt paving of the areas north and west of the Main Building.

A *Final Remedial Design Report* dated June 1997 outlined the final design specifications for the remedial measures being implemented at the Site. The *Final Remedial Construction Report* dated July 1998 summarized all remedial measures completed thus far, following the requirements laid out in the *Final Remedial Design Report* and the Consent Order.

In August 2004, operation of the SVE system was discontinued with NYSDEC approval since it was demonstrated that the mass of TCE removed by the SVE system under optimal operating conditions was insignificant in contrast to the effectiveness of the groundwater treatment system.

In December 2004, pumping began at MW-2 due to persistence of VOCs in groundwater outside of the barrier wall; however, the well would run dry sooner than anticipated.

In November 2007, a voluntary program was initiated to pump groundwater from MW-14 due to elevated VOC concentrations compared to nearby extraction well concentrations.

On January 19, 2010, the CCU was taken off-line with NYSDEC approval, as it was no longer required to provide treatment of VOC off gases from the air stripper to achieve compliance with air emission discharge limitations.

In May 2011, a NYSDEC approved OM&M Plan was implemented to update OM&M activities as part of the long-term operation of the various components of the remedial measures.

In March 2015, a request was submitted to NYSDEC to suspend the OM&M requirements for monthly pumping and sampling of monitoring wells MW-2 and MW-14 due to minimal recovery of impacted groundwater.

From January 2010 to February 2016, Benchmark Environmental Engineering & Science, PLLC performed OM&M at the Site. Work completed was reported in the annual Periodic Review Reports (PRRs).

In 2016, NYSDEC took over the operation of the onsite remedial system.

In February 2016, GES was contracted by the NYSDEC to conduct routine O&M of the remediation system, groundwater sampling, Site/system repairs as needed, and other associated activities.

In July 2016, GES performed a pilot test to determine total fluid recovery flow rates to allow sizing of a proper total-phase extraction (TPE) pump to replace the existing centrifugal pump.

On October 4, 2016, GES submitted a *Pilot Test Summary Report* to the NYSDEC. The report recommended the installation of a TPE skid to help increase system effectiveness and reliability.

Between February 22, 2019, and March 13, 2019, GES plumbed and installed a TPE skid and control panel, built by Newterra of Brockville, Ontario.

From February 24 through March 12, 2020, a GES subcontractor, TREC Environmental, performed Geoprobe subsurface investigation at 93 locations that were probed to depths ranging from 10 feet bgs to 22 feet bgs.

On April 7 and April 8, 2020, GES disconnected the on-Site water treatment system oil water separator (OWS) from the treatment train; the OWS was bypassed and treatment water fed directly to the air stripper. The OWS was cleaned of any residual contamination.

On June 6, 2020, GES performed electrical upgrades to the control panel to install remote access via a cellular based internet connection.

On November 6, 2020, GES oversaw the installation of a new bedding pump and floats in the sewer bedding pump vault. This required confined space entry and was performed by a GES Subcontractor--Delmar Electric Construction Corp.

On February 8, 2021, GES performed system upgrades by raising the knock-out tank and upgrading plumbing.

On February 8, 2022, a variable frequency drive (VFD) was installed on the vapor/liquid separator (VLS) transfer pump.

On February 11, 2022, a replacement transfer pump was installed. However, the pump failed again on September 2, 2022.

On January 31, 2023, the transfer pump was repaired and the treatment system resumed normal operations.

1.3 Recent Project Activities

Work performed at the Site during the 2024 period included:

- On April 22 to April 24, 2024, six (6) soil vapor well points were installed on western perimeter and south end of the site to evaluate potential human exposure to VOCs in the subsurface soil gas.
- On May 20, 2024, soil vapor samples were collected at five (5) of the six (6) soil vapor points. The results of this sampling event have been submitted to the NYSDEC under a separate report titled *Soil Vapor Intrusion Investigation*.
    - Based upon the soil vapor sampling results, NYSDEC and the New York State Department of Health (NYSDOH) determined that this soil vapor intrusion investigation conducted along the western perimeter of the site to evaluate off-site vapor migration did not identify significant VOC concentrations in vadose zone soil gas samples. Therefore, no actions are currently needed to address off-site exposures.
- On May 20, 2024, a Site-wide well gauging event took place. All 18 extraction wells along with 16 monitoring wells, two (2) piezometers, and one (1) staff gauge reading were completed. One (1) piezometer was not gauged due to area flooding.
- On May 21 to 24, 2024, low-flow groundwater sampling spring event was performed at 16 wells. Site groundwater sampling wells were analyzed for VOCs, PFAS, and TSS.
- On July 19, 2024, the groundwater extraction system was partially shut down due to a broken TPE blower, which was removed and sent offsite for evaluation and repair. The blower will be reinstalled in 2025. While the TPE blower was offline, no water was produced from the groundwater extraction wells, but the sewer bedding pump continued to operate and was treated through the system air stripper prior to discharge.
- On October 20, 2024, a Site-wide well gauging event took place. All 18 extraction wells along with 15 monitoring wells, and two (2) piezometers were measured. One (1) piezometer was not gauged because it was unable to be located, one (1) staff gauge was not gauged due to it being unsafe to access, and one (1) monitoring well (MW-14) was not gauged because it was inaccessible. Monitoring well MW-14 was subsequently gauged on November 12, 2024 during groundwater sampling.
- On October 21 to 23 and November 12, 2024, low-flow groundwater sampling fall event was performed at eight (8) wells. Samples were analyzed for VOCs, PFAS, and TSS.
- On December 24, 2024, a site engineering inspection was performed.

- Bi-weekly OM&M events were performed to maintain the system and monitor the Site throughout 2024.

2 Site Operation, Maintenance & Monitoring Plan Compliance Report

The Site remedies include monitoring to evaluate the performance of the remedies as follows:

- Site cover system and drainage monitoring
- Groundwater monitoring
- Monthly system effluent sampling
- Monthly system influent sampling

As a component of the ICs presented in the OM&M Plan, on-site EC systems (specifically the groundwater treatment system, cover system, storm water control, subsurface barriers, and fencing/access control) must be protected and replaced as necessary to ensure the devices function in the manner specified in the OM&M Plan. Inspections should be performed annually as a component of the institutional controls (ICs) as presented in the OM&M Plan. The annual engineering Site inspection was completed by GES personnel on December 24, 2024. During the Site inspection, the only deficiency noted was that the paved cap was found to have cracks and vegetation growing through the cracks. If the NYSDEC determines that asphalt cap repairs are required at the vacant Site, vegetation will need to be cleared, and the cracks patched to restore the paved cap. No Site ICs or ECs have been modified by any Site work since GES took over OM&M activities for the Site in February 2016. The next annual inspection will be performed in the summer of 2025.

Semi-annual groundwater level monitoring is conducted approximately concurrently with the semi-annual groundwater sampling events. Gauging is performed on the 18 extraction wells, 16 monitoring wells, three (3) piezometers, and one (1) staff gauge in Conewango Creek. **Figure 2** shows the location of all on-Site wells and **Table 1** shows the extraction well construction information.

Groundwater sampling is performed at 16 monitoring wells in the spring and at eight (8) monitoring wells in the fall. **Table 2.1** summarizes the sample names, locations, sampling schedule, and describes the hydrogeologic location for all monitoring wells included in the groundwater monitoring program. Samples are tested for the parameters listed in **Table 2.2**.

Table 2.1 Monitoring Well Network Summary

Well ID	Physical Location	Sampling Schedule	General Hydrogeologic Location
MW-1	On-site	Spring Only	Upgradient
MW-2	On-site	Spring and Fall	Downgradient
MW-3	On-site	Spring and Fall	Downgradient
MW-4	On-site	Spring and Fall	Downgradient
MW-4D	On-site	Spring Only	Deep Aquifer Downgradient
MW-5	On-site	Spring Only	Upgradient
MW-5D	On-site	Spring Only	Deep Aquifer Upgradient
MW-6	On-site	Spring Only	Cross/Downgradient
MW-7	Off-site	Spring Only	Crossgradient
MW-8	On-site	Spring Only	Upgradient
MW-9R	On-site	Spring and Fall	Downgradient
MW-10	On-site	Spring Only	Upgradient
MW-11R	On-site	Spring and Fall	Source Area
MW-12	Off-site	Spring and Fall	Cross/Downgradient
MW-13	On-site	Spring and Fall	Downgradient
MW-14	On-site	Spring and Fall	Downgradient

System influent, system effluent, and outfall samples are collected monthly and analyzed for the parameters listed in **Table 2.2**. Effluent samples are collected from a dedicated sample port located on the air stripper effluent discharge piping. System influent sampling is performed to monitor trends in influent concentrations and verify treatment system efficiency. Outfall samples are collected from the Outfall 001 discharge point to monitor discharge water. Outfall 001 is a discharge point located on the northern boundary of the Site for non-treated surface runoff water (**Figure 2**). Due to a gap in the NYSDEC standby laboratory contract, no samples were collected in January and February 2024.

Table 2.2 Media Monitoring Schedule For 2024

Monitoring Program	Frequency	Matrix	Analysis
Groundwater	Semi-Annual	Water	Routine Field Parameters: 1. Static Water Level 2. Specific Conductance 3. Temperature 4. pH 5. Oxidation-Reduction Potential 6. Dissolved Oxygen 7. Turbidity
Groundwater	Semi-Annual	Water	Laboratory Analytes: 1. Target Compound List VOCs 2. PFAS 3. TSS
Treatment Effluent	Monthly	Water	Routine Field Parameters 1. pH Laboratory Analytes 1. Target Compound List VOCs 2. Oil & Grease 3. Total Aluminum, Iron, and Zinc
Treatment Influent	Monthly	Water	Laboratory Analytes 1. Target Compound List VOCs
Outfall	Monthly	Water	Laboratory Analytes 1. Target Compound List VOCs 2. Oil & Grease 3. Total Aluminum, Iron, and Zinc 4. TSS

Laboratory analysis is performed using USEPA Method 8260C or 8260D (TCL [Target Compound List] VOCs), USEPA Method 200.7 (Total Aluminum, Iron, and Zinc), USEPA Method 1664B (Oil & Grease), USEPA Method 2540D (TSS), and USEPA Method 1633 (PFAS). Samples were analyzed by Eurofins of Amherst, NY and Contest-Pace Analytical of East Longmeadow, MA.

As outlined in the OM&M Plan, semi-annual groundwater monitoring and sampling events were conducted from May 21 to 24, 2024 and October 21 to 23 and November 12, 2024. Samples were collected via low-flow methods utilizing dedicated tubing, a peristaltic pump, and field parameters were collected using a flow-thru cell and a water quality meter. Low-flow sample logs are included in **Appendix A**.

Spring 2024 Groundwater Sampling Summary

- VOCs in the shallow and deep zones are summarized below:
  - In the shallow zone, monitoring wells MW-2, MW-3, MW-4, MW-9R, MW-11R, MW-12, MW-13, and MW-14 had concentrations that exceeded NYSDEC TOGS 1.1.1 Class GA

AWQS, while monitoring wells MW-1, MW-5, MW-6, MW-7, MW-8, and MW-10 did not exceed standards.

  - In the deep zone, MW-4D and MW-5D concentrations were below NYSDEC TOGS 1.1.1 Class GA AWQS.

- PFAS in the shallow and deep zones are summarized below:
  - In the shallow zone, monitoring wells MW-2, MW-3, MW-6, MW-11R, and MW-14 had concentrations that exceeded the NYSDEC 2023 Addendum to TOGS 1.1.1 Class GA AWQS, while monitoring wells MW-1, MW-4 MW-5, MW-7, MW-8, MW-9R, MW-10, MW-12, and MW-13 did not exceed standards.
  - In the deep zone, MW-4D and MW-5D concentrations were below the NYSDEC 2023 Addendum to TOGS 1.1.1 Class GA AWQS.

Fall 2024 Groundwater Sampling Summary

- VOCs in the shallow and deep zones are summarized below:
  - In the shallow zone, all eight (8) monitoring well samples, MW-2, MW-3, MW-4, MW-9R, MW-11R, MW-12, MW-13, and MW-14 had concentrations that exceeded NYSDEC TOGS 1.1.1 Class GA AWQS.
  - No samples were collected from the deep zone during this sampling event.
- PFAS in the shallow and deep zones are summarized below:
  - In the shallow zone, monitoring well samples MW-2, MW-3, MW-4, MW-11R, MW-13, and MW-14 had concentrations that exceeded the NYSDEC 2023 Addendum to NYSDEC TOGS 1.1.1 Class GA AWQS while monitoring wells MW-9R and MW-12 did not exceed standards.
  - No samples were collected from the deep zone during this sampling event

Groundwater sampling activities conducted in 2024 indicate that current groundwater conditions do not meet the NYSDEC TOGS 1.1.1 Class GA AWQS and the NYSDEC 2023 Addendum to TOGS 1.1.1 Class GA AWQS in multiple monitoring wells.

Results of the 2024 monitoring activities are summarized in **Table 2** and **Table 3**. Figures showing groundwater contouring for the gauging events are included as **Figure 3** and **Figure 4**. Complete results, including quality assurance/ quality control (QA/QC) sample results, are provided in **Appendix B**. The results of this monitoring program are discussed at greater length in **Section 3**.

3 Remedy Performance, Effectiveness, and Protectiveness Evaluation

Operation, maintenance, and monitoring activities are conducted at the Site as part of the ongoing implementation of the OM&M Plan. These activities provide data to evaluate remedy performance, effectiveness, and protectiveness which are summarized below.

3.1 Site Inspections

The Site is inspected by GES personnel under the following schedule: twice weekly as part of the OM&M schedule, and the treatment system is inspected annually by a licensed Professional Engineer (P.E.) or the P.E.'s designee. The annual system inspection form is included as **Appendix C**. During the 2024 period, the annual treatment system inspection was completed on December 24, 2024.

The paved cap, namely the asphalt, is in poor condition and exhibiting cracking and vegetation growth. The remainder of the Site cover system is in good condition and operating as designed.

The Site fence and gate are in poor condition. There are several holes in the fence and several man gates that are unsecured. There was evidence of Site trespassing and vandalism in 2024, including:

- Overhead doors to the main Site building being left open;
- Door latch guard to GWS Treatment Building cut and door pried open;
- Metal spike planted in the ground that lead to injury to GES personnel;
- Graffiti; and
- Broken windows.

Due to the increased trespassing and vandalism activity, cameras were installed on the GWS Treatment Building. Additionally, Town of Carrol personnel installed barbed wire around two (2) man gates in the site fencing in 2024.

The stormceptor unit is inspected quarterly and was found to be free of any collected product. The groundwater monitoring points remained in good condition with well covers in place and secured.

3.2 Groundwater Quality Monitoring

As outlined in the OM&M Plan, semi-annual groundwater monitoring and sampling was conducted by GES on May 21 to 24, 2024 and October 21 to 23 and November 12, 2024. VOC, PFAS, and TSS data are presented in **Table 3** and laboratory analytical reports are included in **Appendix B.** No data validation was performed on the laboratory analytical data.

Groundwater monitoring results are summarized below:

Spring 2024 Groundwater Quality Results

Acetone had exceedances in the following monitoring well samples:

- MW-2 at 1,100 micrograms per liter (µg/L)
- MW-4 at 310 µg/L
- MW-14 at 58 µg/L

2-Butanone (MEK) had exceedances in the following monitoring well samples:

- MW-4 at 260 µg/L (and at 150 µg/L in the Field Duplicate)
- MW-12 at 96 µg/L
- MW-14 at 51 µg/L

1,1-Dichloroethylene had exceedances in the following monitoring well samples:

- MW-2 at 92 µg/L
- MW-9R at 12 µg/L

cis-1,2-Dichloroethene had exceedances in the following monitoring well samples:

- MW-2 at 37,000 µg/L
- MW-3 at 94 µg/L
- MW-4 at 420 µg/L (and at 400 µg/L in the Field Duplicate)
- MW-9R at 1,500 µg/L
- MW-11R at 120 µg/L
- MW-12 at 82 µg/L
- MW-13 at 1,700 µg/L
- MW-14 at 560 µg/L

trans-1,2-Dichloroethene had an exceedance in the following monitoring well sample:

- MW-9R at 16 µg/L
- MW-13 at 5.1 µg/L

Trichloroethene had exceedances in the following monitoring well samples:

- MW-3 at 690 µg/L
- MW-4 at 10,000 µg/L (and at 9,800 µg/L in the Field Duplicate)
- MW-9R at 1,200 µg/L
- MW-11R at 230 µg/L
- MW-12 at 4,600 µg/L
- MW-13 at 770 µg/L
- MW-14 at 2,600 µg/L

Vinyl Chloride had exceedances in the following monitoring well samples:

- MW-2 at 22,000 µg/L
- MW-9R at 130 µg/L
- MW-13 at 130 µg/L

Perfluorooctanoic acid (PFOA) had exceedances in the following monitoring well sample:

- MW-6 at 15 nanograms per liter (ng/L)

Perfluorooctanesulfonic acid (PFOS) had exceedances in the following monitoring well samples:

- MW-2 at 18 ng/L
- MW-3 at 3.7 ng/L
- MW-6 at 16 ng/L
- MW-11R at 4.2 ng/L
- MW-14 at 3.5 ng/L

In the deep interval, MW-4D and MW-5D sample locations did not exceed NYSDEC TOGS 1.1.1 or the NYSDEC 2023 Addendum to TOGS 1.1.1 Class GA AWQS.

Fall 2024 Groundwater Quality Results

1,1-Dichloroethylene had exceedances in the following monitoring well samples:

- MW-2 at 140 µg/L
- MW-9R at 9.2 µg/L

cis-1,2-Dichloroethene had exceedances in the following monitoring well samples:

- MW-2 at 53,000 µg/L (and at 53,000 µg/L in the Field Duplicate)
- MW-3 at 87 µg/L
- MW-4 at 950 µg/L
- MW-9R at 1,200 µg/L
- MW-11R at 2,000 µg/L
- MW-12 at 91 µg/L
- MW-13 at 2,000 µg/L
- MW-14 at 700 µg/L

trans-1,2-Dichloroethene had exceedances in the following monitoring well sample:

- MW-2 at 110 µg/L (and at 120 µg/L in the Field Duplicate)
- MW-9R at 24 µg/L
- MW-13 at 15 µg/L

Trichloroethene had exceedances in the following monitoring well samples:

- MW-2 at 400 µg/L in the Field Duplicate
- MW-3 at 430 µg/L
- MW-4 at 19,000 µg/L
- MW-9R at 470 µg/L

- MW-11R at 7,100 µg/L
- MW-12 at 4,700 µg/L
- MW-13 at 6,700 µg/L
- MW-14 at 2,200 µg/L

Vinyl Chloride had exceedances in the following monitoring well samples:

- MW-2 at 31,000 µg/L (and at 27,000 µg/L in the Field Duplicate)
- MW-9R at 270 µg/L
- MW-13 at 110 µg/L

PFOS had exceedances in the following monitoring well samples:

- MW-2 at 23 ng/L (and at 23 ng/L in the Field Duplicate)
- MW-3 at 4.3 ng/L
- MW-4 at 3.3 ng/L
- MW-11R at 3.8 ng/L
- MW-13 at 3.3 ng/L
- MW-14 at 4.2 ng/L

The deep interval wells, MW-4D and MW-5D, were not sampled during the fall 2024 event.

2024 Groundwater Level Monitoring

Groundwater level monitoring was performed semi-annually concurrently with groundwater sampling. In addition to the water level measurements, the thickness of light non-aqueous phase liquid (LNAPL), if present, was measured and recorded. No LNAPL was detected during the 2024 monitoring activities. An oil/water interface probe was used to measure depth to product (DTP) and DTW levels with an accuracy of approximately ±0.01 feet. Groundwater gauging and elevation data is presented in **Table 2**.

Groundwater contour maps were developed based on the Spring (May) 2024 (**Figure 3**) and Fall (October) 2024 (**Figure 4**) water level data.

The Spring (May) 2024 gauging event was performed while the system was fully operational, and the Fall (October) 2024 gauging event was performed while the system was partially operational; the extraction wells were offline but the sewer bedding pump was operational. The gauging data shows that the natural groundwater flow direction is to the north and towards the barrier wall and the extraction wells during normal system operation.

Monitoring of the wells will continue to be conducted on a semi-annual basis to continue to evaluate contamination levels and groundwater flow conditions.

3.3 Remedial System Summary

A TPE skid and control panel, built by Newterra of Brockville, Ontario, were plumbed and installed between February 22, 2019, and March 13, 2019, by GES staff. The TPE skid consists of a 140-gallon VLS, a high efficiency vacuum pump, inlet vacuum filters, pulse meter (skid totalizer), and transfer pump. The TPE system is capable of continuous vacuum at 24 inches of mercury (”Hg). This vacuum is tied into 18 extraction wells located across the Site, allowing for increased groundwater extraction and treatment. Results show an increase in the water table depression across the Site during system operation.

Groundwater is pulled from the 18 extraction wells to the water treatment building. It enters the 140-gallon VLS where larger solids can settle out before a float system triggers the transfer pump. The groundwater is then pumped through two (2) 50-micron bag filters, where smaller sediments are removed. From the bag filters, the water then moves to an air stripper before discharge. In 2020, GES bypassed the OWS allowing water to be sent directly to the air stripper for treatment.

Groundwater is also pumped by the sewer bedding sump which collects water migrating along the 28-inch HDPE storm sewer bedding material. The sewer bedding pump vault is equipped with a submersible pump which directs water into the treatment system. The sewer bedding pump water bypasses the bag filters and enters the treatment train prior to the air stripper.

From December 29, 2023, through July 19, 2024, the system treated 4,291,101 gallons of groundwater with an average flow rate of approximately 15.8 gpm (gallons per minute) during this time period.

On July 19, 2024, the TPE blower was observed making strange noises. It was shut down and taken to a vendor for a maintenance evaluation. It was recommended that the blower undergo remanufacturing and rebuilding.

From July 19, 2024, through December 31, 2024, the system only treated water from the sewer bedding pump, not the extraction wells due to the broken TPE blower. During this period, the system treated 517,430 gallons of groundwater with an average flow rate of approximately 2.2 gpm.

The system up-time for 2024 period (indicating when the air stripper was treating water from the extraction wells and/or sewer bedding pump) was approximately 96.39%, which takes system downtime into account due to standard system maintenance, repairs, and upgrades.

System operational data for the reporting period including hour meters and totalizer readings is included in **Table 4**.

2024 System Water Quality Results

System effluent samples are collected monthly for USEPA Method 8260C/8260D (TCL VOCs), USEPA Method 200.7 (Total Aluminum, Iron, and Zinc), and USEPA Method 1664B (Oil & Grease) analysis. **Table 5** presents a summary of the monthly effluent results for 2024 compared to the NYSDEC Effluent Limits provided in the 2015 OM&M Manual. **Table 6** presents a summary of monthly treatment system influent and effluent VOC analytical data. Samples were not collected for the months of January and February due to the NYSDEC lab contract expiring.

System effluent water VOC concentration results were below effluent limits (10.0 µg/L) in 2024 apart from April (10.6 µg/L). Subsequent sampling results showed VOC concentrations were below effluent limits for the remainder of the year. System effluent water iron concentrations were higher than the effluent limit (2.0 milligrams per liter [mg/L]) during seven (7) of the 10 months where analysis was completed in 2024; however, the effluent iron concentrations observed are consistent with the range of effluent iron concentrations observed during monthly sampling since 2019. Iron in groundwater may precipitate out in the system piping and the air stripper trays and suspended iron may be removed by the bag filters; however, the system treatment train is not designed to specifically remove iron from recovered groundwater. The effluent water will continue to be sampled and monitored for exceedances of the effluent limits. See **Table 5** for monthly effluent analytical results.

3.4 Outfall Monitoring

Stormwater recovered at the site is funneled through an in-ground oil water separator which discharges through Outfall 001 into Conewango Creek. Samples of water from Outfall 001 are collected monthly for USEPA Method 8260C/8260D (TCL VOCs), USEPA Method 200.7 (Total Aluminum, Iron, and Zinc), USEPA Method 1664B (Oil & Grease), and USEPA Method 2540D (TSS) analysis. **Table 7** presents a monthly summary of outfall analytical data. Samples were not collected for the months of January and February due to the NYSDEC lab contract expiring. Sampling in 2024 indicated that no VOCs were detected in the outfall samples.

3.5 Remedial Evaluation

Although the Site remedies and ECs are still in place and functional, an evaluation of the Site 2024 groundwater sampling results reveals the following items of note:

1. The highest groundwater VOC concentrations in the Site monitoring well network are present at monitoring well MW-2, which is located downgradient of the slurry wall barrier system, between the barrier and Conewango Creek. However, a drum field is believed to be present to the north of MW-2, outside the existing slurry wall adjacent up to where MW-2 is located. Due to the presence of the drum field adjacent to monitoring well MW-2, the source of the VOC impacts at MW-2 is not defined. Further testing must be conducted to identify the source of VOC impacts at MW-2 to evaluate plans for remediation.
    - Operation of the groundwater treatment system in conjunction with the barrier wall is not eliminating all groundwater VOC impacts downgradient of the barrier system (in the vicinity of monitoring well MW-2).
    - Monitoring well MW-2 concentrations are indicating a slightly increasing trend since 2020, specifically related to concentrations of cis-1,2-dichloroethylene.
    - Modification of the Site ECs to address groundwater impacts at monitoring well MW-2 should be evaluated.
        - Because VOC concentrations at MW-2 have not been affected by the upgraded TPE system, it is recommended test pits be dug on the downgradient

side of MW-2 where the drum field is located to evaluate the extent of the source area contributing to groundwater concentrations observed at MW-2. This evaluation should be utilized to develop a remedial plan for the area surrounding monitoring well MW-2, downgradient of the current barrier system.
    - Due to the location of the drum field in relation to Conewango Creek, measures must be taken to ensure that disturbing the drum field will not send potential impacts into the creek.

2. Elevated groundwater VOC concentrations are observed at monitoring wells MW-3, MW-13, and MW-14, located to the west of the end of the slurry wall and adjacent to and downgradient of the groundwater recovery system extraction wells, respectively.
    - Trichloroethene concentrations at monitoring wells MW-3, MW-13, and MW-14 appear to have an increasing trend since 2020; therefore, operation of the TPE system at the Site in 2024 is not adequately capturing dissolved-phase VOCs from migrating past the line of extraction wells located to the west of the barrier wall.
    - Continued groundwater monitoring in 2025 is recommended to continue recovering VOC-impacted water in the vicinity of monitoring wells MW-3, MW-13, and MW-14. However, alternate remedial solutions to address groundwater and potentially soil VOCs in the vicinity of monitoring wells MW-3, MW-13, and MW-14 is being evaluated.
3. Elevated groundwater VOC concentrations are still observed at off-Site monitoring well MW-12, located west of Falconer Street from monitoring well MW-13.
    - Therefore, the Site ECs are not preventing migration of impacted groundwater off-Site to the west. There is likely a component of groundwater flow at the Site which extends northwest instead of directly north. Therefore, all impacted groundwater from the Site is not captured by the existing groundwater recovery system.
    - Expansion of the Site groundwater recovery system or implementation of an alternate remedial solution along the Site's northwestern property boundary (between approximately monitoring well MW-13 and MW-4) should be evaluated to mitigate additional off-Site migration of the dissolved-phase plume.

4 Institutional Control/Engineering Control Compliance Report

The Keywell LLC Vac-Air Division Site remedies involve the use of both ICs and ECs, which include the following:

- ICs
    - Land Use Restriction
    - Groundwater Use Restriction
    - Long-term OM&M Plan
- ECs
    - Groundwater treatment system
    - Barrier wall

- Stormwater control with sediment catch basins
- Paved cap
- Subsurface barriers
- Fencing/Access control

Based on review of project documentation and Site inspections, each of the ICs and ECs at the Site are fully in place and have not been significantly modified by any Site work since GES took over OM&M activities in February 2016, with the exception of the groundwater treatment system process equipment and paved cap. The changes to the system can be found in Sections 1.2 and 1.3. Repairs to the asphalt cover where there are large cracks and vegetation growing through the asphalt is recommended.

5 Summary, Conclusions, and Recommendations

5.1 Compliance with OM&M Plan

The controlling document for the Site is the approved *Post Remediation OM&M Plan* (prepared by Benchmark Environmental Engineering & Science, PLLC, dated May 2011, revised April 2015); however, this document is dated and should be updated as a Site Management Plan (SMP). GES and Ramboll are in the process of producing an SMP for the site. The requirements of the OM&M Plan have been met during the reporting period of this PRR.

5.2 Performance and Effectiveness of the Remedies

- The system was fully operational from December 29, 2023, through July 19, 2024. The system treated 4,291,101 gallons of groundwater with an average flow rate of approximately 15.8 gpm during this period.
- The system was partially down due to a broken TPE Blower from July 19, 2024, through December 31, 2024 (the TPE blower which recovers groundwater from the extraction wells was offline). The system treated 517,430 gallons of groundwater from the sewer bedding pump only with an average flow rate of approximately 2.2 gpm during this period.
- The groundwater treatment system uptime was 96.39% for the 2024 reporting period (operating either from the groundwater extraction wells and/or the sewer bedding pump). In comparison, the 2023 uptime was 94.23%. Uptime in 2024 was affected by system shut down related downtime for system maintenance and cleaning.
    - Site groundwater concentration trends in 2025 should continue to be evaluated to determine if reductions in the groundwater VOC concentrations at monitoring wells MW-2, MW-3, MW-12, MW-13, and MW-14 are observed following operation of the enhanced groundwater treatment system.
- The upgrades to all 18 extraction wells in 2019 have allowed GES to gauge the system while it is operating, allowing for measurement of groundwater table depression during

system operation at each extraction well. Gauging events in 2024 have shown DTW ranging from 3.30 feet bgs to 17.05 feet bgs across all 18 extraction wells during system operation.

  - Site wide groundwater level measurements in Spring 2024 were measured while the system was fully operational and in Fall 2024 when the system was partially operational (extraction wells were offline). In **Figure 3** and **Figure 4**, groundwater contours show that the natural groundwater flow direction is to the north, towards the barrier wall and the extraction wells during normal system operation. Site-wide gauging events will continue to be conducted during 2025 while the system is operating normally to determine the effectiveness of groundwater depression.
  - Increased pumping rates from the extraction wells in 2025 after development of the extraction wells may increase the groundwater depression zone upgradient of the barrier wall, potentially increasing mitigation of the Site dissolved-phase VOC; therefore, preventing migration towards Conewango Creek.

- The work recommended in Section 5.3 and Section 5.4 is expected to increase system efficiency and uptime.
- VOC concentrations remain elevated at monitoring wells MW-12 (to the west of Falconer Street in the direction of Municipal Supply Well 2A), MW-3, MW-13, and MW-14 (located downgradient of the barrier wall and extraction system wells in the northwest of the Site), and at monitoring well MW-2 located upgradient of the Site remedial measures between the barrier wall and Conewango Creek.
  - Therefore, the system ECs of the barrier wall and groundwater extraction system are not adequately mitigating off-Site migration of impacted groundwater.
  - Additional contaminant plumes may exist outside the barrier wall and could account for the levels of VOCs in upgradient wells. Test pitting should be conducted outside the barrier wall, in a recently discovered drum field, to determine if contamination is present.
  - An evaluation of additional remedial measures to address these groundwater impacts should be completed after an additional year of TPE system operation.

5.3 Upcoming work

GES will conduct additional repairs and improvements in 2025. This work has already been scheduled or is in the process of being scheduled and will take place throughout 2025.

  - Well Development – Development of eighteen (18) extraction wells to remove sediment and bacteria growth to increase groundwater extraction efficiency.
  - Air Stripper Motor Replacement – Replacement of the air stripper motor in February 2025.
  - TPE Blower Rebuild – The TPE Blower was found to be emitting strange noises, and it was determined that the blower needed to undergo a remanufacturing and

rebuild. The blower will be reinstalled in 2025, once factory refurbishing is completed.

5.4 Recommendations

To increase the groundwater treatment system effectiveness, further understand the extent and distribution of on-Site contaminants, and evaluate alternate remedial options to address various areas of Site impacts, GES recommends completion of the activities and evaluations detailed below.

- Repairs & Upgrades:
    - Air stripper effectiveness evaluation – Water discharge VOC exceedances continued to occur in 2024. System analytical results for 2024 are presented in **Table 5** and **Table 6**. Effluent exceedances were observed in April 2024. Analytical data will continue to be tracked monthly throughout 2025 to determine if the trend continues. However, installation of the VFD on the VLS transfer pump has resulted in some increase in VOC treatment efficiency through the air stripper.
    - OWS Removal – The OWS was bypassed and cleaned in 2020. The system has been monitored for the presence of product and system water analytical data for any changes related to the removal of the OWS with no changes observed. It is recommended that the OWS be removed from the system.
    - Paved Cap – The paved cap was found to be cracked with vegetation growing through the cracks. The paved cap will continue to be monitored. If the NYSDEC determines that cracks in the paved cap are an unacceptable detriment to the EC at the vacant Site, the vegetation should be removed and the cracks sealed.
- Additional Remediation Evaluation:
    - Remedial option evaluations: northwest portion of the Site – In order to address groundwater VOC impacts at monitoring wells MW-3, MW-13, and MW-14 (located adjacent to and downgradient of the system extraction wells in the northwest corner of the Site) and to address off-Site VOC impacts observed at monitoring well MW-12, evaluation of the current system to mitigate this migration and/or evaluation of alternate remedial options should be completed.
    - Investigation: In order to assess the source area location and extent around monitoring well MW-2, an investigation should be completed in this area downgradient of the existing barrier wall and groundwater extraction barrier. Results of this investigation could be utilized to complete a remedial option evaluation for the area around monitoring well MW-2.

Figures



Source:
USGS 7.5 Minute Series
Topographic Quadrangle, 1979
Jamestown, New York
Contour Interval = 10'



Site Location Map

NYSDEC
Vac-Air Alloys Site #907016
300 Falconer Street
Frewsburg, New York

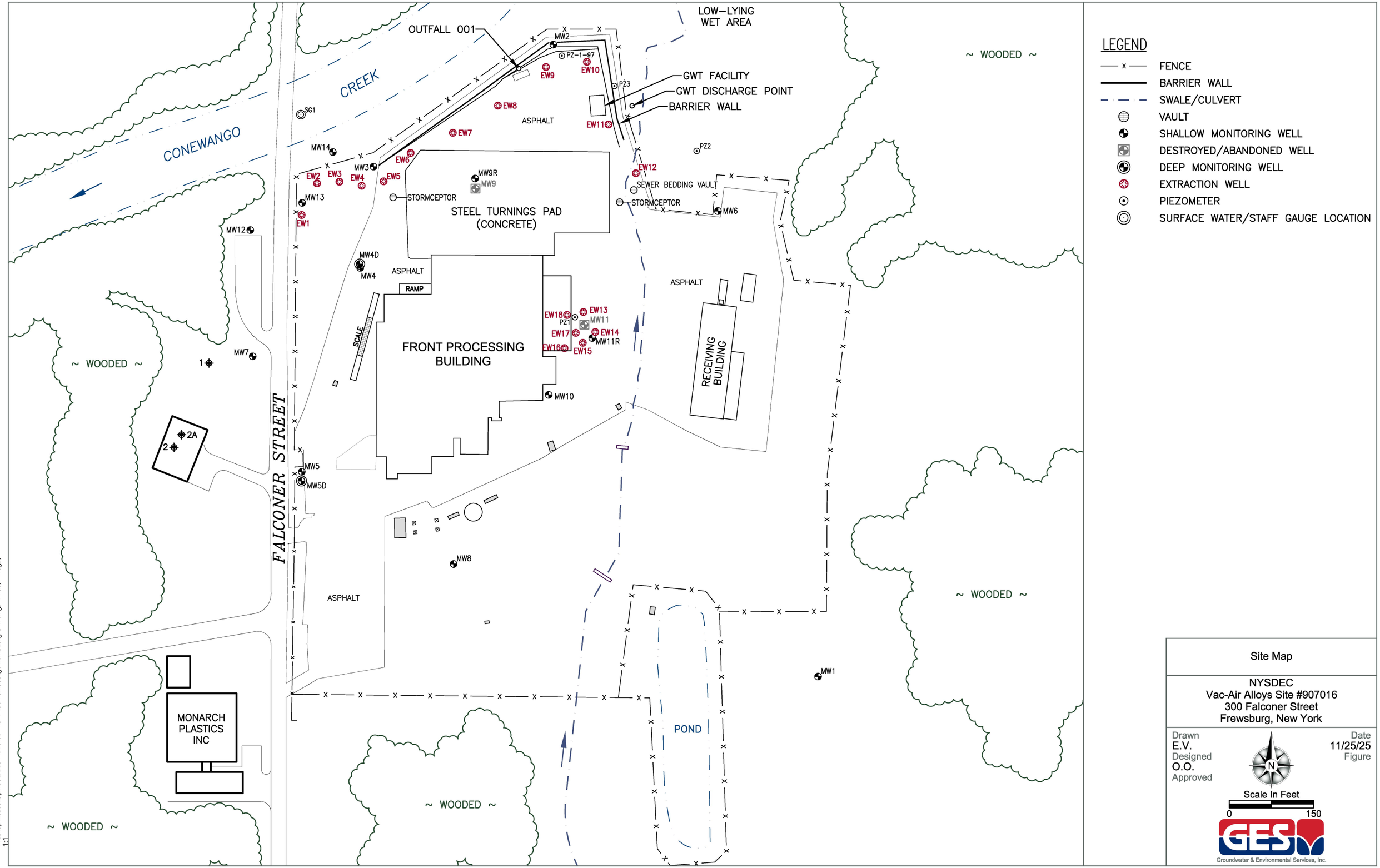
Drawn W.G.S.
Designed
Approved
Date 2/6/19
Figure 1

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Scale In Feet
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GES
Groundwater & Environmental Services, Inc.

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LEGEND

- FENCE
- BARRIER WALL
- SWALE/CULVERT
- VAULT
- SHALLOW MONITORING WELL
- DESTROYED/ABANDONED WELL
- DEEP MONITORING WELL
- EXTRACTION WELL
- PIEZOMETER
- SURFACE WATER/STAFF GAUGE LOCATION

Site Map

NYSDEC
Vac-Air Alloys Site #907016
300 Falconer Street
Frewsburg, New York

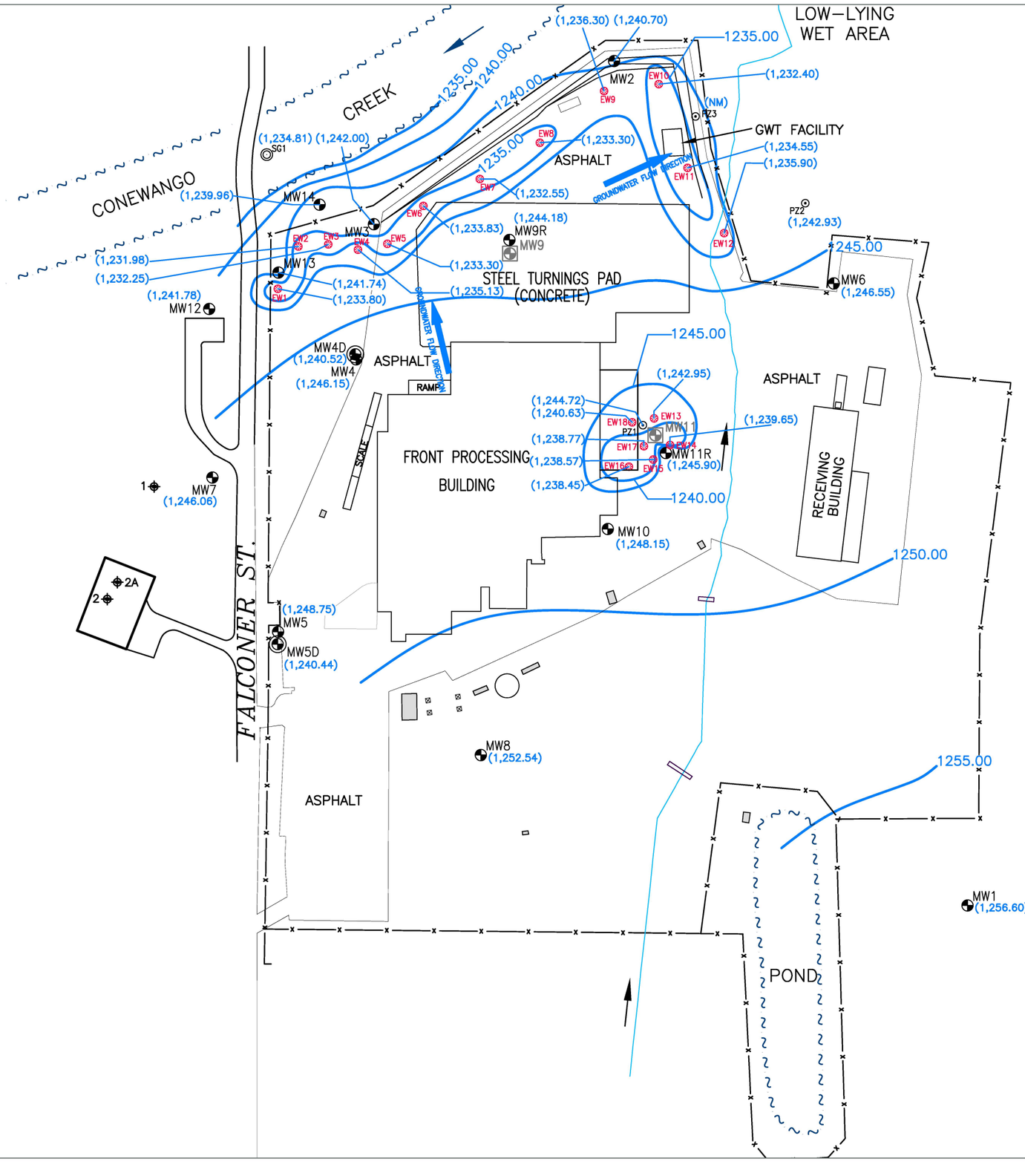
Drawn
E.V.
Designed
O.O.
Approved

Date
11/25/25
Figure

Scale In Feet
0 150

Groundwater & Environmental Services, Inc.

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LEGEND

- FENCE
- BARRIER WALL
- SWALE/CULVERT
- SHALLOW MONITORING WELL
- DESTROYED/ABANDONED WELL
- DEEP MONITORING WELL
- EXTRACTION WELL
- PIEZOMETER
- SURFACE WATER/STAFF GAUGE LOCATION
- (1,233.80) GROUNDWATER ELEVATION (feet)
- GROUNDWATER CONTOUR (feet) DASHED WHERE INFERRED
- NM NOT MEASURED

NOTE:

MW4D AND MW5D ELEVATIONS ARE EXCLUDED FROM GROUNDWATER CONTOURS.

Groundwater Contour Map
May 20, 2024

NYSDEC
Vac-Air Alloys Site #907016
300 Falconer Street
Frewsburg, New York

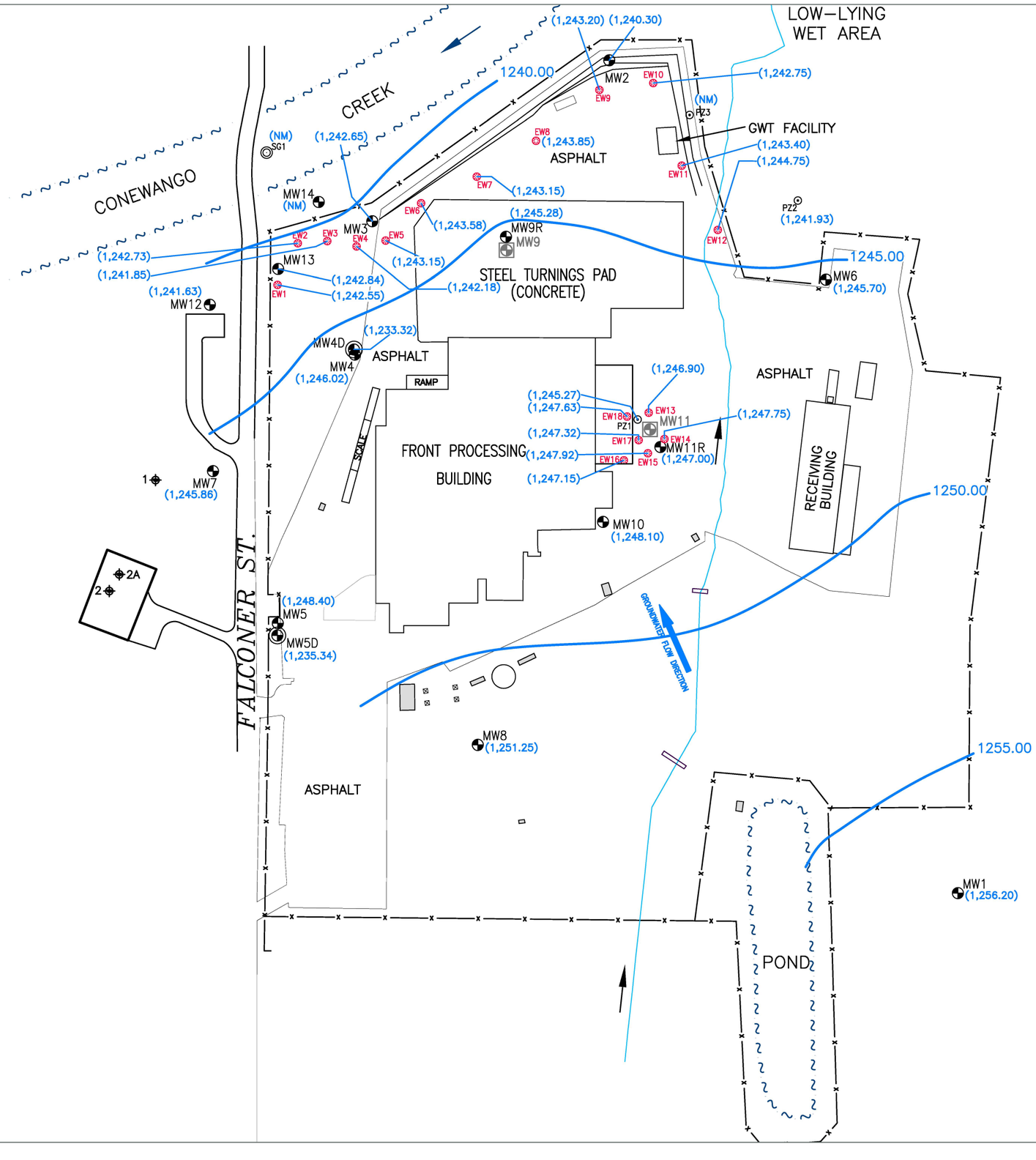
Drawn M.H.
Designed O.O.
Approved

Date 08/14/25
Figure 3

Scale In Feet
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Groundwater & Environmental Services, Inc.

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LEGEND

- FENCE
- BARRIER WALL
- SWALE/CULVERT
- SHALLOW MONITORING WELL
- DESTROYED/ABANDONED WELL
- DEEP MONITORING WELL
- EXTRACTION WELL
- PIEZOMETER
- SURFACE WATER/STAFF GAUGE LOCATION
- (1,242.55) GROUNDWATER ELEVATION (feet)
- GROUNDWATER CONTOUR (feet) DASHED WHERE INFERRED
- NM NOT MEASURED

NOTE:

MW4D AND MW5D ELEVATIONS ARE EXCLUDED FROM GROUNDWATER CONTOURS.

Groundwater Contour Map
October 22, 2024

NYSDEC
Vac-Air Alloys Site #907016
300 Falconer Street
Frewsburg, New York

Drawn M.H.
Designed O.O.
Approved

Date 08/14/25
Figure 4

Scale In Feet
0 150

Groundwater & Environmental Services, Inc.

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Tables

Table 1

Extraction Well Construction Details

Extraction Well No.	Ground Elevation	Top of Clay Elevation	Bottom of Screen Elevation	Discharge Invert Elevation
EW-1	1246.00	1229.77	1230.02	1241.80
EW-2	1246.48	1228.43	1228.68	1241.50
EW-3	1247.85	1229.85	1230.10	1242.50
EW-4	1248.93	1230.93	1231.18	1244.27
EW-5	1249.35	1227.10	1227.35	1244.31
EW-6	1249.93	1225.93	1226.18	1244.47
EW-7	1249.60	1227.60	1227.85	1244.63
EW-8	1249.10	1231.60	1231.85	1244.82
EW-9	1250.10	1231.93	1232.18	1244.93
EW-10	1249.10	1230.68	1230.93	1245.07
EW-11	1249.35	1232.10	1232.35	1245.17
EW-12	1251.00	1229.77	1230.02	1244.95
EW-13	1251.60	1231.60	1231.85	1244.38
EW-14	1251.35	1233.35	1233.60	1244.34
EW-15	1251.27	1233.27	1233.52	1246.72
EW-16	1251.00	1231.27	1231.52	1246.75
EW-17	1251.27	1231.27	1231.52	1246.54
EW-18	1250.93	1226.93	1227.18	1246.71

Table 2

Groundwater Gauging Data

Well ID	Top of Casing Elevation (ft amsl)	Well Diameter (inches)	Depth to Water (ft btoc)		Groundwater Elevation (ft amsl)	
		Date:	5/20/2024	10/22/2024 [1]	5/20/2024	10/22/2024 [1]
		System Status:	On	Off	On	Off
EW-1	1,246.00	4	12.20	3.45	1,233.80	1,242.55
EW-2	1,246.48	4	14.50	3.75	1,231.98	1,242.73
EW-3	1,247.85	4	15.60	6.00	1,232.25	1,241.85
EW-4	1,248.93	4	13.80	6.75	1,235.13	1,242.18
EW-5	1,249.35	4	16.05	6.20	1,233.30	1,243.15
EW-6	1,249.93	4	16.10	6.35	1,233.83	1,243.58
EW-7	1,249.60	4	17.05	6.45	1,232.55	1,243.15
EW-8	1,249.10	4	15.80	5.25	1,233.30	1,243.85
EW-9	1,250.10	4	13.80	6.90	1,236.30	1,243.20
EW-10	1,249.10	4	16.70	6.35	1,232.40	1,242.75
EW-11	1,249.35	4	14.80	5.95	1,234.55	1,243.40
EW-12	1,251.00	4	15.10	6.25	1,235.90	1,244.75
EW-13	1,251.60	4	8.65	4.70	1,242.95	1,246.90
EW-14	1,251.35	4	11.70	3.60	1,239.65	1,247.75
EW-15	1,251.27	4	12.70	3.35	1,238.57	1,247.92
EW-16	1,251.00	4	12.55	3.85	1,238.45	1,247.15
EW-17	1,251.27	4	12.50	3.95	1,238.77	1,247.32
EW-18	1,250.93	4	10.30	3.30	1,240.63	1,247.63
MW-1	1,260.60	2	4.00	4.40	1,256.60	1,256.20
MW-2	1,251.60	2	10.90	11.30	1,240.70	1,240.30
MW-3	1,252.30	2	10.30	9.65	1,242.00	1,242.65
MW-4	1,250.10	2	3.95	4.08	1,246.15	1,246.02
MW-4D	1,249.37	2	8.85	16.05	1,240.52	1,233.32
MW-5	1,256.50	2	7.75	8.10	1,248.75	1,248.40
MW-5D	1,255.14	2	14.70	19.80	1,240.44	1,235.34
MW-6	1,253.70	2	7.15	8.00	1,246.55	1,245.70
MW-7	1,253.76	2	7.70	7.90	1,246.06	1,245.86
MW-8	1,256.65	2	4.11	5.40	1,252.54	1,251.25
MW-9R	1,249.88	2	5.70	4.60	1,244.18	1,245.28
MW-10	1,253.50	2	5.35	5.40	1,248.15	1,248.10
MW-11R	1,250.80	2	4.90	3.80	1,245.90	1,247.00
MW-12	1,243.08	2	1.30	1.45	1,241.78	1,241.63
MW-13	1,246.04	2	4.30	3.20	1,241.74	1,242.84
MW-14	1,247.46	2	7.50	7.61 [2]	1,239.96	1,239.85
PZ-1	1,250.22	2	5.50	4.95	1,244.72	1,245.27
PZ-2	1,247.43	2	4.50	5.50	1,242.93	1,241.93
PZ-3	1,250.82	2	Unable To Locate			
SG-1	1,253.91	2	19.10	NM	1,234.81	NM

Note:

ft btoc - feet below top of casing NM - Not measured

ft amsl - feet above mean sea level NA - Not applicable

* Extraction wells (EW-#) were previously surveyed at ground elevation, no data top of casing

[1] The groundwater extraction system was not operating on October 22, 2024 due to the total-phase extraction blower being offsite for evaluation.

[2] Monitoring well MW-14 was inaccessible on October 22, 2024; therefore, depth to water is reported from groundwater sampling on November 12, 2024.

Table 3
Groundwater Analytical Data
April and October/November 2024

Chemical Name	NYSDEC TOGS 1.1.1 GWQS	Well ID	MW-1	MW-2			MW-3		MW-4			MW-4D	MW-5	MW-5D	MW-6	MW-7	MW-8	MW-9R		MW-10
		Sample Date	5/24/24	5/22/24	10/21/24	10/21/24	5/23/24	10/22/24	5/21/24	5/21/24	10/22/24	5/21/24	5/21/24	5/21/24	5/22/24	5/24/24	5/23/24	5/23/24	10/21/24	5/22/24
		Depth to Water (ft btoc)	4.00	11.90	11.30	DUP	10.30	9.65	3.95	DUP	4.08	8.85	7.80	15.30	7.20	7.70	4.50	5.70	4.60	5.40
Volatile Organic Compounds (VOCs)		**Units**																		
Acetone	50	µg/L	ND <2.0 V-05	**1,100 V-05, J**	***ND <1000***	***ND <1000***	ND <20 V-05	ND <10	**310 V-05, J**	***ND <200 V-05***	***ND <410***	ND <2.0 V-05	ND <2.0 V-05	ND <2.0 V-05	ND <2.0 V-05	ND <2.0 V-05	ND <2.0 V-05	47 V-05, J	ND <41	ND <2.0 V-05
Benzene	1	µg/L	ND <0.14	***ND <57***	***ND <72***	***ND <72***	ND <1.4	ND <0.72	***ND <14***	***ND <14***	***ND <29***	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <0.14	***ND <2.9***	***ND <2.9***	ND <0.14
Bromochloromethane	5	µg/L	ND <0.32	***ND <130***	***ND <160***	***ND <160***	ND <3.2	ND <1.6	***ND <32***	***ND <32***	***ND <64***	ND <0.32	ND <0.32	ND <0.32	ND <0.32	ND <0.32	ND <0.32	***ND <6.4***	***ND <6.4***	ND <0.32
Bromodichloromethane	50	µg/L	ND <0.19	***ND <74***	***ND <93***	***ND <93***	ND <1.9	ND <0.93	ND <19	ND <19	ND <37	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <3.7	ND <3.7	ND <0.19
Bromoform	50	µg/L	ND <0.30	***ND <120***	***ND <150***	***ND <150***	ND <3.0	ND <1.5	ND <30	ND <30	***ND <60***	ND <0.30	ND <0.30	ND <0.30	ND <0.30	ND <0.30	ND <0.30	ND <6.0	ND <6.0	ND <0.30
Bromomethane	5	µg/L	ND <1.5	***ND <590***	***ND <740***	***ND <740***	***ND <15***	***ND <7.4***	***ND <150***	***ND <150***	***ND <300***	ND <1.5	ND <1.5	ND <1.5	ND <1.5	ND <1.5	ND <1.5	***ND <30***	***ND <30***	ND <1.5
2-Butanone (MEK)	50	µg/L	ND <1.4	***ND <570***	***ND <710***	***ND <710***	ND <14	ND <7.1	**260 J**	**150 J**	***ND <280***	ND <1.4	ND <1.4	ND <1.4	ND <1.4	ND <1.4	ND <1.4	43 J	ND <28	ND <1.4
n-Butylbenzene	5	µg/L	ND <0.16	***ND <62***	***ND <78***	***ND <78***	ND <1.6	ND <0.78	***ND <16***	***ND <16***	***ND <31***	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <3.1	ND <3.1	ND <0.16
sec-Butylbenzene	5	µg/L	ND <0.16	***ND <65***	***ND <82***	***ND <82***	ND <1.6	ND <0.82	***ND <16***	***ND <16***	***ND <33***	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <3.3	ND <3.3	ND <0.16
tert-Butylbenzene	5	µg/L	ND <0.17	***ND <66***	***ND <83***	***ND <83***	ND <1.7	ND <0.83	***ND <17***	***ND <17***	***ND <33***	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <3.3	ND <3.3	ND <0.17
Carbon Disulfide	60	µg/L	ND <1.5	***ND <610***	***ND <760***	***ND <760***	ND <15	ND <7.6	***ND <150***	***ND <150***	***ND <310***	ND <1.5	ND <1.5	ND <1.5	ND <1.5	ND <1.5	ND <1.5	ND <31	ND <31	ND <1.5
Carbon Tetrachloride	5	µg/L	ND <0.19	***ND <78***	***ND <97***	***ND <97***	ND <1.9	ND <0.97	***ND <19***	***ND <19***	***ND <39***	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <3.9	ND <3.9	ND <0.19
Chlorobenzene	5	µg/L	ND <0.18	***ND <71***	***ND <89***	***ND <89***	ND <1.8	ND <0.89	***ND <18***	***ND <18***	***ND <35***	ND <0.18	ND <0.18	ND <0.18	ND <0.18	ND <0.18	ND <0.18	ND <3.5	ND <3.5	ND <0.18
Chlorodibromomethane	50	µg/L	ND <0.13	***ND <51***	***ND <64***	***ND <64***	ND <1.3	ND <0.64	ND <13	ND <13	ND <26	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <2.6	ND <2.6	ND <0.13
Chloroethane	5	µg/L	ND <0.46	***ND <180***	***ND <230***	***ND <230***	ND <4.6	ND <2.3	***ND <46***	***ND <46***	***ND <92***	ND <0.46	ND <0.46	ND <0.46	ND <0.46	ND <0.46	ND <0.46	ND <9.2	ND <9.2	ND <0.46
Chloroform	7	µg/L	ND <0.19	***ND <76***	***ND <95***	***ND <95***	ND <1.9	ND <0.95	***ND <19***	***ND <19***	***ND <38***	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <3.8	ND <3.8	ND <0.19
Chloromethane	5	µg/L	ND <0.50	***ND <200***	***ND <250***	***ND <250***	ND <5.0	ND <2.5	***ND <50***	***ND <50***	***ND <99***	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	***ND <9.9***	***ND <9.9***	ND <0.50
Cyclohexane	NS	µg/L	ND <1.8	ND <710	ND <880	ND <880	ND <18	ND <8.8	ND <180	ND <180	ND <350	ND <1.8	ND <1.8	ND <1.8	ND <1.8	ND <1.8	ND <1.8	ND <35	ND <35	ND <1.8
1,2-Dibromo-3-chloropropane (DBCP)	0.04	µg/L	***ND <0.63***	***ND <250***	***ND <310 V-05***	***ND <310 V-05***	***ND <6.3***	***ND <3.1 V-05***	***ND <63***	***ND <63***	***ND <130 V-05***	***ND <0.63***	***ND <0.63***	***ND <0.63***	***ND <0.63***	***ND <0.63***	***ND <0.63***	***ND <13***	***ND <13 V-05***	***ND <0.63***
1,2-Dibromoethane (EDB)	0.0006	µg/L	***ND <0.13***	***ND <50***	***ND <63***	***ND <63***	***ND <1.3***	***ND <0.63***	***ND <13***	***ND <13***	***ND <25***	***ND <0.13***	***ND <0.13***	***ND <0.13***	***ND <0.13***	***ND <0.13***	***ND <0.13***	***ND <2.5***	***ND <2.5***	***ND <0.13***
1,2-Dichlorobenzene	3	µg/L	ND <0.17	***ND <70***	***ND <87***	***ND <87***	ND <1.7	ND <0.87	***ND <17***	***ND <17***	***ND <35***	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	***ND <3.5***	***ND <3.5***	ND <0.17
1,3-Dichlorobenzene	3	µg/L	ND <0.15	***ND <62***	***ND <77***	***ND <77***	ND <1.5	ND <0.77	***ND <15***	***ND <15***	***ND <31***	ND <0.15	ND <0.15	ND <0.15	ND <0.15	ND <0.15	ND <0.15	***ND <3.1***	***ND <3.1***	ND <0.15
1,4-Dichlorobenzene	3	µg/L	ND <0.17	***ND <67***	***ND <84***	***ND <84***	ND <1.7	ND <0.84	***ND <17***	***ND <17***	***ND <33***	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	***ND <3.3***	***ND <3.3***	ND <0.17
Dichlorodifluoromethane (Freon 12)	5	µg/L	ND <0.20	***ND <80***	***ND <100***	***ND <100***	ND <2.0	ND <1.0	***ND <20***	***ND <20***	***ND <40***	ND <0.20	ND <0.20	ND <0.20	ND <0.20	ND <0.20	ND <0.20	ND <4.0	ND <4.0	ND <0.20
1,1-Dichloroethane	5	µg/L	ND <0.15	***ND <60***	***ND <75***	***ND <75***	ND <1.5	ND <0.75	***ND <15***	***ND <15***	***ND <30***	ND <0.15	ND <0.15	ND <0.15	ND <0.15	ND <0.15	ND <0.15	ND <3.0	ND <3.0	ND <0.15
1,2-Dichloroethane	0.6	µg/L	ND <0.13	***ND <51***	***ND <63***	***ND <63***	***ND <1.3***	***ND <0.63***	***ND <13***	***ND <13***	***ND <25***	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <0.13	***ND <2.5***	***ND <2.5***	ND <0.13
1,1-Dichloroethylene	5	µg/L	ND <0.18	**92 J**	**140 J**	***ND <90***	ND <1.8	ND <0.90	***ND <18***	***ND <18***	***ND <36***	ND <0.18	ND <0.18	ND <0.18	ND <0.18	ND <0.18	ND <0.18	**12 J**	**9.2 J**	ND <0.18
cis-1,2-Dichloroethylene	5	µg/L	ND <0.20	**37,000**	**53,000**	**53,000**	**94**	**87**	**420**	**400**	**950**	ND <0.20	ND <0.20	ND <0.20	ND <0.20	ND <0.20	ND <0.20	**1,500**	**1,200**	ND <0.20
trans-1,2-Dichloroethylene	5	µg/L	ND <0.16	***ND <62***	**110 J**	**120 J**	ND <1.6	1.3 J	***ND <16***	***ND <16***	***ND <31***	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	**16 J**	**24**	ND <0.16
1,2-Dichloropropane	1	µg/L	ND <0.17	***ND <68***	***ND <85***	***ND <85***	***ND <1.7***	ND <0.85	***ND <17***	***ND <17***	***ND <34***	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	***ND <3.4***	***ND <3.4***	ND <0.17
cis-1,3-Dichloropropene	0.4	µg/L	ND <0.13	***ND <51***	***ND <64***	***ND <64***	***ND <1.3***	***ND <0.64***	***ND <13***	***ND <13***	***ND <26***	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <0.13	***ND <2.6***	***ND <2.6***	ND <0.13
trans-1,3-Dichloropropene	0.4	µg/L	ND <0.14	***ND <58***	***ND <72***	***ND <72***	***ND <1.4***	***ND <0.72***	***ND <14***	***ND <14***	***ND <29***	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <0.14	***ND <2.9***	***ND <2.9***	ND <0.14
1,4-Dioxane	0.35[a]	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	5	µg/L	ND <0.14	***ND <55***	***ND <68***	***ND <68***	ND <1.4	ND <0.68	***ND <14***	***ND <14***	***ND <27***	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <2.7	ND <2.7	ND <0.14
2-Hexanone (MBK)	50	µg/L	ND <1.3	***ND <540***	***ND <670***	***ND <670***	ND <13	ND <6.7	***ND <130***	***ND <130***	***ND <270***	ND <1.3	ND <1.3	ND <1.3	ND <1.3	ND <1.3	ND <1.3	ND <27	ND <27	ND <1.3
Isopropylbenzene (Cumene)	5	µg/L	ND <0.16	***ND <62***	***ND <78***	***ND <78***	ND <1.6	ND <0.78	***ND <16***	***ND <16***	***ND <31***	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <3.1	ND <3.1	ND <0.16
p-Isopropyltoluene (p-Cymene)	NS	µg/L	ND <0.16	ND <62	ND <78	ND <78	ND <1.6	ND <0.78	ND <16	ND <16	ND <31	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <3.1	ND <3.1	ND <0.16
Methyl Acetate	NS	µg/L	ND <0.48 V-05	ND <190 V-05	ND <240	ND <240	ND <4.8 V-05	ND <2.4	ND <48 V-05	ND <48 V-05	ND <96	ND <0.48 V-05	ND <0.48 V-05	ND <0.48 MS-07A, V05	ND <0.48 V-05	ND <0.48 V-05	ND <0.48 V-05	ND <9.6 V-05	ND <9.6	ND <0.48 V-05
Methyl tert-Butyl Ether (MTBE)	10	µg/L	ND <0.17	***ND <67***	***ND <84***	***ND <84***	ND <1.7	ND <0.84	***ND <17***	***ND <17***	***ND <33***	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <3.3	ND <3.3	ND <0.17
Methyl Cyclohexane	NS	µg/L	ND <0.13	ND <53	ND <67	ND <67	ND <1.3	ND <0.67	ND <13	ND <13	ND <27	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <2.7	ND <2.7	ND <0.13
Methylene Chloride	5	µg/L	ND <0.19	***ND <76***	***ND <95***	***ND <95***	ND <1.9	ND <0.95	***ND <19***	***ND <19***	***ND <38***	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <3.8	ND <3.8	ND <0.19
4-Methyl-2-pentanone (MIBK)	NS	µg/L	ND <1.4	ND <550	ND <680	ND <680	ND <14	ND <6.8	ND <140	ND <140	ND <270	ND <1.4	ND <1.4	ND <1.4	ND <1.4	ND <1.4	ND <1.4	ND <27	ND <27	ND <1.4
Naphthalene	10	µg/L	ND <0.25	***ND <99***	***ND <120 V-05***	***ND <120 V-05***	ND <2.5	ND <1.2 V-05	***ND <25***	***ND <25***	***ND <49 MS-07A, V-05***	ND <0.25	ND <0.25	ND <0.25	ND <0.25	ND <0.25	ND <0.25	ND <4.9	ND <4.9 V-05	ND <0.25
n-Propylbenzene	5	µg/L	ND <0.11	***ND <44***	***ND <55***	***ND <55***	ND <1.1	ND <0.55	***ND <11***	***ND <11***	***ND <22***	ND <0.11	ND <0.11	ND <0.11	ND <0.11	ND <0.11	ND <0.11	ND <2.2	ND <2.2	ND <0.11
Styrene	5	µg/L	ND <0.13	***ND <52***	***ND <64***	***ND <64***	ND <1.3	ND <0.64	***ND <13***	***ND <13***	***ND <26***	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <0.13	ND <2.6	ND <2.6	ND <0.13
1,1,2,2-Tetrachloroethane	5	µg/L	ND <0.10	***ND <41***	***ND <51***	***ND <51***	ND <1.0	ND <0.51	***ND <10***	***ND <10***	***ND <20***	ND <0.10	ND <0.10	ND <0.10	ND <0.10	ND <0.10	ND <0.10	ND <2.0	ND <2.0	ND <0.10
Tetrachloroethylene	5	µg/L	ND <0.17	***ND <67***	***ND <83***	***ND <83***	ND <1.7	ND <0.83	***ND <17***	***ND <17***	***ND <33***	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <3.3	ND <3.3	ND <0.17
Toluene	5	µg/L	ND <0.11	***ND <46***	***ND <57***	***ND <57***	ND <1.1	ND <0.57	***ND <11***	***ND <11***	***ND <23***	ND <0.11	ND <0.11	ND <0.11	ND <0.11	ND <0.11	ND <0.11	ND <2.3	ND <2.3	ND <0.11
1,2,3-Trichlorobenzene	5	µg/L	ND <0.22	***ND <87***	***ND <110***	***ND <110***	ND <2.2	ND <1.1	***ND <22***	***ND <22***	***ND <43***	ND <0.22	ND <0.22	ND <0.22	ND <0.22	ND <0.22	ND <0.22	ND <4.3	ND <4.3	ND <0.22
1,2,4-Trichlorobenzene	5	µg/L	ND <0.19	***ND <78***	***ND <97 V-05***	***ND <97 V-05***	ND <1.9	ND <0.97 V-05	***ND <19***	***ND <19***	***ND <39 MS-07A***	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <3.9	ND <3.9 V-05	ND <0.19
1,1,1-Trichloroethane	5	µg/L	ND <0.14	***ND <56***	***ND <70***	***ND <70***	ND <1.4	ND <0.70	***ND <14***	***ND <14***	***ND <28***	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <2.8	ND <2.8	ND <0.14
1,1,2-Trichloroethane	1	µg/L	ND <0.18	***ND <73***	***ND <91***	***ND <91***	***ND <1.8***	ND <0.91	***ND <18***	***ND <18***	***ND <36***	ND <0.18	ND <0.18	ND <0.18	ND <0.18	ND <0.18	ND <0.18	***ND <3.6***	***ND <3.6***	ND <0.18
Trichloroethylene	5	µg/L	ND <0.17	***ND <66***	***ND <83***	**400 J**	**690**	**430**	**10,000**	**9,800**	**19,000**	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	**1,200**	**470**	ND <0.17
Trichlorofluoromethane (Freon 11)	5	µg/L	ND <0.14	***ND <57***	***ND <71***	***ND <71***	ND <1.4	ND <0.71	***ND <14***	***ND <14***	***ND <29***	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <0.14	ND <2.9	ND <2.9	ND <0.14
1,2,3-Trichloropropane	0.04	µg/L	***ND <0.27***	***ND <110***	***ND <130***	***ND <130***	***ND <2.7***	***ND <1.3***	***ND <27***	***ND <27***	***ND <54***	***ND <0.27***	***ND <0.27***	***ND <0.27***	***ND <0.27***	***ND <0.27***	***ND <0.27***	***ND <5.4***	***ND <5.4***	***ND <0.27***
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5	µg/L	ND <0.16	***ND <63***	***ND <79***	***ND <79***	ND <1.6	ND <0.79	***ND <16***	***ND <16***	***ND <32***	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <3.2	ND <3.2	ND <0.16
1,2,4-Trimethylbenzene	5	µg/L	ND <0.16	***ND <62***	***ND <78***	***ND <78***	ND <1.6	ND <0.78	***ND <16***	***ND <16***	***ND <31***	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <3.1	ND <3.1	ND <0.16
1,3,5-Trimethylbenzene	5	µg/L	ND <0.17	***ND <68***	***ND <85***	***ND <85***	ND <1.7	ND <0.85	***ND <17***	***ND <17***	***ND <34***	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <0.17	ND <3.4	ND <3.4	ND <0.17
Vinyl Chloride	2	µg/L	ND <0.19 V-05	**22,000 V-05**	**31,000**	**27,000**	ND <1.9 V-05	1.4 J	ND <19 V-05	ND <19 V-05	ND <39	ND <0.19 V-05	ND <0.19 V-05	ND <0.19 V-05	ND <0.19 V-05	ND <0.19 V-05	ND <0.19 V-05	**130 V-05**	**270**	ND <0.19 V-05
m+p Xylene	5	µg/L	ND <0.25	***ND <98***	***ND <120***	***ND <120***	ND <2.5	ND <1.2	***ND <25***	***ND <25***	***ND <49***	ND <0.25	ND <0.25	ND <0.25	ND <0.25	ND <0.25	ND <0.25	ND <4.9	ND <4.9	ND <0.25
o-Xylene	5	µg/L	ND <0.16	***ND <62***	***ND <78***	***ND <78***	ND <1.6	ND <0.78	***ND <16***	***ND <16***	***ND <31***	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <0.16	ND <3.1	ND <3.1	ND <0.16
Xylenes (total)	5	µg/L	ND <1.0	***ND <400***	***ND <500***	***ND <500***	***ND <10***	ND <5.0	***ND <100***	***ND <100***	***ND <200***	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	***ND <20***	***ND <20***	ND <1.0

Table 3
Groundwater Analytical Data
April and October/November 2024

Chemical Name	NYSDEC TOGS 1.1.1 GWQS	Well ID	MW-1	MW-2			MW-3		MW-4			MW-4D	MW-5	MW-5D	MW-6	MW-7	MW-8	MW-9R		MW-10
		Sample Date	5/24/24	5/22/24	10/21/24	10/21/24	5/23/24	10/22/24	5/21/24	5/21/24	10/22/24	5/21/24	5/21/24	5/21/24	5/22/24	5/24/24	5/23/24	5/23/24	10/21/24	5/22/24
		Depth to Water (ft btoc)	4.00	11.90	11.30	DUP	10.30	9.65	3.95	DUP	4.08	8.85	7.80	15.30	7.20	7.70	4.50	5.70	4.60	5.40
Per- And Polyfluoroalkyl Substances (PFAS)		**Units**																		
Perfluorobutanoic acid (PFBA)	NS	ng/L	ND <2.1	13	ND <2.3	ND <2.2 PF-18	ND <2.2	ND <2.2	ND <2.2	ND <2.1	ND <2.2	2.6 J	4.3	3.0 J	7.1	ND <2.1	2.2 J	6.5	4.8	ND <2.0
Perfluoropentanoic acid (PFPeA)	NS	ng/L	ND <0.41	ND <0.87	ND <0.44	ND <0.43	ND <0.42	ND <0.44	ND <0.43	ND <0.42	ND <0.43	3.3	0.80J	4.5	ND <0.45	ND <0.42	ND <0.43	ND <0.45	ND <0.43	ND <0.40
Perfluorohexanoic acid (PFHxA)	NS	ng/L	ND <0.23	ND <0.48	1.3	1.3	ND <0.24	0.89 J	2.2	1.5	1.5	2.9	0.65 J	4.6	ND <0.25	ND <0.23	ND <0.24	2.0	1.4	ND <0.23
Perfluoroheptanoic acid (PFHpA)	NS	ng/L	ND <0.25	ND <0.54	0.94 J	0.91 J	1.0	0.80 J	1.2	0.90 J	0.90 J	1.1	ND <0.26	1.7	0.89 J	ND <0.26	ND <0.27	1.3	0.72 J	ND <0.25
Perfluorooctanoic acid (PFOA)	6.7[a]	ng/L	ND <0.25	5.7	3.6	3.7	2.9	2.4	3.9	4.2	3.3	3.7	ND <0.25	6.2	**15**	ND <0.25	ND <0.26	6.2	4.4	ND <0.25
Perfluorononanoic acid (PFNA)	NS	ng/L	ND <0.18	ND <0.38	0.58 J	0.64 J	0.56 J	0.47 J	0.56 J	0.47 J	0.47 J	0.73 J	ND <0.18	1.6	1.3	ND <0.18	ND <0.19	ND <0.20	0.51 J	ND <0.18
Perfluorodecanoic acid (PFDA)	NS	ng/L	ND <0.20	0.85 PF-23, J	ND <0.21	ND <0.21	ND <0.20	0.28 J	ND <0.21	ND <0.20	ND <0.21	ND <0.21	ND <0.20	ND <0.21	ND <0.22	ND <0.20	ND <0.21	ND <0.22	ND <0.21	ND <0.19
Perfluoroundecanoic acid (PFUnA)	NS	ng/L	ND <0.19	ND <0.41	ND <0.21	ND <0.20	ND <0.20	ND <0.21	ND <0.20	ND <0.20	ND <0.20	ND <0.20	ND <0.20	ND <0.21	ND <0.22	ND <0.20	ND <0.21	ND <0.21	ND <0.21	ND <0.19
Perfluorododecanoic acid (PFDoA)	NS	ng/L	ND <0.19	ND <0.40	ND <0.21	ND <0.20	ND <0.20	ND <0.20	ND <0.20	ND <0.19	ND <0.20	ND <0.20	ND <0.19	ND <0.20	ND <0.21	ND <0.19	ND <0.20	ND <0.21	ND <0.20	ND <0.19
Perfluorotridecanoic acid (PFTrDA)	NS	ng/L	ND <0.28	ND <0.60	ND <0.31	ND <0.29	ND <0.29	ND <0.30	ND <0.29	ND <0.29	ND <0.30	ND <0.30	ND <0.29	ND <0.30	ND <0.31	ND <0.29	ND <0.30	ND <0.31	ND <0.30	ND <0.28
Perfluorotetradecanoic acid (PFTeDA)	NS	ng/L	ND <0.25	ND <0.52	ND <0.27	ND <0.26	ND <0.26	ND <0.26	ND <0.26	ND <0.25	ND <0.26	ND <0.26	ND <0.25	ND <0.26	ND <0.27	ND <0.25	ND <0.26	ND <0.27	ND <0.26	ND <0.24
Perfluorobutanesulfonic acid (PFBS)	NS	ng/L	0.66 J	ND <0.43	ND <0.22	ND <0.21	ND <0.21	0.61 PF-23, J	ND <0.21	0.64 J	0.76 J	2.3	1.2	2.7	1.2	0.50 J	0.97 J	ND <0.22	0.85 J	ND <0.20
Perfluoropentanesulfonic acid (PFPeS)	NS	ng/L	ND <0.25	ND <0.52	ND <0.26	ND <0.25	ND <0.25	ND <0.26	ND <0.25	ND <0.25	ND <0.26	ND <0.26	0.29 J	ND <0.26	ND <0.27	ND <0.25	ND <0.26	ND <0.27	ND <0.26	ND <0.24
Perfluorohexanesulfonic acid (PFHxS)	NS	ng/L	0.47 J	ND <0.56	0.80 J	0.55 J	ND <0.28	0.56 J	1.3	1.4	1.8	1.1	0.53 J	1.0	1.8	ND <0.27	0.75 J	1.8	2.1	ND <0.26
Perfluoroheptanesulfonic acid (PFHpS)	NS	ng/L	ND <0.32	ND <0.67	ND <0.34	ND <0.33	ND <0.33	ND <0.34	ND <0.33	ND <0.32	ND <0.33	ND <0.33	ND <0.32	ND <0.34	ND <0.35	ND <0.32	ND <0.33	ND <0.34	ND <0.33	ND <0.31
Perfluorooctanesulfonic acid (PFOS)	2.7[a]	ng/L	0.39 J	**18**	**23**	**23**	**3.7**	**4.3**	2.4	2.5	**3.3**	1.7	ND <0.37	2.4	**16**	ND <0.37	ND <0.39	2.3	1.5	ND <0.36
Perfluorononanesulfonic acid (PFNS)	NS	ng/L	ND <0.24	ND <0.51	ND <0.26	ND <0.25	ND <0.25	ND <0.26	ND <0.25	ND <0.25	ND <0.25	ND <0.25	ND <0.24	ND <0.26	ND <0.27	ND <0.24	ND <0.25	ND <0.26	ND <0.25	ND <0.24
Perfluorodecanesulfonic acid (PFDS)	NS	ng/L	ND <0.28	ND <0.58	ND <0.30	ND <0.29	ND <0.28	ND <0.29	ND <0.29	ND <0.28	ND <0.29	ND <0.29	ND <0.28	ND <0.29	ND <0.30	ND <0.28	ND <0.29	ND <0.30	ND <0.29	ND <0.27
Perfluorododecanesulfonic acid (PFDoS)	NS	ng/L	ND <0.28	ND <0.58	ND <0.30	ND <0.29	ND <0.29	ND <0.29	ND <0.29	ND <0.28	ND <0.29	ND <0.29	ND <0.28	ND <0.29	ND <0.31	ND <0.28	ND <0.29	ND <0.30	ND <0.29	ND <0.27
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NS	ng/L	ND <0.72 PF-17C	ND <1.5	ND <0.77 PF-17	ND <0.74 PF-18	ND <0.74	ND <0.76 PF-17	ND <0.74	ND <0.73	ND <0.75	ND <0.75 PF-17C	ND <0.73	ND <0.76	ND <0.79	ND <0.73 PF-17C	ND <0.75 PF-17C	ND <0.78	ND <0.76 PF-17	ND <0.70
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NS	ng/L	ND <2.9	ND <6.1	ND <3.1	ND <3.0	ND <3.0	ND <3.1	ND <3.0	ND <2.9	ND <3.0	ND <3.0	ND <2.9	ND <3.1	ND <3.2	ND <2.9	ND <3.1 PF-17C	ND <3.1	ND <3.1	ND <2.8
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NS	ng/L	ND <1.1	ND <2.3	ND <1.2	ND <1.1	ND <1.1	ND <1.1	ND <1.1	ND <1.1	ND <1.1	ND <1.1	ND <1.1	ND <1.1	ND <1.2	ND <1.1	ND <1.1	ND <1.2	ND <1.1	ND <1.0
Perfluorooctanesulfonamide (PFOSA)	NS	ng/L	0.36 J	ND <0.47	ND <0.24	ND <0.23	0.39 PF-22, J	ND <0.24	0.24 PF-23, J	0.24 PF-22, J	ND <0.23	0.28 PF-22, J	ND <0.23	ND <0.24	ND <0.25	ND <0.23	ND <0.23	ND <0.24	ND <0.23	ND <0.22
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NS	ng/L	ND <0.31	ND <0.66	ND <0.34	ND <0.33	ND <0.32	ND <0.33	ND <0.33	ND <0.32	ND <0.33	ND <0.33	ND <0.32	ND <0.33	ND <0.35	ND <0.32	ND <0.33	ND <0.34	ND <0.33	ND <0.31
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NS	ng/L	ND <0.32	ND <0.68	ND <0.35	ND <0.34	ND <0.33	ND <0.34	ND <0.34	ND <0.33	ND <0.34	ND <0.34	ND <0.33	ND <0.34	ND <0.36	ND <0.33	ND <0.34	ND <0.35	ND <0.34	ND <0.32
N-MeFOSAA (NMeFOSAA)	NS	ng/L	ND <0.34	ND <0.72	ND <0.37	ND <0.36	ND <0.35	ND <0.36	ND <0.36	ND <0.35	ND <0.36	ND <0.36	ND <0.35	ND <0.36	ND <0.38	ND <0.35	ND <0.36	ND <0.37	ND <0.36	ND <0.34
N-EtFOSAA (NEtFOSAA)	NS	ng/L	ND <0.38	ND <0.81	ND <0.41	ND <0.40	ND <0.40	ND <0.41	ND <0.40	ND <0.39	ND <0.40	ND <0.40	ND <0.39	ND <0.41	ND <0.42	ND <0.39	ND <0.40	ND <0.42	ND <0.40	ND <0.37
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NS	ng/L	ND <2.6	ND <5.5	ND <2.8	ND <2.7	ND <2.7	ND <2.8	ND <2.7	ND <2.7	ND <2.7	ND <2.7	ND <2.7	ND <2.8	ND <2.9	ND <2.7	ND <2.8	ND <2.8	ND <2.8	ND <2.6
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NS	ng/L	ND <2.6	ND <5.4	ND <2.8	ND <2.7	ND <2.6	ND <2.7	ND <2.7	ND <2.6	ND <2.7	ND <2.7	ND <2.6	ND <2.7	ND <2.8	ND <2.6	ND <2.7	ND <2.8	ND <2.7	ND <2.5
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NS	ng/L	ND <0.99	ND <2.1	ND <1.1	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.1	ND <1.0	ND <1.0	ND <1.1	ND <1.0	ND <0.97
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	ng/L	ND <0.79	ND <1.7	ND <0.85	ND <0.82	ND <0.81	ND <0.83	ND <0.82	ND <0.80	ND <0.82	ND <0.82	ND <0.80	ND <0.83	ND <0.87	ND <0.80	ND <0.83	ND <0.86	ND <0.83	ND <0.77
9Cl-PF3ONS (F53B Minor)	NS	ng/L	ND <0.92	ND <1.9	ND <0.99	ND <0.96	ND <0.95	ND <0.98	ND <0.96	ND <0.94	ND <0.96	ND <0.96	ND <0.94	ND <0.98	ND <1.0	ND <0.94	ND <0.97	ND <1.0	ND <0.98	ND <0.90
11Cl-PF3OUdS (F53B Major)	NS	ng/L	ND <1.0	ND <2.2	ND <1.1	ND <1.1	ND <1.1	ND <1.1	ND <1.0	ND <1.1	ND <1.1	ND <1.1	ND <1.0	ND <1.1	ND <1.1	ND <1.0	ND <1.1	ND <1.1	ND <1.1	ND <1.0
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NS	ng/L	ND <2.1	ND <4.4	ND <2.2	ND <2.2	ND <2.2	ND <2.2	ND <2.2	ND <2.1	ND <2.2	ND <2.2	ND <2.1	ND <2.2	ND <2.3	ND <2.1	ND <2.2	ND <2.3	ND <2.2	ND <2.0
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NS	ng/L	ND <11	ND <23	ND <12	ND <11	ND <11	ND <11	ND <11	ND <11	ND <11	ND <11	ND <11	ND <11	ND <12	ND <11	ND <11	ND <12	ND <11	ND <11
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NS	ng/L	ND <9.1	ND <19	ND <9.8	ND <9.4	ND <9.4	ND <9.6	ND <9.4	ND <9.2	ND <9.5	ND <9.5	ND <9.2	ND <9.6	ND <10	ND <9.2	ND <9.6	ND <9.9	ND <9.6	ND <8.9
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NS	ng/L	ND <0.33	ND <0.71	ND <0.36	ND <0.35	ND <0.35	ND <0.35	ND <0.35	ND <0.34	ND <0.35	ND <0.35	ND <0.34	ND <0.35	ND <0.37	ND <0.34	ND <0.35	ND <0.36	ND <0.35	ND <0.33
Perfluoro-3-methoxypropanoic acid (PFMPA)	NS	ng/L	ND <0.53	ND <1.1	ND <0.57	ND <0.55	ND <0.55	ND <0.56	ND <0.55	ND <0.54	ND <0.56	ND <0.56	ND <0.54	ND <0.56	ND <0.59	ND <0.54	ND <0.56	ND <0.58	ND <0.56	ND <0.52
Perfluoro-4-methoxybutanoic acid (PFMBA)	NS	ng/L	ND <0.52	ND <1.1	ND <0.56	ND <0.54	ND <0.53	ND <0.55	ND <0.54	ND <0.53	ND <0.54	ND <0.54	ND <0.52	ND <0.55	ND <0.57	ND <0.52	ND <0.55	ND <0.56	ND <0.55	ND <0.51
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NS	ng/L	ND <0.53	ND <1.1	ND <0.57	ND <0.55	ND <0.55	ND <0.56	ND <0.55	ND <0.54	ND <0.55	ND <0.55	ND <0.54	ND <0.56	ND <0.58	ND <0.54	ND <0.56	ND <0.57	ND <0.56	ND <0.52
General Chemistry		**Units**																		
Total Suspended Solids	NS	mg/L	ND <10 H-01	50 H-01	130 H-01	88 H-01	ND <10 H-01	22 H-01	ND <10 H-01	ND <10 H-01	ND <10 H-01	ND <10 H-01	ND <10 H-01	ND <10 H-01	ND <10 H-01	ND <10 H-01	ND <10 H-01	16 H-01	ND <10 H-01	24 H-01

Notes:

µg/L = micrograms per liter

ng/L = nnograms per liter

mg/L = milligrams per liter

ft btoc = feet below top of casing

NYSDEC TOGS 1.1.1 GWQS = New York State Department of Environmental Conservation Technical and Operational Guidance Series 1.1.1 June 1998 Ambient Water Quality Standards and Guidance Values for Groundwater.

[a] = Standard from 2023 Addendum to TOGS 1.1.1

values exceed the NYSDEC TOGS 1.1.1 GWQS.

NA = Not Applicable

NS = No Standard

ND <# = Indicates compound was analyzed for, but not detected at or above the indicated method detection limit.

J = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

U = Compound was not detected at or above laboratory method detection limit (MDL)

V-05 = Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

MS-07A = Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

PF-23 = Qualifier ion ratio <50% of associated calibration. Detection is suspect.

PF-22 = Qualifier ion ratio >150% of associated calibration. Detection is suspect.

PF-17C = Extracted internal standard is outside of control limits. Analyte is a known difficult compound.

H-01 = Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Table 3
Groundwater Analytical Data
April and October/November 2024

Chemical Name	NYSDEC TOGS 1.1.1 GWQS	Well ID	MW-11R		MW-12		MW-13		MW-14		Trip Blank	Trip Blank	Equipment Blank	Equipment Blank
		Sample Date	5/22/24	10/21/24	5/24/24	10/22/24	5/23/24	10/23/24	5/23/24	11/12/24	5/22/24	10/23/24	5/22/2024	10/21/2024
		Depth to Water (ft btoc)	4.90	3.80	1.30	1.45	4.30	3.20	7.50	7.61	NA	NA	NA	NA
Volatile Organic Compounds (VOCs)		**Units**												
Acetone	50	µg/L	12 V-05, J	***ND <200***	***ND <100 V-05***	***ND <100***	23 V-05, J	***ND <100***	**58 V-05, J**	ND <41	ND <2.0 V-05	ND <2.0	NA	NA
Benzene	1	µg/L	ND <0.57	***ND <14***	***ND <7.2***	***ND <7.2***	***ND <1.4***	***ND <7.2***	***ND <3.6***	***ND <2.9***	ND <0.14	ND <0.14	NA	NA
Bromochloromethane	5	µg/L	ND <1.3	***ND <32***	***ND <16***	***ND <16***	ND <3.2	***ND <16***	***ND <8.0***	***ND <6.4***	ND <0.32	ND <0.32	NA	NA
Bromodichloromethane	50	µg/L	ND <0.74	ND <19	ND <9.3	ND <9.3	ND <1.9	ND <9.3	ND <4.6	ND <3.7	ND <0.19	ND <0.19	NA	NA
Bromoform	50	µg/L	ND <1.2	ND <30	ND <15	ND <15	ND <3.0	ND <15	ND <7.5	ND <6.0	ND <0.30	ND <0.30	NA	NA
Bromomethane	5	µg/L	***ND <5.9***	***ND <150***	***ND <74***	***ND <74***	***ND <15***	***ND <74***	***ND <37***	***ND <30***	ND <1.5	ND <1.5	NA	NA
2-Butanone (MEK)	50	µg/L	20 J	***ND <140***	**96 J**	***ND <71***	24 J	***ND <71***	**51 J**	ND <28	ND <1.4	ND <1.4	NA	NA
n-Butylbenzene	5	µg/L	ND <0.62	***ND <16***	***ND <7.8***	***ND <7.8***	ND <1.6	***ND <7.8***	ND <3.9	ND <3.1	ND <0.16	ND <0.16	NA	NA
sec-Butylbenzene	5	µg/L	ND <0.65	***ND <16***	***ND <8.2***	***ND <8.2***	ND <1.6	***ND <8.2***	ND <4.1	ND <3.3	ND <0.16	ND <0.16	NA	NA
tert-Butylbenzene	5	µg/L	ND <0.66	***ND <17***	***ND <8.3***	***ND <8.3***	ND <1.7	***ND <8.3***	ND <4.1	ND <3.3	ND <0.17	ND <0.17	NA	NA
Carbon Disulfide	60	µg/L	ND <6.1	***ND <150***	***ND <76***	***ND <76***	ND <15	***ND <76***	ND <38	ND <31	ND <1.5	ND <1.5	NA	NA
Carbon Tetrachloride	5	µg/L	ND <0.78	***ND <19***	***ND <9.7***	***ND <9.7***	ND <1.9	***ND <9.7***	ND <4.9	ND <3.9	ND <0.19	ND <0.19	NA	NA
Chlorobenzene	5	µg/L	ND <0.71	***ND <18***	***ND <8.9***	***ND <8.9***	ND <1.8	***ND <8.9***	ND <4.4	ND <3.5	ND <0.18	ND <0.18	NA	NA
Chlorodibromomethane	50	µg/L	ND <0.51	ND <13	ND <6.4	ND <6.4	ND <1.3	ND <6.4	ND <3.2	ND <2.6	ND <0.13	ND <0.13	NA	NA
Chloroethane	5	µg/L	ND <1.8	***ND <46***	***ND <23***	***ND <23***	ND <4.6	***ND <23***	***ND <11***	***ND <9.2***	ND <0.46	ND <0.46	NA	NA
Chloroform	7	µg/L	ND <0.76	***ND <19***	***ND <9.5***	***ND <9.5***	ND <1.9	***ND <9.5***	ND <4.8	ND <3.8	ND <0.19	ND <0.19	NA	NA
Chloromethane	5	µg/L	ND <2.0	***ND <50***	***ND <25***	***ND <25***	ND <5.0	***ND <25***	***ND <12***	***ND <9.9***	ND <0.50	ND <0.50	NA	NA
Cyclohexane	NS	µg/L	ND <7.1	ND <180	ND <88	ND <88	ND <18	ND <88	ND <44	ND <35	ND <1.8	ND <1.8	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	0.04	µg/L	***ND <2.5***	***ND <63 V-05***	***ND <31***	***ND <31 V-05***	***ND <6.3***	***ND <31 V-05***	***ND <16***	***ND <13***	***ND <0.63***	***ND <0.63 V-05***	NA	NA
1,2-Dibromoethane (EDB)	0.0006	µg/L	***ND <0.50***	***ND <13***	***ND <6.3***	***ND <6.3***	***ND <1.3***	***ND <6.3***	***ND <3.1***	***ND <2.5***	***ND <0.13***	***ND <0.13***	NA	NA
1,2-Dichlorobenzene	3	µg/L	ND <0.70	***ND <17***	***ND <8.7***	***ND <8.7***	ND <1.7	***ND <8.7***	***ND <4.4***	***ND <3.5***	ND <0.17	ND <0.17	NA	NA
1,3-Dichlorobenzene	3	µg/L	ND <0.62	***ND <15***	***ND <7.7***	***ND <7.7***	ND <1.5	***ND <7.7***	***ND <3.9***	***ND <3.1***	ND <0.15	ND <0.15	NA	NA
1,4-Dichlorobenzene	3	µg/L	ND <0.67	***ND <17***	***ND <8.4***	***ND <8.4***	ND <1.7	***ND <8.4***	***ND <4.2***	***ND <3.3***	ND <0.17	ND <0.17	NA	NA
Dichlorodifluoromethane (Freon 12)	5	µg/L	ND <0.80	***ND <20***	***ND <10***	***ND <10***	ND <2.0	***ND <10***	ND <5.0	ND <4.0	ND <0.20	ND <0.20	NA	NA
1,1-Dichloroethane	5	µg/L	ND <0.60	***ND <15***	***ND <7.5***	***ND <7.5***	ND <1.5	***ND <7.5***	ND <3.7	ND <3.0	ND <0.15	ND <0.15	NA	NA
1,2-Dichloroethane	0.6	µg/L	ND <0.51	***ND <13***	***ND <6.3***	***ND <6.3***	***ND <1.3***	***ND <6.3***	***ND <3.2***	***ND <2.5***	ND <0.13	ND <0.13	NA	NA
1,1-Dichloroethylene	5	µg/L	ND <0.72	***ND <18***	***ND <9.0***	***ND <9.0***	3.8 J	***ND <9.0***	ND <4.5	ND <3.6	ND <0.18	ND <0.18	NA	NA
cis-1,2-Dichloroethylene	5	µg/L	**120**	**2,000**	**82**	**91**	**1,700**	**2,000**	**560**	**700**	ND <0.20	ND <0.20	NA	NA
trans-1,2-Dichloroethylene	5	µg/L	0.68 J	***ND <16***	***ND <7.8***	***ND <7.8***	**5.1 J**	**15 J**	ND <3.9	4.4 J	ND <0.16	ND <0.16	NA	NA
1,2-Dichloropropane	1	µg/L	ND <0.68	***ND <17***	***ND <8.5***	***ND <8.5***	***ND <1.7***	***ND <8.5***	***ND <4.2***	***ND <3.4***	ND <0.17	ND <0.17	NA	NA
cis-1,3-Dichloropropene	0.4	µg/L	***ND <0.51***	***ND <13***	***ND <6.4***	***ND <6.4***	***ND <1.3***	***ND <6.4***	***ND <3.2***	***ND <2.6***	ND <0.13	ND <0.13	NA	NA
trans-1,3-Dichloropropene	0.4	µg/L	***ND <0.58***	***ND <14***	***ND <7.2***	***ND <7.2***	***ND <1.4***	***ND <7.2***	***ND <3.6***	***ND <2.9***	ND <0.14	ND <0.14	NA	NA
1,4-Dioxane	0.35[a]	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
Ethylbenzene	5	µg/L	ND <0.55	***ND <14***	***ND <6.8***	***ND <6.8***	ND <1.4	***ND <6.8***	ND <3.4	ND <2.7	ND <0.14	ND <0.14	NA	NA
2-Hexanone (MBK)	50	µg/L	ND <5.4	***ND <130***	***ND <67***	***ND <67***	ND <13	***ND <67***	ND <34	ND <27	ND <1.3	ND <1.3	NA	NA
Isopropylbenzene (Cumene)	5	µg/L	ND <0.62	***ND <16***	***ND <7.8***	***ND <7.8***	ND <1.6	***ND <7.8***	ND <3.9	ND <3.1	ND <0.16	ND <0.16	NA	NA
p-Isopropyltoluene (p-Cymene)	NS	µg/L	ND <0.62	ND <16	ND <7.8	ND <7.8	ND <1.6	ND <7.8	ND <3.9	ND <3.1	ND <0.16	ND <0.16	NA	NA
Methyl Acetate	NS	µg/L	ND <1.9 V-05	ND <48	ND <24 V-05	ND <24	ND <4.8 V-05	ND <24	ND <12 V-05	ND <9.6	ND <0.48 V-05	ND <0.48	NA	NA
Methyl tert-Butyl Ether (MTBE)	10	µg/L	ND <0.67	***ND <17***	ND <8.4	ND <8.4	ND <1.7	ND <8.4	ND <4.2	ND <3.3	ND <0.17	ND <0.17	NA	NA
Methyl Cyclohexane	NS	µg/L	ND <0.53	ND <13	ND <6.7	ND <6.7	ND <1.3	ND <6.7	ND <3.3	ND <2.7	ND <0.13	ND <0.13	NA	NA
Methylene Chloride	5	µg/L	ND <0.76	***ND <19***	***ND <9.5***	***ND <9.5***	ND <1.9	***ND <9.5***	ND <4.8	ND <3.8	ND <0.19	ND <0.19	NA	NA
4-Methyl-2-pentanone (MIBK)	NS	µg/L	ND <5.5	ND <140	ND <68	ND <68	ND <14	ND <68	ND <34	ND <27	ND <1.4	ND <1.4	NA	NA
Naphthalene	10	µg/L	ND <0.99	***ND <25 V-05***	***ND <12***	***ND <12 V-05***	ND <2.5	***ND <12 V-05***	ND <6.2	ND <4.9	ND <0.25	ND <0.25 V-05	NA	NA
n-Propylbenzene	5	µg/L	ND <0.44	***ND <11***	***ND <5.5***	***ND <5.5***	ND <1.1	***ND <5.5***	ND <2.8	ND <2.2	ND <0.11	ND <0.11	NA	NA
Styrene	5	µg/L	ND <0.52	***ND <13***	***ND <6.4***	***ND <6.4***	ND <1.3	***ND <6.4***	ND <3.2	ND <2.6	ND <0.13	ND <0.13	NA	NA
1,1,2,2-Tetrachloroethane	5	µg/L	ND <0.41	***ND <10***	***ND <5.1***	***ND <5.1***	ND <1.0	***ND <5.1***	ND <2.6	ND <2.0	ND <0.10	ND <0.10	NA	NA
Tetrachloroethylene	5	µg/L	ND <0.67	***ND <17***	***ND <8.3***	***ND <8.3***	ND <1.7	***ND <8.3***	ND <4.2	4.8 J	ND <0.17	ND <0.17	NA	NA
Toluene	5	µg/L	ND <0.46	***ND <11***	***ND <5.7***	***ND <5.7***	ND <1.1	***ND <5.7***	ND <2.8	ND <2.3	ND <0.11	ND <0.11	NA	NA
1,2,3-Trichlorobenzene	5	µg/L	ND <0.87	***ND <22***	***ND <11***	***ND <11***	ND <2.2	***ND <11***	***ND <5.4***	ND <4.3	ND <0.22	ND <0.22	NA	NA
1,2,4-Trichlorobenzene	5	µg/L	ND <0.78	***ND <19 V-05***	***ND <9.7***	***ND <9.7 V-05***	ND <1.9	***ND <9.7 V-05***	ND <4.9	ND <3.9	ND <0.19	ND <0.19 V-05	NA	NA
1,1,1-Trichloroethane	5	µg/L	ND <0.56	***ND <14***	***ND <7.0***	***ND <7.0***	ND <1.4	***ND <7.0***	ND <3.5	ND <2.8	ND <0.14	ND <0.14	NA	NA
1,1,2-Trichloroethane	1	µg/L	ND <0.73	***ND <18***	***ND <9.1***	***ND <9.1***	***ND <1.8***	***ND <9.1***	***ND <4.5***	***ND <3.6***	ND <0.18	ND <0.18	NA	NA
Trichloroethylene	5	µg/L	**230**	**7,100**	**4,600**	**4,700**	**770**	**6,700**	**2,600**	**2,200**	ND <0.17	ND <0.17	NA	NA
Trichlorofluoromethane (Freon 11)	5	µg/L	ND <0.57	***ND <14***	***ND <7.1***	***ND <7.1***	ND <1.4	***ND <7.1***	ND <3.6	ND <2.9	ND <0.14	ND <0.14	NA	NA
1,2,3-Trichloropropane	0.04	µg/L	***ND <1.1***	***ND <27***	***ND <13***	***ND <13***	***ND <2.7***	***ND <13***	***ND <6.7***	***ND <5.4***	***ND <0.27***	***ND <0.27***	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5	µg/L	ND <0.63	***ND <16***	***ND <7.9***	***ND <7.9***	ND <1.6	***ND <7.9***	ND <3.9	ND <3.2	ND <0.16	ND <0.16	NA	NA
1,2,4-Trimethylbenzene	5	µg/L	ND <0.62	***ND <16***	***ND <7.8***	***ND <7.8***	ND <1.6	***ND <7.8***	ND <3.9	ND <3.1	ND <0.16	ND <0.16	NA	NA
1,3,5-Trimethylbenzene	5	µg/L	ND <0.68	***ND <17***	***ND <8.5***	***ND <8.5***	ND <1.7	***ND <8.5***	ND <4.2	ND <3.4	ND <0.17	ND <0.17	NA	NA
Vinyl Chloride	2	µg/L	ND <0.77 V-05	ND <19	ND <9.7 V-05	ND <9.7	**130 V-05**	**110**	ND <4.8 V-05	ND <3.9	ND <0.19 V-05	ND <0.19	NA	NA
m+p Xylene	5	µg/L	ND <0.98	***ND <25***	***ND <12***	***ND <12***	ND <2.5	***ND <12***	***ND <6.1***	ND <4.9	ND <0.25	ND <0.25	NA	NA
o-Xylene	5	µg/L	ND <0.62	***ND <16***	***ND <7.8***	***ND <7.8***	ND <1.6	***ND <7.8***	ND <3.9	ND <3.1	ND <0.16	ND <0.16	NA	NA
Xylenes (total)	5	µg/L	ND <4.0	***ND <100***	***ND <50***	***ND <50***	***ND <10***	***ND <50***	***ND <25***	***ND <20***	ND <1.0	ND <1.0	NA	NA

Table 3
Groundwater Analytical Data
April and October/November 2024

Chemical Name	NYSDEC TOGS 1.1.1 GWQS	Well ID	MW-11R		MW-12		MW-13		MW-14		Trip Blank	Trip Blank	Equipment Blank	Equipment Blank
		Sample Date	5/22/24	10/21/24	5/24/24	10/22/24	5/23/24	10/23/24	5/23/24	11/12/24	5/22/24	10/23/24	5/22/2024	10/21/2024
		Depth to Water (ft btoc)	4.90	3.80	1.30	1.45	4.30	3.20	7.50	7.61	NA	NA	NA	NA
Per- And Polyfluoroalkyl Substances (PFAS)		**Units**												
Perfluorobutanoic acid (PFBA)	NS	ng/L	2.3 J	ND <2.1	2.6 J	2.4 J	ND <2.1	2.7 J	2.5 J	ND <0.76	ND <2.2	NA	ND <2.2	ND <2.9
Perfluoropentanoic acid (PFPeA)	NS	ng/L	ND <0.42	ND <0.42	0.56 PF-22,J	0.69 J	ND <0.41	0.44 PF-22, J	ND <0.43	ND <0.42	ND <0.43	NA	ND <0.43	ND <0.57
Perfluorohexanoic acid (PFHxA)	NS	ng/L	ND <0.23	0.33 J	0.70 J	0.79 J	0.37 J	0.90 J	ND <0.24	1.3 J	ND <0.24	NA	ND <0.24	ND <0.32
Perfluoroheptanoic acid (PFHpA)	NS	ng/L	ND <0.26	ND <0.26	0.80 J	0.70 J	0.37 J	0.80 J	0.99 J	1.0 J	ND <0.27	NA	ND <0.27	ND <0.35
Perfluorooctanoic acid (PFOA)	6.7[a]	ng/L	1.6	1.5	2.2	2.6	0.98	2.5	2.8	3.0	ND <0.26	NA	ND <0.26	ND <0.35
Perfluorononanoic acid (PFNA)	NS	ng/L	ND <0.18	0.28 J	0.26 J	0.34 J	0.27 J	0.55 J	0.79 J	ND <0.62	ND <0.19	NA	ND <0.19	ND <0.25
Perfluorodecanoic acid (PFDA)	NS	ng/L	ND <0.20	ND <0.20	ND <0.20	ND <0.19	ND <0.20	ND <0.20	ND <0.21	ND <0.37	ND <0.21	NA	ND <0.21	ND <0.27
Perfluoroundecanoic acid (PFUnA)	NS	ng/L	ND <0.20	ND <0.20	ND <0.19	ND <0.19	ND <0.20	ND <0.20	ND <0.20	ND <0.49	ND <0.21	NA	ND <0.21	ND <0.27
Perfluorododecanoic acid (PFDoA)	NS	ng/L	ND <0.20	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.19	ND <0.20	ND <0.33	ND <0.20	NA	ND <0.20	ND <0.26
Perfluorotridecanoic acid (PFTrDA)	NS	ng/L	ND <0.29	ND <0.29	ND <0.28	ND <0.28	ND <0.29	ND <0.29	ND <0.29	ND <0.46	ND <0.30	NA	ND <0.30	ND <0.39
Perfluorotetradecanoic acid (PFTeDA)	NS	ng/L	ND <0.25	ND <0.25	ND <0.25	ND <0.24	ND <0.25	ND <0.25	ND <0.26	ND <0.15	ND <0.26	NA	ND <0.26	ND <0.34
Perfluorobutanesulfonic acid (PFBS)	NS	ng/L	1.1	0.64 J	0.70 J	0.83 J	0.34 J	0.55 J	ND <0.21	ND <0.33	ND <0.21	NA	ND <0.21	ND <0.28
Perfluoropentanesulfonic acid (PFPeS)	NS	ng/L	ND <0.25	ND <0.25	ND <0.24	ND <0.24	ND <0.25	0.33 PF-23, J	ND <0.25	ND <0.44	ND <0.26	NA	ND <0.26	ND <0.34
Perfluorohexanesulfonic acid (PFHxS)	NS	ng/L	0.91 J	0.76 J	0.65 J	0.65 J	0.39 J	0.80 J	1.1	1.0 J	ND <0.28	NA	ND <0.28	ND <0.37
Perfluoroheptanesulfonic acid (PFHpS)	NS	ng/L	ND <0.32	ND <0.32	ND <0.31	ND <0.31	ND <0.32	ND <0.32	ND <0.33	ND <0.80	ND <0.33	NA	ND <0.33	ND <0.44
Perfluorooctanesulfonic acid (PFOS)	2.7[a]	ng/L	**4.2**	**3.8**	0.93 J	1.3 PF-22	1.1	**3.3**	**3.5**	**4.2**	ND <0.39	NA	ND <0.39	ND <0.51
Perfluorononanesulfonic acid (PFNS)	NS	ng/L	ND <0.25	ND <0.24	ND <0.24	ND <0.23	ND <0.24	ND <0.24	ND <0.25	ND <0.44	ND <0.25	NA	ND <0.25	ND <0.33
Perfluorodecanesulfonic acid (PFDS)	NS	ng/L	ND <0.28	ND <0.28	ND <0.27	ND <0.27	ND <0.28	ND <0.28	ND <0.29	ND <0.48	ND <0.29	NA	ND <0.29	ND <0.38
Perfluorododecanesulfonic acid (PFDoS)	NS	ng/L	ND <0.28	ND <0.28	ND <0.27	ND <0.27	ND <0.28	ND <0.28	ND <0.29	ND <0.68	ND <0.29	NA	ND <0.29	ND <0.38
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NS	ng/L	ND <0.73	ND <0.73	ND <0.71	ND <0.70	ND <0.72	ND <0.72 PF-17	ND <0.74	ND <1.3	ND <0.76	NA	ND <0.76	ND <0.99
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NS	ng/L	ND <3.0	ND <2.9	ND <2.9	ND <2.8	ND <2.9 PF-17C	ND <2.9	ND <3.0	ND <2.8	ND <3.1	NA	ND <3.1	ND <4.0
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NS	ng/L	ND <1.1	ND <1.1	ND <1.1	ND <1.0	ND <1.1	ND <1.1	ND <1.1	ND <3.1	ND <1.1	NA	ND <1.1	ND <1.5
Perfluorooctanesulfonamide (PFOSA)	NS	ng/L	ND <0.23	ND <0.23	ND <0.22	ND <0.22	ND <0.22	ND <0.22	ND <0.23	ND <0.53	ND <0.23	NA	ND <0.23	ND <0.31
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NS	ng/L	ND <0.32	ND <0.32	ND <0.31	ND <0.31	ND <0.32	ND <0.32	ND <0.33	ND <0.26	ND <0.33	NA	ND <0.33	ND <0.43
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NS	ng/L	ND <0.33	ND <0.33	ND <0.32	ND <0.31	ND <0.33	ND <0.33	ND <0.33	ND <0.31	ND <0.34	NA	ND <0.34	ND <0.45
N-MeFOSAA (NMeFOSAA)	NS	ng/L	ND <0.35	ND <0.35	ND <0.34	ND <0.33	ND <0.35	ND <0.35	ND <0.35	ND <1.4	ND <0.36	NA	ND <0.36	ND <0.47
N-EtFOSAA (NEtFOSAA)	NS	ng/L	ND <0.39	ND <0.39	ND <0.38	ND <0.37	ND <0.39 PF-17C	ND <0.39	ND <0.40	ND <0.61	ND <0.40	NA	ND <0.40	ND <0.53
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NS	ng/L	ND <2.7	ND <2.7	ND <2.6	ND <2.5	ND <2.6	ND <2.6	ND <2.7	ND <1.2	ND <2.8	NA	ND <2.8	ND <3.6
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NS	ng/L	ND <2.6	ND <2.6	ND <2.5	ND <2.5	ND <2.6	ND <2.6	ND <2.6	ND <1.6	ND <2.7	NA	ND <2.7	ND <3.5
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NS	ng/L	ND <1.0	ND <1.0	ND <0.98	ND <0.96	ND <1.0	ND <1.0	ND <1.0	ND <1.4	ND <1.0	NA	ND <1.0	ND <1.4
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NS	ng/L	ND <0.80	ND <0.80	ND <0.78	ND <0.77	ND <0.79	ND <0.79	ND <0.81	ND <0.81	ND <0.83	NA	ND <0.83	ND <1.1
9Cl-PF3ONS (F53B Minor)	NS	ng/L	ND <0.94	ND <0.94	ND <0.91	ND <0.90	ND <0.93	ND <0.93	ND <0.95	ND <0.89	ND <0.97	NA	ND <0.97	ND <1.3
11Cl-PF3OUdS (F53B Major)	NS	ng/L	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.1	ND <1.6	ND <1.1	NA	ND <1.1	ND <1.4
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NS	ng/L	ND <2.1	ND <2.1	ND <2.1	ND <2.0	ND <2.1	ND <2.1	ND <2.2	ND <2.1	ND <2.2	NA	ND <2.2	ND <2.9
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NS	ng/L	ND <11	ND <11	ND <11	ND <11	ND <11	ND <11	ND <11	ND <6.7	ND <11	NA	ND <11	ND <15
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NS	ng/L	ND <9.3	ND <9.2	ND <9.0	ND <8.8	ND <9.2	ND <9.2	ND <9.4	ND <8.5	ND <9.6	NA	ND <9.6	ND <13
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NS	ng/L	ND <0.34	ND <0.34	ND <0.33	ND <0.33	ND <0.34	ND <0.34	ND <0.35	ND <0.54	ND <0.35	NA	ND <0.35	ND <0.46
Perfluoro-3-methoxypropanoic acid (PFMPA)	NS	ng/L	ND <0.54	ND <0.54	ND <0.53	ND <0.52	ND <0.54	ND <0.54	ND <0.55	ND <0.44	ND <0.56	NA	ND <0.56	ND <0.73
Perfluoro-4-methoxybutanoic acid (PFMBA)	NS	ng/L	ND <0.53	ND <0.52	ND <0.51	ND <0.50	ND <0.52	ND <0.52	ND <0.53	ND <0.41	ND <0.54	NA	ND <0.55	ND <0.71
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NS	ng/L	ND <0.54	ND <0.54	ND <0.52	ND <0.51	ND <0.53	ND <0.53	ND <0.55	ND <2.0	ND <0.56	NA	ND <0.56	ND <0.73
General Chemistry		**Units**												
Total Suspended Solids	NS	mg/L	ND <10 H-01	12 H-01	ND <10 H-01	ND <10 H-01	ND <10 H-01	18 H-01	12 H-01	NA	ND <10	NA	ND <10	ND <10

Notes:

µg/L = micrograms per liter

ng/L = nnograms per liter

mg/L = milligrams per liter

ft btoc = feet below top of casing

NYSDEC TOGS 1.1.1 GWQS = New York State Department of Environmental Conservation Technical and Operational Guidance Series 1.1.1 June 1998 Ambient Water Quality Standards and Guidance Values for Groundwater.

[a] = Standard from 2023 Addendum to TOGS 1.1.1

values exceed the NYSDEC TOGS 1.1.1 GWQS.

NA = Not Applicable

NS = No Standard

ND <# = Indicates compound was analyzed for, but not detected at or above the indicated method detection limit.

J = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

U = Compound was not detected at or above laboratory method detection limit (MDL)

V-05 = Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this con

MS-07A = Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

PF-23 = Qualifier ion ratio <50% of associated calibration. Detection is suspect.

PF-22 = Qualifier ion ratio >150% of associated calibration. Detection is suspect.

PF-17C = Extracted internal standard is outside of control limits. Analyte is a known difficult compound.

H-01 = Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Table 4

Remedial System Operation Data 2024

Date	System Status on arrival (up/down)	System Status on departure (up/down)	System Sampled (Y/N)	Flow Rate (GPM)	Blower Vac (in./Hg)	KO Vac (in./Hg)	Vac Differential	Blower Discharge (PSI)	Blower Discharge Temp	Pump Pressure (PSI)	Bag 1 Pressure (PSI)	Bag 2 Pressure (PSI)	Stripper Pressure (PSI)	Stripper Flow (in./H2O)	Effluent pH	Bag Filters Changed	Transfer Pump Hourmeter	Total hours since last visit	TPE Blower Hourmeter	Total hours since last visit	Periodic Uptime	Bedding Pump Hourmeter	Total hours since last visit	Stripper Blower Hourmeter	Total hours since last visit	Periodic Uptime
1/12/2024	Down	Up	N	6	20	10	1.0	0	60	19	19	20	2.5	16	7	Yes	3,632.3	164.7	12,286.2	313.3	93.24%	8,218.6	18.6	16,448.8	315.1	93.78%
1/16/2024	Up	Up	N	5.1	12	14	1.0	0	85	15	20	22	2.5	18	7	Yes	3,638.1	5.8	12,381.9	95.7	99.69%	8,219.7	1.1	16,544.7	95.9	99.90%
1/19/2024	Up	Up	N	6.2	22	21	1.0	0	90	34	16	17	2.5	17	7	Yes	3,638.5	0.4	12,452.3	70.4	97.78%	8,231.2	11.5	16,615.4	70.7	98.19%
1/23/2024	Up	Up	N	8	22	21	2.0	0	100	28	16	18	2	19	7	Yes	3,715.2	76.7	12,544.9	92.6	96.46%	8,236.3	5.1	16,712.7	97.3	101.35%
1/26/2024	Up	Up	N	8.1	22	21	1.0	0	100	30	22	24	2	18	7	Yes	3,757.1	41.9	12,615.7	70.8	98.33%	8,243.3	7.0	16,783.4	70.7	98.19%
1/30/2024	Up	Up	N	7.3	23	22	1.0	0	100	30	23	25	2	18	7	Yes	3,814.9	57.8	12,706.0	90.3	94.06%	8,254.8	11.5	16,873.9	90.5	94.27%
January																		347.3		733.1	95.46%		54.8		740.2	96.38%
2/2/2024	Up	Up	N	6.7	23	22	1.0	0	100	30	23	25	2	19	7	Yes	3,860.3	45.4	12,779.7	73.7	102.36%	8,259.7	4.9	16,947.5	73.6	9.58%
2/6/2024	Up	Up	N	6.9	23	22	1.0	0	98	32	25	27	2	17	7	Yes	3,918.6	58.3	12,875.3	95.6	99.58%	8,264.1	4.4	17,043.1	95.6	99.58%
2/9/2024	Up	Up	N	7.3	22	21	1.0	0	100	32	24	26	2	17	6	Yes	3,958.9	40.3	12,945.4	70.1	97.36%	8,266.3	2.2	17,113.3	70.2	97.50%
2/13/2024	Up	Up	N	5.2	23	22	1.0	0	95	36	29	30	2.5	18	7	Yes	4,023.1	64.2	13,044.7	99.3	103.44%	8,269.0	2.7	17,212.5	99.2	103.33%
2/16/2024	Up	Up	N	6.5	23	22	1.0	0	100	35	26	28	2	17	7	Yes	4,061.9	38.8	13,112.5	67.8	94.17%	8,270.8	1.8	17,280.8	68.3	94.86%
2/20/2024	Up	Up	N	5.8	23	22	1.0	0	100	34	26	28	2	20	7	Yes	4,119.9	58.0	13,206.9	94.4	98.33%	8,273.2	2.4	17,377.4	96.6	100.63%
2/23/2024	Up	Up	N	6.4	22	21	1.0	0	98	29	22	24	2	17	7	Yes	4,159.8	39.9	13,276.5	69.6	96.67%	8,275.2	2.0	17,448.1	70.7	98.19%
2/27/2024	Up	Up	N	5.5	23	22	1.0	0	100	32	25	27	2	18	7	Yes	4,217.1	57.3	13,371.4	94.9	98.85%	8,278.1	2.9	17,543.1	95.0	98.96%
February																		402.2		665.4	99.02%		23.3		669.2	99.58%
3/1/2024	Up	Up	N	5.6	23	22	1.0	0	97	28	21	23	2	18	7	Yes	4,262.1	46.0	13,444.4	73.0	101.39%	8,282.2	4.1	17,616.1	73.0	101.39%
3/5/2024	Up	Up	Y	5.8	23	22	1.0	0	100	31	23	25	2	18	7	Yes	4,321.5	59.4	13,638.8	194.4	202.50%	8,286.3	4.1	17,710.4	94.3	98.23%
3/8/2024	Up	Up	N	5.1	23	22	1.0	0	100	31	23	25	2	17	7	Yes	4,366.8	45.3	13,611.7	-27.1	-37.64%	8,291.7	5.4	17,783.3	72.9	101.25%
3/12/2024	Up	Up	N	5.3	23	22	1.0	0	100	30	22	24	2	17	7	Yes	4,430.7	63.9	13,706.1	94.4	98.33%	8,303.2	11.5	17,876.8	93.5	97.40%
3/15/2024	Up	Up	N	5.3	23	22	1.0	0	100	30	22	24	2	17	7	Yes	4,482.7	52.0	13,780.6	74.5	103.47%	8,310.6	7.4	17,952.3	75.5	104.86%
3/19/2024	Up	Up	N	4.6	22	21	1.0	0	100	33	25	27	2	18	7	Yes	4,547.1	64.4	13,873.8	93.2	97.08%	8,320.3	9.7	18,045.4	93.1	96.98%
3/22/2024	Up	Up	N	5.2	23	22	1.0	0	98	27	19	20	2	19	7	Yes	4,594.7	47.6	13,944.3	70.5	97.92%	8,326.3	6.0	18,116.0	70.6	98.06%
3/26/2024	Up	Up	N	4.4	23	22	1.0	0	100	30	22	24	2	17	7	Yes	4,662.1	67.4	14,039.6	95.3	99.27%	8,386.0	59.7	18,211.3	95.3	99.27%
3/29/2024	Up	Up	N	4.8	23	22	1.0	0	98	31	24	26	2	17	7	Yes	4,709.7	47.6	14,111.7	72.1	100.14%	8,342.4	0.0	18,283.5	72.2	100.28%
March																		492.6		740.3	99.50%		107.9		740.4	99.52%
4/1/2024	Up	Up	No	4.7	23	22	1.0	0	98	31	22	24	2	17	7	Yes	4,757.2	47.5	14,179.5	67.8	94.17%	8,348.8	6.4	18,354.2	70.7	98.19%
4/5/2024	Up	Up	No	8.1	23	22	1.0	0	100	40	32	33	2	18	6	Yes	4,828.7	71.5	14,275.2	95.7	99.69%	8,370.1	21.3	18,449.9	95.7	99.69%
4/8/2024	Up	Up	Yes	5.3	23	22	1.0	0	100	29	20	22	2	16	7	Yes	4,881.2	52.5	14,347.2	72.0	100.00%	8,380.1	10.0	18,522.0	72.1	100.14%
4/12/2024	Down	Up	No	6.4	15	14	1.0	0	77	48	37	39	2	18	7	Yes	4,948.7	67.5	14,438.9	91.7	95.52%	8,399.4	19.3	18,616.2	94.2	98.13%
4/16/2024	Up	Up	No	6.3	23	22	1.0	0	100	55	46	47	2	18	7	Yes	5,018.4	69.7	14,530.0	91.1	94.90%	8,459.1	59.7	18,707.2	91.0	94.79%
4/19/2024	Up	Up	No	5.3	23	22	1.0	0	101	48	38	39	2	18	7	Yes	5,063.0	44.6	14,606.7	76.7	106.53%	8,482.1	23.0	18,783.9	76.7	106.53%
4/24/2024	Up	Up	No	9.5	23	22	1.0	-	100	47	35	37	2	18	6	Yes	5,126.9	63.9	14,725.4	118.7	98.92%	8,507.0	24.9	18,902.6	118.7	98.92%
4/26/2024	Up	Up	No	12.7	23	22	1.0	-	101	40	29	30	2	17	7	Yes	5,149.4	22.5	14,770.5	45.1	93.96%	8,516.2	9.2	18,947.7	45.1	93.96%
4/29/2024	Up	Up	No	9.7	23	22	1.0	-	104	38	28	30	2	16	7	Yes	5,193.6	44.2	14,843.3	72.8	101.11%	8,535.9	19.7	19,020.5	72.8	101.11%
April																		483.9		731.6	98.33%		193.5		737.0	99.06%
5/3/2024	Up	Up	No	10.3	23	22	1.0	0	100	44	34	35	2	18	7	Yes	5,252.2	58.6	14,937.4	94.1	98.02%	8,556.5	20.6	19,114.7	94.2	98.13%
5/7/2024	Up	Up	Yes	11.6	23	22	1.0	0	101	42	32	33	2	17	7	Yes	5,313.3	61.1	15,030.2	92.8	96.67%	8,579.7	23.2	19,210.8	96.1	100.10%
5/10/2024	Up	Up	No	9.7	23	22	1.0	0	100	37	27	28	2	17	6	Yes	5,355.7	42.4	15,100.4	70.2	97.50%	8,595.1	15.4	19,281.1	70.3	97.64%
5/14/2024	Up	Up	No	8.8	22	21	1.0	0	100	39	30	31	2	16	7	Yes	5,415.1	59.4	15,195.8	95.4	99.37%	8,616.4	21.3	19,376.4	95.3	99.27%
5/17/2024	Up	Up	No	8.5	23	22	1.0	0	100	37	27	28	2	18	7	Yes	5,460.9	45.8	15,269.9	74.1	102.92%	8,632.1	15.7	19,450.4	74.0	102.78%
5/21/2024	Up	Up	No	8.5	23	22	1.0	0	101	41	31	32	2	17	7	Yes	5,522.3	61.4	15,364.7	94.8	98.75%	8,658.9	26.8	19,545.3	94.9	98.85%
5/24/2024	Up	Up	No	8.6	23	22	1.0	0	102	38	28	30	2	18	7	Yes	5,565.9	43.6	15,437.4	72.7	100.97%	8,674.8	15.9	19,618.0	72.7	100.97%
5/28/2024	Up	Up	No	7.5	23	22	1.0	0	100	40	31	32	2.5	17	7	Yes	5,632.7	66.8	15,533.5	96.1	100.10%	8,695.6	20.8	19,714.1	96.1	100.10%
May																		439.1		690.2	99.17%		159.7		693.6	99.66%
6/4/2024	Down	Up	No	11.1	18	17	1.0	0	75	35	25	26	2	13	7	Yes	5,748.4	115.7	15,688.6	155.1	92.32%	8,724.8	29.2	19,871.5	157.4	93.69%
6/7/2024	Up	Up	No	8.1	23	22	1.0	0	100	36	26	27	2	18	7	Yes	5,808.0	59.6	15,761.1	72.5	100.69%	8,744.9	20.1	19,944.0	72.5	100.69%
6/11/2024	Up	Up	Yes	6.9	23	22	1.0	0	100	42	32	33	2	17	7	Yes	5,885.2	77.2	15,855.3	94.2	98.12%	8,773.2	28.3	20,040.3	96.3	100.31%
6/14/2024	Up	Up	No	6.7	23	22	1.0	0	101	39	28	30	2	18	7	Yes	5,939.8	54.6	15,927.3	72.0	100.00%	8,787.3	14.1	20,112.3	72.0	100.00%
6/18/2024	Up	Up	No	3.5	23	22	1.0	0	100	51	41	42	2	19	7	Yes	6,014.9	75.1	16,015.2	87.9	91.56%	8,801.3	14.0	20,204.7	92.4	96.25%
6/21/2024	Down	Up	No	7	22	21	1.0	0	101	43	34	35	2	16	7	Yes	6,025.8	10.9	16,029.2	14.0	19.44%	8,803.3	2.0	20,219.3	14.6	20.28%
6/24/2024	Down	Up	No	7.3	18	17	1.0	0	80	37	33	34	2	18	7	Yes	6,042.3	16.5	16,053.1	23.9	33.19%	8,813.9	10.6	20,243.6	24.3	33.75%
6/28/2024	Up	Up	No	5.3	22	21	1.0	0	100	38	32	33	2	17	7	Yes	6,115.3	73.0	16,146.4	93.3	97.19%	8,838.2	24.3	20,337.0	93.4	97.29%
June																		482.6		612.9	82.38%		142.6		622.9	83.72%
7/2/2024	Up	Up	No	-3.1	22	21	1.0	0	95	47	40	41	2.5	17	7	Yes	6,196.8	81.5	16,240.4	94.0	97.92%	8,900.7	62.5	20,434.8	97.8	101.87%
7/5/2024	Up	Up	No	4.4	31	20	1.0	0	105	41	32	34	17	2.5	7	Yes	6,241.7	44.9	16,310.6	70.2	97.50%	8,900.7	0.0	20,505.0	70.2	97.50%
7/9/2024	Up	Up	No	4.2	20	19	1.0	0	100	50	37	38	2	16	7	Yes	6,302.6	60.9	16,404.4	93.8	97.71%	8,900.7	0.0	20,598.8	93.8	97.71%
7/12/2024	Up	Up	No	4.2	21	20	1.0	-	105	49	38	39	2	18	7	Yes	6,359.5	56.9	16,471.4	67.0	93.06%	8,900.7	0.0	20,672.4	73.6	102.22%
7/16/2024	Down	Down	Yes	2.5	17	16	1.0	-	88	55	44	45	2	16	7	No	6,437.7	78.2	16,548.7	77.3	80.52%	8,900.8	0.1	20,762.9	90.5	94.27%
7/19/2024	Down	Up*	No	-	-	-	-	-	-	-	-	-	2	14	7	No	6,438.3	0.6	16,550.3	1.6	2.22%	8,900.9	0.1	20,764.7	1.8	2.50%
Summary of System Conditions during operation of the groundwater extraction wells and the sewer bedding pump (Pre-TPE Blower Shutdown)																		*2,970.7*		*4,577.4*	*100.91%*		*744.5*		*4,631.0*	*102.09%*

Table 4

Remedial System Operation Data 2024

Date	System Status on arrival (up/down)	System Status on departure (up/down)	System Sampled (Y/N)	Flow Rate (GPM)	Blower Vac (in./Hg)	KO Vac (in./Hg)	Vac Differential	Blower Discharge (PSI)	Blower Discharge Temp	Pump Pressure (PSI)	Bag 1 Pressure (PSI)	Bag 2 Pressure (PSI)	Stripper Pressure (PSI)	Stripper Flow (in./H2O)	Effluent pH	Bag Filters Changed	Transfer Pump Hourmeter	Total hours since last visit	TPE Blower Hourmeter	Total hours since last visit	Periodic Uptime	Bedding Pump Hourmeter	Total hours since last visit	Stripper Blower Hourmeter	Total hours since last visit	Periodic Uptime
7/24/2024	Up*	Up*	No	-	-	-	-	-	-	-	-	-	2	15	7	No	6,438.3	0.0	16,550.3	0.0	0.00%	8,914.8	13.9	20,878.5	113.8	94.83%
7/30/2024	Up*	Up*	No	2.6	-	-	-	-	-	-	-	-	2	17	7	No	6,438.3	0.0	16,550.3	0.0	0.00%	8,930.5	15.7	21,023.1	144.6	100.42%
July																		323.0		403.9	52.59%		92.3		686.1	89.34%
8/6/2024	Up*	Up*	No	1.8	-	-	-	-	-	-	-	-	2	17	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	8,955.4	24.9	21,191.0	167.9	99.94%
8/13/2024	Up*	Up*	No	2.4	-	-	-	-	-	-	-	-	2	16	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	8,991.9	36.5	21,358.1	167.1	99.46%
8/20/2024	Up*	Up*	Yes	2.1	-	-	-	-	-	-	-	-	2	15	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,017.4	25.5	21,524.6	166.5	99.11%
8/26/2024	Up*	Up*	No	2.1	-	-	-	-	-	-	-	-	2	18	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,035.1	17.7	21,669.0	144.4	100.28%
August																		0.0		0.0	0.00%		104.6		645.9	99.68%
9/3/2024	Up*	Up*	No	2.1	-	-	-	-	-	-	-	-	2.5	15	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,053.3	18.2	21,863.4	194.4	101.25%
9/9/2024	Up*	Up*	No	2	-	-	-	-	-	-	-	-	2	15	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,073.3	20.0	22,004.5	141.1	97.99%
9/17/2024	Up*	Up*	No	2	-	-	-	-	-	-	-	-	2	16	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,095.8	22.5	22,200.0	195.5	101.82%
9/24/2024	Up*	Up*	Yes	1.9	-	-	-	-	-	-	-	-	2	16	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,111.0	15.2	22,361.8	161.8	96.31%
September																		0.0		0.0	0.00%		75.9		692.8	99.54%
10/1/2024	Up*	Up*	No	2	-	-	-	-	-	-	-	-	2	18	6	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,142.0	31.0	22,528.7	166.9	99.35%
10/8/2024	Up*	Up*	No	1.8	-	-	-	-	-	-	-	-	2	16	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,163.1	21.1	22,699.4	170.7	101.61%
10/15/2024	Down	Up*	Yes	2.7	-	-	-	-	-	-	-	-	2	19	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,176.1	13.0	22,810.3	110.9	66.01%
10/22/2024	Up*	Up*	No	2	-	-	-	-	-	-	-	-	2	19	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,220.2	44.1	22,974.9	164.6	97.98%
10/29/2024	Up*	Up*	No	2	-	-	-	-	-	-	-	-	2	17	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,241.4	21.2	23,142.8	167.9	99.94%
October																		0.0		0.0	0.00%		130.4		781.0	92.98%
11/5/2024	Up*	Up*	Yes	2.1	-	-	-	-	-	-	-	-	2	17	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,257.9	16.5	23,312.9	170.1	101.25%
11/12/2024	Up*	Up*	No	2.1	-	-	-	-	-	-	-	-	2	17	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,274.2	16.3	23,477.5	164.6	97.98%
11/19/2024	Up*	Up*	No	2	-	-	-	-	-	-	-	-	2.5	17	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,292.8	18.6	23,645.6	168.1	100.06%
11/26/2024	Up*	Up*	No	2.1	-	-	-	-	-	-	-	-	2	17	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,334.8	42.0	23,814.8	169.2	100.71%
November																		0.0		0.0	0.00%		93.4		672.0	100.00%
12/3/2024	Up*	Up*	No	2.1	-	-	-	-	-	-	-	-	2	17	6	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,386.8	52.0	23,983.1	168.3	100.18%
12/12/2024	Up*	Up*	No	1.8	-	-	-	-	-	-	-	-	2	19	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,501.4	114.6	24,195.0	211.9	98.10%
12/17/2024	Up*	Up*	Yes	1.4	-	-	-	-	-	-	-	-	2	18	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,564.1	62.7	24,315.5	120.5	100.42%
12/24/2024	Up*	Up*	No	1.2	-	-	-	-	-	-	-	-	2	18	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,662.2	98.1	24,482.3	166.8	99.29%
12/31/2024	Up*	Up*	No	0	-	-	-	-	-	-	-	-	0	18	7	No	6,438.4	0.0	16,550.3	0.0	0.00%	9,771.4	109.2	24,647.0	164.7	98.04%
December																		0.0		0.0	0.00%		436.6		832.2	99.07%
Summary of System Conditions during operation of the sewer bedding pump only (Post-TPE Blower Shutdown)																		*0.0*		*0.0*	*0.00%*		*870.5*		*3,882.3*	*98.04%*
2024 Totals																		**2,970.7**		**4,577.4**	**51.83%**		**1,615.0**		**8,513.3**	**96.39%**

* - Only Air Stripper and Bedding Pump are online. Extraction wells offline.

* - Only Air Stripper and Bedding Pump are online. Extraction wells offline.

Table 4

Remedial System Operation Data 2024

Date	Bedding Pump Totalizer	Discharge Between Events: Bedding Pump	*Calculated* GPM	TPE Pump Totalizer	Discharge Between Events: TPE Pump	*Calculated Influent* GPM	*Calculated TP/Air Stripper* GPM	Total Discharge Between Events: Bedding Pump & TPE Totalizers	CE Checks?	Operational Status
	Gallons	*Gallons*		*Gallons*	*Gallons*			*Gallons*		
1/12/2024	730,629	14,129	12.7	7,812,629	376,319	18.7	38.1	-362,190	No	High VLS alarm, opened air bleeder. Turned off bedding pump on departure.
1/16/2024	731,500	871	13.2	7,827,001	14,372	2.5	41.3	-13,501	No	System on, no water in site tubes. Turn bedding pump off on departure.
1/19/2024	740,394	8,894	12.9	7,827,256	255	0.1	10.6	8,639	No	System on, no water in site tubes. Adjust vacuum to extract water. Normal operations.
1/23/2024	743,312	2,918	9.5	7,977,479	150,223	26.1	32.6	-147,305	No	System on. High KO alert. Clean KO and flowmeter.
1/26/2024	749,409	6,097	14.5	7,980,244	2,765	0.6	1.1	3,332	No	System On. Normal operations. Skid flowmeter is not reading properly.
1/30/2024	758,072	8,663	12.6	8,057,205	76,961	13.4	22.2	-68,298	No	System On. Normal operations. Skid flowmeter is not reading properly.
January		41,572	0.9		620,895	13.5	29.8	-579,323		
2/2/2024	761,803	3,731	12.7	8,118,274	61,069	14.1	22.4	-57,338	No	System On. Normal operations.
2/6/2024	765,109	3,306	12.5	8,198,025	79,751	13.8	22.8	-76,445	No	System On. Normal operations.
2/9/2024	766,820	1,711	13.0	8,246,070	48,045	11.1	19.9	-46,334	No	System On. Normal operations.
2/13/2024	769,160	2,340	14.4	8,322,896	76,826	13.3	19.9	-74,486	No	System On. Normal operations.
2/16/2024	770,542	1,382	12.8	8,373,164	50,268	11.6	21.6	-48,886	No	System On. Normal operations.
2/20/2024	772,464	1,922	13.3	8,444,016	70,852	12.3	20.4	-68,930	No	System On. Normal operations.
2/23/2024	774,038	1,574	13.1	8,496,629	52,613	12.2	22.0	-51,039	No	System On. Normal operations.
2/27/2024	776,373	2,335	13.4	8,568,453	71,824	12.5	20.9	-69,489	No	System On. Normal operations.
February		18,301	0.5		511,248	12.7	21.2	-492,947		
3/1/2024	779,622	3,249	13.2	8,625,062	56,609	12.9	21.0	-53,360	No	System On. Normal operations.
3/5/2024	782,955	3,333	13.5	8,699,548	74,486	13.2	20.9	-71,153	No	System On. Normal operations.
3/8/2024	787,317	4,362	13.5	8,757,119	57,571	13.2	21.2	-53,209	No	System On. Normal operations. Error with TPE Blower hourmeter reading.
3/12/2024	796,753	9,436	13.7	8,835,044	77,925	13.9	20.3	-68,489	No	System On. Normal operations.
3/15/2024	802,784	6,031	13.6	8,900,194	65,150	14.4	20.9	-59,119	No	System On. Normal operations.
3/19/2024	810,702	7,918	13.6	8,980,465	80,271	14.4	20.8	-72,353	No	System On. Normal operations.
3/22/2024	815,629	4,927	13.7	9,042,546	62,081	14.7	21.7	-57,154	No	System On. Normal operations.
3/26/2024	823,777	8,148	2.3	9,128,107	85,561	15.0	21.2	-77,413	No	System On. Normal operations.
3/29/2024	829,119	5,342	1.2	9,191,953	63,846	14.7	22.4	-58,504	No	System On. Normal operations. Error with Bedding Pump hourmeter reading.
March		52,746	1.2		623,500	14.0	21.1	-570,754		
4/1/2024	834,670	5,551	14.5	9,250,346	58,393	13.8	20.5	-52,842	No	System On. Normal operations.
4/5/2024	853,178	18,508	14.5	9,334,654	84,308	14.7	19.7	-65,800	No	System On. Normal operations.
4/8/2024	861,869	8,691	14.5	9,401,244	66,590	15.4	21.1	-57,899	No	System On. Normal operations.
4/12/2024	876,942	15,073	13.0	9,483,537	82,293	14.6	20.3	-67,220	No	High VLS alarm, increased Transfer Pump frequency to handle water from increased rainfall. System On on departure.
4/16/2024	907,989	31,047	8.7	9,584,357	100,820	18.5	24.1	-69,773	No	System On. Normal operations. High Bedding alarm.
4/19/2024	919,137	11,148	8.1	9,659,587	75,230	16.3	28.1	-64,082	No	System On. Normal operations.
4/24/2024	932,993	13,856	9.3	9,768,218	108,631	15.3	28.3	-94,775	No	System On. Normal operations.
4/26/2024	938,023	5,030	9.1	9,810,819	42,601	15.7	31.6	-37,571	No	System On. Normal operations.
4/29/2024	948,722	10,699	9.1	9,873,719	62,900	14.4	23.7	-52,201	No	System On. Normal operations.
April		119,603	2.7		681,766	15.3	24.2	-562,163		
5/3/2024	959,183	10,461	8.5	9,952,326	78,607	13.9	22.4	-68,146	No	System On. Normal operations.
5/7/2024	970,333	11,150	8.0	10,037,019	84,693	14.7	23.1	-73,543	No	System On. Normal operations.
5/10/2024	976,908	6,575	7.1	10,098,316	61,297	14.5	24.1	-54,722	No	System On. Normal operations.
5/14/2024	985,738	8,830	6.9	10,180,292	81,976	14.3	23.0	-73,146	No	System On. Normal operations.
5/17/2024	991,952	6,214	6.6	10,244,568	64,276	14.5	23.4	-58,062	No	System On. Normal operations.
5/21/2024	1,002,400	10,448	6.5	10,328,788	84,220	14.8	22.9	-73,772	No	System On. Normal operations.
5/24/2024	1,008,657	6,257	6.6	10,391,028	62,240	14.3	23.8	-55,983	No	System On. Normal operations.
5/28/2024	1,016,904	8,247	6.6	10,476,455	85,427	14.8	21.3	-77,180	No	System On. Normal operations.
May		68,182	1.6		602,736	14.4	22.9	-534,554		
6/4/2024	1,028,182	11,278	6.4	10,616,963	140,508	14.9	20.2	-129,230	No	System Off on arrival. High VLS alarm shutoff. Change bag filters and reset. System On on departure.
6/7/2024	1,033,618	5,436	4.5	10,696,548	79,585	18.3	22.3	-74,149	No	System On. Normal operations.
6/11/2024	1,045,912	12,294	7.2	10,800,778	104,230	18.0	22.5	-91,936	No	System On. Normal operations.
6/14/2024	1,050,599	4,687	5.5	10,879,578	78,800	18.2	24.1	-74,113	Yes	System On. Normal operations.
6/18/2024	1,055,224	4,625	5.5	10,979,718	100,140	18.1	22.2	-95,515	No	System On. Normal operations.
6/21/2024	1,055,862	638	5.3	10,996,889	17,171	19.6	26.3	-16,533	No	System Off on arrival. High VLS alarm shutoff. Change bag filters and reset. System On on departure.
6/24/2024	1,058,824	2,962	4.7	11,012,587	15,698	10.8	15.9	-12,736	No	System Off on arrival. Level Switch Failure alarm shutoff. Cleaned system floats, unable to recreate issue. System On on departure.
6/28/2024	1,065,785	6,961	4.8	11,078,294	65,707	11.7	15.0	-58,746	No	System On. Normal operations.
June		48,881	1.1		601,839	13.5	21.0	-552,958		
7/2/2024	1,083,282	17,497	4.7	11,146,198	67,904	11.6	13.9	-50,407	No	System On. High bag filter pressure alarm. Change bag filters and reset. Switch off bedding pump due to high bag filter pressure. System On on departure.
7/5/2024	1,083,282	0	0.0	11,191,042	44,844	10.6	16.6	-44,844	No	System on; bedding pump off. High Bedding alarm. Change bag filters and reset. System On on departure.
7/9/2024	1,083,282	0	0.0	11,249,007	57,965	10.3	15.9	-57,965	No	System on; bedding pump on. High Bedding alarm. Change bag filters and reset. System On on departure.
7/12/2024	1,083,282	0	0.0	11,297,430	48,423	11.0	14.2	-48,423	No	System on. KO High and High Bedding alarm. Change bag filters and reset. System On on departure.
7/16/2024	1,083,282	0	0.0	11,360,059	62,629	11.5	13.3	-62,629	No	System down on arrival from High VLS time out. GWE Blower making strange noises. System off on departure.
7/19/2024	1,083,282	0	0.0	11,360,629	570	5.3	15.8	-570	No	GWE system down, air stripper and bedding pump on.
		366,782	*1.3*		*3,924,319*	*14.4*	*21.6*	*4,291,101*		*Summary of system up-time and treated water amount prior to shutdown of TPE Blower due to repairs and the groundwater extraction wells becoming inactive*

Table 4

Remedial System Operation Data 2024

Date	Bedding Pump Totalizer	Discharge Between Events: Bedding Pump	*Calculated* GPM	TPE Pump Totalizer	Discharge Between Events: TPE Pump	*Calculated Influent* GPM	*Calculated TP/Air Stripper* GPM	Total Discharge Between Events: Bedding Pump & TPE Totalizers	CE Checks?	Operational Status
	Gallons	*Gallons*		*Gallons*	*Gallons*			*Gallons*		
7/24/2024	1,092,910	9,628	11.5	11,360,629	0	0.0	0.0	9,628	No	GWE Blower removed and sent for repairs. GWE system down, air stripper and bedding pump on.
7/30/2024	1,103,939	11,029	11.7	11,360,629	0	0.0	0.0	11,029	No	GWE system down, air stripper and bedding pump on.
July		38,154	0.8		282,335	6.1	12.4	-244,181		
8/6/2024	1,120,910	16,971	11.4	11,360,629	0	0.0	0.0	16,971	No	GWE system down, air stripper and bedding pump on.
8/13/2024	1,145,988	25,078	11.5	11,360,629	0	0.0	0.0	25,078	No	GWE system down, air stripper and bedding pump on.
8/20/2024	1,162,879	16,891	11.0	11,360,629	0	0.0	0.0	16,891	No	GWE system down, air stripper and bedding pump on.
8/26/2024	1,174,657	11,778	11.1	11,360,629	0	0.0	0.0	11,778	No	GWE system down, air stripper and bedding pump on.
August		70,718	1.8		0	0.0	0.0	70,718		
9/3/2024	1,186,765	12,108	1.1	11,360,629	0	0.0	0.0	12,108	No	GWE system down, air stripper and bedding pump on.
9/9/2024	1,200,447	13,682	1.6	11,360,629	0	0.0	0.0	13,682	Yes	GWE system down, air stripper and bedding pump on. CE check.
9/17/2024	1,215,597	15,150	1.3	11,360,629	0	0.0	0.0	15,150	No	GWE system down, air stripper and bedding pump on.
9/24/2024	1,225,509	9,912	1.0	11,360,629	0	0.0	0.0	9,912	No	GWE system down, air stripper and bedding pump on.
September		50,852	1.2		0	0.0	0.0	50,852		
10/1/2024	1,246,339	20,830	2.1	11,360,629	0	0.0	0.0	20,830	No	GWE system down, air stripper and bedding pump on.
10/8/2024	1,260,262	13,923	1.4	11,360,629	0	0.0	0.0	13,923	No	GWE system down, air stripper and bedding pump on.
10/15/2024	1,268,501	8,239	0.8	11,360,629	0	0.0	0.0	8,239	No	System down on arrival. Low air flow stripper alarm. Reset. GWE system down, air stripper and bedding pump on.
10/22/2024	1,297,383	28,882	2.9	11,360,629	0	0.0	0.0	28,882	No	GWE system down, air stripper and bedding pump on.
10/29/2024	1,311,113	13,730	1.4	11,360,629	0	0.0	0.0	13,730	No	GWE system down, air stripper and bedding pump on.
October		85,604	1.7		0	0.0	0.0	85,604		
11/5/2024	1,321,651	10,538	1.0	11,360,629	0	0.0	0.0	10,538	No	GWE system down, air stripper and bedding pump on.
11/12/2024	1,332,137	10,486	1.0	11,360,629	0	0.0	0.0	10,486	No	GWE system down, air stripper and bedding pump on.
11/19/2024	1,344,268	12,131	1.2	11,360,629	0	0.0	0.0	12,131	No	GWE system down, air stripper and bedding pump on.
11/26/2024	1,372,284	28,016	2.8	11,360,629	0	0.0	0.0	28,016	No	GWE system down, air stripper and bedding pump on.
November		61,171	1.5		0	0.0	0.0	61,171		
12/3/2024	1,405,554	33,270	3.3	11,360,629	0	0.0	0.0	33,270	Yes	GWE system down, air stripper and bedding pump on. CE check.
12/12/2024	1,475,530	69,976	5.4	11,360,629	0	0.0	0.0	69,976	No	GWE system down, air stripper and bedding pump on.
12/17/2024	1,509,949	34,419	4.8	11,360,629	0	0.0	0.0	34,419	No	GWE system down, air stripper and bedding pump on.
12/24/2024	1,557,124	47,175	4.7	11,360,629	0	0.0	0.0	47,175	No	GWE system down, air stripper and bedding pump on. Annual Inspection.
12/31/2024	1,600,712	43,588	4.3	11,360,629	0	0.0	0.0	43,588	No	GWE system down, air stripper and bedding pump on. High high sewer bedding alarm
December		228,428	4.5		0	0.0	0.0	228,428		
		517,430	*2.2*		*0*	*0.0*	*0.0*	*517,430*		*Summary of system up-time and treated water amount after the shutdown of TPE Blower due to repairs and the groundwater extraction wells becoming inactive - system processing water from the sewer bedding pump only.*
2024 Totals		**884,212**	**1.7**		**3,924,319**	**7.4**	**22.0**	**4,808,531**		

Table 5
Monthly Treatment
Effluent Data

Parameter	Units	Measurement Frequency	Effluent Limits (Daily Maximum)	1/1/2024	2/1/2024	3/5/2024	4/8/2024	5/7/2024	6/11/2024	7/16/2024	8/20/2024	9/24/2024	10/15/2024	11/5/2024	12/17/2024
VOCs	µg/L	Monthly	10	NS	NS	ND	**10.6**	ND	ND	ND	ND	3.4	3.1	3.0	4.1
Aluminum	mg/L	Monthly	2.7	NS	NS	ND < 0.20	ND < 0.20	ND < 0.20	ND < 0.20	ND < 0.20	ND < 0.20	ND < 0.050	ND < 0.20	ND < 0.20	ND < 0.20
Iron	mg/L	Monthly	2.0	NS	NS	**2.1**	1.6	**2.1**	1.6	**13.2**	**2.9**	**3.7**	**5.5**	**3.9**	0.35
Zinc	mg/L	Monthly	0.4	NS	NS	0.0090 J	0.016	0.014 J	0.016	0.020	ND < 0.010	0.013	0.022	0.012	ND < 0.010
Oil & Grease	mg/L	Monthly	15	NS	NS	ND < 4.7	ND < 5.2	ND < 5.0	ND < 4.8	1.6 J	2.7 J	ND < 5.0	ND < 4.7	ND < 4.7	1.3 J

Notes:

mg/L = milligrams per litre

µg/L = micrograms per liter

Indicates values exceed the Effluent Limits defined in the 2015 SMP (10 µg/l Total VOCs).

ND <# = Indicates compound was analyzed for, but not detected at or above the indicated reporting limit.

J = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

B = Compund was found in blank and sample

NS = No sample collected (NYSDEC stand by lab contract on hold in January and February)

Table 6
System VOC Summary

Sample Date	Concentration (µg/L)				
	cis-1,2-DCE	TCE	Vinyl Chloride	Acetone	Total TCL VOCs
Influent					
1/1/2024	No Sample				
2/1/2024	No Sample				
3/5/2024	2,700	3,000	160	ND< 500	5,860
4/8/2024	3,100	2,400	120	ND< 500	5,620
5/7/2024	2,300	2,200	110	ND< 500	4,610
6/11/2024	3,300	4,000	210	ND< 500	7,510
7/16/2024	1,600	2,700	81	ND< 500	4,381
8/20/2025	830	ND < 20	93	ND < 200	923
9/24/2024	750	1.9 J	100	ND< 500	862.9
10/15/2024	580	ND < 20	65	ND < 200	646.9
11/5/2024	940	ND < 20	140	ND < 200	1,080
12/17/2024	190	230	11	ND < 50	431
Effluent					
1/1/2024	No Sample				
2/1/2024	No Sample				
3/5/2024	ND < 4.0	ND < 4.0	ND < 4.0	ND < 40	ND
4/8/2024	3.6 J	ND < 4.0	ND < 4.0	ND < 40	**10.6**
5/7/2024	ND < 4.0	ND < 4.0	ND < 4.0	ND < 40	ND
6/11/2024	ND < 4.0	ND < 4.0	ND < 4.0	ND < 40	ND
7/16/2024	ND < 10	ND < 10	ND < 10	ND < 100	ND
8/20/2025	ND < 10	ND < 10	ND < 10	ND < 100	ND
9/24/2024	ND < 1.0	ND < 1.0	ND < 2.0	3.4 J	3.4
10/15/2024	ND < 1.0	ND < 1.0	ND < 1.0	3.1 J	3.1
11/5/2024	ND < 1.0	ND < 1.0	ND < 1.0	3.0 J	3.0
12/17/2024	ND < 1.0	ND < 1.0	ND < 1.0	4.1 J	4.1

Notes:

µg/L = micrograms per liter

Indicates values exceed the Effluent Limits defined in the 2015 SMP (10 ug/l Total VOCs).

ND <# = Indicates compound was analyzed for, but not detected at or above the indicated reporting limit.

NS = No sample collected (NYSDEC stand by lab contract on hold in January and February)

J = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

System influent sampling frequency was modified to monthly following the system upgrades.

TCE = Trichloroethene

cis-1,2-DCE = cis-1,2-Dichloroethene

TCL = Target Compound List

VOCs = Volatile Organic Compounds

Table 7
Monthly Outfall
Analytical Data

Parameter	Units	Measurement Frequency	Discharge Limit	1/1/2024	2/1/2024	3/5/2024	4/8/2024	5/7/2024	6/11/2024	7/16/2024	8/20/2024	9/24/2024	10/15/2024	11/5/2024	12/17/2024
VOCs	ug/L	Monthly	10	NS - Lab contract on hold	NS - Lab contract on hold	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aluminum	mg/L	Monthly	No Limit			5.1	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<0.050	ND<0.20	ND<0.20	ND<0.20
Iron	mg/L	Monthly	No Limit			7.3	ND<0.050	0.52	0.23	0.36	0.88	0.55	0.20	0.067	0.18
Zinc	mg/L	Monthly	No Limit			0.50	0.0024 J	0.012 J	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	ND<0.010	0.0082 J
Total Suspended Solids	mg/L	Monthly	No Limit			ND<4.0	ND<4.0	ND<4.0	ND<4.0	ND<4.0	ND<4.0	ND<5.0	ND<4.0	ND<4.0	ND<4.0
Oil & Grease	mg/L	Monthly	No Limit			ND<4.8	1.3 J	ND<4.9	ND<4.8	ND<4.8	5.7	1.1 J	1.6 J	ND<4.7	1.4 J

Notes:

mg/L = milligrams per litre

ug/L = micrograms per liter

Bold Indicates values exceed effluent limits defined in the 2015 SMP.

ND <# = Indicates compound was analyzed for, but not detected at or above the indicated reporting limit.

J = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

B = Compund was found in blank and sample

NS = No sample collected (NYSDEC stand by lab contract on hold in December 2023)

Appendix A – Groundwater Sampling Logs

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	4.00
Date:	5/24/2024	**Depth to Bottom of Well (ft, TOC)**	15.00
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	11.00
Well ID:	MW-1	**Volume of Water in Well (gal)**	1.76

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
0935	4.80	9.9	7.87	401.4	17.9	0.59	2.00
0940	4.85	9.8	7.83	412.6	8.7	0.22	0.80
0945	4.85	9.8	7.82	416.9	5.7	0.21	0.20
0950	4.85	9.9	7.81	421.5	4.7	0.20	0.10
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	0930	Notes:	0950	Sample Time	1.5	gal purged
Purge End Time:	0950		VOC+PFAS			
Weather:	Clear 50s		Purge Rate: 300 ml/min			
Purge/Sampled by	OO					

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	11.90
Date:	5/22/2024	**Depth to Bottom of Well (ft, TOC)**	15.30
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	3.40
Well ID:	MW-2	**Volume of Water in Well (gal)**	0.54

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1300	11.90	12.5	6.68	969	-73.2	0.21	28
1305	11.90	12.3	6.67	990	-80.7	0.09	12
1310	11.90	12.1	6.67	1,003	-86.9	0.03	3.6
1315	11.90	12.1	6.68	1,005	-90.8	0.01	2.3
1320	11.90	12.4	6.68	1,012	-94.2	0.00	1.65
1325	11.90	12.3	6.68	1,008	-96.4	0.00	1.59
1330	11.90	12.2	6.68	1,019	-98.3	0.00	1.51
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1255	Notes:	1330	Sample Time	5	gal purged
Purge End Time:	1330		VOC+PFAS			
Weather:	Clear 50s		Purge rate:	200	ml/min	
Purge/Sampled by	OO		Clear purge water			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	10.30
Date:	5/23/2024	**Depth to Bottom of Well (ft, TOC)**	23.00
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	12.70
Well ID:	MW-3	**Volume of Water in Well (gal)**	2.03

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1050	11.30	14.6	7.71	362.8	21.1	0.43	25.0
1055	11.30	14.4	7.72	361.6	19.6	0.36	19.0
1100	11.30	14.3	7.72	357.8	16.2	0.19	18.5
1105	11.30	14.1	7.76	345.0	13.4	0.20	17.6
1110	11.30	14.2	7.77	338.8	12.5	0.20	17.1
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1045	Notes:	1110	Sample Time	1.5	gal purged
Purge End Time:	1110		VOC+PFAS			
Weather:	Clear 40s		Purge rate:	200	ml/min	
Purge/Sampled by	OO		Purge Water			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	3.95
Date:	5/21/2024	**Depth to Bottom of Well (ft, TOC)**	20.30
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	16.35
Well ID:	MW-4	**Volume of Water in Well (gal)**	2.62

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1400	4.50	15.7	7.75	585	47.3	0.18	3.80
1405	4.50	15.4	7.75	566	47.0	0.08	3.35
1410	4.50	15.6	7.76	554	44.7	0.05	4.90
1415	4.50	16.4	7.76	544	40.9	0.02	9.80
1420	4.50	16.5	7.76	533	38.4	0.01	10.35
1425	4.50	16.6	7.76	530	36.5	0.01	10.70
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1335	Notes:	1425	Sample Time	2	gal purged
Purge End Time:	1425		VOC+PFAS & DUP			
Weather:	Clear 50s		Purge rate:	200	ml/min	
Purge/Sampled by	OO		Purge Water	clear w. orange sediment		

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	8.85
Date:	5/21/2024	**Depth to Bottom of Well (ft, TOC)**	42.00
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	33.15
Well ID:	MW-4D	**Volume of Water in Well (gal)**	5.30

	Meter(s):	YSI PRO DSS #233341					
Time	**Depth to Water (ft, TOC)**	**Temperature (ºC)**	**pH**	**Specific Conductance (uS/cm)**	**ORP**	**DO (mg/L)**	**Turbidity (NTU)**
1255	9.30	17.0	7.45	429	60.5	4.08	100
1300	9.30	17.3	7.46	505	66.0	5.07	120
1305	9.30	17.0	7.45	595	72.0	6.15	30
1310	9.30	16.8	7.52	655	75.4	6.90	12
1315	9.30	16.9	7.54	687	78.5	7.19	8.90
1320	9.30	17.1	7.55	698	79.8	7.29	9.40
1325	9.30	17.0	7.55	701	80.7	7.33	9.60
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1250	Notes:	1325	Sample Time	2	gal purged
Purge End Time:	1325		VOC+PFAS			
Weather:	Clear 40s		Purge rate:	200	ml/min	
Purge/Sampled by	OO		Purge Water	Clear with Brown sediment		

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	7.80
Date:	5/21/2024	**Depth to Bottom of Well (ft, TOC)**	21.00
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	13.20
Well ID:	MW-5	**Volume of Water in Well (gal)**	2.11

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1150	7.90	16.4	7.58	513	83.1	0.87	33
1155	7.90	15.6	7.61	519	79.5	0.53	26
1200	7.90	15.3	7.61	520	77.1	0.50	6.15
1205	7.90	15.4	7.60	519	74.8	0.50	5.95
1210	7.90	15.3	7.60	518	73.4	0.50	5.70
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1145	Notes:	1210	Sample Time	1.5	gal purged
Purge End Time:	1210		VOC+PFAS			
Weather:	Clear 40s		Purge rate:	200	ml/min	
Purge/Sampled by	OO		Purge Water: clear			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	15.30
Date:	5/21/2024	**Depth to Bottom of Well (ft, TOC)**	30.45
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	15.15
Well ID:	MW-5D	**Volume of Water in Well (gal)**	2.42

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1035	15.30	14.0	7.69	705	62.4	8.31	0.60
1040	15.30	14.2	7.69	705	65.0	8.29	0.70
1045	15.30	14.1	7.69	705	68.2	8.26	0.80
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1030	Notes:	1045	Sample Time	1 gal purged
Purge End Time:	1045		VOC+PFAS, MS/MSD		
Weather:	Clear 40s		Purge rate:	200	ml/min
Purge/Sampled by	OO		Purge Water: clear		

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	7.20
Date:	5/22/2024	**Depth to Bottom of Well (ft, TOC)**	14.90
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	7.70
Well ID:	MW-6	**Volume of Water in Well (gal)**	1.23

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
0920	7.60	13.7	7.14	483.3	-61.0	0.22	6.0
0925	7.60	13.5	7.11	493.6	-61.5	0.09	8.0
0930	7.60	13.5	7.09	497.3	-60.8	0.05	2.50
0935	7.60	13.7	7.08	500.0	-60.5	0.04	2.45
0940	7.60	13.7	7.07	502.0	-61.0	0.04	2.55
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	0915	Notes:	0940	Sample Time	2	gal purged
Purge End Time:	0940		VOC+PFAS			
Weather:	Clear 40s		Purge rate:	160	ml/min	
Purge/Sampled by	OO		Purge Water: clear with orange bacteria			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	7.70
Date:	5/24/2024	**Depth to Bottom of Well (ft, TOC)**	25.15
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	17.45
Well ID:	MW-7	**Volume of Water in Well (gal)**	2.79

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1225	8.00	14.9	7.68	525	48.4	0.65	371
1230	8.00	14.8	7.68	526	42.1	0.64	216
1235	8.00	14.7	7.68	526	40.3	0.56	120
1240	8.00	14.8	7.67	522	29.7	0.19	50.0
1245	8.00	15.1	7.67	522	19.3	0.15	32.0
1250	8.00	15.0	7.67	524	8.2	0.11	15.3
1255	8.00	15.1	7.67	521	3.0	0.10	14.6
1300	8.00	14.9	7.67	524	-1.0	0.09	14.0
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1220	Notes:	1300	Sample Time	1.75	gal purged
Purge End Time:	1300		VOC+PFAS			
Weather:	Clear 50s		Purge rate:	200	ml/min	
Purge/Sampled by	OO		Purge Water: clear w/ some sed			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	4.50
Date:	5/23/2024	**Depth to Bottom of Well (ft, TOC)**	19.40
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	14.90
Well ID:	MW-8	**Volume of Water in Well (gal)**	2.38

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1500	4.50	11.6	7.76	447.1	-3.9	0.19	4.10
1505	4.50	11.6	7.66	471.8	-5.5	0.08	0.90
1510	4.50	11.6	7.63	480.0	-5.0	0.05	0.80
1515	4.50	11.7	7.61	485.5	-4.8	0.02	0.65
1520	4.50	11.7	7.59	492.7	-4.0	0.00	0.45
1525	4.50	11.6	7.57	496.2	-3.8	0.00	0.20
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1455	Notes:	1525	Sample Time	2	gal purged
Purge End Time:	1525		VOC+PFAS			
Weather:	Clear 50s		Purge rate:	240	ml/min	
Purge/Sampled by	OO		Purge Water: clear			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	5.70
Date:	5/23/2024	**Depth to Bottom of Well (ft, TOC)**	21.70
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	16.00
Well ID:	MW-9R	**Volume of Water in Well (gal)**	2.56

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
0950	6.50	13.3	7.52	1073	-101.1	0.87	20.5
0955	6.40	13.3	7.50	1065	-100.5	0.63	21.0
1000	6.40	13.4	7.49	1057	-101.0	0.51	15.0
1005	6.40	13.5	7.44	1040	-101.0	0.29	10.0
1010	6.40	13.4	7.43	1032	-100.9	0.23	8.0
1015	6.40	13.4	7.41	1022	-100.8	0.22	8.1
1020	6.40	13.4	7.40	1010	-100.7	0.21	7.6
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	0945	Notes:	1020	Sample Time	2.5	gal purged
Purge End Time:	1020		VOC+PFAS			
Weather:	Clear 40s		Purge rate:	200	ml/min	
Purge/Sampled by	OO		Purge Water: turbid to clear			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	5.40
Date:	5/22/2024	**Depth to Bottom of Well (ft, TOC)**	14.75
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	9.35
Well ID:	MW-10	**Volume of Water in Well (gal)**	1.50

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1130	5.40	14.5	8.17	315.3	-184.3	0.08	35.0
1135	5.40	14.3	8.16	316.4	-184.7	0.04	24.0
1140	5.40	14.4	8.16	318.3	-185.8	0.02	21.0
1145	5.40	14.5	8.16	316.6	-187.2	0.01	19.2
1150	5.40	14.6	8.16	316.8	-188.3	0.00	19.3
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1125	Notes:	1150	Sample Time	2	gal purged
Purge End Time:	1150		VOC+PFAS			
Weather:	Clear 40s		Purge rate:	200	ml/min	
Purge/Sampled by	OO		Purge Water: clear with orange bacteria			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	4.90
Date:	5/22/2024	**Depth to Bottom of Well (ft, TOC)**	15.00
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	10.10
Well ID:	MW-11R	**Volume of Water in Well (gal)**	1.62

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1040	5.20	15.5	7.31	528	49.8	0.10	0.01
1045	5.20	15.6	7.30	531	49.2	0.09	0.00
1050	5.20	15.5	7.30	532	49.0	0.09	0.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1035	Notes:	1050	Sample Time	1.5	gal purged
Purge End Time:	1050		VOC+PFAS			
Weather:	Clear 40s		Purge rate:	200	ml/min	
Purge/Sampled by:	OO		Purge Water: clear			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	1.30
Date:	5/24/2024	**Depth to Bottom of Well (ft, TOC)**	9.90
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	8.60
Well ID:	MW-12	**Volume of Water in Well (gal)**	1.38

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1105	2.50	14.1	7.80	528	56.1	0.38	3.00
1110	2.50	13.8	7.80	526	50.1	0.22	0.20
1115	2.50	13.6	7.79	524	46.5	0.21	0.16
1120	2.50	13.8	7.79	523	43.1	0.20	0.14
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1100	Notes:	1120	Sample Time	1.5	gal purged
Purge End Time:	1120		VOC+PFAS			
Weather:	Clear 40s		Purge rate:	160	ml/min	
Purge/Sampled by:	OO		Purge Water: clear			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	4.30
Date:	5/23/2024	**Depth to Bottom of Well (ft, TOC)**	18.40
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	14.10
Well ID:	MW-13	**Volume of Water in Well (gal)**	2.26

Meter(s): YSI PRO DSS #233341

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (uS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1345	5.70	12.9	8.71	386.8	-97.2	0.24	7.00
1350	6.25	12.8	8.70	387.7	-96.9	0.16	7.10
1355	6.50	13.3	8.61	397.9	-91.8	0.12	3.30
1400	6.50	13.8	8.53	407.9	-221.2	0.11	1.10
1405	6.50	13.7	8.40	421.5	-214.6	0.08	1.25
1410	6.50	13.6	8.32	427.8	-210.6	0.05	1.10
1415	6.50	13.7	8.28	430.1	-206.0	0.05	1.00
1420	6.50	13.6	8.25	432.3	-203.1	0.05	0.95
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1340	Notes:	1420	Sample Time	2	gal purged
Purge End Time:	1420		VOC+PFAS			
Weather:	Clear 50s		Purge rate:	150	ml/min	
Purge/Sampled by	OO		Purge Water: clear			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Casing Diameter (")**:	2
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	7.50
Date:	5/23/2024	**Depth to Bottom of Well (ft, TOC)**	20.70
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	13.20
Well ID:	MW-14	**Volume of Water in Well (gal)**	2.11

	Meter(s):	YSI PRO DSS #233341					
Time	**Depth to Water (ft, TOC)**	**Temperature (ºC)**	**pH**	**Specific Conductance (uS/cm)**	**ORP**	**DO (mg/L)**	**Turbidity (NTU)**
1150	8.80	11.3	7.84	387.2	-102.2	0.26	90.0
1155	8.90	11.3	7.76	386.2	-102.9	0.15	60.0
1200	8.90	11.5	7.80	385.4	-105.6	0.09	36.0
1205	8.90	11.3	7.81	385.9	-104.1	0.05	23.0
1210	8.90	11.3	7.79	387.2	-104.4	0.01	10.5
1215	8.90	11.3	7.83	388.3	-106.4	0.01	10.0
1220	8.90	11.3	7.82	391.1	-104.4	0.01	9.8
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1145	Notes:	1220	Sample Time	2	gal purged
Purge End Time:	1220		VOC+PFAS			
Weather:	Clear 40s		Purge rate:	200	ml/min	
Purge/Sampled by	OO		Purge Water: clear w/ orange bacteria			

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Well Diameter (ID):**	2"
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	11.30
Date:	10/21/2024	**Depth to Bottom of Well (ft, TOC)**	15.30
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	4.00
Well ID:	MW-2	**Volume of Water in Well (gal)**	0.68

Meter(s): Horiba U-52 #41026

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH*	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1115	12.00	16.30	5.83	1.06	-119	0.68	1.0
1120	12.10	16.20	5.79	1.06	-126	0.57	1.1
1125	12.10	16.22	5.79	1.07	-128	0.53	0.9
1130	12.10	16.25	5.79	1.08	-133	0.47	0.8
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1105	Notes:	1130	Sample Time 2	gal purged
Purge End Time:	1130		VOC+PFAS+Dup		
Weather:	60 Sunny		160 ml/min	Clear water, oxidized to yellow	
Purge/Sampled by:	OO		* - pH probe biasing low after calibration		

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Well Diameter (ID):**	2"
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	9.65
Date:	10/22/2024	**Depth to Bottom of Well (ft, TOC)**	18.00
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	8.35
Well ID:	MW-3	**Volume of Water in Well (gal)**	1.34

Meter(s): Horiba U-52 #41026

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH*	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
940	11.85	17.03	5.73	0.219	47	1.46	84
945	12.75	17.23	5.72	0.219	45	1.38	82
950	13.25	17.15	5.72	0.218	42	1.19	42
955	13.25	17.19	5.71	0.218	38	1.02	35
1000	13.25	17.27	5.70	0.217	31	0.92	20
1005	13.25	17.32	5.69	0.216	26	0.89	10
1010	13.25	17.39	5.69	0.217	21	0.84	3.4
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	930	Notes:	1010	Sample Time 3	gal purged
Purge End Time:	1010		VOC+PFAS		
Weather:	60 Sunny		150 ml/min	Clear water	
Purge/Sampled by:	OO		* - pH probe biasing low after calibration		

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Well Diameter (ID):**	2"
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	4.08
Date:	10/22/2024	**Depth to Bottom of Well (ft, TOC)**	20.50
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	16.42
Well ID:	MW-4	**Volume of Water in Well (gal)**	2.63

Meter(s): Horiba U-52 #41026

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH*	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1105	4.50	20.71	5.43	0.481	-140	0.44	3.1
1110	4.50	19.18	5.43	0.471	-131	0.46	2.9
1115	4.50	19.10	5.42	0.442	-124	0.37	2.2
1120	4.50	19.09	5.43	0.430	-121	0.36	1.0
1125	4.50	19.17	5.44	0.426	-117	0.37	0.7
1130	4.50	19.15	5.45	0.423	-115	0.37	0.8
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1050	Notes:	1130 Sample Time 3 gal purged
Purge End Time:	1130		VOC+PFAS; MS/MSD
Weather:	70 Sunny		240 ml/min Clear water
Purge/Sampled by:	OO		* - pH probe biasing low after calibration

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Well Diameter (ID):**	2"
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	4.60
Date:	10/21/2024	**Depth to Bottom of Well (ft, TOC)**	15.25
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	10.65
Well ID:	MW-9R	**Volume of Water in Well (gal)**	1.70

Meter(s): Horiba U-52 #41026

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH*	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1435	5.60	19.71	2.99	0.801	-54	0.75	5.7
1440	6.00	19.62	3.41	0.804	-85	0.59	5.5
1445	6.00	19.57	3.50	0.804	-93	0.54	5.1
1450	6.00	19.52	3.63	0.804	-100	0.49	4.8
1455	6.00	19.27	3.76	0.804	-108	0.44	4.4
1500	6.00	19.27	3.92	0.802	-117	0.41	4.0
1505	6.00	19.40	4.25	0.796	-125	0.40	3.8
1510	6.00	19.54	4.52	0.790	-140	0.40	3.5
1515	6.00	19.51	4.49	0.790	-133	0.39	3.4
1520	6.00	19.52	4.50	0.790	-132	0.38	3.2
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1420	Notes:	1520 Sample Time 3.5 gal purged
Purge End Time:	1520		VOC+PFAS
Weather:	60 Sunny		200 ml/min Clear water
Purge/Sampled by:	OO		* - pH probe biasing low after calibration

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Well Diameter (ID):**	2"
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	3.80
Date:	10/21/2024	**Depth to Bottom of Well (ft, TOC)**	14.95
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	11.15
Well ID:	MW-11R	**Volume of Water in Well (gal)**	1.78

Meter(s): Horiba U-52 #41026

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH*	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1235	4.20	19.96	6.03	0.391	-70	1.96	69
1240	4.20	20.02	6.16	0.389	-76	1.81	47
1245	4.20	20.09	6.28	0.394	-81	1.55	28
1250	4.20	20.15	6.36	0.406	-86	1.32	13
1255	4.20	20.17	6.36	0.412	-87	1.30	9
1300	4.20	20.20	6.37	0.416	-88	1.28	3
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1225	Notes:	1300 Sample Time 2.5 gal purged
Purge End Time:	1300		VOC+PFAS
Weather:	60 Sunny		200 ml/min Clear water
Purge/Sampled by:	OO		* - pH probe biasing low after calibration

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Well Diameter (ID):**	2"
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	1.45
Date:	10/22/2024	**Depth to Bottom of Well (ft, TOC)**	9.90
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	8.45
Well ID:	MW-12	**Volume of Water in Well (gal)**	1.35

Meter(s): Horiba U-52 #41026

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH*	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1315	2.80	18.28	5.20	0.355	44	8.30	9.4
1320	3.15	18.05	5.19	0.364	28	4.80	7.8
1325	3.20	18.16	5.18	0.370	18	3.08	4.1
1330	3.30	18.13	5.24	0.373	6	2.16	1.4
1335	3.30	18.29	5.29	0.376	-2	1.34	1.5
1340	3.30	18.27	5.43	0.377	-16	1.06	0.5
1345	3.30	18.37	5.57	0.375	-29	1.20	0.4
1350	3.30	18.33	5.54	0.376	-32	1.00	0.3
1355	3.30	18.34	5.52	0.377	-36	1.03	0.3
1400	3.30	18.40	5.52	0.376	-38	1.08	0.4
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1300	Notes:	1400 Sample Time 3 gal purged
Purge End Time:	1400		VOC+PFAS
Weather:	Sunny 70		250 ml/min Clear water
Purge/Sampled by:	OO		* - pH probe biasing low after calibration

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Well Diameter (ID):**	2"
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	3.20
Date:	10/23/2024	**Depth to Bottom of Well (ft, TOC)**	18.60
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	15.40
Well ID:	MW-13	**Volume of Water in Well (gal)**	2.46

Meter(s): Horiba U-52 #41026

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH*	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1435	3.85	25.10	3.33	0.269	-40	1.07	0.0
1440	4.60	19.90	2.43	0.291	-47	0.67	0.0
1445	4.89	16.97	2.22	0.295	-52	0.60	0.0
1500	5.60	16.09	4.57	0.320	-20	2.46	60.0
1510	5.61	15.66	4.86	0.319	-122	0.69	53.6
1515	5.60	15.55	5.20	0.312	-164	0.46	0.0
1520	5.60	15.51	5.21	0.311	-173	0.46	0.0
1525	5.61	15.52	5.22	0.311	-180	0.47	0.0
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1430	Notes:	1530	Sample Time 1.5	gal purged
Purge End Time:	1525		VOC+PFAS		
Weather:	Sunny 70		100 ml/min	Clear water	
Purge/Sampled by:	MR		* - pH probe biasing low after calibration		

WELL PURGING RECORD
LOW-FLOW SAMPLING METHOD

Site:	NYSDEC Frewsburg	**Well Diameter (ID):**	2"
Project #:	0924003	**Initial Depth to Water (ft, TOC)**	7.61
Date:	11/12/2024	**Depth to Bottom of Well (ft, TOC)**	20.80
Sampling Device:	Peristaltic Pump	**Feet of Water in Well (ft)**	13.19
Well ID:	MW-14	**Volume of Water in Well (gal)**	2.11

Meter(s): Horiba U-52 #41026

Time	Depth to Water (ft, TOC)	Temperature (ºC)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1010	8.02	11.6	7.36	0.563	-7.4	2.09	177.8
1015	7.93	11.0	7.67	0.549	-43.9	1.96	98.6
1020	7.95	11.3	7.72	0.545	-58.7	1.83	74.2
1025	7.96	11.4	7.76	0.543	-60.9	1.73	27.4
1030	7.97	11.3	7.77	0.543	-61.8	1.68	17.4
1035	7.98	11.4	7.78	0.543	-64.2	1.65	16.8
1040	7.98	11.3	7.78	0.543	-63.5	1.67	16.9
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	1005	Notes:	1045 Sample Time 3 gal purged
Purge End Time:	1040		VOC+PFAS
Weather:	Sunny/coudy 40s		100 ml/min
Purge/Sampled by:	MR		water: Rusty then clear

Appendix B – Laboratory Analytical Reports

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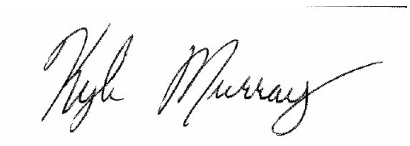
June 10, 2024

Steven Moeller
NYDEC_GES - Amherst, NY
6010 North Bailey Ave., Suite 1
Amherst, NY 14226

Project Location: Frewsburg, NY
Client Job Number:
Project Number: 907016
Laboratory Work Order Number: 24E3608

Enclosed are results of analyses for samples as received by the laboratory on May 28, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

Table of Contents

Sample Summary 4

Case Narrative 5

Sample Results 8

24E3608-01 8

24E3608-02 13

24E3608-03 18

24E3608-04 23

24E3608-05 28

24E3608-06 33

24E3608-07 38

24E3608-08 43

24E3608-09 48

24E3608-10 53

24E3608-11 58

24E3608-12 63

24E3608-13 68

24E3608-14 73

24E3608-15 78

24E3608-16 83

24E3608-17 88

24E3608-18 93

24E3608-19 96

Sample Preparation Information 101

QC Data 103

Volatile Organic Compounds by GC/MS 103

Table of Contents (continued)

B375963 103

Semivolatile Organic Compounds by - LC/MS-MS 110

B375973 110

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) 118

B375812 118

B375813 118

B376055 118

Flag/Qualifier Summary 119

Certifications 120

Chain of Custody/Sample Receipt 123

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NYDEC_GES - Amherst, NY
6010 North Bailey Ave., Suite 1
Amherst, NY 14226
ATTN: Steven Moeller

REPORT DATE: 6/10/2024

PURCHASE ORDER NUMBER: 151686

PROJECT NUMBER: 907016

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24E3608

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Frewsburg, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-1	24E3608-01	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-2	24E3608-02	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-3	24E3608-03	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-4	24E3608-04	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-4D	24E3608-05	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-5	24E3608-06	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-5D	24E3608-07	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-6	24E3608-08	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-7	24E3608-09	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-8	24E3608-10	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-9R	24E3608-11	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-10	24E3608-12	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-11R	24E3608-13	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-12	24E3608-14	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-13	24E3608-15	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-14	24E3608-16	Ground Water		Draft Method 1633	
				SW-846 8260D	
DUP	24E3608-17	Ground Water		Draft Method 1633	
				SW-846 8260D	
EQUIPMENT BLANK	24E3608-18	Equipment Blank Water		Draft Method 1633	
Trip Blank	24E3608-19	Trip Blank Water		Draft Method 1633	
				SW-846 8260D	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

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Draft Method 1633

Qualifications:

D-01

Sample extracted/prepared at a dilution due to sample matrix.

Analyte & Samples(s) Qualified:

24E3608-02[MW-2]

H-01

Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Analyte & Samples(s) Qualified:

Total Suspended Solids
24E3608-01[MW-1], 24E3608-02[MW-2], 24E3608-03[MW-3], 24E3608-04[MW-4], 24E3608-05[MW-4D], 24E3608-06[MW-5], 24E3608-07[MW-5D], 24E3608-08[MW-6], 24E3608-09[MW-7], 24E3608-10[MW-8], 24E3608-11[MW-9R], 24E3608-12[MW-10], 24E3608-13[MW-11R], 24E3608-14[MW-12], 24E3608-15[MW-13], 24E3608-16[MW-14], 24E3608-17[DUP]

L-01

Laboratory fortified blank/laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.

Analyte & Samples(s) Qualified:

Perfluoro-3-methoxypropanoic acid (PFMPA)
B375973-MRL1

PF-17C

Extracted internal standard is outside of control limits. Analyte is a known difficult compound.

Analyte & Samples(s) Qualified:

13C2-4:2FTS
24E3608-01[MW-1], 24E3608-05[MW-4D], 24E3608-09[MW-7], 24E3608-10[MW-8]

13C2-6:2FTS
24E3608-10[MW-8], 24E3608-15[MW-13]

1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS
24E3608-01[MW-1], 24E3608-05[MW-4D], 24E3608-09[MW-7], 24E3608-10[MW-8]

1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS
24E3608-10[MW-8], 24E3608-15[MW-13]

PF-22

Qualifier ion ratio >150% of associated calibration. Detection is suspect.

Analyte & Samples(s) Qualified:

Perfluorooctanesulfonamide (PFOSA)
24E3608-03[MW-3], 24E3608-05[MW-4D], 24E3608-17[DUP]

Perfluoropentanoic acid (PFPeA)
24E3608-14[MW-12]

PF-23

Qualifier ion ratio <50% of associated calibration. Detection is suspect.

Analyte & Samples(s) Qualified:

Perfluorodecanoic acid (PFDA)
24E3608-02[MW-2]

Perfluorooctanesulfonamide (PFOSA)
24E3608-04[MW-4]

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Perfluoro-3-methoxypropanoic acid (PFMPA)
S105727-CCV2

SW-846 8260D

Qualifications:

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MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Methyl Acetate

24E3608-07[MW-5D], B375963-MS1, B375963-MSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

24E3608-02[MW-2], 24E3608-03[MW-3], 24E3608-04[MW-4], 24E3608-11[MW-9R], 24E3608-13[MW-11R], 24E3608-14[MW-12], 24E3608-15[MW-13], 24E3608-16[MW-14], 24E3608-17[DUP]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Acetone

24E3608-01[MW-1], 24E3608-02[MW-2], 24E3608-03[MW-3], 24E3608-04[MW-4], 24E3608-05[MW-4D], 24E3608-06[MW-5], 24E3608-07[MW-5D], 24E3608-08[MW-6], 24E3608-09[MW-7], 24E3608-10[MW-8], 24E3608-11[MW-9R], 24E3608-12[MW-10], 24E3608-13[MW-11R], 24E3608-14[MW-12], 24E3608-15[MW-13], 24E3608-16[MW-14], 24E3608-17[DUP], 24E3608-19[Trip Blank], B375963-BLK1, B375963-BS1, B375963-BSD1, B375963-MS1, B375963-MSD1, S105405-CCV1

Methyl Acetate

24E3608-01[MW-1], 24E3608-02[MW-2], 24E3608-03[MW-3], 24E3608-04[MW-4], 24E3608-05[MW-4D], 24E3608-06[MW-5], 24E3608-07[MW-5D], 24E3608-08[MW-6], 24E3608-09[MW-7], 24E3608-10[MW-8], 24E3608-11[MW-9R], 24E3608-12[MW-10], 24E3608-13[MW-11R], 24E3608-14[MW-12], 24E3608-15[MW-13], 24E3608-16[MW-14], 24E3608-17[DUP], 24E3608-19[Trip Blank], B375963-BLK1, B375963-BS1, B375963-BSD1, B375963-MS1, B375963-MSD1, S105405-CCV1

Vinyl Chloride

24E3608-01[MW-1], 24E3608-02[MW-2], 24E3608-03[MW-3], 24E3608-04[MW-4], 24E3608-05[MW-4D], 24E3608-06[MW-5], 24E3608-07[MW-5D], 24E3608-08[MW-6], 24E3608-09[MW-7], 24E3608-10[MW-8], 24E3608-11[MW-9R], 24E3608-12[MW-10], 24E3608-13[MW-11R], 24E3608-14[MW-12], 24E3608-15[MW-13], 24E3608-16[MW-14], 24E3608-17[DUP], 24E3608-19[Trip Blank], B375963-BLK1, B375963-BS1, B375963-BSD1, B375963-MS1, B375963-MSD1, S105405-CCV1

V-36

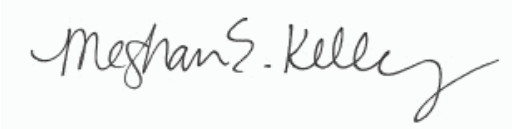
Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Methyl Acetate

B375963-BS1, B375963-BSD1, B375963-MS1, B375963-MSD1, S105405-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-1 | Sampled: 5/24/2024 09:50

Sample ID: 24E3608-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Bromoform	ND	1.0	0.30	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
2-Hexanone (MBK)	ND	10	1.3	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Methyl Acetate	ND	1.0	0.48	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Naphthalene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-1 | Sampled: 5/24/2024 09:50

Sample ID: 24E3608-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Vinyl Chloride	ND	2.0	0.19	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 22:10	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:10	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.6	70-130		6/3/24 22:10
Toluene-d8	101	70-130		6/3/24 22:10
4-Bromofluorobenzene	105	70-130		6/3/24 22:10

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-1 | Sampled: 5/24/2024 09:50

Sample ID: 24E3608-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	3.8	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.41	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.96	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.96	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorooctanoic acid (PFOA)	ND	0.96	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorononanoic acid (PFNA)	ND	0.96	0.18	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorodecanoic acid (PFDA)	ND	0.96	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.96	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.96	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.96	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.96	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorobutanesulfonic acid (PFBS)	0.66	0.96	0.20	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.96	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.47	0.96	0.27	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.96	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorooctanesulfonic acid (PFOS)	0.39	0.96	0.37	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.96	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.96	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.96	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	0.72	ng/L	1	PF-17C	Draft Method 1633	6/6/24	6/7/24 18:46	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	2.9	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluorooctanesulfonamide (PFOSA)	0.36	0.96	0.22	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 18:46	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.96	0.31	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.96	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.96	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.96	0.38	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.6	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.6	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	0.99	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.8	0.79	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	0.92	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.8	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.6	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	48	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	48	9.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.53	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-1 | Sampled: 5/24/2024 09:50

Sample ID: 24E3608-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.52	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.53	ng/L	1		Draft Method 1633	6/6/24	6/7/24 18:46	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	88.4		10-130		6/7/24 18:46
13C5-PFPeA	79.1		35-150		6/7/24 18:46
13C5-PFHxA	89.0		55-150		6/7/24 18:46
13C4-PFHpA	87.5		55-150		6/7/24 18:46
13C8-PFOA	90.9		60-140		6/7/24 18:46
13C9-PFNA	86.9		55-140		6/7/24 18:46
13C6-PFDA	90.4		50-140		6/7/24 18:46
13C7-PFUnA	87.5		30-140		6/7/24 18:46
13C2-PFDoA	84.3		10-150		6/7/24 18:46
13C2-PFTeDA	70.9		10-130		6/7/24 18:46
13C3-PFBS	91.4		55-150		6/7/24 18:46
13C3-PFHxS	89.1		55-150		6/7/24 18:46
13C8-PFOS	88.5		45-140		6/7/24 18:46
13C2-4:2FTS	**58.7**	*	60-200	PF-17C	6/7/24 18:46
13C2-6:2FTS	70.8		60-200		6/7/24 18:46
13C2-8:2FTS	69.6		50-200		6/7/24 18:46
13C8-PFOSA	85.2		30-130		6/7/24 18:46
D3-NMeFOSA	63.0		15-130		6/7/24 18:46
D5-NEtFOSA	60.0		10-130		6/7/24 18:46
D3-NMeFOSAA	79.7		45-200		6/7/24 18:46
D5-NEtFOSAA	77.8		10-200		6/7/24 18:46
D7-NMeFOSE	72.0		10-150		6/7/24 18:46
D9-NEtFOSE	69.4		10-150		6/7/24 18:46
13C3-HFPO-DA	94.0		25-160		6/7/24 18:46

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-1 | Sampled: 5/24/2024 09:50

Sample ID: 24E3608-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-2 | Sampled: 5/22/2024 13:30

Sample ID: 24E3608-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	1100	20000	820	µg/L	400	V-05, J	SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Benzene	ND	400	57	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Bromochloromethane	ND	400	130	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Bromodichloromethane	ND	200	74	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Bromoform	ND	400	120	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Bromomethane	ND	800	590	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
2-Butanone (MEK)	ND	8000	570	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
n-Butylbenzene	ND	400	62	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
sec-Butylbenzene	ND	400	65	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
tert-Butylbenzene	ND	400	66	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Carbon Disulfide	ND	2000	610	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Carbon Tetrachloride	ND	2000	78	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Chlorobenzene	ND	400	71	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Chlorodibromomethane	ND	200	51	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Chloroethane	ND	800	180	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Chloroform	ND	800	76	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Chloromethane	ND	800	200	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Cyclohexane	ND	2000	710	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2000	250	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,2-Dibromoethane (EDB)	ND	200	50	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,2-Dichlorobenzene	ND	400	70	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,3-Dichlorobenzene	ND	400	62	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,4-Dichlorobenzene	ND	400	67	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Dichlorodifluoromethane (Freon 12)	ND	800	80	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,1-Dichloroethane	ND	400	60	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,2-Dichloroethane	ND	400	51	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,1-Dichloroethylene	92	400	72	µg/L	400	J	SW-846 8260D	5/31/24	6/4/24 2:01	EEH
cis-1,2-Dichloroethylene	37000	400	81	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
trans-1,2-Dichloroethylene	ND	400	62	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,2-Dichloropropane	ND	400	68	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
cis-1,3-Dichloropropene	ND	200	51	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
trans-1,3-Dichloropropene	ND	200	58	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Ethylbenzene	ND	400	55	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
2-Hexanone (MBK)	ND	4000	540	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Isopropylbenzene (Cumene)	ND	400	62	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
p-Isopropyltoluene (p-Cymene)	ND	400	62	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Methyl Acetate	ND	400	190	µg/L	400	V-05	SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	400	67	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Methyl Cyclohexane	ND	400	53	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Methylene Chloride	ND	2000	76	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
4-Methyl-2-pentanone (MIBK)	ND	4000	550	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Naphthalene	ND	800	99	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
n-Propylbenzene	ND	400	44	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Styrene	ND	400	52	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-2 | Sampled: 5/22/2024 13:30

Sample ID: 24E3608-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	200	41	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Tetrachloroethylene	ND	400	67	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Toluene	ND	400	46	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,2,3-Trichlorobenzene	ND	2000	87	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,2,4-Trichlorobenzene	ND	400	78	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,1,1-Trichloroethane	ND	400	56	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,1,2-Trichloroethane	ND	400	73	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Trichloroethylene	ND	400	66	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Trichlorofluoromethane (Freon 11)	ND	800	57	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,2,3-Trichloropropane	ND	800	110	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	400	63	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,2,4-Trimethylbenzene	ND	400	62	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
1,3,5-Trimethylbenzene	ND	400	68	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Vinyl Chloride	22000	800	77	µg/L	400	V-05	SW-846 8260D	5/31/24	6/4/24 2:01	EEH
m+p Xylene	ND	800	98	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
o-Xylene	ND	400	62	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH
Xylenes (total)	ND	400	400	µg/L	400		SW-846 8260D	5/31/24	6/4/24 2:01	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.3	70-130		6/4/24 2:01
Toluene-d8	102	70-130		6/4/24 2:01
4-Bromofluorobenzene	107	70-130		6/4/24 2:01

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-2 | Sampled: 5/22/2024 13:30

Sample ID: 24E3608-02

Sample Matrix: Ground Water

Sample Flags: D-01

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	13	8.1	4.4	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluoropentanoic acid (PFPeA)	ND	4.0	0.87	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorohexanoic acid (PFHxA)	ND	2.0	0.48	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluoroheptanoic acid (PFHpA)	ND	2.0	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorooctanoic acid (PFOA)	5.7	2.0	0.53	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorononanoic acid (PFNA)	ND	2.0	0.38	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorodecanoic acid (PFDA)	0.85	2.0	0.42	ng/L	1	PF-23, J	Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluoroundecanoic acid (PFUnA)	ND	2.0	0.41	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorododecanoic acid (PFDoA)	ND	2.0	0.40	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	0.60	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	2.0	0.52	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	2.0	0.43	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	2.0	0.52	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	0.67	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorooctanesulfonic acid (PFOS)	18	2.0	0.78	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorononanesulfonic acid (PFNS)	ND	2.0	0.51	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	0.58	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	2.0	0.58	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	8.1	1.5	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	8.1	6.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	8.1	2.3	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	2.0	0.47	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	2.0	0.66	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	2.0	0.68	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
N-MeFOSAA (NMeFOSAA)	ND	2.0	0.72	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
N-EtFOSAA (NEtFOSAA)	ND	2.0	0.81	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	20	5.5	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	20	5.4	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	8.1	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	8.1	1.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
9Cl-PF3ONS (F53B Minor)	ND	8.1	1.9	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
11Cl-PF3OUdS (F53B Major)	ND	8.1	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	20	4.4	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	100	23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	100	19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	4.0	0.71	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-2 | Sampled: 5/22/2024 13:30

Sample ID: 24E3608-02

Sample Matrix: Ground Water

Sample Flags: D-01

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:02	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	59.5	10-130		6/7/24 19:02
13C5-PFPeA	66.9	35-150		6/7/24 19:02
13C5-PFHxA	79.0	55-150		6/7/24 19:02
13C4-PFHpA	81.7	55-150		6/7/24 19:02
13C8-PFOA	85.5	60-140		6/7/24 19:02
13C9-PFNA	79.0	55-140		6/7/24 19:02
13C6-PFDA	75.4	50-140		6/7/24 19:02
13C7-PFUnA	77.1	30-140		6/7/24 19:02
13C2-PFDoA	73.4	10-150		6/7/24 19:02
13C2-PFTeDA	62.7	10-130		6/7/24 19:02
13C3-PFBS	92.6	55-150		6/7/24 19:02
13C3-PFHxS	86.2	55-150		6/7/24 19:02
13C8-PFOS	79.9	45-140		6/7/24 19:02
13C2-4:2FTS	115	60-200		6/7/24 19:02
13C2-6:2FTS	83.2	60-200		6/7/24 19:02
13C2-8:2FTS	60.7	50-200		6/7/24 19:02
13C8-PFOSA	71.3	30-130		6/7/24 19:02
D3-NMeFOSA	53.7	15-130		6/7/24 19:02
D5-NEtFOSA	51.2	10-130		6/7/24 19:02
D3-NMeFOSAA	72.4	45-200		6/7/24 19:02
D5-NEtFOSAA	68.5	10-200		6/7/24 19:02
D7-NMeFOSE	62.8	10-150		6/7/24 19:02
D9-NEtFOSE	60.8	10-150		6/7/24 19:02
13C3-HFPO-DA	83.6	25-160		6/7/24 19:02

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-2 | Sampled: 5/22/2024 13:30

Sample ID: 24E3608-02

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	50	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-3 | Sampled: 5/23/2024 11:10

Sample ID: 24E3608-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	20	µg/L	10	V-05	SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Benzene	ND	10	1.4	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Bromochloromethane	ND	10	3.2	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Bromodichloromethane	ND	5.0	1.9	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Bromoform	ND	10	3.0	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Bromomethane	ND	20	15	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
2-Butanone (MEK)	ND	200	14	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
n-Butylbenzene	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
sec-Butylbenzene	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
tert-Butylbenzene	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Carbon Disulfide	ND	50	15	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Carbon Tetrachloride	ND	50	1.9	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Chlorobenzene	ND	10	1.8	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Chlorodibromomethane	ND	5.0	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Chloroethane	ND	20	4.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Chloroform	ND	20	1.9	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Chloromethane	ND	20	5.0	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Cyclohexane	ND	50	18	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	6.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,2-Dibromoethane (EDB)	ND	5.0	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,2-Dichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,3-Dichlorobenzene	ND	10	1.5	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,4-Dichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Dichlorodifluoromethane (Freon 12)	ND	20	2.0	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,1-Dichloroethane	ND	10	1.5	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,2-Dichloroethane	ND	10	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,1-Dichloroethylene	ND	10	1.8	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
cis-1,2-Dichloroethylene	94	10	2.0	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
trans-1,2-Dichloroethylene	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,2-Dichloropropane	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
cis-1,3-Dichloropropene	ND	5.0	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
trans-1,3-Dichloropropene	ND	5.0	1.4	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Ethylbenzene	ND	10	1.4	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
2-Hexanone (MBK)	ND	100	13	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Isopropylbenzene (Cumene)	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
p-Isopropyltoluene (p-Cymene)	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Methyl Acetate	ND	10	4.8	µg/L	10	V-05	SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Methyl tert-Butyl Ether (MTBE)	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Methyl Cyclohexane	ND	10	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Methylene Chloride	ND	50	1.9	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
4-Methyl-2-pentanone (MIBK)	ND	100	14	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Naphthalene	ND	20	2.5	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
n-Propylbenzene	ND	10	1.1	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Styrene	ND	10	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-3 | Sampled: 5/23/2024 11:10

Sample ID: 24E3608-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	5.0	1.0	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Tetrachloroethylene	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Toluene	ND	10	1.1	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,2,3-Trichlorobenzene	ND	50	2.2	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,2,4-Trichlorobenzene	ND	10	1.9	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,1,1-Trichloroethane	ND	10	1.4	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,1,2-Trichloroethane	ND	10	1.8	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Trichloroethylene	690	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Trichlorofluoromethane (Freon 11)	ND	20	1.4	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,2,3-Trichloropropane	ND	20	2.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,2,4-Trimethylbenzene	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
1,3,5-Trimethylbenzene	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Vinyl Chloride	ND	20	1.9	µg/L	10	V-05	SW-846 8260D	5/31/24	6/4/24 2:27	EEH
m+p Xylene	ND	20	2.5	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
o-Xylene	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH
Xylenes (total)	ND	10	10	µg/L	10		SW-846 8260D	5/31/24	6/4/24 2:27	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.8	70-130		6/4/24 2:27
Toluene-d8	100	70-130		6/4/24 2:27
4-Bromofluorobenzene	108	70-130		6/4/24 2:27

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-3 | Sampled: 5/23/2024 11:10

Sample ID: 24E3608-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.0	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.42	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.99	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluoroheptanoic acid (PFHpA)	1.0	0.99	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorooctanoic acid (PFOA)	2.9	0.99	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorononanoic acid (PFNA)	0.56	0.99	0.19	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorodecanoic acid (PFDA)	ND	0.99	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.99	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.99	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.99	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.99	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.99	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.99	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.99	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.99	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorooctanesulfonic acid (PFOS)	3.7	0.99	0.38	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.99	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.99	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.99	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.74	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	3.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluorooctanesulfonamide (PFOSA)	0.39	0.99	0.23	ng/L	1	PF-22, J	Draft Method 1633	6/6/24	6/7/24 19:17	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.99	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.99	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.99	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.99	0.40	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.9	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.9	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.81	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.95	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.9	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	9.4	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-3 | Sampled: 5/23/2024 11:10

Sample ID: 24E3608-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.53	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:17	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	56.9	10-130		6/7/24 19:17
13C5-PFPeA	68.9	35-150		6/7/24 19:17
13C5-PFHxA	82.5	55-150		6/7/24 19:17
13C4-PFHpA	86.6	55-150		6/7/24 19:17
13C8-PFOA	82.7	60-140		6/7/24 19:17
13C9-PFNA	78.4	55-140		6/7/24 19:17
13C6-PFDA	77.3	50-140		6/7/24 19:17
13C7-PFUnA	79.7	30-140		6/7/24 19:17
13C2-PFDoA	74.5	10-150		6/7/24 19:17
13C2-PFTeDA	64.7	10-130		6/7/24 19:17
13C3-PFBS	85.2	55-150		6/7/24 19:17
13C3-PFHxS	82.1	55-150		6/7/24 19:17
13C8-PFOS	78.1	45-140		6/7/24 19:17
13C2-4:2FTS	108	60-200		6/7/24 19:17
13C2-6:2FTS	87.9	60-200		6/7/24 19:17
13C2-8:2FTS	64.2	50-200		6/7/24 19:17
13C8-PFOSA	71.9	30-130		6/7/24 19:17
D3-NMeFOSA	51.1	15-130		6/7/24 19:17
D5-NEtFOSA	49.0	10-130		6/7/24 19:17
D3-NMeFOSAA	69.6	45-200		6/7/24 19:17
D5-NEtFOSAA	71.4	10-200		6/7/24 19:17
D7-NMeFOSE	58.1	10-150		6/7/24 19:17
D9-NEtFOSE	54.8	10-150		6/7/24 19:17
13C3-HFPO-DA	86.9	25-160		6/7/24 19:17

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-3 | Sampled: 5/23/2024 11:10

Sample ID: 24E3608-03

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-4 | Sampled: 5/21/2024 14:25

Sample ID: 24E3608-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	310	5000	200	µg/L	100	V-05, J	SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Benzene	ND	100	14	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Bromochloromethane	ND	100	32	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Bromodichloromethane	ND	50	19	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Bromoform	ND	100	30	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Bromomethane	ND	200	150	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
2-Butanone (MEK)	260	2000	140	µg/L	100	J	SW-846 8260D	5/31/24	6/4/24 2:53	EEH
n-Butylbenzene	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
sec-Butylbenzene	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
tert-Butylbenzene	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Carbon Disulfide	ND	500	150	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Carbon Tetrachloride	ND	500	19	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Chlorobenzene	ND	100	18	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Chlorodibromomethane	ND	50	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Chloroethane	ND	200	46	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Chloroform	ND	200	19	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Chloromethane	ND	200	50	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Cyclohexane	ND	500	180	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	63	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,2-Dibromoethane (EDB)	ND	50	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,2-Dichlorobenzene	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,3-Dichlorobenzene	ND	100	15	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,4-Dichlorobenzene	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Dichlorodifluoromethane (Freon 12)	ND	200	20	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,1-Dichloroethane	ND	100	15	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,2-Dichloroethane	ND	100	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,1-Dichloroethylene	ND	100	18	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
cis-1,2-Dichloroethylene	420	100	20	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
trans-1,2-Dichloroethylene	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,2-Dichloropropane	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
cis-1,3-Dichloropropene	ND	50	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
trans-1,3-Dichloropropene	ND	50	14	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Ethylbenzene	ND	100	14	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
2-Hexanone (MBK)	ND	1000	130	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Isopropylbenzene (Cumene)	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
p-Isopropyltoluene (p-Cymene)	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Methyl Acetate	ND	100	48	µg/L	100	V-05	SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Methyl tert-Butyl Ether (MTBE)	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Methyl Cyclohexane	ND	100	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Methylene Chloride	ND	500	19	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
4-Methyl-2-pentanone (MIBK)	ND	1000	140	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Naphthalene	ND	200	25	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
n-Propylbenzene	ND	100	11	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Styrene	ND	100	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-4 | Sampled: 5/21/2024 14:25

Sample ID: 24E3608-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	50	10	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Tetrachloroethylene	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Toluene	ND	100	11	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,2,3-Trichlorobenzene	ND	500	22	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,2,4-Trichlorobenzene	ND	100	19	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,1,1-Trichloroethane	ND	100	14	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,1,2-Trichloroethane	ND	100	18	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Trichloroethylene	10000	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Trichlorofluoromethane (Freon 11)	ND	200	14	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,2,3-Trichloropropane	ND	200	27	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,2,4-Trimethylbenzene	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
1,3,5-Trimethylbenzene	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Vinyl Chloride	ND	200	19	µg/L	100	V-05	SW-846 8260D	5/31/24	6/4/24 2:53	EEH
m+p Xylene	ND	200	25	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
o-Xylene	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH
Xylenes (total)	ND	100	100	µg/L	100		SW-846 8260D	5/31/24	6/4/24 2:53	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.9	70-130		6/4/24 2:53
Toluene-d8	101	70-130		6/4/24 2:53
4-Bromofluorobenzene	107	70-130		6/4/24 2:53

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-4 | Sampled: 5/21/2024 14:25

Sample ID: 24E3608-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.0	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.43	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorohexanoic acid (PFHxA)	2.2	0.99	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluoroheptanoic acid (PFHpA)	1.2	0.99	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorooctanoic acid (PFOA)	3.9	0.99	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorononanoic acid (PFNA)	0.56	0.99	0.19	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorodecanoic acid (PFDA)	ND	0.99	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.99	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.99	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.99	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.99	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.99	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.99	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorohexanesulfonic acid (PFHxS)	1.3	0.99	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.99	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorooctanesulfonic acid (PFOS)	2.4	0.99	0.38	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.99	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.99	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.99	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.74	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	3.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluorooctanesulfonamide (PFOSA)	0.24	0.99	0.23	ng/L	1	PF-23, J	Draft Method 1633	6/6/24	6/7/24 19:33	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.99	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.99	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.99	0.36	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.99	0.40	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.9	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.9	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.82	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.96	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.9	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	9.4	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-4 | Sampled: 5/21/2024 14:25

Sample ID: 24E3608-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:33	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	67.0	10-130		6/7/24 19:33
13C5-PFPeA	66.5	35-150		6/7/24 19:33
13C5-PFHxA	80.3	55-150		6/7/24 19:33
13C4-PFHpA	84.0	55-150		6/7/24 19:33
13C8-PFOA	83.6	60-140		6/7/24 19:33
13C9-PFNA	78.8	55-140		6/7/24 19:33
13C6-PFDA	76.8	50-140		6/7/24 19:33
13C7-PFUnA	80.4	30-140		6/7/24 19:33
13C2-PFDoA	79.0	10-150		6/7/24 19:33
13C2-PFTeDA	61.8	10-130		6/7/24 19:33
13C3-PFBS	82.3	55-150		6/7/24 19:33
13C3-PFHxS	79.9	55-150		6/7/24 19:33
13C8-PFOS	80.7	45-140		6/7/24 19:33
13C2-4:2FTS	88.8	60-200		6/7/24 19:33
13C2-6:2FTS	74.3	60-200		6/7/24 19:33
13C2-8:2FTS	59.5	50-200		6/7/24 19:33
13C8-PFOSA	74.6	30-130		6/7/24 19:33
D3-NMeFOSA	57.0	15-130		6/7/24 19:33
D5-NEtFOSA	55.0	10-130		6/7/24 19:33
D3-NMeFOSAA	69.9	45-200		6/7/24 19:33
D5-NEtFOSAA	71.7	10-200		6/7/24 19:33
D7-NMeFOSE	63.0	10-150		6/7/24 19:33
D9-NEtFOSE	60.8	10-150		6/7/24 19:33
13C3-HFPO-DA	83.0	25-160		6/7/24 19:33

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-4 | Sampled: 5/21/2024 14:25

Sample ID: 24E3608-04

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-4D | Sampled: 5/21/2024 13:25

Sample ID: 24E3608-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Bromoform	ND	1.0	0.30	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
2-Hexanone (MBK)	ND	10	1.3	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Methyl Acetate	ND	1.0	0.48	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Naphthalene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-4D | Sampled: 5/21/2024 13:25

Sample ID: 24E3608-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Vinyl Chloride	ND	2.0	0.19	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 22:35	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	5/31/24	6/3/24 22:35	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.1	70-130		6/3/24 22:35
Toluene-d8	102	70-130		6/3/24 22:35
4-Bromofluorobenzene	105	70-130		6/3/24 22:35

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-4D | Sampled: 5/21/2024 13:25

Sample ID: 24E3608-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.6	4.0	2.2	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluoropentanoic acid (PFPeA)	3.3	2.0	0.43	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorohexanoic acid (PFHxA)	2.9	1.0	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluoroheptanoic acid (PFHpA)	1.1	1.0	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorooctanoic acid (PFOA)	3.7	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorononanoic acid (PFNA)	0.73	1.0	0.19	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorobutanesulfonic acid (PFBS)	2.3	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorohexanesulfonic acid (PFHxS)	1.1	1.0	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorooctanesulfonic acid (PFOS)	1.7	1.0	0.38	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.75	ng/L	1	PF-17C	Draft Method 1633	6/6/24	6/7/24 19:49	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	3.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluorooctanesulfonamide (PFOSA)	0.28	1.0	0.23	ng/L	1	PF-22, J	Draft Method 1633	6/6/24	6/7/24 19:49	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.36	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.40	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.82	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.96	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	9.5	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-4D | Sampled: 5/21/2024 13:25

Sample ID: 24E3608-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	6/6/24	6/7/24 19:49	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	80.1		10-130		6/7/24 19:49
13C5-PFPeA	71.2		35-150		6/7/24 19:49
13C5-PFHxA	79.4		55-150		6/7/24 19:49
13C4-PFHpA	78.0		55-150		6/7/24 19:49
13C8-PFOA	83.9		60-140		6/7/24 19:49
13C9-PFNA	74.3		55-140		6/7/24 19:49
13C6-PFDA	70.7		50-140		6/7/24 19:49
13C7-PFUnA	67.6		30-140		6/7/24 19:49
13C2-PFDoA	59.6		10-150		6/7/24 19:49
13C2-PFTeDA	52.0		10-130		6/7/24 19:49
13C3-PFBS	80.2		55-150		6/7/24 19:49
13C3-PFHxS	80.5		55-150		6/7/24 19:49
13C8-PFOS	72.0		45-140		6/7/24 19:49
13C2-4:2FTS	**57.1**	*	60-200	PF-17C	6/7/24 19:49
13C2-6:2FTS	65.6		60-200		6/7/24 19:49
13C2-8:2FTS	59.7		50-200		6/7/24 19:49
13C8-PFOSA	71.8		30-130		6/7/24 19:49
D3-NMeFOSA	49.8		15-130		6/7/24 19:49
D5-NEtFOSA	46.1		10-130		6/7/24 19:49
D3-NMeFOSAA	61.9		45-200		6/7/24 19:49
D5-NEtFOSAA	60.4		10-200		6/7/24 19:49
D7-NMeFOSE	52.0		10-150		6/7/24 19:49
D9-NEtFOSE	50.4		10-150		6/7/24 19:49
13C3-HFPO-DA	82.5		25-160		6/7/24 19:49

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-4D | Sampled: 5/21/2024 13:25

Sample ID: 24E3608-05

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-5 | Sampled: 5/21/2024 12:10

Sample ID: 24E3608-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Bromoform	ND	1.0	0.30	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
2-Hexanone (MBK)	ND	10	1.3	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Methyl Acetate	ND	1.0	0.48	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Naphthalene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-5 | Sampled: 5/21/2024 12:10

Sample ID: 24E3608-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Vinyl Chloride	ND	2.0	0.19	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 23:01	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:01	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.3	70-130		6/3/24 23:01
Toluene-d8	102	70-130		6/3/24 23:01
4-Bromofluorobenzene	106	70-130		6/3/24 23:01

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-5 | Sampled: 5/21/2024 12:10

Sample ID: 24E3608-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	4.3	3.9	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluoropentanoic acid (PFPeA)	0.80	1.9	0.42	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorohexanoic acid (PFHxA)	0.65	0.97	0.23	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.97	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorooctanoic acid (PFOA)	ND	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorononanoic acid (PFNA)	ND	0.97	0.18	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorodecanoic acid (PFDA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.97	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.97	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorobutanesulfonic acid (PFBS)	1.2	0.97	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluoropentanesulfonic acid (PFPeS)	0.29	0.97	0.25	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.53	0.97	0.27	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.97	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.97	0.37	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.97	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.73	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	2.9	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.97	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.97	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.97	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.97	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.97	0.39	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.7	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.7	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.80	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.94	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.7	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	9.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-5 | Sampled: 5/21/2024 12:10

Sample ID: 24E3608-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.52	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:04	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	86.2	10-130		6/7/24 20:04
13C5-PFPeA	79.5	35-150		6/7/24 20:04
13C5-PFHxA	90.5	55-150		6/7/24 20:04
13C4-PFHpA	86.5	55-150		6/7/24 20:04
13C8-PFOA	96.7	60-140		6/7/24 20:04
13C9-PFNA	89.0	55-140		6/7/24 20:04
13C6-PFDA	87.5	50-140		6/7/24 20:04
13C7-PFUnA	90.1	30-140		6/7/24 20:04
13C2-PFDoA	89.3	10-150		6/7/24 20:04
13C2-PFTeDA	75.8	10-130		6/7/24 20:04
13C3-PFBS	92.7	55-150		6/7/24 20:04
13C3-PFHxS	90.6	55-150		6/7/24 20:04
13C8-PFOS	94.1	45-140		6/7/24 20:04
13C2-4:2FTS	64.2	60-200		6/7/24 20:04
13C2-6:2FTS	75.0	60-200		6/7/24 20:04
13C2-8:2FTS	74.5	50-200		6/7/24 20:04
13C8-PFOSA	89.9	30-130		6/7/24 20:04
D3-NMeFOSA	69.2	15-130		6/7/24 20:04
D5-NEtFOSA	67.2	10-130		6/7/24 20:04
D3-NMeFOSAA	86.5	45-200		6/7/24 20:04
D5-NEtFOSAA	85.9	10-200		6/7/24 20:04
D7-NMeFOSE	77.5	10-150		6/7/24 20:04
D9-NEtFOSE	76.0	10-150		6/7/24 20:04
13C3-HFPO-DA	90.2	25-160		6/7/24 20:04

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-5 | Sampled: 5/21/2024 12:10

Sample ID: 24E3608-06

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-5D | Sampled: 5/21/2024 10:45

Sample ID: 24E3608-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Bromoform	ND	1.0	0.30	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
2-Hexanone (MBK)	ND	10	1.3	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Methyl Acetate	ND	1.0	0.48	µg/L	1	MS-07A, V-05	SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Naphthalene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-5D | Sampled: 5/21/2024 10:45

Sample ID: 24E3608-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Vinyl Chloride	ND	2.0	0.19	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 23:27	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:27	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.2	70-130		6/3/24 23:27
Toluene-d8	99.7	70-130		6/3/24 23:27
4-Bromofluorobenzene	105	70-130		6/3/24 23:27

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-5D | Sampled: 5/21/2024 10:45

Sample ID: 24E3608-07

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	3.0	4.1	2.2	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluoropentanoic acid (PFPeA)	4.5	2.0	0.44	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorohexanoic acid (PFHxA)	4.6	1.0	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluoroheptanoic acid (PFHpA)	1.7	1.0	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorooctanoic acid (PFOA)	6.2	1.0	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorononanoic acid (PFNA)	1.6	1.0	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorobutanesulfonic acid (PFBS)	2.7	1.0	0.22	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorohexanesulfonic acid (PFHxS)	1.0	1.0	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorooctanesulfonic acid (PFOS)	2.4	1.0	0.39	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.1	0.76	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.1	3.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.36	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.41	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.8	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.1	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.1	0.83	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.1	0.98	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	51	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	51	9.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-5D | Sampled: 5/21/2024 10:45

Sample ID: 24E3608-07

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:20	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	81.3	10-130		6/7/24 20:20
13C5-PFPeA	73.1	35-150		6/7/24 20:20
13C5-PFHxA	86.5	55-150		6/7/24 20:20
13C4-PFHpA	83.8	55-150		6/7/24 20:20
13C8-PFOA	83.8	60-140		6/7/24 20:20
13C9-PFNA	82.2	55-140		6/7/24 20:20
13C6-PFDA	82.1	50-140		6/7/24 20:20
13C7-PFUnA	80.6	30-140		6/7/24 20:20
13C2-PFDoA	77.8	10-150		6/7/24 20:20
13C2-PFTeDA	69.5	10-130		6/7/24 20:20
13C3-PFBS	90.4	55-150		6/7/24 20:20
13C3-PFHxS	89.5	55-150		6/7/24 20:20
13C8-PFOS	85.1	45-140		6/7/24 20:20
13C2-4:2FTS	71.5	60-200		6/7/24 20:20
13C2-6:2FTS	75.4	60-200		6/7/24 20:20
13C2-8:2FTS	68.3	50-200		6/7/24 20:20
13C8-PFOSA	80.2	30-130		6/7/24 20:20
D3-NMeFOSA	60.4	15-130		6/7/24 20:20
D5-NEtFOSA	60.7	10-130		6/7/24 20:20
D3-NMeFOSAA	75.7	45-200		6/7/24 20:20
D5-NEtFOSAA	73.4	10-200		6/7/24 20:20
D7-NMeFOSE	70.3	10-150		6/7/24 20:20
D9-NEtFOSE	69.7	10-150		6/7/24 20:20
13C3-HFPO-DA	85.7	25-160		6/7/24 20:20

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-5D | Sampled: 5/21/2024 10:45

Sample ID: 24E3608-07

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-6 | Sampled: 5/22/2024 09:40

Sample ID: 24E3608-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Bromoform	ND	1.0	0.30	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
2-Hexanone (MBK)	ND	10	1.3	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Methyl Acetate	ND	1.0	0.48	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Naphthalene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-6 | Sampled: 5/22/2024 09:40

Sample ID: 24E3608-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Vinyl Chloride	ND	2.0	0.19	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 23:53	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	5/31/24	6/3/24 23:53	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	97.7	70-130		6/3/24 23:53
Toluene-d8	103	70-130		6/3/24 23:53
4-Bromofluorobenzene	106	70-130		6/3/24 23:53

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-6 | Sampled: 5/22/2024 09:40

Sample ID: 24E3608-08

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	7.1	4.2	2.3	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.1	0.45	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorohexanoic acid (PFHxA)	ND	1.1	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluoroheptanoic acid (PFHpA)	0.89	1.1	0.28	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorooctanoic acid (PFOA)	15	1.1	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorononanoic acid (PFNA)	1.3	1.1	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorodecanoic acid (PFDA)	ND	1.1	0.22	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.1	0.22	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.1	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.1	0.31	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.1	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorobutanesulfonic acid (PFBS)	1.2	1.1	0.22	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.1	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorohexanesulfonic acid (PFHxS)	1.8	1.1	0.30	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.1	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorooctanesulfonic acid (PFOS)	16	1.1	0.41	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.1	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.1	0.30	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.1	0.31	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.2	0.79	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.2	3.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.2	1.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.1	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.1	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.1	0.36	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.1	0.38	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.1	0.42	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	11	2.9	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	11	2.8	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.2	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.2	0.87	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.2	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.2	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	11	2.3	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	53	12	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	53	10	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.1	0.37	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.1	0.59	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-6 | Sampled: 5/22/2024 09:40

Sample ID: 24E3608-08

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.1	0.57	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.1	0.58	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:36	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	64.7	10-130		6/7/24 20:36
13C5-PFPeA	67.6	35-150		6/7/24 20:36
13C5-PFHxA	81.8	55-150		6/7/24 20:36
13C4-PFHpA	89.0	55-150		6/7/24 20:36
13C8-PFOA	88.0	60-140		6/7/24 20:36
13C9-PFNA	82.2	55-140		6/7/24 20:36
13C6-PFDA	80.6	50-140		6/7/24 20:36
13C7-PFUnA	79.2	30-140		6/7/24 20:36
13C2-PFDoA	74.8	10-150		6/7/24 20:36
13C2-PFTeDA	58.5	10-130		6/7/24 20:36
13C3-PFBS	85.0	55-150		6/7/24 20:36
13C3-PFHxS	83.5	55-150		6/7/24 20:36
13C8-PFOS	82.2	45-140		6/7/24 20:36
13C2-4:2FTS	124	60-200		6/7/24 20:36
13C2-6:2FTS	97.2	60-200		6/7/24 20:36
13C2-8:2FTS	67.2	50-200		6/7/24 20:36
13C8-PFOSA	75.0	30-130		6/7/24 20:36
D3-NMeFOSA	53.5	15-130		6/7/24 20:36
D5-NEtFOSA	52.1	10-130		6/7/24 20:36
D3-NMeFOSAA	72.0	45-200		6/7/24 20:36
D5-NEtFOSAA	69.8	10-200		6/7/24 20:36
D7-NMeFOSE	53.6	10-150		6/7/24 20:36
D9-NEtFOSE	49.1	10-150		6/7/24 20:36
13C3-HFPO-DA	84.7	25-160		6/7/24 20:36

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-6 | Sampled: 5/22/2024 09:40

Sample ID: 24E3608-08

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-7 | Sampled: 5/24/2024 13:00

Sample ID: 24E3608-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Bromoform	ND	1.0	0.30	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
2-Hexanone (MBK)	ND	10	1.3	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Methyl Acetate	ND	1.0	0.48	µg/L	1	V-05	SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Naphthalene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-7 | Sampled: 5/24/2024 13:00

Sample ID: 24E3608-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Vinyl Chloride	ND	2.0	0.19	µg/L	1	V-05	SW-846 8260D	5/31/24	6/4/24 0:18	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:18	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	96.7	70-130		6/4/24 0:18
Toluene-d8	101	70-130		6/4/24 0:18
4-Bromofluorobenzene	105	70-130		6/4/24 0:18

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-7 | Sampled: 5/24/2024 13:00

Sample ID: 24E3608-09

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	3.9	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.42	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.97	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.97	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorooctanoic acid (PFOA)	ND	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorononanoic acid (PFNA)	ND	0.97	0.18	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorodecanoic acid (PFDA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.97	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.97	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorobutanesulfonic acid (PFBS)	0.50	0.97	0.21	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.97	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.97	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.97	0.37	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.97	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.73	ng/L	1	PF-17C	Draft Method 1633	6/6/24	6/7/24 20:51	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	2.9	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.97	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.97	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.97	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.97	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.97	0.39	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.7	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.7	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.80	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.94	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.7	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	9.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-7 | Sampled: 5/24/2024 13:00

Sample ID: 24E3608-09

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.52	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 20:51	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	76.9		10-130		6/7/24 20:51
13C5-PFPeA	66.9		35-150		6/7/24 20:51
13C5-PFHxA	75.4		55-150		6/7/24 20:51
13C4-PFHpA	74.2		55-150		6/7/24 20:51
13C8-PFOA	76.3		60-140		6/7/24 20:51
13C9-PFNA	73.0		55-140		6/7/24 20:51
13C6-PFDA	73.9		50-140		6/7/24 20:51
13C7-PFUnA	76.9		30-140		6/7/24 20:51
13C2-PFDoA	72.8		10-150		6/7/24 20:51
13C2-PFTeDA	64.8		10-130		6/7/24 20:51
13C3-PFBS	79.7		55-150		6/7/24 20:51
13C3-PFHxS	78.1		55-150		6/7/24 20:51
13C8-PFOS	75.5		45-140		6/7/24 20:51
13C2-4:2FTS	**55.5**	*	60-200	PF-17C	6/7/24 20:51
13C2-6:2FTS	64.9		60-200		6/7/24 20:51
13C2-8:2FTS	63.4		50-200		6/7/24 20:51
13C8-PFOSA	72.6		30-130		6/7/24 20:51
D3-NMeFOSA	55.6		15-130		6/7/24 20:51
D5-NEtFOSA	56.8		10-130		6/7/24 20:51
D3-NMeFOSAA	70.1		45-200		6/7/24 20:51
D5-NEtFOSAA	66.0		10-200		6/7/24 20:51
D7-NMeFOSE	63.0		10-150		6/7/24 20:51
D9-NEtFOSE	61.3		10-150		6/7/24 20:51
13C3-HFPO-DA	75.8		25-160		6/7/24 20:51

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-7 | Sampled: 5/24/2024 13:00

Sample ID: 24E3608-09

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	6/3/24	6/3/24 13:15	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-8 | Sampled: 5/23/2024 15:25

Sample ID: 24E3608-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Bromoform	ND	1.0	0.30	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
2-Hexanone (MBK)	ND	10	1.3	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Methyl Acetate	ND	1.0	0.48	µg/L	1	V-05	SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Naphthalene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-8 | Sampled: 5/23/2024 15:25

Sample ID: 24E3608-10

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Vinyl Chloride	ND	2.0	0.19	µg/L	1	V-05	SW-846 8260D	5/31/24	6/4/24 0:44	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	5/31/24	6/4/24 0:44	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	96.7	70-130		6/4/24 0:44
Toluene-d8	101	70-130		6/4/24 0:44
4-Bromofluorobenzene	106	70-130		6/4/24 0:44

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-8 | Sampled: 5/23/2024 15:25

Sample ID: 24E3608-10

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.2	4.0	2.2	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.43	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorohexanoic acid (PFHxA)	ND	1.0	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluoroheptanoic acid (PFHpA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorooctanoic acid (PFOA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorobutanesulfonic acid (PFBS)	0.97	1.0	0.21	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.75	1.0	0.28	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.0	0.39	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.75	ng/L	1	PF-17C	Draft Method 1633	6/6/24	6/7/24 21:07	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	3.1	ng/L	1	PF-17C	Draft Method 1633	6/6/24	6/7/24 21:07	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.36	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.40	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.8	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.83	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.97	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	51	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	51	9.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-8 | Sampled: 5/23/2024 15:25

Sample ID: 24E3608-10

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:07	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	69.8		10-130		6/7/24 21:07
13C5-PFPeA	60.3		35-150		6/7/24 21:07
13C5-PFHxA	67.4		55-150		6/7/24 21:07
13C4-PFHpA	65.7		55-150		6/7/24 21:07
13C8-PFOA	68.3		60-140		6/7/24 21:07
13C9-PFNA	65.5		55-140		6/7/24 21:07
13C6-PFDA	65.3		50-140		6/7/24 21:07
13C7-PFUnA	66.9		30-140		6/7/24 21:07
13C2-PFDoA	66.1		10-150		6/7/24 21:07
13C2-PFTeDA	58.6		10-130		6/7/24 21:07
13C3-PFBS	71.0		55-150		6/7/24 21:07
13C3-PFHxS	67.8		55-150		6/7/24 21:07
13C8-PFOS	67.2		45-140		6/7/24 21:07
13C2-4:2FTS	**48.2**	*	60-200	PF-17C	6/7/24 21:07
13C2-6:2FTS	**58.4**	*	60-200	PF-17C	6/7/24 21:07
13C2-8:2FTS	55.8		50-200		6/7/24 21:07
13C8-PFOSA	61.4		30-130		6/7/24 21:07
D3-NMeFOSA	48.0		15-130		6/7/24 21:07
D5-NEtFOSA	47.3		10-130		6/7/24 21:07
D3-NMeFOSAA	60.7		45-200		6/7/24 21:07
D5-NEtFOSAA	59.6		10-200		6/7/24 21:07
D7-NMeFOSE	52.5		10-150		6/7/24 21:07
D9-NEtFOSE	53.1		10-150		6/7/24 21:07
13C3-HFPO-DA	72.2		25-160		6/7/24 21:07

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-8 | Sampled: 5/23/2024 15:25

Sample ID: 24E3608-10

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-9R | Sampled: 5/23/2024 10:20

Sample ID: 24E3608-11

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	47	1000	41	µg/L	20	V-05, J	SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Benzene	ND	20	2.9	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Bromochloromethane	ND	20	6.4	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Bromodichloromethane	ND	10	3.7	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Bromoform	ND	20	6.0	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Bromomethane	ND	40	30	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
2-Butanone (MEK)	43	400	28	µg/L	20	J	SW-846 8260D	5/31/24	6/4/24 3:19	EEH
n-Butylbenzene	ND	20	3.1	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
sec-Butylbenzene	ND	20	3.3	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
tert-Butylbenzene	ND	20	3.3	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Carbon Disulfide	ND	100	31	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Carbon Tetrachloride	ND	100	3.9	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Chlorobenzene	ND	20	3.5	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Chlorodibromomethane	ND	10	2.6	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Chloroethane	ND	40	9.2	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Chloroform	ND	40	3.8	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Chloromethane	ND	40	9.9	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Cyclohexane	ND	100	35	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	13	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,2-Dibromoethane (EDB)	ND	10	2.5	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,2-Dichlorobenzene	ND	20	3.5	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,3-Dichlorobenzene	ND	20	3.1	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,4-Dichlorobenzene	ND	20	3.3	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Dichlorodifluoromethane (Freon 12)	ND	40	4.0	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,1-Dichloroethane	ND	20	3.0	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,2-Dichloroethane	ND	20	2.5	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,1-Dichloroethylene	12	20	3.6	µg/L	20	J	SW-846 8260D	5/31/24	6/4/24 3:19	EEH
cis-1,2-Dichloroethylene	1500	20	4.0	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
trans-1,2-Dichloroethylene	16	20	3.1	µg/L	20	J	SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,2-Dichloropropane	ND	20	3.4	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
cis-1,3-Dichloropropene	ND	10	2.6	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
trans-1,3-Dichloropropene	ND	10	2.9	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Ethylbenzene	ND	20	2.7	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
2-Hexanone (MBK)	ND	200	27	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Isopropylbenzene (Cumene)	ND	20	3.1	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
p-Isopropyltoluene (p-Cymene)	ND	20	3.1	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Methyl Acetate	ND	20	9.6	µg/L	20	V-05	SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Methyl tert-Butyl Ether (MTBE)	ND	20	3.3	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Methyl Cyclohexane	ND	20	2.7	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Methylene Chloride	ND	100	3.8	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
4-Methyl-2-pentanone (MIBK)	ND	200	27	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Naphthalene	ND	40	4.9	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
n-Propylbenzene	ND	20	2.2	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Styrene	ND	20	2.6	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-9R | Sampled: 5/23/2024 10:20

Sample ID: 24E3608-11

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	10	2.0	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Tetrachloroethylene	ND	20	3.3	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Toluene	ND	20	2.3	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,2,3-Trichlorobenzene	ND	100	4.3	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,2,4-Trichlorobenzene	ND	20	3.9	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,1,1-Trichloroethane	ND	20	2.8	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,1,2-Trichloroethane	ND	20	3.6	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Trichloroethylene	1200	20	3.3	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Trichlorofluoromethane (Freon 11)	ND	40	2.9	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,2,3-Trichloropropane	ND	40	5.4	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	20	3.2	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,2,4-Trimethylbenzene	ND	20	3.1	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
1,3,5-Trimethylbenzene	ND	20	3.4	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Vinyl Chloride	130	40	3.9	µg/L	20	V-05	SW-846 8260D	5/31/24	6/4/24 3:19	EEH
m+p Xylene	ND	40	4.9	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
o-Xylene	ND	20	3.1	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH
Xylenes (total)	ND	20	20	µg/L	20		SW-846 8260D	5/31/24	6/4/24 3:19	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.3	70-130		6/4/24 3:19
Toluene-d8	102	70-130		6/4/24 3:19
4-Bromofluorobenzene	105	70-130		6/4/24 3:19

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-9R | Sampled: 5/23/2024 10:20

Sample ID: 24E3608-11

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	6.5	4.2	2.3	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.1	0.45	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorohexanoic acid (PFHxA)	2.0	1.0	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluoroheptanoic acid (PFHpA)	1.3	1.0	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorooctanoic acid (PFOA)	6.2	1.0	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.22	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	1.0	0.22	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorohexanesulfonic acid (PFHxS)	1.8	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorooctanesulfonic acid (PFOS)	2.3	1.0	0.40	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.2	0.78	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.2	3.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.2	1.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.37	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.42	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.8	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.8	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.2	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.2	0.86	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.2	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.2	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	2.3	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	52	12	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	52	9.9	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.1	0.36	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.1	0.58	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-9R | Sampled: 5/23/2024 10:20

Sample ID: 24E3608-11

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.1	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.1	0.57	ng/L	1		Draft Method 1633	6/6/24	6/7/24 21:54	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	60.4	10-130		6/7/24 21:54
13C5-PFPeA	68.4	35-150		6/7/24 21:54
13C5-PFHxA	85.2	55-150		6/7/24 21:54
13C4-PFHpA	92.7	55-150		6/7/24 21:54
13C8-PFOA	82.4	60-140		6/7/24 21:54
13C9-PFNA	83.9	55-140		6/7/24 21:54
13C6-PFDA	86.1	50-140		6/7/24 21:54
13C7-PFUnA	85.3	30-140		6/7/24 21:54
13C2-PFDoA	78.3	10-150		6/7/24 21:54
13C2-PFTeDA	69.2	10-130		6/7/24 21:54
13C3-PFBS	86.8	55-150		6/7/24 21:54
13C3-PFHxS	86.5	55-150		6/7/24 21:54
13C8-PFOS	84.1	45-140		6/7/24 21:54
13C2-4:2FTS	134	60-200		6/7/24 21:54
13C2-6:2FTS	121	60-200		6/7/24 21:54
13C2-8:2FTS	76.4	50-200		6/7/24 21:54
13C8-PFOSA	76.1	30-130		6/7/24 21:54
D3-NMeFOSA	58.0	15-130		6/7/24 21:54
D5-NEtFOSA	57.1	10-130		6/7/24 21:54
D3-NMeFOSAA	80.8	45-200		6/7/24 21:54
D5-NEtFOSAA	81.2	10-200		6/7/24 21:54
D7-NMeFOSE	66.1	10-150		6/7/24 21:54
D9-NEtFOSE	65.5	10-150		6/7/24 21:54
13C3-HFPO-DA	88.7	25-160		6/7/24 21:54

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-9R | Sampled: 5/23/2024 10:20

Sample ID: 24E3608-11

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	16	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-10 | Sampled: 5/22/2024 11:50

Sample ID: 24E3608-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Bromoform	ND	1.0	0.30	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
2-Hexanone (MBK)	ND	10	1.3	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Methyl Acetate	ND	1.0	0.48	µg/L	1	V-05	SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Naphthalene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-10 | Sampled: 5/22/2024 11:50

Sample ID: 24E3608-12

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Vinyl Chloride	ND	2.0	0.19	µg/L	1	V-05	SW-846 8260D	5/31/24	6/4/24 1:10	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	5/31/24	6/4/24 1:10	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	97.6	70-130		6/4/24 1:10
Toluene-d8	102	70-130		6/4/24 1:10
4-Bromofluorobenzene	105	70-130		6/4/24 1:10

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-10 | Sampled: 5/22/2024 11:50

Sample ID: 24E3608-12

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	3.7	2.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.40	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.94	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.94	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorooctanoic acid (PFOA)	ND	0.94	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorononanoic acid (PFNA)	ND	0.94	0.18	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorodecanoic acid (PFDA)	ND	0.94	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.94	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.94	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.94	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.94	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.94	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.94	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.94	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.94	0.31	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.94	0.36	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.94	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.94	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.94	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	0.70	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	2.8	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.94	0.22	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.94	0.31	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.94	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.94	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.94	0.37	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.4	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.4	2.5	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	0.97	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.7	0.77	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	0.90	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.7	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.4	2.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	8.9	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.52	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-10 | Sampled: 5/22/2024 11:50

Sample ID: 24E3608-12

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.51	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.52	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:10	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	68.4	10-130		6/7/24 22:10
13C5-PFPeA	79.4	35-150		6/7/24 22:10
13C5-PFHxA	89.9	55-150		6/7/24 22:10
13C4-PFHpA	88.2	55-150		6/7/24 22:10
13C8-PFOA	90.7	60-140		6/7/24 22:10
13C9-PFNA	88.3	55-140		6/7/24 22:10
13C6-PFDA	92.5	50-140		6/7/24 22:10
13C7-PFUnA	95.1	30-140		6/7/24 22:10
13C2-PFDoA	90.4	10-150		6/7/24 22:10
13C2-PFTeDA	80.1	10-130		6/7/24 22:10
13C3-PFBS	93.5	55-150		6/7/24 22:10
13C3-PFHxS	91.0	55-150		6/7/24 22:10
13C8-PFOS	89.9	45-140		6/7/24 22:10
13C2-4:2FTS	79.9	60-200		6/7/24 22:10
13C2-6:2FTS	86.2	60-200		6/7/24 22:10
13C2-8:2FTS	79.1	50-200		6/7/24 22:10
13C8-PFOSA	83.0	30-130		6/7/24 22:10
D3-NMeFOSA	66.4	15-130		6/7/24 22:10
D5-NEtFOSA	63.8	10-130		6/7/24 22:10
D3-NMeFOSAA	78.5	45-200		6/7/24 22:10
D5-NEtFOSAA	78.4	10-200		6/7/24 22:10
D7-NMeFOSE	74.0	10-150		6/7/24 22:10
D9-NEtFOSE	73.1	10-150		6/7/24 22:10
13C3-HFPO-DA	95.5	25-160		6/7/24 22:10

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-10 | Sampled: 5/22/2024 11:50

Sample ID: 24E3608-12

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	24	10	10	mg/L	1	H-01	Draft Method 1633	6/3/24	6/3/24 13:15	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-11R | Sampled: 5/22/2024 10:50

Sample ID: 24E3608-13

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	12	200	8.2	µg/L	4	V-05, J	SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Benzene	ND	4.0	0.57	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Bromochloromethane	ND	4.0	1.3	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Bromodichloromethane	ND	2.0	0.74	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Bromoform	ND	4.0	1.2	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Bromomethane	ND	8.0	5.9	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
2-Butanone (MEK)	20	80	5.7	µg/L	4	J	SW-846 8260D	5/31/24	6/4/24 3:44	EEH
n-Butylbenzene	ND	4.0	0.62	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
sec-Butylbenzene	ND	4.0	0.65	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
tert-Butylbenzene	ND	4.0	0.66	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Carbon Disulfide	ND	20	6.1	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Carbon Tetrachloride	ND	20	0.78	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Chlorobenzene	ND	4.0	0.71	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Chlorodibromomethane	ND	2.0	0.51	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Chloroethane	ND	8.0	1.8	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Chloroform	ND	8.0	0.76	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Chloromethane	ND	8.0	2.0	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Cyclohexane	ND	20	7.1	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	2.5	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,2-Dibromoethane (EDB)	ND	2.0	0.50	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,2-Dichlorobenzene	ND	4.0	0.70	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,3-Dichlorobenzene	ND	4.0	0.62	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,4-Dichlorobenzene	ND	4.0	0.67	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Dichlorodifluoromethane (Freon 12)	ND	8.0	0.80	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,1-Dichloroethane	ND	4.0	0.60	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,2-Dichloroethane	ND	4.0	0.51	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,1-Dichloroethylene	ND	4.0	0.72	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
cis-1,2-Dichloroethylene	120	4.0	0.81	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
trans-1,2-Dichloroethylene	0.68	4.0	0.62	µg/L	4	J	SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,2-Dichloropropane	ND	4.0	0.68	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
cis-1,3-Dichloropropene	ND	2.0	0.51	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
trans-1,3-Dichloropropene	ND	2.0	0.58	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Ethylbenzene	ND	4.0	0.55	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
2-Hexanone (MBK)	ND	40	5.4	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Isopropylbenzene (Cumene)	ND	4.0	0.62	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
p-Isopropyltoluene (p-Cymene)	ND	4.0	0.62	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Methyl Acetate	ND	4.0	1.9	µg/L	4	V-05	SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Methyl tert-Butyl Ether (MTBE)	ND	4.0	0.67	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Methyl Cyclohexane	ND	4.0	0.53	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Methylene Chloride	ND	20	0.76	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
4-Methyl-2-pentanone (MIBK)	ND	40	5.5	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Naphthalene	ND	8.0	0.99	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
n-Propylbenzene	ND	4.0	0.44	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Styrene	ND	4.0	0.52	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-11R | Sampled: 5/22/2024 10:50

Sample ID: 24E3608-13

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	2.0	0.41	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Tetrachloroethylene	ND	4.0	0.67	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Toluene	ND	4.0	0.46	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,2,3-Trichlorobenzene	ND	20	0.87	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,2,4-Trichlorobenzene	ND	4.0	0.78	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,1,1-Trichloroethane	ND	4.0	0.56	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,1,2-Trichloroethane	ND	4.0	0.73	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Trichloroethylene	230	4.0	0.66	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Trichlorofluoromethane (Freon 11)	ND	8.0	0.57	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,2,3-Trichloropropane	ND	8.0	1.1	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	0.63	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,2,4-Trimethylbenzene	ND	4.0	0.62	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
1,3,5-Trimethylbenzene	ND	4.0	0.68	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Vinyl Chloride	ND	8.0	0.77	µg/L	4	V-05	SW-846 8260D	5/31/24	6/4/24 3:44	EEH
m+p Xylene	ND	8.0	0.98	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
o-Xylene	ND	4.0	0.62	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH
Xylenes (total)	ND	4.0	4.0	µg/L	4		SW-846 8260D	5/31/24	6/4/24 3:44	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.2	70-130		6/4/24 3:44
Toluene-d8	101	70-130		6/4/24 3:44
4-Bromofluorobenzene	105	70-130		6/4/24 3:44

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-11R | Sampled: 5/22/2024 10:50

Sample ID: 24E3608-13

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.3	3.9	2.1	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.42	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.98	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.98	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorooctanoic acid (PFOA)	1.6	0.98	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorononanoic acid (PFNA)	ND	0.98	0.18	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorodecanoic acid (PFDA)	ND	0.98	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.98	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.98	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.98	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.98	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorobutanesulfonic acid (PFBS)	1.1	0.98	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.98	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.91	0.98	0.27	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.98	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorooctanesulfonic acid (PFOS)	4.2	0.98	0.38	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.98	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.98	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.98	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.73	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	3.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.98	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.98	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.98	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.98	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.98	0.39	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.8	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.8	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.80	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.94	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.8	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	9.3	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-11R | Sampled: 5/22/2024 10:50

Sample ID: 24E3608-13

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.53	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:25	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	92.1	10-130		6/7/24 22:25
13C5-PFPeA	79.3	35-150		6/7/24 22:25
13C5-PFHxA	91.7	55-150		6/7/24 22:25
13C4-PFHpA	87.9	55-150		6/7/24 22:25
13C8-PFOA	93.1	60-140		6/7/24 22:25
13C9-PFNA	87.2	55-140		6/7/24 22:25
13C6-PFDA	85.2	50-140		6/7/24 22:25
13C7-PFUnA	84.3	30-140		6/7/24 22:25
13C2-PFDoA	84.9	10-150		6/7/24 22:25
13C2-PFTeDA	70.9	10-130		6/7/24 22:25
13C3-PFBS	92.6	55-150		6/7/24 22:25
13C3-PFHxS	89.9	55-150		6/7/24 22:25
13C8-PFOS	84.7	45-140		6/7/24 22:25
13C2-4:2FTS	81.0	60-200		6/7/24 22:25
13C2-6:2FTS	70.8	60-200		6/7/24 22:25
13C2-8:2FTS	63.5	50-200		6/7/24 22:25
13C8-PFOSA	78.5	30-130		6/7/24 22:25
D3-NMeFOSA	60.2	15-130		6/7/24 22:25
D5-NEtFOSA	56.9	10-130		6/7/24 22:25
D3-NMeFOSAA	74.2	45-200		6/7/24 22:25
D5-NEtFOSAA	71.9	10-200		6/7/24 22:25
D7-NMeFOSE	64.4	10-150		6/7/24 22:25
D9-NEtFOSE	61.8	10-150		6/7/24 22:25
13C3-HFPO-DA	93.5	25-160		6/7/24 22:25

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-11R | Sampled: 5/22/2024 10:50

Sample ID: 24E3608-13

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 13:18	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-12 | Sampled: 5/24/2024 11:20

Sample ID: 24E3608-14

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	100	µg/L	50	V-05	SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Benzene	ND	50	7.2	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Bromochloromethane	ND	50	16	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Bromodichloromethane	ND	25	9.3	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Bromoform	ND	50	15	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Bromomethane	ND	100	74	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
2-Butanone (MEK)	96	1000	71	µg/L	50	J	SW-846 8260D	5/31/24	6/4/24 4:10	EEH
n-Butylbenzene	ND	50	7.8	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
sec-Butylbenzene	ND	50	8.2	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
tert-Butylbenzene	ND	50	8.3	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Carbon Disulfide	ND	250	76	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Carbon Tetrachloride	ND	250	9.7	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Chlorobenzene	ND	50	8.9	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Chlorodibromomethane	ND	25	6.4	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Chloroethane	ND	100	23	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Chloroform	ND	100	9.5	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Chloromethane	ND	100	25	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Cyclohexane	ND	250	88	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	31	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,2-Dibromoethane (EDB)	ND	25	6.3	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,2-Dichlorobenzene	ND	50	8.7	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,3-Dichlorobenzene	ND	50	7.7	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,4-Dichlorobenzene	ND	50	8.4	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Dichlorodifluoromethane (Freon 12)	ND	100	10	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,1-Dichloroethane	ND	50	7.5	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,2-Dichloroethane	ND	50	6.3	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,1-Dichloroethylene	ND	50	9.0	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
cis-1,2-Dichloroethylene	82	50	10	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
trans-1,2-Dichloroethylene	ND	50	7.8	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,2-Dichloropropane	ND	50	8.5	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
cis-1,3-Dichloropropene	ND	25	6.4	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
trans-1,3-Dichloropropene	ND	25	7.2	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Ethylbenzene	ND	50	6.8	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
2-Hexanone (MBK)	ND	500	67	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Isopropylbenzene (Cumene)	ND	50	7.8	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
p-Isopropyltoluene (p-Cymene)	ND	50	7.8	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Methyl Acetate	ND	50	24	µg/L	50	V-05	SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Methyl tert-Butyl Ether (MTBE)	ND	50	8.4	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Methyl Cyclohexane	ND	50	6.7	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Methylene Chloride	ND	250	9.5	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
4-Methyl-2-pentanone (MIBK)	ND	500	68	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Naphthalene	ND	100	12	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
n-Propylbenzene	ND	50	5.5	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Styrene	ND	50	6.4	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-12 | Sampled: 5/24/2024 11:20

Sample ID: 24E3608-14

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	25	5.1	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Tetrachloroethylene	ND	50	8.3	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Toluene	ND	50	5.7	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,2,3-Trichlorobenzene	ND	250	11	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,2,4-Trichlorobenzene	ND	50	9.7	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,1,1-Trichloroethane	ND	50	7.0	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,1,2-Trichloroethane	ND	50	9.1	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Trichloroethylene	4600	50	8.3	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Trichlorofluoromethane (Freon 11)	ND	100	7.1	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,2,3-Trichloropropane	ND	100	13	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	7.9	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,2,4-Trimethylbenzene	ND	50	7.8	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
1,3,5-Trimethylbenzene	ND	50	8.5	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Vinyl Chloride	ND	100	9.7	µg/L	50	V-05	SW-846 8260D	5/31/24	6/4/24 4:10	EEH
m+p Xylene	ND	100	12	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
o-Xylene	ND	50	7.8	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH
Xylenes (total)	ND	50	50	µg/L	50		SW-846 8260D	5/31/24	6/4/24 4:10	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.2	70-130		6/4/24 4:10
Toluene-d8	100	70-130		6/4/24 4:10
4-Bromofluorobenzene	106	70-130		6/4/24 4:10

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-12 | Sampled: 5/24/2024 11:20

Sample ID: 24E3608-14

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.6	3.8	2.1	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluoropentanoic acid (PFPeA)	0.56	1.9	0.41	ng/L	1	PF-22, J	Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorohexanoic acid (PFHxA)	0.70	0.95	0.23	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluoroheptanoic acid (PFHpA)	0.80	0.95	0.25	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorooctanoic acid (PFOA)	2.2	0.95	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorononanoic acid (PFNA)	0.26	0.95	0.18	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorodecanoic acid (PFDA)	ND	0.95	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.95	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.95	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.95	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.95	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorobutanesulfonic acid (PFBS)	0.70	0.95	0.20	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.95	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.65	0.95	0.26	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.95	0.31	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorooctanesulfonic acid (PFOS)	0.93	0.95	0.36	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.95	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.95	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.95	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	0.71	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	2.9	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.95	0.22	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.95	0.31	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.95	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.95	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.95	0.38	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.5	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.5	2.5	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	0.98	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.8	0.78	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	0.91	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.8	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.5	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	9.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.53	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-12 | Sampled: 5/24/2024 11:20

Sample ID: 24E3608-14

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.51	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.52	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:41	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	72.8	10-130		6/7/24 22:41
13C5-PFPeA	73.3	35-150		6/7/24 22:41
13C5-PFHxA	82.7	55-150		6/7/24 22:41
13C4-PFHpA	80.9	55-150		6/7/24 22:41
13C8-PFOA	83.8	60-140		6/7/24 22:41
13C9-PFNA	78.1	55-140		6/7/24 22:41
13C6-PFDA	80.8	50-140		6/7/24 22:41
13C7-PFUnA	79.3	30-140		6/7/24 22:41
13C2-PFDoA	75.1	10-150		6/7/24 22:41
13C2-PFTeDA	63.8	10-130		6/7/24 22:41
13C3-PFBS	84.5	55-150		6/7/24 22:41
13C3-PFHxS	80.6	55-150		6/7/24 22:41
13C8-PFOS	78.8	45-140		6/7/24 22:41
13C2-4:2FTS	70.7	60-200		6/7/24 22:41
13C2-6:2FTS	61.7	60-200		6/7/24 22:41
13C2-8:2FTS	62.4	50-200		6/7/24 22:41
13C8-PFOSA	72.8	30-130		6/7/24 22:41
D3-NMeFOSA	57.5	15-130		6/7/24 22:41
D5-NEtFOSA	57.7	10-130		6/7/24 22:41
D3-NMeFOSAA	71.4	45-200		6/7/24 22:41
D5-NEtFOSAA	70.3	10-200		6/7/24 22:41
D7-NMeFOSE	61.6	10-150		6/7/24 22:41
D9-NEtFOSE	60.0	10-150		6/7/24 22:41
13C3-HFPO-DA	85.3	25-160		6/7/24 22:41

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-12 | Sampled: 5/24/2024 11:20

Sample ID: 24E3608-14

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	6/3/24	6/3/24 13:15	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-13 | Sampled: 5/23/2024 14:20

Sample ID: 24E3608-15

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	23	500	20	µg/L	10	V-05, J	SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Benzene	ND	10	1.4	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Bromochloromethane	ND	10	3.2	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Bromodichloromethane	ND	5.0	1.9	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Bromoform	ND	10	3.0	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Bromomethane	ND	20	15	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
2-Butanone (MEK)	24	200	14	µg/L	10	J	SW-846 8260D	5/31/24	6/4/24 4:36	EEH
n-Butylbenzene	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
sec-Butylbenzene	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
tert-Butylbenzene	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Carbon Disulfide	ND	50	15	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Carbon Tetrachloride	ND	50	1.9	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Chlorobenzene	ND	10	1.8	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Chlorodibromomethane	ND	5.0	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Chloroethane	ND	20	4.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Chloroform	ND	20	1.9	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Chloromethane	ND	20	5.0	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Cyclohexane	ND	50	18	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	6.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,2-Dibromoethane (EDB)	ND	5.0	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,2-Dichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,3-Dichlorobenzene	ND	10	1.5	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,4-Dichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Dichlorodifluoromethane (Freon 12)	ND	20	2.0	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,1-Dichloroethane	ND	10	1.5	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,2-Dichloroethane	ND	10	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,1-Dichloroethylene	3.8	10	1.8	µg/L	10	J	SW-846 8260D	5/31/24	6/4/24 4:36	EEH
cis-1,2-Dichloroethylene	1700	10	2.0	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
trans-1,2-Dichloroethylene	5.1	10	1.6	µg/L	10	J	SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,2-Dichloropropane	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
cis-1,3-Dichloropropene	ND	5.0	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
trans-1,3-Dichloropropene	ND	5.0	1.4	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Ethylbenzene	ND	10	1.4	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
2-Hexanone (MBK)	ND	100	13	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Isopropylbenzene (Cumene)	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
p-Isopropyltoluene (p-Cymene)	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Methyl Acetate	ND	10	4.8	µg/L	10	V-05	SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Methyl tert-Butyl Ether (MTBE)	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Methyl Cyclohexane	ND	10	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Methylene Chloride	ND	50	1.9	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
4-Methyl-2-pentanone (MIBK)	ND	100	14	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Naphthalene	ND	20	2.5	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
n-Propylbenzene	ND	10	1.1	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Styrene	ND	10	1.3	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-13 | Sampled: 5/23/2024 14:20

Sample ID: 24E3608-15

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	5.0	1.0	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Tetrachloroethylene	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Toluene	ND	10	1.1	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,2,3-Trichlorobenzene	ND	50	2.2	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,2,4-Trichlorobenzene	ND	10	1.9	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,1,1-Trichloroethane	ND	10	1.4	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,1,2-Trichloroethane	ND	10	1.8	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Trichloroethylene	770	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Trichlorofluoromethane (Freon 11)	ND	20	1.4	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,2,3-Trichloropropane	ND	20	2.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,2,4-Trimethylbenzene	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
1,3,5-Trimethylbenzene	ND	10	1.7	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Vinyl Chloride	130	20	1.9	µg/L	10	V-05	SW-846 8260D	5/31/24	6/4/24 4:36	EEH
m+p Xylene	ND	20	2.5	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
o-Xylene	ND	10	1.6	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH
Xylenes (total)	ND	10	10	µg/L	10		SW-846 8260D	5/31/24	6/4/24 4:36	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	92.0	70-130		6/4/24 4:36
Toluene-d8	99.9	70-130		6/4/24 4:36
4-Bromofluorobenzene	107	70-130		6/4/24 4:36

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-13 | Sampled: 5/23/2024 14:20

Sample ID: 24E3608-15

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	3.9	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.41	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorohexanoic acid (PFHxA)	0.37	0.97	0.23	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluoroheptanoic acid (PFHpA)	0.37	0.97	0.26	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorooctanoic acid (PFOA)	0.98	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorononanoic acid (PFNA)	0.27	0.97	0.18	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorodecanoic acid (PFDA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.97	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.97	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorobutanesulfonic acid (PFBS)	0.34	0.97	0.20	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.39	0.97	0.27	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.97	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorooctanesulfonic acid (PFOS)	1.1	0.97	0.37	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.97	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.72	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	2.9	ng/L	1	PF-17C	Draft Method 1633	6/6/24	6/7/24 22:57	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.97	0.22	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.97	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.97	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.97	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.97	0.39	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.7	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.7	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.79	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.93	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.7	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	48	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	48	9.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-13 | Sampled: 5/23/2024 14:20

Sample ID: 24E3608-15

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.52	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.53	ng/L	1		Draft Method 1633	6/6/24	6/7/24 22:57	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	50.3		10-130		6/7/24 22:57
13C5-PFPeA	69.1		35-150		6/7/24 22:57
13C5-PFHxA	78.2		55-150		6/7/24 22:57
13C4-PFHpA	76.6		55-150		6/7/24 22:57
13C8-PFOA	75.9		60-140		6/7/24 22:57
13C9-PFNA	74.3		55-140		6/7/24 22:57
13C6-PFDA	64.7		50-140		6/7/24 22:57
13C7-PFUnA	67.9		30-140		6/7/24 22:57
13C2-PFDoA	58.8		10-150		6/7/24 22:57
13C2-PFTeDA	39.7		10-130		6/7/24 22:57
13C3-PFBS	83.8		55-150		6/7/24 22:57
13C3-PFHxS	75.2		55-150		6/7/24 22:57
13C8-PFOS	70.3		45-140		6/7/24 22:57
13C2-4:2FTS	63.2		60-200		6/7/24 22:57
13C2-6:2FTS	**58.8**	*	60-200	PF-17C	6/7/24 22:57
13C2-8:2FTS	56.5		50-200		6/7/24 22:57
13C8-PFOSA	67.2		30-130		6/7/24 22:57
D3-NMeFOSA	45.8		15-130		6/7/24 22:57
D5-NEtFOSA	40.7		10-130		6/7/24 22:57
D3-NMeFOSAA	58.0		45-200		6/7/24 22:57
D5-NEtFOSAA	54.7		10-200		6/7/24 22:57
D7-NMeFOSE	28.5		10-150		6/7/24 22:57
D9-NEtFOSE	21.5		10-150		6/7/24 22:57
13C3-HFPO-DA	82.5		25-160		6/7/24 22:57

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-13 | Sampled: 5/23/2024 14:20

Sample ID: 24E3608-15

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-14 | Sampled: 5/23/2024 12:20

Sample ID: 24E3608-16

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	58	1200	51	µg/L	25	V-05, J	SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Benzene	ND	25	3.6	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Bromochloromethane	ND	25	8.0	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Bromodichloromethane	ND	12	4.6	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Bromoform	ND	25	7.5	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Bromomethane	ND	50	37	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
2-Butanone (MEK)	51	500	35	µg/L	25	J	SW-846 8260D	5/31/24	6/4/24 5:02	EEH
n-Butylbenzene	ND	25	3.9	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
sec-Butylbenzene	ND	25	4.1	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
tert-Butylbenzene	ND	25	4.1	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Carbon Disulfide	ND	120	38	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Carbon Tetrachloride	ND	120	4.9	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Chlorobenzene	ND	25	4.4	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Chlorodibromomethane	ND	12	3.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Chloroethane	ND	50	11	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Chloroform	ND	50	4.8	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Chloromethane	ND	50	12	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Cyclohexane	ND	120	44	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	120	16	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,2-Dibromoethane (EDB)	ND	12	3.1	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,2-Dichlorobenzene	ND	25	4.4	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,3-Dichlorobenzene	ND	25	3.9	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,4-Dichlorobenzene	ND	25	4.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Dichlorodifluoromethane (Freon 12)	ND	50	5.0	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,1-Dichloroethane	ND	25	3.7	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,2-Dichloroethane	ND	25	3.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,1-Dichloroethylene	ND	25	4.5	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
cis-1,2-Dichloroethylene	560	25	5.1	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
trans-1,2-Dichloroethylene	ND	25	3.9	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,2-Dichloropropane	ND	25	4.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
cis-1,3-Dichloropropene	ND	12	3.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
trans-1,3-Dichloropropene	ND	12	3.6	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Ethylbenzene	ND	25	3.4	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
2-Hexanone (MBK)	ND	250	34	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Isopropylbenzene (Cumene)	ND	25	3.9	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
p-Isopropyltoluene (p-Cymene)	ND	25	3.9	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Methyl Acetate	ND	25	12	µg/L	25	V-05	SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Methyl tert-Butyl Ether (MTBE)	ND	25	4.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Methyl Cyclohexane	ND	25	3.3	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Methylene Chloride	ND	120	4.8	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
4-Methyl-2-pentanone (MIBK)	ND	250	34	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Naphthalene	ND	50	6.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
n-Propylbenzene	ND	25	2.8	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Styrene	ND	25	3.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-14 | Sampled: 5/23/2024 12:20

Sample ID: 24E3608-16

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	12	2.6	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Tetrachloroethylene	ND	25	4.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Toluene	ND	25	2.8	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,2,3-Trichlorobenzene	ND	120	5.4	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,2,4-Trichlorobenzene	ND	25	4.9	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,1,1-Trichloroethane	ND	25	3.5	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,1,2-Trichloroethane	ND	25	4.5	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Trichloroethylene	2600	25	4.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Trichlorofluoromethane (Freon 11)	ND	50	3.6	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,2,3-Trichloropropane	ND	50	6.7	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	25	3.9	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,2,4-Trimethylbenzene	ND	25	3.9	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
1,3,5-Trimethylbenzene	ND	25	4.2	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Vinyl Chloride	ND	50	4.8	µg/L	25	V-05	SW-846 8260D	5/31/24	6/4/24 5:02	EEH
m+p Xylene	ND	50	6.1	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
o-Xylene	ND	25	3.9	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH
Xylenes (total)	ND	25	25	µg/L	25		SW-846 8260D	5/31/24	6/4/24 5:02	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	90.7	70-130		6/4/24 5:02
Toluene-d8	99.3	70-130		6/4/24 5:02
4-Bromofluorobenzene	106	70-130		6/4/24 5:02

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-14 | Sampled: 5/23/2024 12:20

Sample ID: 24E3608-16

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.5	4.0	2.2	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.43	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.99	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluoroheptanoic acid (PFHpA)	0.99	0.99	0.26	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorooctanoic acid (PFOA)	2.8	0.99	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorononanoic acid (PFNA)	0.79	0.99	0.19	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorodecanoic acid (PFDA)	ND	0.99	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.99	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.99	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.99	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.99	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.99	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.99	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorohexanesulfonic acid (PFHxS)	1.1	0.99	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.99	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorooctanesulfonic acid (PFOS)	3.5	0.99	0.38	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.99	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.99	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.99	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.74	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	3.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.99	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.99	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.99	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.99	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.99	0.40	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.9	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.9	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.81	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.95	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.9	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	9.4	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-14 | Sampled: 5/23/2024 12:20

Sample ID: 24E3608-16

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.53	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:12	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	72.8	10-130		6/7/24 23:12
13C5-PFPeA	74.4	35-150		6/7/24 23:12
13C5-PFHxA	85.1	55-150		6/7/24 23:12
13C4-PFHpA	91.2	55-150		6/7/24 23:12
13C8-PFOA	84.6	60-140		6/7/24 23:12
13C9-PFNA	81.1	55-140		6/7/24 23:12
13C6-PFDA	80.3	50-140		6/7/24 23:12
13C7-PFUnA	81.0	30-140		6/7/24 23:12
13C2-PFDoA	79.5	10-150		6/7/24 23:12
13C2-PFTeDA	66.6	10-130		6/7/24 23:12
13C3-PFBS	86.0	55-150		6/7/24 23:12
13C3-PFHxS	86.0	55-150		6/7/24 23:12
13C8-PFOS	82.3	45-140		6/7/24 23:12
13C2-4:2FTS	109	60-200		6/7/24 23:12
13C2-6:2FTS	96.1	60-200		6/7/24 23:12
13C2-8:2FTS	69.3	50-200		6/7/24 23:12
13C8-PFOSA	75.4	30-130		6/7/24 23:12
D3-NMeFOSA	55.5	15-130		6/7/24 23:12
D5-NEtFOSA	55.8	10-130		6/7/24 23:12
D3-NMeFOSAA	75.2	45-200		6/7/24 23:12
D5-NEtFOSAA	76.0	10-200		6/7/24 23:12
D7-NMeFOSE	62.7	10-150		6/7/24 23:12
D9-NEtFOSE	60.1	10-150		6/7/24 23:12
13C3-HFPO-DA	91.8	25-160		6/7/24 23:12

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: MW-14 | Sampled: 5/23/2024 12:20

Sample ID: 24E3608-16

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	12	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: DUP | Sampled: 5/21/2024 14:25

Sample ID: 24E3608-17

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	5000	200	µg/L	100	V-05	SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Benzene	ND	100	14	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Bromochloromethane	ND	100	32	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Bromodichloromethane	ND	50	19	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Bromoform	ND	100	30	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Bromomethane	ND	200	150	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
2-Butanone (MEK)	150	2000	140	µg/L	100	J	SW-846 8260D	5/31/24	6/4/24 5:27	EEH
n-Butylbenzene	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
sec-Butylbenzene	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
tert-Butylbenzene	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Carbon Disulfide	ND	500	150	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Carbon Tetrachloride	ND	500	19	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Chlorobenzene	ND	100	18	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Chlorodibromomethane	ND	50	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Chloroethane	ND	200	46	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Chloroform	ND	200	19	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Chloromethane	ND	200	50	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Cyclohexane	ND	500	180	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	63	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,2-Dibromoethane (EDB)	ND	50	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,2-Dichlorobenzene	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,3-Dichlorobenzene	ND	100	15	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,4-Dichlorobenzene	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Dichlorodifluoromethane (Freon 12)	ND	200	20	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,1-Dichloroethane	ND	100	15	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,2-Dichloroethane	ND	100	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,1-Dichloroethylene	ND	100	18	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
cis-1,2-Dichloroethylene	400	100	20	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
trans-1,2-Dichloroethylene	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,2-Dichloropropane	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
cis-1,3-Dichloropropene	ND	50	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
trans-1,3-Dichloropropene	ND	50	14	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Ethylbenzene	ND	100	14	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
2-Hexanone (MBK)	ND	1000	130	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Isopropylbenzene (Cumene)	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
p-Isopropyltoluene (p-Cymene)	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Methyl Acetate	ND	100	48	µg/L	100	V-05	SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Methyl tert-Butyl Ether (MTBE)	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Methyl Cyclohexane	ND	100	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Methylene Chloride	ND	500	19	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
4-Methyl-2-pentanone (MIBK)	ND	1000	140	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Naphthalene	ND	200	25	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
n-Propylbenzene	ND	100	11	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Styrene	ND	100	13	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: DUP | Sampled: 5/21/2024 14:25

Sample ID: 24E3608-17

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	50	10	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Tetrachloroethylene	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Toluene	ND	100	11	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,2,3-Trichlorobenzene	ND	500	22	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,2,4-Trichlorobenzene	ND	100	19	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,1,1-Trichloroethane	ND	100	14	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,1,2-Trichloroethane	ND	100	18	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Trichloroethylene	9800	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Trichlorofluoromethane (Freon 11)	ND	200	14	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,2,3-Trichloropropane	ND	200	27	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,2,4-Trimethylbenzene	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
1,3,5-Trimethylbenzene	ND	100	17	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Vinyl Chloride	ND	200	19	µg/L	100	V-05	SW-846 8260D	5/31/24	6/4/24 5:27	EEH
m+p Xylene	ND	200	25	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
o-Xylene	ND	100	16	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH
Xylenes (total)	ND	100	100	µg/L	100		SW-846 8260D	5/31/24	6/4/24 5:27	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	90.4	70-130		6/4/24 5:27
Toluene-d8	99.2	70-130		6/4/24 5:27
4-Bromofluorobenzene	106	70-130		6/4/24 5:27

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: DUP | Sampled: 5/21/2024 14:25

Sample ID: 24E3608-17

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	3.9	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.42	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorohexanoic acid (PFHxA)	1.5	0.97	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluoroheptanoic acid (PFHpA)	0.90	0.97	0.26	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorooctanoic acid (PFOA)	4.2	0.97	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorononanoic acid (PFNA)	0.47	0.97	0.18	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorodecanoic acid (PFDA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.97	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.97	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorobutanesulfonic acid (PFBS)	0.64	0.97	0.21	ng/L	1	J	Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorohexanesulfonic acid (PFHxS)	1.4	0.97	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.97	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorooctanesulfonic acid (PFOS)	2.5	0.97	0.37	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.97	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.73	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	2.9	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluorooctanesulfonamide (PFOSA)	0.24	0.97	0.23	ng/L	1	PF-22, J	Draft Method 1633	6/6/24	6/7/24 23:28	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.97	0.32	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.97	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.97	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.97	0.39	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.7	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.7	2.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.80	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.94	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.7	2.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	9.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: DUP | Sampled: 5/21/2024 14:25

Sample ID: 24E3608-17

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.53	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:28	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	72.5	10-130		6/7/24 23:28
13C5-PFPeA	75.3	35-150		6/7/24 23:28
13C5-PFHxA	86.6	55-150		6/7/24 23:28
13C4-PFHpA	89.6	55-150		6/7/24 23:28
13C8-PFOA	88.4	60-140		6/7/24 23:28
13C9-PFNA	83.9	55-140		6/7/24 23:28
13C6-PFDA	82.1	50-140		6/7/24 23:28
13C7-PFUnA	87.5	30-140		6/7/24 23:28
13C2-PFDoA	83.0	10-150		6/7/24 23:28
13C2-PFTeDA	73.2	10-130		6/7/24 23:28
13C3-PFBS	93.2	55-150		6/7/24 23:28
13C3-PFHxS	89.2	55-150		6/7/24 23:28
13C8-PFOS	86.7	45-140		6/7/24 23:28
13C2-4:2FTS	101	60-200		6/7/24 23:28
13C2-6:2FTS	83.1	60-200		6/7/24 23:28
13C2-8:2FTS	63.5	50-200		6/7/24 23:28
13C8-PFOSA	76.9	30-130		6/7/24 23:28
D3-NMeFOSA	60.4	15-130		6/7/24 23:28
D5-NEtFOSA	58.1	10-130		6/7/24 23:28
D3-NMeFOSAA	77.7	45-200		6/7/24 23:28
D5-NEtFOSAA	77.1	10-200		6/7/24 23:28
D7-NMeFOSE	66.9	10-150		6/7/24 23:28
D9-NEtFOSE	64.0	10-150		6/7/24 23:28
13C3-HFPO-DA	90.3	25-160		6/7/24 23:28

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: DUP | Sampled: 5/21/2024 14:25

Sample ID: 24E3608-17

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	5/31/24	5/31/24 12:40	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: EQUIPMENT BLANK | Sampled: 5/22/2024 15:20

Sample ID: 24E3608-18

Sample Matrix: Equipment Blank Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.0	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.43	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorohexanoic acid (PFHxA)	ND	1.0	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluoroheptanoic acid (PFHpA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorooctanoic acid (PFOA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.0	0.39	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.76	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	3.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.36	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.40	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.8	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.83	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.97	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	51	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	51	9.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: EQUIPMENT BLANK | Sampled: 5/22/2024 15:20

Sample ID: 24E3608-18

Sample Matrix: Equipment Blank Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:44	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	92.9	10-130		6/7/24 23:44
13C5-PFPeA	87.0	35-150		6/7/24 23:44
13C5-PFHxA	90.5	55-150		6/7/24 23:44
13C4-PFHpA	91.9	55-150		6/7/24 23:44
13C8-PFOA	92.9	60-140		6/7/24 23:44
13C9-PFNA	90.4	55-140		6/7/24 23:44
13C6-PFDA	90.8	50-140		6/7/24 23:44
13C7-PFUnA	87.8	30-140		6/7/24 23:44
13C2-PFDoA	82.9	10-150		6/7/24 23:44
13C2-PFTeDA	72.9	10-130		6/7/24 23:44
13C3-PFBS	96.6	55-150		6/7/24 23:44
13C3-PFHxS	93.4	55-150		6/7/24 23:44
13C8-PFOS	89.6	45-140		6/7/24 23:44
13C2-4:2FTS	92.3	60-200		6/7/24 23:44
13C2-6:2FTS	89.8	60-200		6/7/24 23:44
13C2-8:2FTS	78.8	50-200		6/7/24 23:44
13C8-PFOSA	82.4	30-130		6/7/24 23:44
D3-NMeFOSA	59.2	15-130		6/7/24 23:44
D5-NEtFOSA	62.9	10-130		6/7/24 23:44
D3-NMeFOSAA	80.9	45-200		6/7/24 23:44
D5-NEtFOSAA	77.4	10-200		6/7/24 23:44
D7-NMeFOSE	72.9	10-150		6/7/24 23:44
D9-NEtFOSE	68.7	10-150		6/7/24 23:44
13C3-HFPO-DA	96.2	25-160		6/7/24 23:44

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: EQUIPMENT BLANK | Sampled: 5/22/2024 15:20

Sample ID: 24E3608-18

Sample Matrix: Equipment Blank Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1		Draft Method 1633	5/30/24	5/30/24 14:23	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: Trip Blank | Sampled: 5/22/2024 00:00

Sample ID: 24E3608-19

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Bromoform	ND	1.0	0.30	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
2-Hexanone (MBK)	ND	10	1.3	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Methyl Acetate	ND	1.0	0.48	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Naphthalene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: Trip Blank | Sampled: 5/22/2024 00:00

Sample ID: 24E3608-19

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Vinyl Chloride	ND	2.0	0.19	µg/L	1	V-05	SW-846 8260D	5/31/24	6/3/24 21:44	EEH
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	5/31/24	6/3/24 21:44	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.8	70-130		6/3/24 21:44
Toluene-d8	101	70-130		6/3/24 21:44
4-Bromofluorobenzene	105	70-130		6/3/24 21:44

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: Trip Blank | Sampled: 5/22/2024 00:00

Sample ID: 24E3608-19

Sample Matrix: Trip Blank Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.0	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.43	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorohexanoic acid (PFHxA)	ND	1.0	0.24	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluoroheptanoic acid (PFHpA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorooctanoic acid (PFOA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.0	0.39	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.75	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	3.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.34	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.36	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.40	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.8	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.83	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.97	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	2.2	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	51	11	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	51	9.6	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: Trip Blank | Sampled: 5/22/2024 00:00

Sample ID: 24E3608-19

Sample Matrix: Trip Blank Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.54	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	6/6/24	6/7/24 23:59	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	91.3	10-130		6/7/24 23:59
13C5-PFPeA	84.3	35-150		6/7/24 23:59
13C5-PFHxA	89.5	55-150		6/7/24 23:59
13C4-PFHpA	89.6	55-150		6/7/24 23:59
13C8-PFOA	88.5	60-140		6/7/24 23:59
13C9-PFNA	86.2	55-140		6/7/24 23:59
13C6-PFDA	85.9	50-140		6/7/24 23:59
13C7-PFUnA	84.6	30-140		6/7/24 23:59
13C2-PFDoA	83.2	10-150		6/7/24 23:59
13C2-PFTeDA	73.3	10-130		6/7/24 23:59
13C3-PFBS	95.1	55-150		6/7/24 23:59
13C3-PFHxS	88.7	55-150		6/7/24 23:59
13C8-PFOS	87.5	45-140		6/7/24 23:59
13C2-4:2FTS	85.8	60-200		6/7/24 23:59
13C2-6:2FTS	83.5	60-200		6/7/24 23:59
13C2-8:2FTS	78.6	50-200		6/7/24 23:59
13C8-PFOSA	80.8	30-130		6/7/24 23:59
D3-NMeFOSA	59.0	15-130		6/7/24 23:59
D5-NEtFOSA	61.5	10-130		6/7/24 23:59
D3-NMeFOSAA	81.0	45-200		6/7/24 23:59
D5-NEtFOSAA	77.8	10-200		6/7/24 23:59
D7-NMeFOSE	69.6	10-150		6/7/24 23:59
D9-NEtFOSE	67.7	10-150		6/7/24 23:59
13C3-HFPO-DA	98.5	25-160		6/7/24 23:59

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24E3608

Date Received: 5/28/2024

Field Sample #: Trip Blank | Sampled: 5/22/2024 00:00

Sample ID: 24E3608-19

Sample Matrix: Trip Blank Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1		Draft Method 1633	5/30/24	5/30/24 14:23	LL

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Sample Extraction Data

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
24E3608-01 [MW-1]	B375812	50.0	05/31/24
24E3608-02 [MW-2]	B375812	50.0	05/31/24
24E3608-03 [MW-3]	B375812	50.0	05/31/24
24E3608-04 [MW-4]	B375812	50.0	05/31/24
24E3608-05 [MW-4D]	B375812	50.0	05/31/24
24E3608-06 [MW-5]	B375812	50.0	05/31/24
24E3608-07 [MW-5D]	B375812	50.0	05/31/24
24E3608-08 [MW-6]	B375812	50.0	05/31/24
24E3608-10 [MW-8]	B375812	50.0	05/31/24
24E3608-11 [MW-9R]	B375812	50.0	05/31/24
24E3608-15 [MW-13]	B375812	50.0	05/31/24
24E3608-16 [MW-14]	B375812	50.0	05/31/24
24E3608-17 [DUP]	B375812	50.0	05/31/24

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
24E3608-13 [MW-11R]	B375813	50.0	05/31/24

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
24E3608-18 [EQUIPMENT BLANK]	B375841	50.0	05/30/24
24E3608-19 [Trip Blank]	B375841	50.0	05/30/24

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633** **Leachates were extracted on 5/31/2024 per NO PREP in Batch B375812**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24E3608-01 [MW-1]	B375973	522	5.00	06/06/24
24E3608-02 [MW-2]	B375973	248	5.00	06/06/24
24E3608-03 [MW-3]	B375973	505	5.00	06/06/24
24E3608-04 [MW-4]	B375973	504	5.00	06/06/24
24E3608-05 [MW-4D]	B375973	500	5.00	06/06/24
24E3608-06 [MW-5]	B375973	514	5.00	06/06/24
24E3608-07 [MW-5D]	B375973	493	5.00	06/06/24
24E3608-08 [MW-6]	B375973	473	5.00	06/06/24
24E3608-09 [MW-7]	B375973	515	5.00	06/06/24
24E3608-10 [MW-8]	B375973	495	5.00	06/06/24
24E3608-11 [MW-9R]	B375973	481	5.00	06/06/24
24E3608-12 [MW-10]	B375973	533	5.00	06/06/24
24E3608-13 [MW-11R]	B375973	512	5.00	06/06/24
24E3608-14 [MW-12]	B375973	529	5.00	06/06/24
24E3608-15 [MW-13]	B375973	518	5.00	06/06/24
24E3608-16 [MW-14]	B375973	505	5.00	06/06/24
24E3608-17 [DUP]	B375973	513	5.00	06/06/24
24E3608-18 [EQUIPMENT BLANK]	B375973	495	5.00	06/06/24
24E3608-19 [Trip Blank]	B375973	495	5.00	06/06/24

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Sample Extraction Data

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
24E3608-09 [MW-7]	B376055	50.0	06/03/24
24E3608-12 [MW-10]	B376055	50.0	06/03/24
24E3608-14 [MW-12]	B376055	50.0	06/03/24

Prep Method:SW-846 5030B **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24E3608-01 [MW-1]	B375963	5	5.00	05/31/24
24E3608-02 [MW-2]	B375963	0.0125	5.00	05/31/24
24E3608-03 [MW-3]	B375963	0.5	5.00	05/31/24
24E3608-04 [MW-4]	B375963	0.05	5.00	05/31/24
24E3608-05 [MW-4D]	B375963	5	5.00	05/31/24
24E3608-06 [MW-5]	B375963	5	5.00	05/31/24
24E3608-07 [MW-5D]	B375963	5	5.00	05/31/24
24E3608-08 [MW-6]	B375963	5	5.00	05/31/24
24E3608-09 [MW-7]	B375963	5	5.00	05/31/24
24E3608-10 [MW-8]	B375963	5	5.00	05/31/24
24E3608-11 [MW-9R]	B375963	0.25	5.00	05/31/24
24E3608-12 [MW-10]	B375963	5	5.00	05/31/24
24E3608-13 [MW-11R]	B375963	1.25	5.00	05/31/24
24E3608-14 [MW-12]	B375963	0.1	5.00	05/31/24
24E3608-15 [MW-13]	B375963	0.5	5.00	05/31/24
24E3608-16 [MW-14]	B375963	0.2	5.00	05/31/24
24E3608-17 [DUP]	B375963	0.05	5.00	05/31/24
24E3608-19 [Trip Blank]	B375963	5	5.00	05/31/24

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B375963 - SW-846 5030B										
Blank (B375963-BLK1)				Prepared: 05/31/24 Analyzed: 06/03/24						
Acetone	ND	50	µg/L							V-05
Benzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							V-05
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B375963 - SW-846 5030B											
Blank (B375963-BLK1)				Prepared: 05/31/24 Analyzed: 06/03/24							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L								
1,2,3-Trichloropropane	ND	2.0	µg/L								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L								
1,2,4-Trimethylbenzene	ND	1.0	µg/L								
1,3,5-Trimethylbenzene	ND	1.0	µg/L								
Vinyl Chloride	ND	2.0	µg/L							V-05	
m+p Xylene	ND	2.0	µg/L								
o-Xylene	ND	1.0	µg/L								
Xylenes (total)	ND	1.0	µg/L								
Surrogate: 1,2-Dichloroethane-d4	*22.9*		µg/L	25.0		91.5	70-130				
Surrogate: Toluene-d8	*25.1*		µg/L	25.0		100	70-130				
Surrogate: 4-Bromofluorobenzene	*26.2*		µg/L	25.0		105	70-130				
LCS (B375963-BS1)				Prepared: 05/31/24 Analyzed: 06/03/24							
Acetone	76.6	50	µg/L	100		76.6	70-160			V-05	†
Benzene	10.2	1.0	µg/L	10.0		102	70-130				
Bromochloromethane	8.90	1.0	µg/L	10.0		89.0	70-130				
Bromodichloromethane	10.9	0.50	µg/L	10.0		109	70-130				
Bromoform	10.3	1.0	µg/L	10.0		103	70-130				
Bromomethane	8.86	2.0	µg/L	10.0		88.6	40-160				†
2-Butanone (MEK)	91.2	20	µg/L	100		91.2	40-160				†
n-Butylbenzene	9.06	1.0	µg/L	10.0		90.6	70-130				
sec-Butylbenzene	9.06	1.0	µg/L	10.0		90.6	70-130				
tert-Butylbenzene	9.33	1.0	µg/L	10.0		93.3	70-130				
Carbon Disulfide	72.6	5.0	µg/L	100		72.6	70-130				
Carbon Tetrachloride	10.3	5.0	µg/L	10.0		103	70-130				
Chlorobenzene	9.79	1.0	µg/L	10.0		97.9	70-130				
Chlorodibromomethane	10.7	0.50	µg/L	10.0		107	70-130				
Chloroethane	8.69	2.0	µg/L	10.0		86.9	70-130				
Chloroform	10.6	2.0	µg/L	10.0		106	70-130				
Chloromethane	8.13	2.0	µg/L	10.0		81.3	40-160				†
Cyclohexane	8.19	5.0	µg/L	10.0		81.9	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	9.22	5.0	µg/L	10.0		92.2	70-130				
1,2-Dibromoethane (EDB)	10.8	0.50	µg/L	10.0		108	70-130				
1,2-Dichlorobenzene	9.29	1.0	µg/L	10.0		92.9	70-130				
1,3-Dichlorobenzene	8.85	1.0	µg/L	10.0		88.5	70-130				
1,4-Dichlorobenzene	9.18	1.0	µg/L	10.0		91.8	70-130				
Dichlorodifluoromethane (Freon 12)	8.17	2.0	µg/L	10.0		81.7	40-160				†
1,1-Dichloroethane	9.53	1.0	µg/L	10.0		95.3	70-130				
1,2-Dichloroethane	8.85	1.0	µg/L	10.0		88.5	70-130				
1,1-Dichloroethylene	8.78	1.0	µg/L	10.0		87.8	70-130				
cis-1,2-Dichloroethylene	9.13	1.0	µg/L	10.0		91.3	70-130				
trans-1,2-Dichloroethylene	8.52	1.0	µg/L	10.0		85.2	70-130				
1,2-Dichloropropane	9.77	1.0	µg/L	10.0		97.7	70-130				
cis-1,3-Dichloropropene	10.5	0.50	µg/L	10.0		105	70-130				
trans-1,3-Dichloropropene	10.3	0.50	µg/L	10.0		103	70-130				
Ethylbenzene	9.71	1.0	µg/L	10.0		97.1	70-130				
2-Hexanone (MBK)	97.0	10	µg/L	100		97.0	70-160				†
Isopropylbenzene (Cumene)	9.57	1.0	µg/L	10.0		95.7	70-130				
p-Isopropyltoluene (p-Cymene)	9.19	1.0	µg/L	10.0		91.9	70-130				
Methyl Acetate	7.35	1.0	µg/L	10.0		73.5	70-130			V-05, V-36	
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	µg/L	10.0		102	70-130				

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B375963 - SW-846 5030B											
LCS (B375963-BS1)				Prepared: 05/31/24 Analyzed: 06/03/24							
Methyl Cyclohexane	9.06	1.0	µg/L	10.0		90.6	70-130				
Methylene Chloride	8.56	5.0	µg/L	10.0		85.6	70-130				
4-Methyl-2-pentanone (MIBK)	96.8	10	µg/L	100		96.8	70-160				†
Naphthalene	8.47	2.0	µg/L	10.0		84.7	40-130				†
n-Propylbenzene	9.61	1.0	µg/L	10.0		96.1	70-130				
Styrene	9.72	1.0	µg/L	10.0		97.2	70-130				
1,1,2,2-Tetrachloroethane	10.3	0.50	µg/L	10.0		103	70-130				
Tetrachloroethylene	10.1	1.0	µg/L	10.0		101	70-130				
Toluene	10.2	1.0	µg/L	10.0		102	70-130				
1,2,3-Trichlorobenzene	8.85	5.0	µg/L	10.0		88.5	70-130				
1,2,4-Trichlorobenzene	9.31	1.0	µg/L	10.0		93.1	70-130				
1,1,1-Trichloroethane	10.3	1.0	µg/L	10.0		103	70-130				
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.0		110	70-130				
Trichloroethylene	10.4	1.0	µg/L	10.0		104	70-130				
Trichlorofluoromethane (Freon 11)	10.4	2.0	µg/L	10.0		104	70-130				
1,2,3-Trichloropropane	10.5	2.0	µg/L	10.0		105	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.52	1.0	µg/L	10.0		95.2	70-130				
1,2,4-Trimethylbenzene	9.19	1.0	µg/L	10.0		91.9	70-130				
1,3,5-Trimethylbenzene	9.69	1.0	µg/L	10.0		96.9	70-130				
Vinyl Chloride	6.82	2.0	µg/L	10.0		68.2	40-160			V-05	†
m+p Xylene	19.7	2.0	µg/L	20.0		98.5	70-130				
o-Xylene	10.0	1.0	µg/L	10.0		100	70-130				
Xylenes (total)	29.7	1.0	µg/L	30.0		99.0	0-200				
Surrogate: 1,2-Dichloroethane-d4	*22.0*		µg/L	25.0		87.9	70-130				
Surrogate: Toluene-d8	*24.7*		µg/L	25.0		98.8	70-130				
Surrogate: 4-Bromofluorobenzene	*26.4*		µg/L	25.0		105	70-130				
LCS Dup (B375963-BSD1)				Prepared: 05/31/24 Analyzed: 06/03/24							
Acetone	78.2	50	µg/L	100		78.2	70-160	2.13	25	V-05	†
Benzene	10.2	1.0	µg/L	10.0		102	70-130	0.490	25		
Bromochloromethane	8.94	1.0	µg/L	10.0		89.4	70-130	0.448	25		
Bromodichloromethane	11.1	0.50	µg/L	10.0		111	70-130	1.91	25		
Bromoform	10.4	1.0	µg/L	10.0		104	70-130	0.771	25		
Bromomethane	8.82	2.0	µg/L	10.0		88.2	40-160	0.452	25		†
2-Butanone (MEK)	88.9	20	µg/L	100		88.9	40-160	2.58	25		†
n-Butylbenzene	9.19	1.0	µg/L	10.0		91.9	70-130	1.42	25		
sec-Butylbenzene	9.18	1.0	µg/L	10.0		91.8	70-130	1.32	25		
tert-Butylbenzene	9.53	1.0	µg/L	10.0		95.3	70-130	2.12	25		
Carbon Disulfide	74.2	5.0	µg/L	100		74.2	70-130	2.14	25		
Carbon Tetrachloride	10.8	5.0	µg/L	10.0		108	70-130	4.92	25		
Chlorobenzene	9.97	1.0	µg/L	10.0		99.7	70-130	1.82	25		
Chlorodibromomethane	11.1	0.50	µg/L	10.0		111	70-130	3.22	25		
Chloroethane	9.33	2.0	µg/L	10.0		93.3	70-130	7.10	25		
Chloroform	10.7	2.0	µg/L	10.0		107	70-130	1.41	25		
Chloromethane	8.39	2.0	µg/L	10.0		83.9	40-160	3.15	25		†
Cyclohexane	8.70	5.0	µg/L	10.0		87.0	70-130	6.04	25		
1,2-Dibromo-3-chloropropane (DBCP)	9.31	5.0	µg/L	10.0		93.1	70-130	0.971	25		
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.0		110	70-130	2.20	25		
1,2-Dichlorobenzene	9.35	1.0	µg/L	10.0		93.5	70-130	0.644	25		
1,3-Dichlorobenzene	9.14	1.0	µg/L	10.0		91.4	70-130	3.22	25		
1,4-Dichlorobenzene	8.98	1.0	µg/L	10.0		89.8	70-130	2.20	25		
Dichlorodifluoromethane (Freon 12)	9.46	2.0	µg/L	10.0		94.6	40-160	14.6	25		†

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B375963 - SW-846 5030B											
LCS Dup (B375963-BSD1)				Prepared: 05/31/24 Analyzed: 06/03/24							
1,1-Dichloroethane	9.62	1.0	µg/L	10.0		96.2	70-130	0.940	25		
1,2-Dichloroethane	9.06	1.0	µg/L	10.0		90.6	70-130	2.35	25		
1,1-Dichloroethylene	9.45	1.0	µg/L	10.0		94.5	70-130	7.35	25		
cis-1,2-Dichloroethylene	9.42	1.0	µg/L	10.0		94.2	70-130	3.13	25		
trans-1,2-Dichloroethylene	8.90	1.0	µg/L	10.0		89.0	70-130	4.36	25		
1,2-Dichloropropane	10.1	1.0	µg/L	10.0		101	70-130	3.02	25		
cis-1,3-Dichloropropene	10.6	0.50	µg/L	10.0		106	70-130	1.14	25		
trans-1,3-Dichloropropene	10.8	0.50	µg/L	10.0		108	70-130	4.73	25		
Ethylbenzene	9.91	1.0	µg/L	10.0		99.1	70-130	2.04	25		
2-Hexanone (MBK)	100	10	µg/L	100		100	70-160	3.16	25		†
Isopropylbenzene (Cumene)	9.99	1.0	µg/L	10.0		99.9	70-130	4.29	25		
p-Isopropyltoluene (p-Cymene)	9.41	1.0	µg/L	10.0		94.1	70-130	2.37	25		
Methyl Acetate	7.69	1.0	µg/L	10.0		76.9	70-130	4.52	25	V-05, V-36	
Methyl tert-Butyl Ether (MTBE)	10.4	1.0	µg/L	10.0		104	70-130	1.75	25		
Methyl Cyclohexane	9.82	1.0	µg/L	10.0		98.2	70-130	8.05	25		
Methylene Chloride	9.08	5.0	µg/L	10.0		90.8	70-130	5.90	25		
4-Methyl-2-pentanone (MIBK)	100	10	µg/L	100		100	70-160	3.73	25		†
Naphthalene	8.52	2.0	µg/L	10.0		85.2	40-130	0.589	25		†
n-Propylbenzene	9.97	1.0	µg/L	10.0		99.7	70-130	3.68	25		
Styrene	9.87	1.0	µg/L	10.0		98.7	70-130	1.53	25		
1,1,2,2-Tetrachloroethane	10.6	0.50	µg/L	10.0		106	70-130	2.78	25		
Tetrachloroethylene	10.6	1.0	µg/L	10.0		106	70-130	4.92	25		
Toluene	10.6	1.0	µg/L	10.0		106	70-130	4.24	25		
1,2,3-Trichlorobenzene	9.17	5.0	µg/L	10.0		91.7	70-130	3.55	25		
1,2,4-Trichlorobenzene	9.47	1.0	µg/L	10.0		94.7	70-130	1.70	25		
1,1,1-Trichloroethane	10.5	1.0	µg/L	10.0		105	70-130	2.02	25		
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.0		110	70-130	0.546	25		
Trichloroethylene	10.7	1.0	µg/L	10.0		107	70-130	2.94	25		
Trichlorofluoromethane (Freon 11)	10.7	2.0	µg/L	10.0		107	70-130	2.94	25		
1,2,3-Trichloropropane	10.5	2.0	µg/L	10.0		105	70-130	0.286	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.4	1.0	µg/L	10.0		104	70-130	9.22	25		
1,2,4-Trimethylbenzene	9.32	1.0	µg/L	10.0		93.2	70-130	1.40	25		
1,3,5-Trimethylbenzene	9.99	1.0	µg/L	10.0		99.9	70-130	3.05	25		
Vinyl Chloride	7.13	2.0	µg/L	10.0		71.3	40-160	4.44	25	V-05	†
m+p Xylene	20.0	2.0	µg/L	20.0		100	70-130	1.76	25		
o-Xylene	10.1	1.0	µg/L	10.0		101	70-130	1.19	25		
Xylenes (total)	30.2	1.0	µg/L	30.0		101	0-200	1.57			
Surrogate: 1,2-Dichloroethane-d4	*22.4*		µg/L	25.0		89.5	70-130				
Surrogate: Toluene-d8	*25.2*		µg/L	25.0		101	70-130				
Surrogate: 4-Bromofluorobenzene	*27.0*		µg/L	25.0		108	70-130				
Matrix Spike (B375963-MS1)	**Source: 24E3608-07**			Prepared: 05/31/24 Analyzed: 06/04/24							
Acetone	73.5	50	µg/L	100	ND	73.5	70-130			V-05	
Benzene	10.9	1.0	µg/L	10.0	ND	109	70-130				
Bromochloromethane	9.42	1.0	µg/L	10.0	ND	94.2	70-130				
Bromodichloromethane	10.8	0.50	µg/L	10.0	ND	108	70-130				
Bromoform	9.61	1.0	µg/L	10.0	ND	96.1	70-130				
Bromomethane	9.78	2.0	µg/L	10.0	ND	97.8	70-130				
2-Butanone (MEK)	86.5	20	µg/L	100	ND	86.5	70-130				
n-Butylbenzene	9.23	1.0	µg/L	10.0	ND	92.3	70-130				
sec-Butylbenzene	9.45	1.0	µg/L	10.0	ND	94.5	70-130				
tert-Butylbenzene	9.66	1.0	µg/L	10.0	ND	96.6	70-130				

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B375963 - SW-846 5030B											
Matrix Spike (B375963-MS1)	**Source: 24E3608-07**			Prepared: 05/31/24 Analyzed: 06/04/24							
Carbon Disulfide	87.2	5.0	µg/L	100	ND	87.2		70-130			
Carbon Tetrachloride	11.5	5.0	µg/L	10.0	ND	115		70-130			
Chlorobenzene	10.1	1.0	µg/L	10.0	ND	101		70-130			
Chlorodibromomethane	10.4	0.50	µg/L	10.0	ND	104		70-130			
Chloroethane	10.2	2.0	µg/L	10.0	ND	102		70-130			
Chloroform	11.0	2.0	µg/L	10.0	ND	110		70-130			
Chloromethane	9.65	2.0	µg/L	10.0	ND	96.5		70-130			
Cyclohexane	9.65	5.0	µg/L	10.0	ND	96.5		70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.54	5.0	µg/L	10.0	ND	85.4		70-130			
1,2-Dibromoethane (EDB)	10.6	0.50	µg/L	10.0	ND	106		70-130			
1,2-Dichlorobenzene	9.07	1.0	µg/L	10.0	ND	90.7		70-130			
1,3-Dichlorobenzene	8.90	1.0	µg/L	10.0	ND	89.0		70-130			
1,4-Dichlorobenzene	8.94	1.0	µg/L	10.0	ND	89.4		70-130			
Dichlorodifluoromethane (Freon 12)	11.1	2.0	µg/L	10.0	ND	111		70-130			
1,1-Dichloroethane	10.0	1.0	µg/L	10.0	ND	100		70-130			
1,2-Dichloroethane	8.84	1.0	µg/L	10.0	ND	88.4		70-130			
1,1-Dichloroethylene	10.4	1.0	µg/L	10.0	ND	104		70-130			
cis-1,2-Dichloroethylene	9.86	1.0	µg/L	10.0	ND	98.6		70-130			
trans-1,2-Dichloroethylene	9.61	1.0	µg/L	10.0	ND	96.1		70-130			
1,2-Dichloropropane	10.1	1.0	µg/L	10.0	ND	101		70-130			
cis-1,3-Dichloropropene	10.1	0.50	µg/L	10.0	ND	101		70-130			
trans-1,3-Dichloropropene	9.69	0.50	µg/L	10.0	ND	96.9		70-130			
Ethylbenzene	10.2	1.0	µg/L	10.0	ND	102		70-130			
2-Hexanone (MBK)	93.6	10	µg/L	100	ND	93.6		70-130			
Isopropylbenzene (Cumene)	10.2	1.0	µg/L	10.0	ND	102		70-130			
p-Isopropyltoluene (p-Cymene)	9.38	1.0	µg/L	10.0	ND	93.8		70-130			
Methyl Acetate	5.28	1.0	µg/L	10.0	ND	**52.8**	*	70-130			MS-07A, V-05, V-36
Methyl tert-Butyl Ether (MTBE)	9.88	1.0	µg/L	10.0	ND	98.8		70-130			
Methyl Cyclohexane	10.6	1.0	µg/L	10.0	ND	106		70-130			
Methylene Chloride	9.36	5.0	µg/L	10.0	ND	93.6		70-130			
4-Methyl-2-pentanone (MIBK)	94.2	10	µg/L	100	ND	94.2		70-130			
Naphthalene	8.08	2.0	µg/L	10.0	ND	80.8		70-130			
n-Propylbenzene	10.2	1.0	µg/L	10.0	ND	102		70-130			
Styrene	9.66	1.0	µg/L	10.0	ND	96.6		70-130			
1,1,2,2-Tetrachloroethane	9.99	0.50	µg/L	10.0	ND	99.9		70-130			
Tetrachloroethylene	11.3	1.0	µg/L	10.0	ND	113		70-130			
Toluene	11.0	1.0	µg/L	10.0	ND	110		70-130			
1,2,3-Trichlorobenzene	8.69	5.0	µg/L	10.0	ND	86.9		70-130			
1,2,4-Trichlorobenzene	8.77	1.0	µg/L	10.0	ND	87.7		70-130			
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.0	ND	110		70-130			
1,1,2-Trichloroethane	10.5	1.0	µg/L	10.0	ND	105		70-130			
Trichloroethylene	11.1	1.0	µg/L	10.0	ND	111		70-130			
Trichlorofluoromethane (Freon 11)	12.1	2.0	µg/L	10.0	ND	121		70-130			
1,2,3-Trichloropropane	10.0	2.0	µg/L	10.0	ND	100		70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.3	1.0	µg/L	10.0	ND	113		70-130			
1,2,4-Trimethylbenzene	9.10	1.0	µg/L	10.0	ND	91.0		70-130			
1,3,5-Trimethylbenzene	10.0	1.0	µg/L	10.0	ND	100		70-130			
Vinyl Chloride	8.05	2.0	µg/L	10.0	ND	80.5		70-130			V-05
m+p Xylene	20.5	2.0	µg/L	20.0	ND	103		70-130			
o-Xylene	10.3	1.0	µg/L	10.0	ND	103		70-130			
Xylenes (total)	30.8	1.0	µg/L	30.0	ND	103		0-200			

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B375963 - SW-846 5030B											
Matrix Spike (B375963-MS1)	**Source: 24E3608-07**			Prepared: 05/31/24 Analyzed: 06/04/24							
Surrogate: 1,2-Dichloroethane-d4	*22.3*		µg/L	25.0		89.3		70-130			
Surrogate: Toluene-d8	*24.9*		µg/L	25.0		99.6		70-130			
Surrogate: 4-Bromofluorobenzene	*27.0*		µg/L	25.0		108		70-130			
Matrix Spike Dup (B375963-MSD1)	**Source: 24E3608-07**			Prepared: 05/31/24 Analyzed: 06/04/24							
Acetone	78.0	50	µg/L	100	ND	78.0		70-130	5.85	30	V-05
Benzene	10.8	1.0	µg/L	10.0	ND	108		70-130	1.02	30	
Bromochloromethane	9.27	1.0	µg/L	10.0	ND	92.7		70-130	1.61	30	
Bromodichloromethane	11.2	0.50	µg/L	10.0	ND	112		70-130	3.35	30	
Bromoform	9.76	1.0	µg/L	10.0	ND	97.6		70-130	1.55	30	
Bromomethane	10.1	2.0	µg/L	10.0	ND	101		70-130	3.02	30	
2-Butanone (MEK)	89.8	20	µg/L	100	ND	89.8		70-130	3.72	30	
n-Butylbenzene	9.03	1.0	µg/L	10.0	ND	90.3		70-130	2.19	30	
sec-Butylbenzene	9.38	1.0	µg/L	10.0	ND	93.8		70-130	0.743	30	
tert-Butylbenzene	9.60	1.0	µg/L	10.0	ND	96.0		70-130	0.623	30	
Carbon Disulfide	87.7	5.0	µg/L	100	ND	87.7		70-130	0.617	30	
Carbon Tetrachloride	11.4	5.0	µg/L	10.0	ND	114		70-130	0.436	30	
Chlorobenzene	10.1	1.0	µg/L	10.0	ND	101		70-130	0.00	30	
Chlorodibromomethane	10.8	0.50	µg/L	10.0	ND	108		70-130	3.69	30	
Chloroethane	9.90	2.0	µg/L	10.0	ND	99.0		70-130	2.89	30	
Chloroform	11.1	2.0	µg/L	10.0	ND	111		70-130	0.816	30	
Chloromethane	9.70	2.0	µg/L	10.0	ND	97.0		70-130	0.517	30	
Cyclohexane	9.66	5.0	µg/L	10.0	ND	96.6		70-130	0.104	30	
1,2-Dibromo-3-chloropropane (DBCP)	8.93	5.0	µg/L	10.0	ND	89.3		70-130	4.46	30	
1,2-Dibromoethane (EDB)	11.2	0.50	µg/L	10.0	ND	112		70-130	4.77	30	
1,2-Dichlorobenzene	9.20	1.0	µg/L	10.0	ND	92.0		70-130	1.42	30	
1,3-Dichlorobenzene	9.10	1.0	µg/L	10.0	ND	91.0		70-130	2.22	30	
1,4-Dichlorobenzene	9.11	1.0	µg/L	10.0	ND	91.1		70-130	1.88	30	
Dichlorodifluoromethane (Freon 12)	11.0	2.0	µg/L	10.0	ND	110		70-130	0.994	30	
1,1-Dichloroethane	10.0	1.0	µg/L	10.0	ND	100		70-130	0.499	30	
1,2-Dichloroethane	9.03	1.0	µg/L	10.0	ND	90.3		70-130	2.13	30	
1,1-Dichloroethylene	10.4	1.0	µg/L	10.0	ND	104		70-130	0.385	30	
cis-1,2-Dichloroethylene	9.59	1.0	µg/L	10.0	ND	95.9		70-130	2.78	30	
trans-1,2-Dichloroethylene	9.62	1.0	µg/L	10.0	ND	96.2		70-130	0.104	30	
1,2-Dichloropropane	10.3	1.0	µg/L	10.0	ND	103		70-130	1.67	30	
cis-1,3-Dichloropropene	10.4	0.50	µg/L	10.0	ND	104		70-130	2.44	30	
trans-1,3-Dichloropropene	10.1	0.50	µg/L	10.0	ND	101		70-130	4.54	30	
Ethylbenzene	10.3	1.0	µg/L	10.0	ND	103		70-130	0.391	30	
2-Hexanone (MBK)	99.1	10	µg/L	100	ND	99.1		70-130	5.73	30	
Isopropylbenzene (Cumene)	10.3	1.0	µg/L	10.0	ND	103		70-130	1.18	30	
p-Isopropyltoluene (p-Cymene)	9.35	1.0	µg/L	10.0	ND	93.5		70-130	0.320	30	
Methyl Acetate	5.64	1.0	µg/L	10.0	ND	**56.4**	*	70-130	6.59	30	MS-07A, V-05, V-36
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	µg/L	10.0	ND	102		70-130	3.68	30	
Methyl Cyclohexane	10.8	1.0	µg/L	10.0	ND	108		70-130	2.62	30	
Methylene Chloride	9.24	5.0	µg/L	10.0	ND	92.4		70-130	1.29	30	
4-Methyl-2-pentanone (MIBK)	98.5	10	µg/L	100	ND	98.5		70-130	4.41	30	
Naphthalene	8.43	2.0	µg/L	10.0	ND	84.3		70-130	4.24	30	
n-Propylbenzene	10.1	1.0	µg/L	10.0	ND	101		70-130	0.197	30	
Styrene	9.85	1.0	µg/L	10.0	ND	98.5		70-130	1.95	30	
1,1,2,2-Tetrachloroethane	10.0	0.50	µg/L	10.0	ND	100		70-130	0.300	30	
Tetrachloroethylene	11.1	1.0	µg/L	10.0	ND	111		70-130	1.78	30	
Toluene	11.2	1.0	µg/L	10.0	ND	112		70-130	1.89	30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B375963 - SW-846 5030B										
Matrix Spike Dup (B375963-MSD1)	**Source: 24E3608-07**			Prepared: 05/31/24 Analyzed: 06/04/24						
1,2,3-Trichlorobenzene	9.06	5.0	µg/L	10.0	ND	90.6	70-130	4.17	30	
1,2,4-Trichlorobenzene	9.00	1.0	µg/L	10.0	ND	90.0	70-130	2.59	30	
1,1,1-Trichloroethane	11.2	1.0	µg/L	10.0	ND	112	70-130	1.17	30	
1,1,2-Trichloroethane	10.7	1.0	µg/L	10.0	ND	107	70-130	1.60	30	
Trichloroethylene	11.2	1.0	µg/L	10.0	ND	112	70-130	0.899	30	
Trichlorofluoromethane (Freon 11)	12.0	2.0	µg/L	10.0	ND	120	70-130	0.998	30	
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0	ND	102	70-130	1.59	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.9	1.0	µg/L	10.0	ND	109	70-130	3.24	30	
1,2,4-Trimethylbenzene	9.25	1.0	µg/L	10.0	ND	92.5	70-130	1.63	30	
1,3,5-Trimethylbenzene	9.99	1.0	µg/L	10.0	ND	99.9	70-130	0.200	30	
Vinyl Chloride	8.19	2.0	µg/L	10.0	ND	81.9	70-130	1.72	30	V-05
m+p Xylene	20.6	2.0	µg/L	20.0	ND	103	70-130	0.195	20	
o-Xylene	10.3	1.0	µg/L	10.0	ND	103	70-130	0.0970	30	
Xylenes (total)	30.9	1.0	µg/L	30.0	ND	103	0-200	0.162		
Surrogate: 1,2-Dichloroethane-d4	*22.5*		µg/L	25.0		90.0	70-130			
Surrogate: Toluene-d8	*25.0*		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	*27.3*		µg/L	25.0		109	70-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B375973 - Draft Method 1633										
Blank (B375973-BLK1)				Prepared: 06/06/24 Analyzed: 06/07/24						
Perfluorobutanoic acid (PFBA)	ND	4.0	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.99	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.99	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.99	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.99	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.99	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.99	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.99	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.99	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.99	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.99	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.99	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.99	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.99	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.99	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.99	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.99	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.99	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.99	ng/L							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.99	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.99	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.99	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.99	ng/L							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.9	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.9	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	4.0	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	4.0	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.9	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L							
Surrogate: 13C4-PFBA	*89.0*		ng/L	98.8		90.1	10-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B375973 - Draft Method 1633										
Blank (B375973-BLK1)				Prepared: 06/06/24 Analyzed: 06/07/24						
Surrogate: 13C5-PFPeA	*37.8*		ng/L	49.4		76.6	35-150			
Surrogate: 13C5-PFHxA	*21.7*		ng/L	24.7		87.8	55-150			
Surrogate: 13C4-PFHpA	*21.1*		ng/L	24.7		85.5	55-150			
Surrogate: 13C8-PFOA	*23.5*		ng/L	24.7		95.2	60-140			
Surrogate: 13C9-PFNA	*10.6*		ng/L	12.3		85.6	55-140			
Surrogate: 13C6-PFDA	*10.4*		ng/L	12.3		83.9	50-140			
Surrogate: 13C7-PFUnA	*10.6*		ng/L	12.3		85.5	30-140			
Surrogate: 13C2-PFDoA	*9.65*		ng/L	12.3		78.2	10-150			
Surrogate: 13C2-PFTeDA	*8.94*		ng/L	12.3		72.4	10-130			
Surrogate: 13C3-PFBS	*23.0*		ng/L	24.7		93.1	55-150			
Surrogate: 13C3-PFHxS	*21.7*		ng/L	24.7		87.8	55-150			
Surrogate: 13C8-PFOS	*21.8*		ng/L	24.7		88.3	45-140			
Surrogate: 13C2-4:2FTS	*41.7*		ng/L	49.4		84.4	60-200			
Surrogate: 13C2-6:2FTS	*40.4*		ng/L	49.4		81.9	60-200			
Surrogate: 13C2-8:2FTS	*36.4*		ng/L	49.4		73.7	50-200			
Surrogate: 13C8-PFOSA	*19.4*		ng/L	24.7		78.8	30-130			
Surrogate: D3-NMeFOSA	*13.6*		ng/L	24.7		55.2	15-130			
Surrogate: D5-NEtFOSA	*13.7*		ng/L	24.7		55.3	10-130			
Surrogate: D3-NMeFOSAA	*38.0*		ng/L	49.4		77.0	45-200			
Surrogate: D5-NEtFOSAA	*38.0*		ng/L	49.4		77.1	10-200			
Surrogate: D7-NMeFOSE	*182*		ng/L	247		73.6	10-150			
Surrogate: D9-NEtFOSE	*175*		ng/L	247		70.8	10-150			
Surrogate: 13C3-HFPO-DA	*88.9*		ng/L	98.8		90.0	25-160			
LCS (B375973-BS1)				Prepared: 06/06/24 Analyzed: 06/07/24						
Perfluorobutanoic acid (PFBA)	90.9	3.9	ng/L	93.6		97.1	58-148			
Perfluoropentanoic acid (PFPeA)	46.6	2.0	ng/L	46.8		99.6	54-152			
Perfluorohexanoic acid (PFHxA)	23.3	0.98	ng/L	23.4		99.7	55-152			
Perfluoroheptanoic acid (PFHpA)	22.5	0.98	ng/L	23.4		96.2	54-154			
Perfluorooctanoic acid (PFOA)	22.7	0.98	ng/L	23.4		97.1	52-161			
Perfluorononanoic acid (PFNA)	22.8	0.98	ng/L	23.4		97.3	59-149			
Perfluorodecanoic acid (PFDA)	25.8	0.98	ng/L	23.4		110	52-147			
Perfluoroundecanoic acid (PFUnA)	22.3	0.98	ng/L	23.4		95.5	48-159			
Perfluorododecanoic acid (PFDoA)	22.4	0.98	ng/L	23.4		95.7	64-142			
Perfluorotridecanoic acid (PFTrDA)	20.2	0.98	ng/L	23.4		86.5	49-148			
Perfluorotetradecanoic acid (PFTeDA)	22.6	0.98	ng/L	23.4		96.5	47-161			
Perfluorobutanesulfonic acid (PFBS)	19.8	0.98	ng/L	20.8		95.5	62-144			
Perfluoropentanesulfonic acid (PFPeS)	22.2	0.98	ng/L	22.0		101	59-151			
Perfluorohexanesulfonic acid (PFHxS)	20.1	0.98	ng/L	21.4		94.0	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	22.7	0.98	ng/L	22.3		102	55-152			
Perfluorooctanesulfonic acid (PFOS)	21.5	0.98	ng/L	21.7		98.9	58-149			
Perfluorononanesulfonic acid (PFNS)	22.9	0.98	ng/L	22.5		102	52-148			
Perfluorodecanesulfonic acid (PFDS)	22.1	0.98	ng/L	22.6		98.0	51-147			
Perfluorododecanesulfonic acid (PFDoS)	21.7	0.98	ng/L	22.7		95.7	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	86.6	3.9	ng/L	87.8		98.7	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	89.6	3.9	ng/L	88.9		101	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	90.1	3.9	ng/L	90.1		100	63-152			
Perfluorooctanesulfonamide (PFOSA)	22.3	0.98	ng/L	23.4		95.3	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	24.4	0.98	ng/L	23.4		104	63-145			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B375973 - Draft Method 1633										
LCS (B375973-BS1)				Prepared: 06/06/24 Analyzed: 06/07/24						
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	24.0	0.98	ng/L	23.4		103	65-139			
N-MeFOSAA (NMeFOSAA)	23.3	0.98	ng/L	23.4		99.7	58-144			
N-EtFOSAA (NEtFOSAA)	21.1	0.98	ng/L	23.4		90.1	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	235	9.8	ng/L	234		101	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	237	9.8	ng/L	234		101	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	93.5	3.9	ng/L	93.6		99.8	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	79.9	3.9	ng/L	88.3		90.4	68-146			
9Cl-PF3ONS (F53B Minor)	78.4	3.9	ng/L	87.8		89.4	56-156			
11Cl-PF3OUdS (F53B Major)	76.5	3.9	ng/L	88.3		86.5	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	284	9.8	ng/L	234		121	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1070	49	ng/L	1170		91.5	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	939	49	ng/L	1170		80.3	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	43.2	2.0	ng/L	41.7		104	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	67.7	2.0	ng/L	46.8		145	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	48.3	2.0	ng/L	46.8		103	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	47.6	2.0	ng/L	46.8		102	48-161			
Surrogate: 13C4-PFBA	*94.8*		ng/L	97.5		97.2	10-130			
Surrogate: 13C5-PFPeA	*41.5*		ng/L	48.8		85.1	35-150			
Surrogate: 13C5-PFHxA	*23.5*		ng/L	24.4		96.4	55-150			
Surrogate: 13C4-PFHpA	*23.3*		ng/L	24.4		95.5	55-150			
Surrogate: 13C8-PFOA	*24.3*		ng/L	24.4		99.5	60-140			
Surrogate: 13C9-PFNA	*11.3*		ng/L	12.2		93.0	55-140			
Surrogate: 13C6-PFDA	*10.5*		ng/L	12.2		86.3	50-140			
Surrogate: 13C7-PFUnA	*11.2*		ng/L	12.2		92.1	30-140			
Surrogate: 13C2-PFDoA	*10.9*		ng/L	12.2		89.5	10-150			
Surrogate: 13C2-PFTeDA	*9.42*		ng/L	12.2		77.3	10-130			
Surrogate: 13C3-PFBS	*23.9*		ng/L	24.4		98.0	55-150			
Surrogate: 13C3-PFHxS	*22.9*		ng/L	24.4		93.8	55-150			
Surrogate: 13C8-PFOS	*22.3*		ng/L	24.4		91.3	45-140			
Surrogate: 13C2-4:2FTS	*44.2*		ng/L	48.8		90.7	60-200			
Surrogate: 13C2-6:2FTS	*42.1*		ng/L	48.8		86.4	60-200			
Surrogate: 13C2-8:2FTS	*40.5*		ng/L	48.8		83.0	50-200			
Surrogate: 13C8-PFOSA	*21.4*		ng/L	24.4		87.6	30-130			
Surrogate: D3-NMeFOSA	*16.2*		ng/L	24.4		66.4	15-130			
Surrogate: D5-NEtFOSA	*16.1*		ng/L	24.4		66.1	10-130			
Surrogate: D3-NMeFOSAA	*40.2*		ng/L	48.8		82.3	45-200			
Surrogate: D5-NEtFOSAA	*39.5*		ng/L	48.8		81.0	10-200			
Surrogate: D7-NMeFOSE	*195*		ng/L	244		79.8	10-150			
Surrogate: D9-NEtFOSE	*189*		ng/L	244		77.7	10-150			
Surrogate: 13C3-HFPO-DA	*98.3*		ng/L	97.5		101	25-160			
MRL Check (B375973-MRL1)				Prepared: 06/06/24 Analyzed: 06/07/24						
Perfluorobutanoic acid (PFBA)	8.39	3.9	ng/L	7.88		106	44-157			
Perfluoropentanoic acid (PFPeA)	4.00	2.0	ng/L	3.94		101	57-148			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B375973 - Draft Method 1633											
MRL Check (B375973-MRL1)				Prepared: 06/06/24 Analyzed: 06/07/24							
Perfluorohexanoic acid (PFHxA)	2.02	0.98	ng/L	1.97		103		62-149			
Perfluoroheptanoic acid (PFHpA)	2.00	0.98	ng/L	1.97		102		56-150			
Perfluorooctanoic acid (PFOA)	2.10	0.98	ng/L	1.97		107		57-161			
Perfluorononanoic acid (PFNA)	1.93	0.98	ng/L	1.97		97.8		53-157			
Perfluorodecanoic acid (PFDA)	2.02	0.98	ng/L	1.97		102		43-158			
Perfluoroundecanoic acid (PFUnA)	1.73	0.98	ng/L	1.97		87.7		50-155			
Perfluorododecanoic acid (PFDoA)	1.96	0.98	ng/L	1.97		99.3		60-141			
Perfluorotridecanoic acid (PFTrDA)	1.80	0.98	ng/L	1.97		91.5		52-140			
Perfluorotetradecanoic acid (PFTeDA)	1.93	0.98	ng/L	1.97		97.9		52-156			
Perfluorobutanesulfonic acid (PFBS)	1.75	0.98	ng/L	1.75		100		63-145			
Perfluoropentanesulfonic acid (PFPeS)	1.79	0.98	ng/L	1.85		96.6		58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.79	0.98	ng/L	1.80		99.6		44-158			
Perfluoroheptanesulfonic acid (PFHpS)	1.73	0.98	ng/L	1.88		92.1		51-150			
Perfluorooctanesulfonic acid (PFOS)	2.06	0.98	ng/L	1.83		113		43-162			
Perfluorononanesulfonic acid (PFNS)	2.10	0.98	ng/L	1.90		111		46-151			
Perfluorodecanesulfonic acid (PFDS)	1.66	0.98	ng/L	1.90		87.5		50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.74	0.98	ng/L	1.91		91.2		30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	7.14	3.9	ng/L	7.39		96.6		52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	7.36	3.9	ng/L	7.49		98.3		48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	7.16	3.9	ng/L	7.58		94.4		46-165			
Perfluorooctanesulfonamide (PFOSA)	1.99	0.98	ng/L	1.97		101		47-163			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.25	0.98	ng/L	1.97		114		54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.11	0.98	ng/L	1.97		107		49-156			
N-MeFOSAA (NMeFOSAA)	1.65	0.98	ng/L	1.97		83.7		32-160			
N-EtFOSAA (NEtFOSAA)	2.00	0.98	ng/L	1.97		102		51-154			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	19.7	9.8	ng/L	19.7		100		56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	20.2	9.8	ng/L	19.7		103		60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.64	3.9	ng/L	7.88		97.0		58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	6.25	3.9	ng/L	7.44		84.1		61-148			
9Cl-PF3ONS (F53B Minor)	6.04	3.9	ng/L	7.39		81.8		44-167			
11Cl-PF3OUdS (F53B Major)	5.76	3.9	ng/L	7.44		77.5		36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	22.1	9.8	ng/L	19.7		112		32-161			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	80.2	49	ng/L	98.5		81.4		39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	70.3	49	ng/L	98.5		71.4		36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.56	2.0	ng/L	3.51		101		56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	6.06	2.0	ng/L	3.94		**154**	*	48-150			L-01
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.78	2.0	ng/L	3.94		95.9		49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.34	2.0	ng/L	3.94		84.7		47-160			
Surrogate: 13C4-PFBA	*82.4*		ng/L	98.5		83.6		10-130			
Surrogate: 13C5-PFPeA	*34.6*		ng/L	49.2		70.3		35-150			
Surrogate: 13C5-PFHxA	*19.6*		ng/L	24.6		79.5		55-150			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B375973 - Draft Method 1633										
MRL Check (B375973-MRL1)				Prepared: 06/06/24 Analyzed: 06/07/24						
Surrogate: 13C4-PFHpA	*18.8*		ng/L	24.6		76.3	55-150			
Surrogate: 13C8-PFOA	*19.6*		ng/L	24.6		79.5	60-140			
Surrogate: 13C9-PFNA	*9.70*		ng/L	12.3		78.8	55-140			
Surrogate: 13C6-PFDA	*9.42*		ng/L	12.3		76.5	50-140			
Surrogate: 13C7-PFUnA	*9.47*		ng/L	12.3		76.9	30-140			
Surrogate: 13C2-PFDoA	*8.78*		ng/L	12.3		71.3	10-150			
Surrogate: 13C2-PFTeDA	*8.03*		ng/L	12.3		65.3	10-130			
Surrogate: 13C3-PFBS	*20.5*		ng/L	24.6		83.4	55-150			
Surrogate: 13C3-PFHxS	*19.6*		ng/L	24.6		79.6	55-150			
Surrogate: 13C8-PFOS	*19.0*		ng/L	24.6		77.3	45-140			
Surrogate: 13C2-4:2FTS	*36.4*		ng/L	49.2		74.0	60-200			
Surrogate: 13C2-6:2FTS	*35.3*		ng/L	49.2		71.8	60-200			
Surrogate: 13C2-8:2FTS	*31.7*		ng/L	49.2		64.4	50-200			
Surrogate: 13C8-PFOSA	*17.9*		ng/L	24.6		72.5	30-130			
Surrogate: D3-NMeFOSA	*13.8*		ng/L	24.6		56.2	15-130			
Surrogate: D5-NEtFOSA	*13.5*		ng/L	24.6		54.7	10-130			
Surrogate: D3-NMeFOSAA	*34.3*		ng/L	49.2		69.7	45-200			
Surrogate: D5-NEtFOSAA	*32.7*		ng/L	49.2		66.3	10-200			
Surrogate: D7-NMeFOSE	*164*		ng/L	246		66.7	10-150			
Surrogate: D9-NEtFOSE	*157*		ng/L	246		63.9	10-150			
Surrogate: 13C3-HFPO-DA	*83.4*		ng/L	98.5		84.7	25-160			
Matrix Spike (B375973-MS1)		**Source: 24E3608-07**		Prepared: 06/06/24 Analyzed: 06/07/24						
Perfluorobutanoic acid (PFBA)	102	4.2	ng/L	102	2.99	96.9	58-148			
Perfluoropentanoic acid (PFPeA)	55.7	2.1	ng/L	50.9	4.48	101	54-152			
Perfluorohexanoic acid (PFHxA)	29.6	1.1	ng/L	25.4	4.59	98.5	55-152			
Perfluoroheptanoic acid (PFHpA)	26.3	1.1	ng/L	25.4	1.75	96.7	54-154			
Perfluorooctanoic acid (PFOA)	30.4	1.1	ng/L	25.4	6.20	95.0	52-161			
Perfluorononanoic acid (PFNA)	27.0	1.1	ng/L	25.4	1.59	99.8	59-149			
Perfluorodecanoic acid (PFDA)	27.4	1.1	ng/L	25.4	ND	108	52-147			
Perfluoroundecanoic acid (PFUnA)	23.7	1.1	ng/L	25.4	ND	93.1	48-159			
Perfluorododecanoic acid (PFDoA)	25.6	1.1	ng/L	25.4	ND	101	64-142			
Perfluorotridecanoic acid (PFTrDA)	22.5	1.1	ng/L	25.4	ND	88.3	49-148			
Perfluorotetradecanoic acid (PFTeDA)	25.4	1.1	ng/L	25.4	ND	99.7	47-161			
Perfluorobutanesulfonic acid (PFBS)	24.7	1.1	ng/L	22.6	2.66	97.4	62-144			
Perfluoropentanesulfonic acid (PFPeS)	23.8	1.1	ng/L	23.9	ND	99.5	59-151			
Perfluorohexanesulfonic acid (PFHxS)	23.5	1.1	ng/L	23.3	1.02	96.5	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	23.7	1.1	ng/L	24.2	ND	97.7	55-152			
Perfluorooctanesulfonic acid (PFOS)	24.9	1.1	ng/L	23.6	2.43	95.3	58-149			
Perfluorononanesulfonic acid (PFNS)	24.0	1.1	ng/L	24.5	ND	98.2	52-148			
Perfluorodecanesulfonic acid (PFDS)	23.6	1.1	ng/L	24.6	ND	96.0	51-147			
Perfluorododecanesulfonic acid (PFDoS)	23.3	1.1	ng/L	24.7	ND	94.6	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	90.9	4.2	ng/L	95.4	ND	95.3	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	93.4	4.2	ng/L	96.7	ND	96.6	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	98.4	4.2	ng/L	98.0	ND	100	63-152			
Perfluorooctanesulfonamide (PFOSA)	24.5	1.1	ng/L	25.4	ND	96.1	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	26.9	1.1	ng/L	25.4	ND	106	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	26.0	1.1	ng/L	25.4	ND	102	65-139			
N-MeFOSAA (NMeFOSAA)	26.2	1.1	ng/L	25.4	ND	103	58-144			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B375973 - Draft Method 1633										
Matrix Spike (B375973-MS1)	**Source: 24E3608-07**			Prepared: 06/06/24 Analyzed: 06/07/24						
N-EtFOSAA (NEtFOSAA)	22.7	1.1	ng/L	25.4	ND	89.0	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	260	11	ng/L	254	ND	102	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	258	11	ng/L	254	ND	101	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	107	4.2	ng/L	102	ND	105	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	85.9	4.2	ng/L	96.0	ND	89.5	68-146			
9Cl-PF3ONS (F53B Minor)	86.0	4.2	ng/L	95.4	ND	90.1	56-156			
11Cl-PF3OUdS (F53B Major)	83.0	4.2	ng/L	96.0	ND	86.4	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	308	11	ng/L	254	ND	121	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1140	53	ng/L	1270	ND	89.7	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1030	53	ng/L	1270	ND	81.1	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	45.4	2.1	ng/L	45.3	ND	100	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	68.7	2.1	ng/L	50.9	ND	135	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	53.8	2.1	ng/L	50.9	ND	106	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	48.2	2.1	ng/L	50.9	ND	94.7	48-161			
Surrogate: 13C4-PFBA	*86.8*		ng/L	106		81.9	10-130			
Surrogate: 13C5-PFPeA	*36.5*		ng/L	53.0		68.9	35-150			
Surrogate: 13C5-PFHxA	*21.3*		ng/L	26.5		80.2	55-150			
Surrogate: 13C4-PFHpA	*20.8*		ng/L	26.5		78.6	55-150			
Surrogate: 13C8-PFOA	*21.8*		ng/L	26.5		82.3	60-140			
Surrogate: 13C9-PFNA	*10.2*		ng/L	13.3		76.7	55-140			
Surrogate: 13C6-PFDA	*9.59*		ng/L	13.3		72.4	50-140			
Surrogate: 13C7-PFUnA	*10.3*		ng/L	13.3		77.9	30-140			
Surrogate: 13C2-PFDoA	*9.86*		ng/L	13.3		74.4	10-150			
Surrogate: 13C2-PFTeDA	*8.67*		ng/L	13.3		65.4	10-130			
Surrogate: 13C3-PFBS	*21.9*		ng/L	26.5		82.6	55-150			
Surrogate: 13C3-PFHxS	*21.2*		ng/L	26.5		79.9	55-150			
Surrogate: 13C8-PFOS	*20.6*		ng/L	26.5		77.8	45-140			
Surrogate: 13C2-4:2FTS	*34.2*		ng/L	53.0		64.6	60-200			
Surrogate: 13C2-6:2FTS	*38.4*		ng/L	53.0		72.4	60-200			
Surrogate: 13C2-8:2FTS	*37.7*		ng/L	53.0		71.1	50-200			
Surrogate: 13C8-PFOSA	*19.8*		ng/L	26.5		74.6	30-130			
Surrogate: D3-NMeFOSA	*14.7*		ng/L	26.5		55.5	15-130			
Surrogate: D5-NEtFOSA	*14.8*		ng/L	26.5		55.7	10-130			
Surrogate: D3-NMeFOSAA	*36.6*		ng/L	53.0		69.1	45-200			
Surrogate: D5-NEtFOSAA	*36.3*		ng/L	53.0		68.5	10-200			
Surrogate: D7-NMeFOSE	*176*		ng/L	265		66.4	10-150			
Surrogate: D9-NEtFOSE	*172*		ng/L	265		64.9	10-150			
Surrogate: 13C3-HFPO-DA	*86.8*		ng/L	106		81.8	25-160			
Matrix Spike Dup (B375973-MSD1)	**Source: 24E3608-07**			Prepared: 06/06/24 Analyzed: 06/07/24						
Perfluorobutanoic acid (PFBA)	98.6	4.0	ng/L	96.3	2.99	99.3	58-148	2.98	20	
Perfluoropentanoic acid (PFPeA)	53.0	2.0	ng/L	48.2	4.48	101	54-152	5.08	20	
Perfluorohexanoic acid (PFHxA)	28.6	1.0	ng/L	24.1	4.59	99.6	55-152	3.73	25	
Perfluoroheptanoic acid (PFHpA)	24.7	1.0	ng/L	24.1	1.75	95.4	54-154	6.42	25	
Perfluorooctanoic acid (PFOA)	28.5	1.0	ng/L	24.1	6.20	92.7	52-161	6.24	25	

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B375973 - Draft Method 1633										
Matrix Spike Dup (B375973-MSD1)	**Source: 24E3608-07**			Prepared: 06/06/24 Analyzed: 06/07/24						
Perfluorononanoic acid (PFNA)	24.9	1.0	ng/L	24.1	1.59	96.6	59-149	8.24	25	
Perfluorodecanoic acid (PFDA)	24.0	1.0	ng/L	24.1	ND	99.9	52-147	13.0	25	
Perfluoroundecanoic acid (PFUnA)	22.4	1.0	ng/L	24.1	ND	93.1	48-159	5.54	30	
Perfluorododecanoic acid (PFDoA)	23.8	1.0	ng/L	24.1	ND	98.8	64-142	7.28	25	
Perfluorotridecanoic acid (PFTrDA)	21.5	1.0	ng/L	24.1	ND	89.1	49-148	4.63	25	
Perfluorotetradecanoic acid (PFTeDA)	23.4	1.0	ng/L	24.1	ND	97.3	47-161	7.91	25	
Perfluorobutanesulfonic acid (PFBS)	23.5	1.0	ng/L	21.4	2.66	97.5	62-144	4.84	20	
Perfluoropentanesulfonic acid (PFPeS)	22.9	1.0	ng/L	22.6	ND	101	59-151	3.85	25	
Perfluorohexanesulfonic acid (PFHxS)	22.1	1.0	ng/L	22.0	1.02	95.8	57-146	5.92	25	
Perfluoroheptanesulfonic acid (PFHpS)	22.3	1.0	ng/L	22.9	ND	97.4	55-152	5.88	25	
Perfluorooctanesulfonic acid (PFOS)	23.8	1.0	ng/L	22.3	2.43	95.9	58-149	4.49	20	
Perfluorononanesulfonic acid (PFNS)	22.1	1.0	ng/L	23.2	ND	95.4	52-148	8.39	25	
Perfluorodecanesulfonic acid (PFDS)	21.3	1.0	ng/L	23.2	ND	91.7	51-147	10.1	25	
Perfluorododecanesulfonic acid (PFDoS)	22.0	1.0	ng/L	23.4	ND	94.4	36-145	5.69	30	
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	88.4	4.0	ng/L	90.3	ND	97.9	67-146	2.78	25	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	90.5	4.0	ng/L	91.5	ND	98.9	61-151	3.15	30	
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	85.5	4.0	ng/L	92.7	ND	92.2	63-152	14.0	30	
Perfluorooctanesulfonamide (PFOSA)	22.6	1.0	ng/L	24.1	ND	93.9	61-148	7.89	20	
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	24.3	1.0	ng/L	24.1	ND	101	63-145	10.4	25	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	24.1	1.0	ng/L	24.1	ND	100	65-139	7.88	25	
N-MeFOSAA (NMeFOSAA)	23.0	1.0	ng/L	24.1	ND	95.7	58-144	13.0	25	
N-EtFOSAA (NEtFOSAA)	21.0	1.0	ng/L	24.1	ND	87.3	59-146	7.56	25	
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	245	10	ng/L	241	ND	102	71-136	5.95	20	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	241	10	ng/L	241	ND	99.9	69-137	7.07	25	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	95.0	4.0	ng/L	96.3	ND	98.7	63-144	11.7	25	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	82.4	4.0	ng/L	90.9	ND	90.6	68-146	4.21	20	
9Cl-PF3ONS (F53B Minor)	82.9	4.0	ng/L	90.3	ND	91.9	56-156	3.64	30	
11Cl-PF3OUdS (F53B Major)	79.8	4.0	ng/L	90.9	ND	87.8	46-156	3.91	35	
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	286	10	ng/L	241	ND	119	62-129	7.40	20	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1110	50	ng/L	1200	ND	92.3	63-134	2.68	20	
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1010	50	ng/L	1200	ND	83.9	50-138	2.08	25	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	46.1	2.0	ng/L	42.9	ND	108	56-151	1.46	20	
Perfluoro-3-methoxypropanoic acid (PFMPA)	67.3	2.0	ng/L	48.2	ND	140	51-145	2.12	25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	49.4	2.0	ng/L	48.2	ND	103	55-148	8.54	20	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	51.0	2.0	ng/L	48.2	ND	106	48-161	5.67	35	
Surrogate: 13C4-PFBA	*82.6*		ng/L	100		82.3	10-130			
Surrogate: 13C5-PFPeA	*38.8*		ng/L	50.2		77.4	35-150			
Surrogate: 13C5-PFHxA	*20.7*		ng/L	25.1		82.6	55-150			
Surrogate: 13C4-PFHpA	*20.6*		ng/L	25.1		82.3	55-150			
Surrogate: 13C8-PFOA	*21.8*		ng/L	25.1		86.8	60-140			
Surrogate: 13C9-PFNA	*10.2*		ng/L	12.5		81.6	55-140			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B375973 - Draft Method 1633										
Matrix Spike Dup (B375973-MSD1)	**Source: 24E3608-07**			Prepared: 06/06/24 Analyzed: 06/07/24						
Surrogate: 13C6-PFDA	*9.98*		ng/L	12.5		79.6	50-140			
Surrogate: 13C7-PFUnA	*9.79*		ng/L	12.5		78.0	30-140			
Surrogate: 13C2-PFDoA	*9.58*		ng/L	12.5		76.4	10-150			
Surrogate: 13C2-PFTeDA	*8.04*		ng/L	12.5		64.1	10-130			
Surrogate: 13C3-PFBS	*21.6*		ng/L	25.1		86.0	55-150			
Surrogate: 13C3-PFHxS	*21.3*		ng/L	25.1		84.8	55-150			
Surrogate: 13C8-PFOS	*20.0*		ng/L	25.1		79.8	45-140			
Surrogate: 13C2-4:2FTS	*36.3*		ng/L	50.2		72.4	60-200			
Surrogate: 13C2-6:2FTS	*42.0*		ng/L	50.2		83.8	60-200			
Surrogate: 13C2-8:2FTS	*39.2*		ng/L	50.2		78.1	50-200			
Surrogate: 13C8-PFOSA	*19.1*		ng/L	25.1		76.0	30-130			
Surrogate: D3-NMeFOSA	*14.5*		ng/L	25.1		58.0	15-130			
Surrogate: D5-NEtFOSA	*14.2*		ng/L	25.1		56.7	10-130			
Surrogate: D3-NMeFOSAA	*35.8*		ng/L	50.2		71.4	45-200			
Surrogate: D5-NEtFOSAA	*34.2*		ng/L	50.2		68.1	10-200			
Surrogate: D7-NMeFOSE	*164*		ng/L	251		65.4	10-150			
Surrogate: D9-NEtFOSE	*162*		ng/L	251		64.6	10-150			
Surrogate: 13C3-HFPO-DA	*88.1*		ng/L	100		87.8	25-160			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B375812 - Draft Method 1633										
Blank (B375812-BLK1)				Prepared & Analyzed: 05/31/24						
Total Suspended Solids	ND	5.0	mg/L							
LCS (B375812-BS1)				Prepared & Analyzed: 05/31/24						
Total Suspended Solids	176	5.0	mg/L	200		88.0	51.5-130			
Batch B375813 - Draft Method 1633										
Blank (B375813-BLK1)				Prepared & Analyzed: 05/31/24						
Total Suspended Solids	ND	5.0	mg/L							
LCS (B375813-BS1)				Prepared & Analyzed: 05/31/24						
Total Suspended Solids	237	5.0	mg/L	200		118	51.5-130			
Batch B376055 - Draft Method 1633										
Blank (B376055-BLK1)				Prepared & Analyzed: 06/03/24						
Total Suspended Solids	ND	5.0	mg/L							
LCS (B376055-BS1)				Prepared & Analyzed: 06/03/24						
Total Suspended Solids	216	5.0	mg/L	200		108	51.5-130			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
D-01	Sample extracted/prepared at a dilution due to sample matrix.
H-01	Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-01	Laboratory fortified blank/laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
PF-17C	Extracted internal standard is outside of control limits. Analyte is a known difficult compound.
PF-22	Qualifier ion ratio >150% of associated calibration. Detection is suspect.
PF-23	Qualifier ion ratio <50% of associated calibration. Detection is suspect.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-36	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
Draft Method 1633 in Water	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV,CT
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV,CT
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV,CT
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV,CT
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV,CT
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV,CT
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV,CT
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV,CT
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV,CT
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV,CT
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV,CT
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV,CT
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV,CT
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV,CT
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV,CT
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV,CT
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV,CT
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV,CT
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV,CT
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV,CT
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV,CT
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV,CT
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV,CT
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV,CT
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV,CT
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV,CT
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV,CT
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV,CT
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,NY,PA,WV,CT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV,CT
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV,CT
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
Cyclohexane	ME,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Ethylbenzene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2025
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2025
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2025
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2025
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

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Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

24E3608
KAM

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: NYS DEC	Consultant: Groundwater & Environmental
Consultant Address: 6010 North Bailey Ave., Suite 1 Amherst, NY 14226	
Consultant Phone: 716-796-3827	
Callout Project Name:	Keywell LLC Vac-Air Division
Project Location:	Frewsburg, NY
Callout Number:	151686
Site/Spill Number:	907016
Project Manager:	Steven Moeller
Pace Analytical Quote Name/Number:	
Invoice Recipient:	
Sampled By:	Owen Ogiony

Requested Turnaround Time
DEC Standard 30-calendar day ☐
Due Date:

Rush (Prior Approval Required)
1-Day ☐ 2-Day ☐ 3-Day ☐
4-Day ☐ 5-Day ☐ 10-Day ☑

Data Delivery
Format: PDF ☑ EXCEL ☑
Other: Cat B
CLP Like (Level 4) Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED (Circle Requested Analyses/Reporting List)

Pace Analytical Work Order#	Client Sample ID / Description	Date	Time	Composite	Grab	[1]Matrix Code	Conc Code	8260: DER TCL Oxygenates / CP-51	8270: DER TCL / CP-51	1,4-Dioxane SIM | 8082 PCBs	8081 Pesticide | 8151 Herbicide	TAL Total Metals | TCLP RCRA 8 Metals	PFAS 1633 | PFAS 537 ID	MS / MSD	# of Containers	[2] Preservation Code	[3] Container Code
1	MW-1	5/24	0950		X	GW	U	X					X				
2	MW-2	5/22	1330		X	GW	U	X					X				
3	MW-3	5/23	1110		X	GW	U	X					X				
4	MW-4	5/21	1425		X	GW	U	X					X				
5	MW-4D	5/21	1325		X	GW	U	X					X				
6	MW-5	5/21	1210		X	GW	U	X					X				
7	MW-5D	5/21	1045		X	GW	U	X					X	X			
8	MW-6	5/22	0940		X	GW	U	X					X				
9	MW-7	5/24	1300		X	GW	U	X					X				
10	MW-8	5/23	1525		X	GW	U	X					X				

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)		Date/Time: 5/24 1600
Received by: (signature)	GES FedEx	Date/Time: 5/24 1600
Relinquished by: (signature)	GES	Date/Time: 5/28/24 1625
Received by: (signature)	PACE	Date/Time: 5/28/24 1625
Relinquished by: (signature)	PACE	Date/Time: 5/28/24 1650
Received by: (signature)		Date/Time: 5/29/24 720

1.6, 0.8, 2.0

Program & Regulatory Information
☐ AWQ STDS ☒ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables
☐ Enhanced Data Package
☑ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☑ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

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Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

24E3608
KAM

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: NYS DEC	Consultant: Groundwater & Environmental
Consultant Address: 6010 North Bailey Ave., Suite 1 Amherst, NY 14226	
Consultant Phone: 716-796-3827	
Callout Project Name:	Keywell LLC Vac-Air Division
Project Location:	Frewsburg, NY
Callout Number:	151686
Site/Spill Number:	907016
Project Manager:	Steven Moeller
Pace Analytical Quote Name/Number:	
Invoice Recipient:	
Sampled By:	Owen Ogiony

Requested Turnaround Time
DEC Standard 30-calendar day ☐
Due Date:

Rush (Prior Approval Required)
1-Day ☐ 2-Day ☐ 3-Day ☐
4-Day ☐ 5-Day ☐ 10-Day ☑

Data Delivery
Format: PDF ☑ EXCEL ☑
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Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Date	Time	Composite	Grab	[1]Matrix Code	Conc Code	8260: DER TCL / Oxygenates / CP-51	8270: DER TCL / CP-51	1,4-Dioxane SIM	8082 PCBs	8081 Pesticide	8151 Herbicide	TAL Total Metals	TCLP RCRA 8 Metals	PFAS 1633	PFAS 537 ID	# of Containers	[2] Preservation Code	[3] Container Code
11	MW-9R	5/23	1020		X	GW	U	X								X				
12	MW-10	5/22	1150		X	GW	U	X								X				
13	MW-11R	5/22	1050		X	GW	U	X								X				
14	MW-12	5/24	1120		X	GW	U	X								X				
15	MW-13	5/23	1420		X	GW	U	X								X				
16	MW-14	5/23	1220		X	GW	U	X								X				
17	DUP	5/21	1425		X	GW	U	X								X				
18	EQUIPMENT BLANK	5/22	1520		X	GW	U	X								X				
	~~FIELD BLANK~~				~~X~~	~~GW~~	~~U~~									X				
19	Trip Blank	—	—		X			X								X				

ANALYSIS REQUESTED (Circle Requested Analyses/Reporting List)

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

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T = Tedlar Bag
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Comments:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 5/24 1600	
Received by: (signature) GES	Date/Time: 5/24 1600	
Relinquished by: (signature) GES	Date/Time: 5/28/24 1625	
Received by: (signature) PACE	Date/Time: 5/28/24 1625	
Relinquished by: (signature) PACE	Date/Time: 5/28/24 1650	
Received by: (signature) 1.6, 0.8, 2.0	Date/Time: 5/29/24 720	

Program & Regulatory Information
☐ AWQ STDS ☒ NY TOGS
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☐ Enhanced Data Package
☑ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
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NELAC and AIHA-LAP, LLC Accredited

Project Entity
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☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Table of Contents

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client NYSDEC Groundwater

Project Keywell LLC Vac-Air

MCP/RCP Required N/A

Deliverable Package Requirement CAT B

Location Trewsburg, NY

PWSID# (When Applicable) N/A

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time AB / 5-29-24 / 0720

Back-Sheet By / Date / Time AAM / 5-29-24 / 1155

Temperature Method Temp. Gun # 6

Temp ✓ < 6° C Actual Temperature 1.6 / 0.8 / 2.0°C

Rush Samples: Yes / (No) Notify

Short Hold: Yes / (No) Notify

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☑	☐
Trip Blanks	☑	☐
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client ☑ Analysis ☑ Sampler Name ☑

Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: (N/A) ☐ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Qualtrax ID: 120836

DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist

Effective Date: 07/13/2023

Sample		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
16oz Amb/Clear	Soils Jars (Circle Amb/Clear)																				
8oz Amb/Clear																					
4oz Amb/Clear																					
2oz Amb/Clear																					
Unpreserved	Ambers 1 Liter																				
HCL																					
Sulfuric																					
Sulfuric	Ambers 250mL																				
Phosphoric																					
HCl																					
Unpreserved	Ambers 100mL																				
Unpreserved	Plastics 1 Liter																				
Sulfuric																					
Unpreserved	Plastics 500mL	2					1	6	2										1	1	
Sulfuric																					
Unpreserved	Plastics 250mL																				
Trizma																					
Sulfuric																					
Nitric																					
NaOH																					
Ammonium Acetate																					
NaOH/Zinc																					
Unpreserved	VOA Vials																				
HCl		3					1	6	3									1		2	
MeOH																					
D.I. Water																					
BiSulfate																					
Col/Bact	Other / Fill in																				
125mL Plastic		1																1			

Qualtrax ID: 120836

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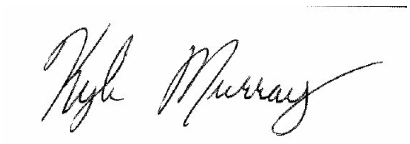
November 11, 2024

Steven Moeller
NYDEC_GES - Amherst, NY
6010 North Bailey Ave., Suite 1
Amherst, NY 14226

Project Location: Frewsburg, NY
Client Job Number:
Project Number: 907016
Laboratory Work Order Number: 24J3835

Enclosed are results of analyses for samples as received by the laboratory on October 25, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

Table of Contents

Sample Summary 4

Case Narrative 5

Sample Results 10

24J3835-01 10

24J3835-02 15

24J3835-03 20

24J3835-04 25

24J3835-05 30

24J3835-06 35

24J3835-07 40

24J3835-08 45

24J3835-09 50

24J3835-10 52

Sample Preparation Information 55

QC Data 56

Volatile Organic Compounds by GC/MS 56

B390686 56

B390914 59

Semivolatile Organic Compounds by - LC/MS-MS 67

B391310 67

B391701 74

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) 79

B390768 79

B390903 79

Flag/Qualifier Summary 80

Table of Contents (continued)

Certifications 81

Chain of Custody/Sample Receipt 84

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NYDEC_GES - Amherst, NY
6010 North Bailey Ave., Suite 1
Amherst, NY 14226
ATTN: Steven Moeller

REPORT DATE: 11/11/2024

PURCHASE ORDER NUMBER: 151686

PROJECT NUMBER: 907016

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24J3835

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Frewsburg, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-2	24J3835-01	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-3	24J3835-02	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-4	24J3835-03	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-9R	24J3835-04	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-11R	24J3835-05	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-12	24J3835-06	Ground Water		Draft Method 1633	
				SW-846 8260D	
MW-13	24J3835-07	Ground Water		Draft Method 1633	
				SW-846 8260D	
DUP	24J3835-08	Ground Water		Draft Method 1633	
				SW-846 8260D	
TRIP BLANK	24J3835-09	Trip Blank Water		SW-846 8260D	
EQUIPMENT BLANK	24J3835-10	Equipment Blank Water		Draft Method 1633	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Equipment Blank received, not on COC. Added as sample -10.

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Draft Method 1633

Qualifications:

H-01

Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Analyte & Samples(s) Qualified:

Total Suspended Solids
24J3835-01[MW-2], 24J3835-02[MW-3], 24J3835-03[MW-4], 24J3835-04[MW-9R], 24J3835-05[MW-11R], 24J3835-06[MW-12], 24J3835-07[MW-13], 24J3835-08[DUP]

PF-17

Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

Analyte & Samples(s) Qualified:

13C2-4:2FTS
24J3835-01[MW-2], 24J3835-02[MW-3], 24J3835-04[MW-9R], 24J3835-07[MW-13]

1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FT
24J3835-01[MW-2], 24J3835-02[MW-3], 24J3835-04[MW-9R], 24J3835-07[MW-13]

PF-18

Re-analysis confirmed Extracted Internal Standard failure due to matrix effects.

Analyte & Samples(s) Qualified:

13C2-4:2FTS
24J3835-08[DUP]

13C4-PFBA
24J3835-08[DUP]

1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FT
24J3835-08[DUP]

Perfluorobutanoic acid (PFBA)
24J3835-08[DUP]

PF-22

Qualifier ion ratio >150% of associated calibration. Detection is suspect.

Analyte & Samples(s) Qualified:

Perfluorooctanesulfonic acid (PFOS)
24J3835-06[MW-12]

Perfluoropentanoic acid (PFPeA)
24J3835-07[MW-13]

PF-23

Qualifier ion ratio <50% of associated calibration. Detection is suspect.

Analyte & Samples(s) Qualified:

Perfluorobutanesulfonic acid (PFBS)
24J3835-02[MW-3]

Perfluoropentanesulfonic acid (PFPeS)
24J3835-07[MW-13]

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S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

13C2-PFTeDA
S113367-CCV2

13C4-PFBA
S113367-CCV2, S113367-CCV3

D3-NMeFOSA
S113367-CCV2

D5-NEtFOSA
S113367-CCV2

D7-NMeFOSE
S113367-CCV2

D9-NEtFOSE
S113367-CCV2

N-ethyl perfluorooctanesulfonamide (NEtFOSA)
S113367-CCV2

N-ethylperfluorooctanesulfonamidoethanol (NEtFO
S113367-CCV2

N-methyl perfluoroocatnesulfonamide (NMeFOSA)
S113367-CCV2

N-methylperfluorooctanesulfonamidoethanol(NMeF
S113367-CCV2

Perfluorobutanoic acid (PFBA)
S113367-CCV2, S113367-CCV3

Perfluorotetradecanoic acid (PFTeDA)
S113367-CCV2

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FT
S113426-CCV1

3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTC
S113426-CCV1

4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
S113367-CCV2

SW-846 8260D

Qualifications:

L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Methyl Acetate
B390686-BS1, B390686-BSD1, B390914-BS1, B390914-BSD1, B390914-MS1, B390914-MSD1

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

1,2,4-Trichlorobenzene
24J3835-03[MW-4], B390914-MS1, B390914-MSD1

Naphthalene
24J3835-03[MW-4], B390914-MS1, B390914-MSD1

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MS-15

Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.

Analyte & Samples(s) Qualified:

Bromomethane
B390914-MS1, B390914-MSD1

Methyl Acetate
B390914-MS1, B390914-MSD1

MS-24

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene
B390914-MS1

Trichloroethylene
B390914-MS1

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

Naphthalene
B390914-MS1, B390914-MSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

24J3835-01[MW-2], 24J3835-02[MW-3], 24J3835-03[MW-4], 24J3835-04[MW-9R], 24J3835-05[MW-11R], 24J3835-06[MW-12], 24J3835-07[MW-13], 24J3835-08[DUP]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

1,2,4-Trichlorobenzene
24J3835-01[MW-2], 24J3835-02[MW-3], 24J3835-04[MW-9R], 24J3835-05[MW-11R], 24J3835-06[MW-12], 24J3835-07[MW-13], 24J3835-08[DUP], 24J3835-09[TRIP BLANK], B390686-BLK1, B390686-BS1, B390686-BSD1, S113048-CCV1

1,2-Dibromo-3-chloropropane (DBCP)
24J3835-01[MW-2], 24J3835-02[MW-3], 24J3835-03[MW-4], 24J3835-04[MW-9R], 24J3835-05[MW-11R], 24J3835-06[MW-12], 24J3835-07[MW-13], 24J3835-08[DUP], 24J3835-09[TRIP BLANK], B390686-BLK1, B390686-BS1, B390686-BSD1, B390914-BLK1, B390914-BS1, B390914-BSD1, B390914-MS1, B390914-MSD1, S113048-CCV1, S113183-CCV1

Naphthalene
24J3835-01[MW-2], 24J3835-02[MW-3], 24J3835-03[MW-4], 24J3835-04[MW-9R], 24J3835-05[MW-11R], 24J3835-06[MW-12], 24J3835-07[MW-13], 24J3835-08[DUP], 24J3835-09[TRIP BLANK], B390686-BLK1, B390686-BS1, B390686-BSD1, B390914-BLK1, B390914-BS1, B390914-BSD1, B390914-MS1, B390914-MSD1, S113048-CCV1, S113183-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Bromomethane
B390686-BS1, B390686-BSD1, S113048-CCV1

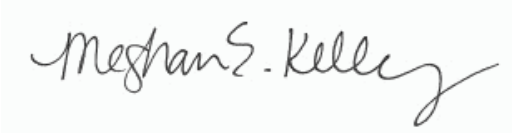
Chloromethane
B390686-BS1, B390686-BSD1, S113048-CCV1

Methyl Acetate
B390686-BS1, B390686-BSD1, B390914-BS1, B390914-BSD1, B390914-MS1, B390914-MSD1, S113048-CCV1, S113183-CCV1

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The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-2 | Sampled: 10/21/2024 11:30

Sample ID: 24J3835-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	25000	1000	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Benzene	ND	500	72	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Bromochloromethane	ND	500	160	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Bromodichloromethane	ND	250	93	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Bromoform	ND	500	150	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Bromomethane	ND	1000	740	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
2-Butanone (MEK)	ND	10000	710	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
n-Butylbenzene	ND	500	78	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
sec-Butylbenzene	ND	500	82	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
tert-Butylbenzene	ND	500	83	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Carbon Disulfide	ND	2500	760	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Carbon Tetrachloride	ND	2500	97	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Chlorobenzene	ND	500	89	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Chlorodibromomethane	ND	250	64	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Chloroethane	ND	1000	230	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Chloroform	ND	1000	95	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Chloromethane	ND	1000	250	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Cyclohexane	ND	2500	880	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	2500	310	µg/L	500	V-05	SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,2-Dibromoethane (EDB)	ND	250	63	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,2-Dichlorobenzene	ND	500	87	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,3-Dichlorobenzene	ND	500	77	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,4-Dichlorobenzene	ND	500	84	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Dichlorodifluoromethane (Freon 12)	ND	1000	100	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,1-Dichloroethane	ND	500	75	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,2-Dichloroethane	ND	500	63	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,1-Dichloroethylene	140	500	90	µg/L	500	J	SW-846 8260D	10/28/24	10/29/24 16:32	MFF
cis-1,2-Dichloroethylene	53000	500	100	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
trans-1,2-Dichloroethylene	110	500	78	µg/L	500	J	SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,2-Dichloropropane	ND	500	85	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
cis-1,3-Dichloropropene	ND	250	64	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
trans-1,3-Dichloropropene	ND	250	72	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Ethylbenzene	ND	500	68	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
2-Hexanone (MBK)	ND	5000	670	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Isopropylbenzene (Cumene)	ND	500	78	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
p-Isopropyltoluene (p-Cymene)	ND	500	78	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Methyl Acetate	ND	500	240	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Methyl tert-Butyl Ether (MTBE)	ND	500	84	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Methyl Cyclohexane	ND	500	67	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Methylene Chloride	ND	2500	95	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
4-Methyl-2-pentanone (MIBK)	ND	5000	680	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Naphthalene	ND	1000	120	µg/L	500	V-05	SW-846 8260D	10/28/24	10/29/24 16:32	MFF
n-Propylbenzene	ND	500	55	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Styrene	ND	500	64	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-2 | Sampled: 10/21/2024 11:30

Sample ID: 24J3835-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	250	51	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Tetrachloroethylene	ND	500	83	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Toluene	ND	500	57	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,2,3-Trichlorobenzene	ND	2500	110	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,2,4-Trichlorobenzene	ND	500	97	µg/L	500	V-05	SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,1,1-Trichloroethane	ND	500	70	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,1,2-Trichloroethane	ND	500	91	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Trichloroethylene	ND	500	83	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Trichlorofluoromethane (Freon 11)	ND	1000	71	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,2,3-Trichloropropane	ND	1000	130	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	500	79	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,2,4-Trimethylbenzene	ND	500	78	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
1,3,5-Trimethylbenzene	ND	500	85	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Vinyl Chloride	31000	1000	97	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
m+p Xylene	ND	1000	120	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
o-Xylene	ND	500	78	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF
Xylenes (total)	ND	500	500	µg/L	500		SW-846 8260D	10/28/24	10/29/24 16:32	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	108	70-130		10/29/24 16:32
Toluene-d8	101	70-130		10/29/24 16:32
4-Bromofluorobenzene	89.2	70-130		10/29/24 16:32

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-2 | Sampled: 10/21/2024 11:30

Sample ID: 24J3835-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.1	2.3	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluoropentanoic acid (PFPeA)	ND	2.1	0.44	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorohexanoic acid (PFHxA)	1.3	1.0	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluoroheptanoic acid (PFHpA)	0.94	1.0	0.27	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorooctanoic acid (PFOA)	3.6	1.0	0.27	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorononanoic acid (PFNA)	0.58	1.0	0.19	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorodecanoic acid (PFDA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorobutanesulfonic acid (PFBS)	ND	1.0	0.22	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorohexanesulfonic acid (PFHxS)	0.80	1.0	0.29	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorooctanesulfonic acid (PFOS)	23	1.0	0.40	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.1	0.77	ng/L	1	PF-17	Draft Method 1633	11/4/24	11/6/24 19:20	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.1	3.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.1	1.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.24	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.35	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.37	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.41	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.8	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.8	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.1	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.1	0.85	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
9Cl-PF3ONS (F53B Minor)	ND	4.1	0.99	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
11Cl-PF3OUdS (F53B Major)	ND	4.1	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	2.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	52	12	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	52	9.8	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.1	0.36	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.1	0.57	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-2 | Sampled: 10/21/2024 11:30

Sample ID: 24J3835-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.1	0.56	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.1	0.57	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:20	AB

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	10.1		10-130		11/6/24 19:20
13C5-PFPeA	53.1		35-150		11/6/24 19:20
13C5-PFHxA	72.9		55-150		11/6/24 19:20
13C4-PFHpA	73.3		55-150		11/6/24 19:20
13C8-PFOA	79.1		60-140		11/6/24 19:20
13C9-PFNA	69.8		55-140		11/6/24 19:20
13C6-PFDA	76.2		50-140		11/6/24 19:20
13C7-PFUnA	78.8		30-140		11/6/24 19:20
13C2-PFDoA	77.3		10-150		11/6/24 19:20
13C2-PFTeDA	72.9		10-130		11/6/24 19:20
13C3-PFBS	78.9		55-150		11/6/24 19:20
13C3-PFHxS	75.1		55-150		11/6/24 19:20
13C8-PFOS	71.4		45-140		11/6/24 19:20
13C2-4:2FTS	**220**	*	60-200	PF-17	11/6/24 19:20
13C2-6:2FTS	174		60-200		11/6/24 19:20
13C2-8:2FTS	133		50-200		11/6/24 19:20
13C8-PFOSA	63.5		30-130		11/6/24 19:20
D3-NMeFOSA	55.8		15-130		11/6/24 19:20
D5-NEtFOSA	57.6		10-130		11/6/24 19:20
D3-NMeFOSAA	88.2		45-200		11/6/24 19:20
D5-NEtFOSAA	93.4		10-200		11/6/24 19:20
D7-NMeFOSE	61.3		10-150		11/6/24 19:20
D9-NEtFOSE	57.6		10-150		11/6/24 19:20
13C3-HFPO-DA	62.2		25-160		11/6/24 19:20

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-2 | Sampled: 10/21/2024 11:30

Sample ID: 24J3835-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	130	10	10	mg/L	1	H-01	Draft Method 1633	10/30/24	10/30/24 12:47	ll

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-3 | Sampled: 10/22/2024 10:10

Sample ID: 24J3835-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	250	10	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Benzene	ND	5.0	0.72	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Bromochloromethane	ND	5.0	1.6	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Bromodichloromethane	ND	2.5	0.93	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Bromoform	ND	5.0	1.5	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Bromomethane	ND	10	7.4	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
2-Butanone (MEK)	ND	100	7.1	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
n-Butylbenzene	ND	5.0	0.78	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
sec-Butylbenzene	ND	5.0	0.82	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
tert-Butylbenzene	ND	5.0	0.83	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Carbon Disulfide	ND	25	7.6	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Carbon Tetrachloride	ND	25	0.97	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Chlorobenzene	ND	5.0	0.89	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Chlorodibromomethane	ND	2.5	0.64	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Chloroethane	ND	10	2.3	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Chloroform	ND	10	0.95	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Chloromethane	ND	10	2.5	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Cyclohexane	ND	25	8.8	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	25	3.1	µg/L	5	V-05	SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,2-Dibromoethane (EDB)	ND	2.5	0.63	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,2-Dichlorobenzene	ND	5.0	0.87	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,3-Dichlorobenzene	ND	5.0	0.77	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,4-Dichlorobenzene	ND	5.0	0.84	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Dichlorodifluoromethane (Freon 12)	ND	10	1.0	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,1-Dichloroethane	ND	5.0	0.75	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,2-Dichloroethane	ND	5.0	0.63	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,1-Dichloroethylene	ND	5.0	0.90	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
cis-1,2-Dichloroethylene	87	5.0	1.0	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
trans-1,2-Dichloroethylene	1.3	5.0	0.78	µg/L	5	J	SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,2-Dichloropropane	ND	5.0	0.85	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
cis-1,3-Dichloropropene	ND	2.5	0.64	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
trans-1,3-Dichloropropene	ND	2.5	0.72	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Ethylbenzene	ND	5.0	0.68	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
2-Hexanone (MBK)	ND	50	6.7	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Isopropylbenzene (Cumene)	ND	5.0	0.78	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
p-Isopropyltoluene (p-Cymene)	ND	5.0	0.78	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Methyl Acetate	ND	5.0	2.4	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Methyl tert-Butyl Ether (MTBE)	ND	5.0	0.84	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Methyl Cyclohexane	ND	5.0	0.67	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Methylene Chloride	ND	25	0.95	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
4-Methyl-2-pentanone (MIBK)	ND	50	6.8	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Naphthalene	ND	10	1.2	µg/L	5	V-05	SW-846 8260D	10/28/24	10/29/24 16:59	MFF
n-Propylbenzene	ND	5.0	0.55	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Styrene	ND	5.0	0.64	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-3 | Sampled: 10/22/2024 10:10

Sample ID: 24J3835-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	2.5	0.51	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Tetrachloroethylene	ND	5.0	0.83	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Toluene	ND	5.0	0.57	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,2,3-Trichlorobenzene	ND	25	1.1	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,2,4-Trichlorobenzene	ND	5.0	0.97	µg/L	5	V-05	SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,1,1-Trichloroethane	ND	5.0	0.70	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,1,2-Trichloroethane	ND	5.0	0.91	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Trichloroethylene	430	5.0	0.83	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Trichlorofluoromethane (Freon 11)	ND	10	0.71	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,2,3-Trichloropropane	ND	10	1.3	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	0.79	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,2,4-Trimethylbenzene	ND	5.0	0.78	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
1,3,5-Trimethylbenzene	ND	5.0	0.85	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Vinyl Chloride	1.4	10	0.97	µg/L	5	J	SW-846 8260D	10/28/24	10/29/24 16:59	MFF
m+p Xylene	ND	10	1.2	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
o-Xylene	ND	5.0	0.78	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF
Xylenes (total)	ND	5.0	5.0	µg/L	5		SW-846 8260D	10/28/24	10/29/24 16:59	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	111	70-130		10/29/24 16:59
Toluene-d8	102	70-130		10/29/24 16:59
4-Bromofluorobenzene	92.6	70-130		10/29/24 16:59

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-3 | Sampled: 10/22/2024 10:10

Sample ID: 24J3835-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.1	2.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.44	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorohexanoic acid (PFHxA)	0.89	1.0	0.24	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluoroheptanoic acid (PFHpA)	0.80	1.0	0.27	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorooctanoic acid (PFOA)	2.4	1.0	0.27	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorononanoic acid (PFNA)	0.47	1.0	0.19	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorodecanoic acid (PFDA)	0.28	1.0	0.21	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.30	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorobutanesulfonic acid (PFBS)	0.61	1.0	0.22	ng/L	1	PF-23, J	Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorohexanesulfonic acid (PFHxS)	0.56	1.0	0.28	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorooctanesulfonic acid (PFOS)	4.3	1.0	0.39	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.1	0.76	ng/L	1	PF-17	Draft Method 1633	11/4/24	11/6/24 19:36	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.1	3.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.1	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.24	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.36	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.41	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.8	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.1	1.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.1	0.83	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
9Cl-PF3ONS (F53B Minor)	ND	4.1	0.98	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
11Cl-PF3OUdS (F53B Major)	ND	4.1	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	2.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	51	11	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	51	9.6	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-3 | Sampled: 10/22/2024 10:10

Sample ID: 24J3835-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:36	AB

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	17.0		10-130		11/6/24 19:36
13C5-PFPeA	67.6		35-150		11/6/24 19:36
13C5-PFHxA	77.6		55-150		11/6/24 19:36
13C4-PFHpA	74.1		55-150		11/6/24 19:36
13C8-PFOA	81.5		60-140		11/6/24 19:36
13C9-PFNA	79.6		55-140		11/6/24 19:36
13C6-PFDA	87.1		50-140		11/6/24 19:36
13C7-PFUnA	78.8		30-140		11/6/24 19:36
13C2-PFDoA	75.3		10-150		11/6/24 19:36
13C2-PFTeDA	67.8		10-130		11/6/24 19:36
13C3-PFBS	88.4		55-150		11/6/24 19:36
13C3-PFHxS	83.7		55-150		11/6/24 19:36
13C8-PFOS	80.4		45-140		11/6/24 19:36
13C2-4:2FTS	**237**	*	60-200	PF-17	11/6/24 19:36
13C2-6:2FTS	187		60-200		11/6/24 19:36
13C2-8:2FTS	120		50-200		11/6/24 19:36
13C8-PFOSA	74.1		30-130		11/6/24 19:36
D3-NMeFOSA	61.6		15-130		11/6/24 19:36
D5-NEtFOSA	64.1		10-130		11/6/24 19:36
D3-NMeFOSAA	94.6		45-200		11/6/24 19:36
D5-NEtFOSAA	94.5		10-200		11/6/24 19:36
D7-NMeFOSE	60.6		10-150		11/6/24 19:36
D9-NEtFOSE	58.4		10-150		11/6/24 19:36
13C3-HFPO-DA	74.5		25-160		11/6/24 19:36

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-3 | Sampled: 10/22/2024 10:10

Sample ID: 24J3835-02

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	22	10	10	mg/L	1	H-01	Draft Method 1633	10/30/24	10/30/24 12:47	ll

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-4 | Sampled: 10/22/2024 11:30

Sample ID: 24J3835-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10000	410	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Benzene	ND	200	29	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Bromochloromethane	ND	200	64	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Bromodichloromethane	ND	100	37	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Bromoform	ND	200	60	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Bromomethane	ND	400	300	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
2-Butanone (MEK)	ND	4000	280	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
n-Butylbenzene	ND	200	31	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
sec-Butylbenzene	ND	200	33	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
tert-Butylbenzene	ND	200	33	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Carbon Disulfide	ND	1000	310	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Carbon Tetrachloride	ND	1000	39	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Chlorobenzene	ND	200	35	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Chlorodibromomethane	ND	100	26	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Chloroethane	ND	400	92	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Chloroform	ND	400	38	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Chloromethane	ND	400	99	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Cyclohexane	ND	1000	350	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	1000	130	µg/L	200	V-05	SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,2-Dibromoethane (EDB)	ND	100	25	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,2-Dichlorobenzene	ND	200	35	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,3-Dichlorobenzene	ND	200	31	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,4-Dichlorobenzene	ND	200	33	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Dichlorodifluoromethane (Freon 12)	ND	400	40	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,1-Dichloroethane	ND	200	30	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,2-Dichloroethane	ND	200	25	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,1-Dichloroethylene	ND	200	36	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
cis-1,2-Dichloroethylene	950	200	40	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
trans-1,2-Dichloroethylene	ND	200	31	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,2-Dichloropropane	ND	200	34	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
cis-1,3-Dichloropropene	ND	100	26	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
trans-1,3-Dichloropropene	ND	100	29	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Ethylbenzene	ND	200	27	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
2-Hexanone (MBK)	ND	2000	270	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Isopropylbenzene (Cumene)	ND	200	31	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
p-Isopropyltoluene (p-Cymene)	ND	200	31	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Methyl Acetate	ND	200	96	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Methyl tert-Butyl Ether (MTBE)	ND	200	33	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Methyl Cyclohexane	ND	200	27	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Methylene Chloride	ND	1000	38	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
4-Methyl-2-pentanone (MIBK)	ND	2000	270	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Naphthalene	ND	400	49	µg/L	200	MS-07A, V-05	SW-846 8260D	10/30/24	10/31/24 20:21	MFF
n-Propylbenzene	ND	200	22	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Styrene	ND	200	26	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-4 | Sampled: 10/22/2024 11:30

Sample ID: 24J3835-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	100	20	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Tetrachloroethylene	ND	200	33	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Toluene	ND	200	23	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,2,3-Trichlorobenzene	ND	1000	43	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,2,4-Trichlorobenzene	ND	200	39	µg/L	200	MS-07A	SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,1,1-Trichloroethane	ND	200	28	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,1,2-Trichloroethane	ND	200	36	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Trichloroethylene	19000	200	33	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Trichlorofluoromethane (Freon 11)	ND	400	29	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,2,3-Trichloropropane	ND	400	54	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	200	32	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,2,4-Trimethylbenzene	ND	200	31	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
1,3,5-Trimethylbenzene	ND	200	34	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Vinyl Chloride	ND	400	39	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
m+p Xylene	ND	400	49	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
o-Xylene	ND	200	31	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF
Xylenes (total)	ND	200	200	µg/L	200		SW-846 8260D	10/30/24	10/31/24 20:21	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	103	70-130		10/31/24 20:21
Toluene-d8	97.5	70-130		10/31/24 20:21
4-Bromofluorobenzene	88.3	70-130		10/31/24 20:21

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-4 | Sampled: 10/22/2024 11:30

Sample ID: 24J3835-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.0	2.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.43	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorohexanoic acid (PFHxA)	1.5	1.0	0.24	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluoroheptanoic acid (PFHpA)	0.90	1.0	0.27	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorooctanoic acid (PFOA)	3.3	1.0	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorononanoic acid (PFNA)	0.47	1.0	0.19	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorodecanoic acid (PFDA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.30	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorobutanesulfonic acid (PFBS)	0.76	1.0	0.21	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorohexanesulfonic acid (PFHxS)	1.8	1.0	0.28	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorooctanesulfonic acid (PFOS)	3.3	1.0	0.38	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.75	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	3.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.36	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.40	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.82	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.96	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
11Cl-PF3OUdS (F53B Major)	ND	4.0	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	2.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	11	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	9.5	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-4 | Sampled: 10/22/2024 11:30

Sample ID: 24J3835-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.54	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	11/4/24	11/6/24 19:51	AB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	10.9	10-130		11/6/24 19:51
13C5-PFPeA	64.2	35-150		11/6/24 19:51
13C5-PFHxA	73.7	55-150		11/6/24 19:51
13C4-PFHpA	70.2	55-150		11/6/24 19:51
13C8-PFOA	78.1	60-140		11/6/24 19:51
13C9-PFNA	74.2	55-140		11/6/24 19:51
13C6-PFDA	78.3	50-140		11/6/24 19:51
13C7-PFUnA	72.2	30-140		11/6/24 19:51
13C2-PFDoA	69.7	10-150		11/6/24 19:51
13C2-PFTeDA	64.4	10-130		11/6/24 19:51
13C3-PFBS	82.6	55-150		11/6/24 19:51
13C3-PFHxS	76.3	55-150		11/6/24 19:51
13C8-PFOS	76.3	45-140		11/6/24 19:51
13C2-4:2FTS	197	60-200		11/6/24 19:51
13C2-6:2FTS	150	60-200		11/6/24 19:51
13C2-8:2FTS	99.0	50-200		11/6/24 19:51
13C8-PFOSA	67.4	30-130		11/6/24 19:51
D3-NMeFOSA	56.4	15-130		11/6/24 19:51
D5-NEtFOSA	57.9	10-130		11/6/24 19:51
D3-NMeFOSAA	80.0	45-200		11/6/24 19:51
D5-NEtFOSAA	77.5	10-200		11/6/24 19:51
D7-NMeFOSE	57.2	10-150		11/6/24 19:51
D9-NEtFOSE	56.0	10-150		11/6/24 19:51
13C3-HFPO-DA	74.1	25-160		11/6/24 19:51

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-4 | Sampled: 10/22/2024 11:30

Sample ID: 24J3835-03

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	10/30/24	10/30/24 12:47	ll

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-9R | Sampled: 10/21/2024 15:20

Sample ID: 24J3835-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	41	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Benzene	ND	20	2.9	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Bromochloromethane	ND	20	6.4	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Bromodichloromethane	ND	10	3.7	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Bromoform	ND	20	6.0	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Bromomethane	ND	40	30	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
2-Butanone (MEK)	ND	400	28	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
n-Butylbenzene	ND	20	3.1	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
sec-Butylbenzene	ND	20	3.3	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
tert-Butylbenzene	ND	20	3.3	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Carbon Disulfide	ND	100	31	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Carbon Tetrachloride	ND	100	3.9	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Chlorobenzene	ND	20	3.5	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Chlorodibromomethane	ND	10	2.6	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Chloroethane	ND	40	9.2	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Chloroform	ND	40	3.8	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Chloromethane	ND	40	9.9	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Cyclohexane	ND	100	35	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	13	µg/L	20	V-05	SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,2-Dibromoethane (EDB)	ND	10	2.5	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,2-Dichlorobenzene	ND	20	3.5	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,3-Dichlorobenzene	ND	20	3.1	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,4-Dichlorobenzene	ND	20	3.3	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Dichlorodifluoromethane (Freon 12)	ND	40	4.0	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,1-Dichloroethane	ND	20	3.0	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,2-Dichloroethane	ND	20	2.5	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,1-Dichloroethylene	9.2	20	3.6	µg/L	20	J	SW-846 8260D	10/28/24	10/29/24 17:52	MFF
cis-1,2-Dichloroethylene	1200	20	4.0	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
trans-1,2-Dichloroethylene	24	20	3.1	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,2-Dichloropropane	ND	20	3.4	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
cis-1,3-Dichloropropene	ND	10	2.6	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
trans-1,3-Dichloropropene	ND	10	2.9	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Ethylbenzene	ND	20	2.7	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
2-Hexanone (MBK)	ND	200	27	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Isopropylbenzene (Cumene)	ND	20	3.1	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
p-Isopropyltoluene (p-Cymene)	ND	20	3.1	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Methyl Acetate	ND	20	9.6	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Methyl tert-Butyl Ether (MTBE)	ND	20	3.3	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Methyl Cyclohexane	ND	20	2.7	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Methylene Chloride	ND	100	3.8	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
4-Methyl-2-pentanone (MIBK)	ND	200	27	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Naphthalene	ND	40	4.9	µg/L	20	V-05	SW-846 8260D	10/28/24	10/29/24 17:52	MFF
n-Propylbenzene	ND	20	2.2	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Styrene	ND	20	2.6	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-9R | Sampled: 10/21/2024 15:20

Sample ID: 24J3835-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	10	2.0	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Tetrachloroethylene	ND	20	3.3	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Toluene	ND	20	2.3	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,2,3-Trichlorobenzene	ND	100	4.3	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,2,4-Trichlorobenzene	ND	20	3.9	µg/L	20	V-05	SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,1,1-Trichloroethane	ND	20	2.8	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,1,2-Trichloroethane	ND	20	3.6	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Trichloroethylene	470	20	3.3	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Trichlorofluoromethane (Freon 11)	ND	40	2.9	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,2,3-Trichloropropane	ND	40	5.4	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	20	3.2	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,2,4-Trimethylbenzene	ND	20	3.1	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
1,3,5-Trimethylbenzene	ND	20	3.4	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Vinyl Chloride	270	40	3.9	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
m+p Xylene	ND	40	4.9	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
o-Xylene	ND	20	3.1	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF
Xylenes (total)	ND	20	20	µg/L	20		SW-846 8260D	10/28/24	10/29/24 17:52	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	111	70-130		10/29/24 17:52
Toluene-d8	100	70-130		10/29/24 17:52
4-Bromofluorobenzene	90.0	70-130		10/29/24 17:52

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-9R | Sampled: 10/21/2024 15:20

Sample ID: 24J3835-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	4.8	4.0	2.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.43	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorohexanoic acid (PFHxA)	1.4	1.0	0.24	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluoroheptanoic acid (PFHpA)	0.72	1.0	0.27	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorooctanoic acid (PFOA)	4.4	1.0	0.27	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorononanoic acid (PFNA)	0.51	1.0	0.19	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorodecanoic acid (PFDA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.21	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.30	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorobutanesulfonic acid (PFBS)	0.85	1.0	0.21	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorohexanesulfonic acid (PFHxS)	2.1	1.0	0.28	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorooctanesulfonic acid (PFOS)	1.5	1.0	0.39	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.76	ng/L	1	PF-17	Draft Method 1633	11/4/24	11/6/24 20:07	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	3.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.36	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.40	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.8	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.83	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.98	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
11Cl-PF3OUdS (F53B Major)	ND	4.0	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	2.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	51	11	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	51	9.6	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-9R | Sampled: 10/21/2024 15:20

Sample ID: 24J3835-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.56	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:07	AB

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	17.6		10-130		11/6/24 20:07
13C5-PFPeA	62.8		35-150		11/6/24 20:07
13C5-PFHxA	73.2		55-150		11/6/24 20:07
13C4-PFHpA	69.4		55-150		11/6/24 20:07
13C8-PFOA	80.6		60-140		11/6/24 20:07
13C9-PFNA	73.9		55-140		11/6/24 20:07
13C6-PFDA	78.6		50-140		11/6/24 20:07
13C7-PFUnA	77.4		30-140		11/6/24 20:07
13C2-PFDoA	67.7		10-150		11/6/24 20:07
13C2-PFTeDA	64.5		10-130		11/6/24 20:07
13C3-PFBS	82.7		55-150		11/6/24 20:07
13C3-PFHxS	79.6		55-150		11/6/24 20:07
13C8-PFOS	75.4		45-140		11/6/24 20:07
13C2-4:2FTS	**212**	*	60-200	PF-17	11/6/24 20:07
13C2-6:2FTS	155		60-200		11/6/24 20:07
13C2-8:2FTS	95.9		50-200		11/6/24 20:07
13C8-PFOSA	65.4		30-130		11/6/24 20:07
D3-NMeFOSA	56.7		15-130		11/6/24 20:07
D5-NEtFOSA	57.6		10-130		11/6/24 20:07
D3-NMeFOSAA	84.8		45-200		11/6/24 20:07
D5-NEtFOSAA	80.8		10-200		11/6/24 20:07
D7-NMeFOSE	59.6		10-150		11/6/24 20:07
D9-NEtFOSE	58.5		10-150		11/6/24 20:07
13C3-HFPO-DA	65.1		25-160		11/6/24 20:07

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-9R | Sampled: 10/21/2024 15:20

Sample ID: 24J3835-04

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	10/31/24	10/31/24 13:35	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-11R | Sampled: 10/21/2024 13:00

Sample ID: 24J3835-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	5000	200	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Benzene	ND	100	14	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Bromochloromethane	ND	100	32	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Bromodichloromethane	ND	50	19	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Bromoform	ND	100	30	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Bromomethane	ND	200	150	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
2-Butanone (MEK)	ND	2000	140	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
n-Butylbenzene	ND	100	16	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
sec-Butylbenzene	ND	100	16	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
tert-Butylbenzene	ND	100	17	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Carbon Disulfide	ND	500	150	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Carbon Tetrachloride	ND	500	19	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Chlorobenzene	ND	100	18	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Chlorodibromomethane	ND	50	13	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Chloroethane	ND	200	46	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Chloroform	ND	200	19	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Chloromethane	ND	200	50	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Cyclohexane	ND	500	180	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	500	63	µg/L	100	V-05	SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,2-Dibromoethane (EDB)	ND	50	13	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,2-Dichlorobenzene	ND	100	17	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,3-Dichlorobenzene	ND	100	15	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,4-Dichlorobenzene	ND	100	17	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Dichlorodifluoromethane (Freon 12)	ND	200	20	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,1-Dichloroethane	ND	100	15	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,2-Dichloroethane	ND	100	13	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,1-Dichloroethylene	ND	100	18	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
cis-1,2-Dichloroethylene	2000	100	20	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
trans-1,2-Dichloroethylene	ND	100	16	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,2-Dichloropropane	ND	100	17	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
cis-1,3-Dichloropropene	ND	50	13	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
trans-1,3-Dichloropropene	ND	50	14	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Ethylbenzene	ND	100	14	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
2-Hexanone (MBK)	ND	1000	130	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Isopropylbenzene (Cumene)	ND	100	16	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
p-Isopropyltoluene (p-Cymene)	ND	100	16	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Methyl Acetate	ND	100	48	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Methyl tert-Butyl Ether (MTBE)	ND	100	17	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Methyl Cyclohexane	ND	100	13	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Methylene Chloride	ND	500	19	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
4-Methyl-2-pentanone (MIBK)	ND	1000	140	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Naphthalene	ND	200	25	µg/L	100	V-05	SW-846 8260D	10/28/24	10/29/24 18:19	MFF
n-Propylbenzene	ND	100	11	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Styrene	ND	100	13	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-11R | Sampled: 10/21/2024 13:00

Sample ID: 24J3835-05

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	50	10	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Tetrachloroethylene	ND	100	17	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Toluene	ND	100	11	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,2,3-Trichlorobenzene	ND	500	22	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,2,4-Trichlorobenzene	ND	100	19	µg/L	100	V-05	SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,1,1-Trichloroethane	ND	100	14	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,1,2-Trichloroethane	ND	100	18	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Trichloroethylene	7100	100	17	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Trichlorofluoromethane (Freon 11)	ND	200	14	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,2,3-Trichloropropane	ND	200	27	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	100	16	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,2,4-Trimethylbenzene	ND	100	16	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
1,3,5-Trimethylbenzene	ND	100	17	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Vinyl Chloride	ND	200	19	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
m+p Xylene	ND	200	25	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
o-Xylene	ND	100	16	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF
Xylenes (total)	ND	100	100	µg/L	100		SW-846 8260D	10/28/24	10/29/24 18:19	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	107	70-130		10/29/24 18:19
Toluene-d8	99.6	70-130		10/29/24 18:19
4-Bromofluorobenzene	90.8	70-130		10/29/24 18:19

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-11R | Sampled: 10/21/2024 13:00

Sample ID: 24J3835-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	3.9	2.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.42	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorohexanoic acid (PFHxA)	0.33	0.97	0.23	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluoroheptanoic acid (PFHpA)	ND	0.97	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorooctanoic acid (PFOA)	1.5	0.97	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorononanoic acid (PFNA)	0.28	0.97	0.18	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorodecanoic acid (PFDA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluoroundecanoic acid (PFUnA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorododecanoic acid (PFDoA)	ND	0.97	0.19	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorotridecanoic acid (PFTrDA)	ND	0.97	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.97	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorobutanesulfonic acid (PFBS)	0.64	0.97	0.21	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	0.97	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorohexanesulfonic acid (PFHxS)	0.76	0.97	0.27	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.97	0.32	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorooctanesulfonic acid (PFOS)	3.8	0.97	0.37	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorononanesulfonic acid (PFNS)	ND	0.97	0.24	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorodecanesulfonic acid (PFDS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.73	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	2.9	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluorooctanesulfonamide (PFOSA)	ND	0.97	0.23	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.97	0.32	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.97	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
N-MeFOSAA (NMeFOSAA)	ND	0.97	0.35	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
N-EtFOSAA (NEtFOSAA)	ND	0.97	0.39	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.7	2.7	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.7	2.6	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	1.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.80	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.94	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
11Cl-PF3OUdS (F53B Major)	ND	3.9	1.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.7	2.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	11	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	9.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.54	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-11R | Sampled: 10/21/2024 13:00

Sample ID: 24J3835-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.52	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.54	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:23	AB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	20.6	10-130		11/6/24 20:23
13C5-PFPeA	72.2	35-150		11/6/24 20:23
13C5-PFHxA	74.4	55-150		11/6/24 20:23
13C4-PFHpA	68.8	55-150		11/6/24 20:23
13C8-PFOA	81.1	60-140		11/6/24 20:23
13C9-PFNA	73.3	55-140		11/6/24 20:23
13C6-PFDA	73.3	50-140		11/6/24 20:23
13C7-PFUnA	66.7	30-140		11/6/24 20:23
13C2-PFDoA	64.3	10-150		11/6/24 20:23
13C2-PFTeDA	57.9	10-130		11/6/24 20:23
13C3-PFBS	90.6	55-150		11/6/24 20:23
13C3-PFHxS	81.7	55-150		11/6/24 20:23
13C8-PFOS	71.4	45-140		11/6/24 20:23
13C2-4:2FTS	168	60-200		11/6/24 20:23
13C2-6:2FTS	114	60-200		11/6/24 20:23
13C2-8:2FTS	72.0	50-200		11/6/24 20:23
13C8-PFOSA	60.6	30-130		11/6/24 20:23
D3-NMeFOSA	53.6	15-130		11/6/24 20:23
D5-NEtFOSA	55.6	10-130		11/6/24 20:23
D3-NMeFOSAA	70.6	45-200		11/6/24 20:23
D5-NEtFOSAA	69.3	10-200		11/6/24 20:23
D7-NMeFOSE	55.2	10-150		11/6/24 20:23
D9-NEtFOSE	56.1	10-150		11/6/24 20:23
13C3-HFPO-DA	78.2	25-160		11/6/24 20:23

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-11R | Sampled: 10/21/2024 13:00

Sample ID: 24J3835-05

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	12	10	10	mg/L	1	H-01	Draft Method 1633	10/30/24	10/30/24 12:47	ll

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-12 | Sampled: 10/22/2024 14:00

Sample ID: 24J3835-06

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	100	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Benzene	ND	50	7.2	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Bromochloromethane	ND	50	16	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Bromodichloromethane	ND	25	9.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Bromoform	ND	50	15	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Bromomethane	ND	100	74	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
2-Butanone (MEK)	ND	1000	71	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
n-Butylbenzene	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
sec-Butylbenzene	ND	50	8.2	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
tert-Butylbenzene	ND	50	8.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Carbon Disulfide	ND	250	76	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Carbon Tetrachloride	ND	250	9.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Chlorobenzene	ND	50	8.9	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Chlorodibromomethane	ND	25	6.4	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Chloroethane	ND	100	23	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Chloroform	ND	100	9.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Chloromethane	ND	100	25	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Cyclohexane	ND	250	88	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	31	µg/L	50	V-05	SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,2-Dibromoethane (EDB)	ND	25	6.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,2-Dichlorobenzene	ND	50	8.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,3-Dichlorobenzene	ND	50	7.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,4-Dichlorobenzene	ND	50	8.4	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Dichlorodifluoromethane (Freon 12)	ND	100	10	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,1-Dichloroethane	ND	50	7.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,2-Dichloroethane	ND	50	6.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,1-Dichloroethylene	ND	50	9.0	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
cis-1,2-Dichloroethylene	91	50	10	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
trans-1,2-Dichloroethylene	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,2-Dichloropropane	ND	50	8.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
cis-1,3-Dichloropropene	ND	25	6.4	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
trans-1,3-Dichloropropene	ND	25	7.2	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Ethylbenzene	ND	50	6.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
2-Hexanone (MBK)	ND	500	67	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Isopropylbenzene (Cumene)	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
p-Isopropyltoluene (p-Cymene)	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Methyl Acetate	ND	50	24	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Methyl tert-Butyl Ether (MTBE)	ND	50	8.4	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Methyl Cyclohexane	ND	50	6.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Methylene Chloride	ND	250	9.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
4-Methyl-2-pentanone (MIBK)	ND	500	68	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Naphthalene	ND	100	12	µg/L	50	V-05	SW-846 8260D	10/28/24	10/29/24 18:46	MFF
n-Propylbenzene	ND	50	5.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Styrene	ND	50	6.4	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-12 | Sampled: 10/22/2024 14:00

Sample ID: 24J3835-06

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	25	5.1	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Tetrachloroethylene	ND	50	8.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Toluene	ND	50	5.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,2,3-Trichlorobenzene	ND	250	11	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,2,4-Trichlorobenzene	ND	50	9.7	µg/L	50	V-05	SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,1,1-Trichloroethane	ND	50	7.0	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,1,2-Trichloroethane	ND	50	9.1	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Trichloroethylene	4700	50	8.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Trichlorofluoromethane (Freon 11)	ND	100	7.1	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,2,3-Trichloropropane	ND	100	13	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	7.9	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,2,4-Trimethylbenzene	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
1,3,5-Trimethylbenzene	ND	50	8.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Vinyl Chloride	ND	100	9.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
m+p Xylene	ND	100	12	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
o-Xylene	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF
Xylenes (total)	ND	50	50	µg/L	50		SW-846 8260D	10/28/24	10/29/24 18:46	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	112	70-130		10/29/24 18:46
Toluene-d8	101	70-130		10/29/24 18:46
4-Bromofluorobenzene	89.3	70-130		10/29/24 18:46

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-12 | Sampled: 10/22/2024 14:00

Sample ID: 24J3835-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.4	3.7	2.0	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluoropentanoic acid (PFPeA)	0.69	1.9	0.40	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorohexanoic acid (PFHxA)	0.79	0.93	0.22	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluoroheptanoic acid (PFHpA)	0.70	0.93	0.25	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorooctanoic acid (PFOA)	2.6	0.93	0.24	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorononanoic acid (PFNA)	0.34	0.93	0.18	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorodecanoic acid (PFDA)	ND	0.93	0.19	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluoroundecanoic acid (PFUnA)	ND	0.93	0.19	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorododecanoic acid (PFDoA)	ND	0.93	0.19	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorotridecanoic acid (PFTrDA)	ND	0.93	0.28	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.93	0.24	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorobutanesulfonic acid (PFBS)	0.83	0.93	0.20	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	0.93	0.24	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorohexanesulfonic acid (PFHxS)	0.65	0.93	0.26	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.93	0.31	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorooctanesulfonic acid (PFOS)	1.3	0.93	0.36	ng/L	1	PF-22	Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorononanesulfonic acid (PFNS)	ND	0.93	0.23	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorodecanesulfonic acid (PFDS)	ND	0.93	0.27	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.93	0.27	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	0.70	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	2.8	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	1.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluorooctanesulfonamide (PFOSA)	ND	0.93	0.22	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.93	0.31	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.93	0.31	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
N-MeFOSAA (NMeFOSAA)	ND	0.93	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
N-EtFOSAA (NEtFOSAA)	ND	0.93	0.37	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.3	2.5	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.3	2.5	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	0.96	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.7	0.77	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
9Cl-PF3ONS (F53B Minor)	ND	3.7	0.90	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
11Cl-PF3OUdS (F53B Major)	ND	3.7	1.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.3	2.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	11	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	8.8	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.52	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-12 | Sampled: 10/22/2024 14:00

Sample ID: 24J3835-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.50	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.51	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:38	AB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	17.6	10-130		11/6/24 20:38
13C5-PFPeA	69.5	35-150		11/6/24 20:38
13C5-PFHxA	74.5	55-150		11/6/24 20:38
13C4-PFHpA	68.4	55-150		11/6/24 20:38
13C8-PFOA	73.7	60-140		11/6/24 20:38
13C9-PFNA	73.0	55-140		11/6/24 20:38
13C6-PFDA	77.1	50-140		11/6/24 20:38
13C7-PFUnA	70.6	30-140		11/6/24 20:38
13C2-PFDoA	69.6	10-150		11/6/24 20:38
13C2-PFTeDA	63.9	10-130		11/6/24 20:38
13C3-PFBS	86.4	55-150		11/6/24 20:38
13C3-PFHxS	75.5	55-150		11/6/24 20:38
13C8-PFOS	73.9	45-140		11/6/24 20:38
13C2-4:2FTS	162	60-200		11/6/24 20:38
13C2-6:2FTS	107	60-200		11/6/24 20:38
13C2-8:2FTS	72.7	50-200		11/6/24 20:38
13C8-PFOSA	64.8	30-130		11/6/24 20:38
D3-NMeFOSA	59.3	15-130		11/6/24 20:38
D5-NEtFOSA	59.3	10-130		11/6/24 20:38
D3-NMeFOSAA	81.8	45-200		11/6/24 20:38
D5-NEtFOSAA	73.2	10-200		11/6/24 20:38
D7-NMeFOSE	61.0	10-150		11/6/24 20:38
D9-NEtFOSE	58.9	10-150		11/6/24 20:38
13C3-HFPO-DA	74.5	25-160		11/6/24 20:38

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-12 | Sampled: 10/22/2024 14:00

Sample ID: 24J3835-06

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1	H-01	Draft Method 1633	10/31/24	10/31/24 13:35	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-13 | Sampled: 10/23/2024 15:30

Sample ID: 24J3835-07

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	100	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Benzene	ND	50	7.2	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Bromochloromethane	ND	50	16	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Bromodichloromethane	ND	25	9.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Bromoform	ND	50	15	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Bromomethane	ND	100	74	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
2-Butanone (MEK)	ND	1000	71	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
n-Butylbenzene	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
sec-Butylbenzene	ND	50	8.2	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
tert-Butylbenzene	ND	50	8.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Carbon Disulfide	ND	250	76	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Carbon Tetrachloride	ND	250	9.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Chlorobenzene	ND	50	8.9	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Chlorodibromomethane	ND	25	6.4	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Chloroethane	ND	100	23	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Chloroform	ND	100	9.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Chloromethane	ND	100	25	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Cyclohexane	ND	250	88	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	31	µg/L	50	V-05	SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,2-Dibromoethane (EDB)	ND	25	6.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,2-Dichlorobenzene	ND	50	8.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,3-Dichlorobenzene	ND	50	7.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,4-Dichlorobenzene	ND	50	8.4	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Dichlorodifluoromethane (Freon 12)	ND	100	10	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,1-Dichloroethane	ND	50	7.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,2-Dichloroethane	ND	50	6.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,1-Dichloroethylene	ND	50	9.0	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
cis-1,2-Dichloroethylene	2000	50	10	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
trans-1,2-Dichloroethylene	15	50	7.8	µg/L	50	J	SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,2-Dichloropropane	ND	50	8.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
cis-1,3-Dichloropropene	ND	25	6.4	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
trans-1,3-Dichloropropene	ND	25	7.2	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Ethylbenzene	ND	50	6.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
2-Hexanone (MBK)	ND	500	67	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Isopropylbenzene (Cumene)	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
p-Isopropyltoluene (p-Cymene)	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Methyl Acetate	ND	50	24	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Methyl tert-Butyl Ether (MTBE)	ND	50	8.4	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Methyl Cyclohexane	ND	50	6.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Methylene Chloride	ND	250	9.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
4-Methyl-2-pentanone (MIBK)	ND	500	68	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Naphthalene	ND	100	12	µg/L	50	V-05	SW-846 8260D	10/28/24	10/29/24 19:12	MFF
n-Propylbenzene	ND	50	5.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Styrene	ND	50	6.4	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-13 | Sampled: 10/23/2024 15:30

Sample ID: 24J3835-07

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	25	5.1	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Tetrachloroethylene	ND	50	8.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Toluene	ND	50	5.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,2,3-Trichlorobenzene	ND	250	11	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,2,4-Trichlorobenzene	ND	50	9.7	µg/L	50	V-05	SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,1,1-Trichloroethane	ND	50	7.0	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,1,2-Trichloroethane	ND	50	9.1	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Trichloroethylene	6700	50	8.3	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Trichlorofluoromethane (Freon 11)	ND	100	7.1	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,2,3-Trichloropropane	ND	100	13	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	7.9	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,2,4-Trimethylbenzene	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
1,3,5-Trimethylbenzene	ND	50	8.5	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Vinyl Chloride	110	100	9.7	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
m+p Xylene	ND	100	12	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
o-Xylene	ND	50	7.8	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF
Xylenes (total)	ND	50	50	µg/L	50		SW-846 8260D	10/28/24	10/29/24 19:12	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	112	70-130		10/29/24 19:12
Toluene-d8	101	70-130		10/29/24 19:12
4-Bromofluorobenzene	85.6	70-130		10/29/24 19:12

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-13 | Sampled: 10/23/2024 15:30

Sample ID: 24J3835-07

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.7	3.9	2.1	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluoropentanoic acid (PFPeA)	0.44	1.9	0.41	ng/L	1	PF-22, J	Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorohexanoic acid (PFHxA)	0.90	0.97	0.23	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluoroheptanoic acid (PFHpA)	0.80	0.97	0.26	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorooctanoic acid (PFOA)	2.5	0.97	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorononanoic acid (PFNA)	0.55	0.97	0.18	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorodecanoic acid (PFDA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluoroundecanoic acid (PFUnA)	ND	0.97	0.20	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorododecanoic acid (PFDoA)	ND	0.97	0.19	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorotridecanoic acid (PFTrDA)	ND	0.97	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.97	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorobutanesulfonic acid (PFBS)	0.55	0.97	0.20	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluoropentanesulfonic acid (PFPeS)	0.33	0.97	0.25	ng/L	1	PF-23, J	Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorohexanesulfonic acid (PFHxS)	0.80	0.97	0.27	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.97	0.32	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorooctanesulfonic acid (PFOS)	3.3	0.97	0.37	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorononanesulfonic acid (PFNS)	ND	0.97	0.24	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorodecanesulfonic acid (PFDS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.97	0.28	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.72	ng/L	1	PF-17	Draft Method 1633	11/4/24	11/6/24 20:54	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	2.9	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluorooctanesulfonamide (PFOSA)	ND	0.97	0.22	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.97	0.32	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.97	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
N-MeFOSAA (NMeFOSAA)	ND	0.97	0.35	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
N-EtFOSAA (NEtFOSAA)	ND	0.97	0.39	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.7	2.6	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.7	2.6	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	1.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.79	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.93	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
11Cl-PF3OUdS (F53B Major)	ND	3.9	1.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.7	2.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	48	11	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	48	9.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.54	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-13 | Sampled: 10/23/2024 15:30

Sample ID: 24J3835-07

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.52	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.53	ng/L	1		Draft Method 1633	11/4/24	11/6/24 20:54	AB

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	36.5		10-130		11/6/24 20:54
13C5-PFPeA	77.4		35-150		11/6/24 20:54
13C5-PFHxA	83.8		55-150		11/6/24 20:54
13C4-PFHpA	79.7		55-150		11/6/24 20:54
13C8-PFOA	82.8		60-140		11/6/24 20:54
13C9-PFNA	82.5		55-140		11/6/24 20:54
13C6-PFDA	86.7		50-140		11/6/24 20:54
13C7-PFUnA	77.0		30-140		11/6/24 20:54
13C2-PFDoA	72.0		10-150		11/6/24 20:54
13C2-PFTeDA	68.1		10-130		11/6/24 20:54
13C3-PFBS	94.1		55-150		11/6/24 20:54
13C3-PFHxS	87.5		55-150		11/6/24 20:54
13C8-PFOS	82.0		45-140		11/6/24 20:54
13C2-4:2FTS	**204**	*	60-200	PF-17	11/6/24 20:54
13C2-6:2FTS	142		60-200		11/6/24 20:54
13C2-8:2FTS	90.5		50-200		11/6/24 20:54
13C8-PFOSA	73.6		30-130		11/6/24 20:54
D3-NMeFOSA	60.6		15-130		11/6/24 20:54
D5-NEtFOSA	60.9		10-130		11/6/24 20:54
D3-NMeFOSAA	88.9		45-200		11/6/24 20:54
D5-NEtFOSAA	82.6		10-200		11/6/24 20:54
D7-NMeFOSE	63.0		10-150		11/6/24 20:54
D9-NEtFOSE	60.4		10-150		11/6/24 20:54
13C3-HFPO-DA	88.3		25-160		11/6/24 20:54

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: MW-13 | Sampled: 10/23/2024 15:30

Sample ID: 24J3835-07

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	18	10	10	mg/L	1	H-01	Draft Method 1633	10/31/24	10/31/24 13:35	LL

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: DUP | Sampled: 10/21/2024 11:30

Sample ID: 24J3835-08

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	25000	1000	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Benzene	ND	500	72	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Bromochloromethane	ND	500	160	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Bromodichloromethane	ND	250	93	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Bromoform	ND	500	150	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Bromomethane	ND	1000	740	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
2-Butanone (MEK)	ND	10000	710	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
n-Butylbenzene	ND	500	78	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
sec-Butylbenzene	ND	500	82	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
tert-Butylbenzene	ND	500	83	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Carbon Disulfide	ND	2500	760	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Carbon Tetrachloride	ND	2500	97	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Chlorobenzene	ND	500	89	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Chlorodibromomethane	ND	250	64	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Chloroethane	ND	1000	230	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Chloroform	ND	1000	95	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Chloromethane	ND	1000	250	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Cyclohexane	ND	2500	880	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	2500	310	µg/L	500	V-05	SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,2-Dibromoethane (EDB)	ND	250	63	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,2-Dichlorobenzene	ND	500	87	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,3-Dichlorobenzene	ND	500	77	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,4-Dichlorobenzene	ND	500	84	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Dichlorodifluoromethane (Freon 12)	ND	1000	100	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,1-Dichloroethane	ND	500	75	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,2-Dichloroethane	ND	500	63	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,1-Dichloroethylene	ND	500	90	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
cis-1,2-Dichloroethylene	53000	500	100	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
trans-1,2-Dichloroethylene	120	500	78	µg/L	500	J	SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,2-Dichloropropane	ND	500	85	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
cis-1,3-Dichloropropene	ND	250	64	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
trans-1,3-Dichloropropene	ND	250	72	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Ethylbenzene	ND	500	68	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
2-Hexanone (MBK)	ND	5000	670	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Isopropylbenzene (Cumene)	ND	500	78	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
p-Isopropyltoluene (p-Cymene)	ND	500	78	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Methyl Acetate	ND	500	240	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Methyl tert-Butyl Ether (MTBE)	ND	500	84	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Methyl Cyclohexane	ND	500	67	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Methylene Chloride	ND	2500	95	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
4-Methyl-2-pentanone (MIBK)	ND	5000	680	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Naphthalene	ND	1000	120	µg/L	500	V-05	SW-846 8260D	10/28/24	10/29/24 19:39	MFF
n-Propylbenzene	ND	500	55	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Styrene	ND	500	64	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: DUP | Sampled: 10/21/2024 11:30

Sample ID: 24J3835-08

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	250	51	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Tetrachloroethylene	ND	500	83	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Toluene	ND	500	57	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,2,3-Trichlorobenzene	ND	2500	110	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,2,4-Trichlorobenzene	ND	500	97	µg/L	500	V-05	SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,1,1-Trichloroethane	ND	500	70	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,1,2-Trichloroethane	ND	500	91	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Trichloroethylene	400	500	83	µg/L	500	J	SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Trichlorofluoromethane (Freon 11)	ND	1000	71	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,2,3-Trichloropropane	ND	1000	130	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	500	79	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,2,4-Trimethylbenzene	ND	500	78	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
1,3,5-Trimethylbenzene	ND	500	85	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Vinyl Chloride	27000	1000	97	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
m+p Xylene	ND	1000	120	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
o-Xylene	ND	500	78	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF
Xylenes (total)	ND	500	500	µg/L	500		SW-846 8260D	10/28/24	10/29/24 19:39	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	101	70-130		10/29/24 19:39
Toluene-d8	98.2	70-130		10/29/24 19:39
4-Bromofluorobenzene	89.7	70-130		10/29/24 19:39

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: DUP | Sampled: 10/21/2024 11:30

Sample ID: 24J3835-08

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.0	2.2	ng/L	1	PF-18	Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.43	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorohexanoic acid (PFHxA)	1.3	0.99	0.24	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluoroheptanoic acid (PFHpA)	0.91	0.99	0.26	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorooctanoic acid (PFOA)	3.7	0.99	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorononanoic acid (PFNA)	0.64	0.99	0.19	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorodecanoic acid (PFDA)	ND	0.99	0.21	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluoroundecanoic acid (PFUnA)	ND	0.99	0.20	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorododecanoic acid (PFDoA)	ND	0.99	0.20	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorotridecanoic acid (PFTrDA)	ND	0.99	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	0.99	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorobutanesulfonic acid (PFBS)	ND	0.99	0.21	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	0.99	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorohexanesulfonic acid (PFHxS)	0.55	0.99	0.28	ng/L	1	J	Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.99	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorooctanesulfonic acid (PFOS)	23	0.99	0.38	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorononanesulfonic acid (PFNS)	ND	0.99	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorodecanesulfonic acid (PFDS)	ND	0.99	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	0.99	0.29	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.74	ng/L	1	PF-18	Draft Method 1633	11/4/24	11/6/24 21:41	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	3.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluorooctanesulfonamide (PFOSA)	ND	0.99	0.23	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.99	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.99	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
N-MeFOSAA (NMeFOSAA)	ND	0.99	0.36	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
N-EtFOSAA (NEtFOSAA)	ND	0.99	0.40	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.9	2.7	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.9	2.7	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.82	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.96	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
11Cl-PF3OUdS (F53B Major)	ND	4.0	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.9	2.2	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	11	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	9.4	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: DUP | Sampled: 10/21/2024 11:30

Sample ID: 24J3835-08

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.54	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.55	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:41	AB

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	**8.50**	*	10-130	PF-18	11/6/24 21:41
13C5-PFPeA	52.9		35-150		11/6/24 21:41
13C5-PFHxA	74.0		55-150		11/6/24 21:41
13C4-PFHpA	76.4		55-150		11/6/24 21:41
13C8-PFOA	76.3		60-140		11/6/24 21:41
13C9-PFNA	73.2		55-140		11/6/24 21:41
13C6-PFDA	76.5		50-140		11/6/24 21:41
13C7-PFUnA	73.8		30-140		11/6/24 21:41
13C2-PFDoA	74.9		10-150		11/6/24 21:41
13C2-PFTeDA	70.2		10-130		11/6/24 21:41
13C3-PFBS	80.2		55-150		11/6/24 21:41
13C3-PFHxS	77.9		55-150		11/6/24 21:41
13C8-PFOS	71.1		45-140		11/6/24 21:41
13C2-4:2FTS	**222**	*	60-200	PF-18	11/6/24 21:41
13C2-6:2FTS	184		60-200		11/6/24 21:41
13C2-8:2FTS	139		50-200		11/6/24 21:41
13C8-PFOSA	63.3		30-130		11/6/24 21:41
D3-NMeFOSA	58.2		15-130		11/6/24 21:41
D5-NEtFOSA	57.8		10-130		11/6/24 21:41
D3-NMeFOSAA	91.4		45-200		11/6/24 21:41
D5-NEtFOSAA	91.5		10-200		11/6/24 21:41
D7-NMeFOSE	63.2		10-150		11/6/24 21:41
D9-NEtFOSE	61.6		10-150		11/6/24 21:41
13C3-HFPO-DA	64.4		25-160		11/6/24 21:41

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: DUP | Sampled: 10/21/2024 11:30

Sample ID: 24J3835-08

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	88	10	10	mg/L	1	H-01	Draft Method 1633	10/30/24	10/30/24 12:47	ll

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: TRIP BLANK | Sampled: 10/23/2024 15:40

Sample ID: 24J3835-09

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Bromoform	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1	V-05	SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
2-Hexanone (MBK)	ND	10	1.3	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Methyl Acetate	ND	1.0	0.48	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Naphthalene	ND	2.0	0.25	µg/L	1	V-05	SW-846 8260D	10/28/24	10/29/24 12:31	MFF
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: TRIP BLANK | Sampled: 10/23/2024 15:40

Sample ID: 24J3835-09

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1	V-05	SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Vinyl Chloride	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	10/28/24	10/29/24 12:31	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	109	70-130		10/29/24 12:31
Toluene-d8	101	70-130		10/29/24 12:31
4-Bromofluorobenzene	91.4	70-130		10/29/24 12:31

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: EQUIPMENT BLANK | Sampled: 10/21/2024 00:00

Sample ID: 24J3835-10

Sample Matrix: Equipment Blank Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	5.3	2.9	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluoropentanoic acid (PFPeA)	ND	2.6	0.57	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorohexanoic acid (PFHxA)	ND	1.3	0.32	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluoroheptanoic acid (PFHpA)	ND	1.3	0.35	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorooctanoic acid (PFOA)	ND	1.3	0.35	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorononanoic acid (PFNA)	ND	1.3	0.25	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorodecanoic acid (PFDA)	ND	1.3	0.27	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluoroundecanoic acid (PFUnA)	ND	1.3	0.27	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorododecanoic acid (PFDoA)	ND	1.3	0.26	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorotridecanoic acid (PFTrDA)	ND	1.3	0.39	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorotetradecanoic acid (PFTeDA)	ND	1.3	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorobutanesulfonic acid (PFBS)	ND	1.3	0.28	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluoropentanesulfonic acid (PFPeS)	ND	1.3	0.34	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorohexanesulfonic acid (PFHxS)	ND	1.3	0.37	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.3	0.44	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorooctanesulfonic acid (PFOS)	ND	1.3	0.51	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorononanesulfonic acid (PFNS)	ND	1.3	0.33	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorodecanesulfonic acid (PFDS)	ND	1.3	0.38	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorododecanesulfonic acid (PFDoS)	ND	1.3	0.38	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	5.3	0.99	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	5.3	4.0	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	5.3	1.5	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluorooctanesulfonamide (PFOSA)	ND	1.3	0.31	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.3	0.43	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.3	0.45	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
N-MeFOSAA (NMeFOSAA)	ND	1.3	0.47	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
N-EtFOSAA (NEtFOSAA)	ND	1.3	0.53	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	13	3.6	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	13	3.5	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	5.3	1.4	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	5.3	1.1	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
9Cl-PF3ONS (F53B Minor)	ND	5.3	1.3	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
11Cl-PF3OUdS (F53B Major)	ND	5.3	1.4	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	13	2.9	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	66	15	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	66	13	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.6	0.46	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.6	0.73	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: EQUIPMENT BLANK | Sampled: 10/21/2024 00:00

Sample ID: 24J3835-10

Sample Matrix: Equipment Blank Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.6	0.71	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.6	0.73	ng/L	1		Draft Method 1633	11/4/24	11/6/24 21:57	AB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	82.9	10-130		11/6/24 21:57
13C5-PFPeA	76.5	35-150		11/6/24 21:57
13C5-PFHxA	74.4	55-150		11/6/24 21:57
13C4-PFHpA	70.3	55-150		11/6/24 21:57
13C8-PFOA	77.9	60-140		11/6/24 21:57
13C9-PFNA	73.6	55-140		11/6/24 21:57
13C6-PFDA	77.7	50-140		11/6/24 21:57
13C7-PFUnA	73.9	30-140		11/6/24 21:57
13C2-PFDoA	72.5	10-150		11/6/24 21:57
13C2-PFTeDA	67.6	10-130		11/6/24 21:57
13C3-PFBS	85.5	55-150		11/6/24 21:57
13C3-PFHxS	77.7	55-150		11/6/24 21:57
13C8-PFOS	76.4	45-140		11/6/24 21:57
13C2-4:2FTS	91.5	60-200		11/6/24 21:57
13C2-6:2FTS	83.4	60-200		11/6/24 21:57
13C2-8:2FTS	73.1	50-200		11/6/24 21:57
13C8-PFOSA	62.7	30-130		11/6/24 21:57
D3-NMeFOSA	58.7	15-130		11/6/24 21:57
D5-NEtFOSA	62.2	10-130		11/6/24 21:57
D3-NMeFOSAA	78.3	45-200		11/6/24 21:57
D5-NEtFOSAA	70.3	10-200		11/6/24 21:57
D7-NMeFOSE	65.3	10-150		11/6/24 21:57
D9-NEtFOSE	64.0	10-150		11/6/24 21:57
13C3-HFPO-DA	81.6	25-160		11/6/24 21:57

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24J3835

Date Received: 10/25/2024

Field Sample #: EQUIPMENT BLANK | Sampled: 10/21/2024 00:00

Sample ID: 24J3835-10

Sample Matrix: Equipment Blank Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1		Draft Method 1633	10/28/24	10/28/24 11:10	LL

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Sample Extraction Data

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
24J3835-10 [EQUIPMENT BLANK]	B390662	50.0	10/28/24

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
24J3835-01 [MW-2]	B390768	50.0	10/30/24
24J3835-02 [MW-3]	B390768	50.0	10/30/24
24J3835-03 [MW-4]	B390768	50.0	10/30/24
24J3835-05 [MW-11R]	B390768	50.0	10/30/24
24J3835-08 [DUP]	B390768	50.0	10/30/24

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
24J3835-04 [MW-9R]	B390903	50.0	10/31/24
24J3835-06 [MW-12]	B390903	50.0	10/31/24
24J3835-07 [MW-13]	B390903	50.0	10/31/24

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633** **Leachates were extracted on 10/30/2024 per NO PREP in Batch B390768**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24J3835-01 [MW-2]	B391310	485	5.00	11/04/24
24J3835-02 [MW-3]	B391310	492	5.00	11/04/24
24J3835-03 [MW-4]	B391310	500	5.00	11/04/24
24J3835-04 [MW-9R]	B391310	494	5.00	11/04/24
24J3835-05 [MW-11R]	B391310	514	5.00	11/04/24
24J3835-06 [MW-12]	B391310	536	5.00	11/04/24
24J3835-07 [MW-13]	B391310	517	5.00	11/04/24
24J3835-08 [DUP]	B391310	504	5.00	11/04/24
24J3835-10 [EQUIPMENT BLANK]	B391310	378	5.00	11/04/24

Prep Method:SW-846 5030B **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24J3835-01 [MW-2]	B390686	0.01	5.00	10/28/24
24J3835-02 [MW-3]	B390686	1	5.00	10/28/24
24J3835-04 [MW-9R]	B390686	0.25	5.00	10/28/24
24J3835-05 [MW-11R]	B390686	0.05	5.00	10/28/24
24J3835-06 [MW-12]	B390686	0.1	5.00	10/28/24
24J3835-07 [MW-13]	B390686	0.1	5.00	10/28/24
24J3835-08 [DUP]	B390686	0.01	5.00	10/28/24
24J3835-09 [TRIP BLANK]	B390686	5	5.00	10/28/24

Prep Method:SW-846 5030B **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24J3835-03 [MW-4]	B390914	0.025	5.00	10/30/24

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B390686 - SW-846 5030B										
Blank (B390686-BLK1)				Prepared: 10/28/24 Analyzed: 10/29/24						
Acetone	ND	50	µg/L							
Benzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							V-05
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							V-05
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B390686 - SW-846 5030B											
Blank (B390686-BLK1)				Prepared: 10/28/24 Analyzed: 10/29/24							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L								
1,2,3-Trichloropropane	ND	2.0	µg/L								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L								
1,2,4-Trimethylbenzene	ND	1.0	µg/L								
1,3,5-Trimethylbenzene	ND	1.0	µg/L								
Vinyl Chloride	ND	2.0	µg/L								
m+p Xylene	ND	2.0	µg/L								
o-Xylene	ND	1.0	µg/L								
Xylenes (total)	ND	1.0	µg/L								
Surrogate: 1,2-Dichloroethane-d4	*26.7*		µg/L	25.00		107	70-130				
Surrogate: Toluene-d8	*24.5*		µg/L	25.00		98.2	70-130				
Surrogate: 4-Bromofluorobenzene	*23.8*		µg/L	25.00		95.0	70-130				
LCS (B390686-BS1)				Prepared: 10/28/24 Analyzed: 10/29/24							
Acetone	96.8	50	µg/L	100.0		96.8	70-160				†
Benzene	10.8	1.0	µg/L	10.00		108	70-130				
Bromochloromethane	12.1	1.0	µg/L	10.00		121	70-130				
Bromodichloromethane	11.2	0.50	µg/L	10.00		112	70-130				
Bromoform	8.71	1.0	µg/L	10.00		87.1	70-130				
Bromomethane	13.0	2.0	µg/L	10.00		130	40-160			V-20	†
2-Butanone (MEK)	102	20	µg/L	100.0		102	40-160				†
n-Butylbenzene	9.65	1.0	µg/L	10.00		96.5	70-130				
sec-Butylbenzene	9.86	1.0	µg/L	10.00		98.6	70-130				
tert-Butylbenzene	9.89	1.0	µg/L	10.00		98.9	70-130				
Carbon Disulfide	96.5	5.0	µg/L	100.0		96.5	70-130				
Carbon Tetrachloride	10.1	5.0	µg/L	10.00		101	70-130				
Chlorobenzene	11.3	1.0	µg/L	10.00		113	70-130				
Chlorodibromomethane	10.6	0.50	µg/L	10.00		106	70-130				
Chloroethane	10.1	2.0	µg/L	10.00		101	70-130				
Chloroform	11.0	2.0	µg/L	10.00		110	70-130				
Chloromethane	12.0	2.0	µg/L	10.00		120	40-160			V-20	†
Cyclohexane	10.8	5.0	µg/L	10.00		108	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	7.71	5.0	µg/L	10.00		77.1	70-130			V-05	
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.00		110	70-130				
1,2-Dichlorobenzene	10.9	1.0	µg/L	10.00		109	70-130				
1,3-Dichlorobenzene	10.8	1.0	µg/L	10.00		108	70-130				
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.00		104	70-130				
Dichlorodifluoromethane (Freon 12)	9.84	2.0	µg/L	10.00		98.4	40-160				†
1,1-Dichloroethane	10.7	1.0	µg/L	10.00		107	70-130				
1,2-Dichloroethane	12.0	1.0	µg/L	10.00		120	70-130				
1,1-Dichloroethylene	10.4	1.0	µg/L	10.00		104	70-130				
cis-1,2-Dichloroethylene	10.9	1.0	µg/L	10.00		109	70-130				
trans-1,2-Dichloroethylene	10.3	1.0	µg/L	10.00		103	70-130				
1,2-Dichloropropane	11.1	1.0	µg/L	10.00		111	70-130				
cis-1,3-Dichloropropene	10.6	0.50	µg/L	10.00		106	70-130				
trans-1,3-Dichloropropene	10.2	0.50	µg/L	10.00		102	70-130				
Ethylbenzene	11.2	1.0	µg/L	10.00		112	70-130				
2-Hexanone (MBK)	93.8	10	µg/L	100.0		93.8	70-160				†
Isopropylbenzene (Cumene)	10.7	1.0	µg/L	10.00		107	70-130				
p-Isopropyltoluene (p-Cymene)	10.1	1.0	µg/L	10.00		101	70-130				
Methyl Acetate	13.6	1.0	µg/L	10.00		**136**	70-130	*		L-02, V-20	
Methyl tert-Butyl Ether (MTBE)	9.75	1.0	µg/L	10.00		97.5	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B390686 - SW-846 5030B											
LCS (B390686-BS1)				Prepared: 10/28/24 Analyzed: 10/29/24							
Methyl Cyclohexane	11.3	1.0	µg/L	10.00		113	70-130				
Methylene Chloride	10.4	5.0	µg/L	10.00		104	70-130				
4-Methyl-2-pentanone (MIBK)	99.8	10	µg/L	100.0		99.8	70-160				†
Naphthalene	5.80	2.0	µg/L	10.00		58.0	40-130			V-05	†
n-Propylbenzene	10.8	1.0	µg/L	10.00		108	70-130				
Styrene	10.4	1.0	µg/L	10.00		104	70-130				
1,1,2,2-Tetrachloroethane	10.1	0.50	µg/L	10.00		101	70-130				
Tetrachloroethylene	12.1	1.0	µg/L	10.00		121	70-130				
Toluene	11.7	1.0	µg/L	10.00		117	70-130				
1,2,3-Trichlorobenzene	9.39	5.0	µg/L	10.00		93.9	70-130				
1,2,4-Trichlorobenzene	8.53	1.0	µg/L	10.00		85.3	70-130			V-05	
1,1,1-Trichloroethane	10.6	1.0	µg/L	10.00		106	70-130				
1,1,2-Trichloroethane	11.5	1.0	µg/L	10.00		115	70-130				
Trichloroethylene	11.0	1.0	µg/L	10.00		110	70-130				
Trichlorofluoromethane (Freon 11)	11.0	2.0	µg/L	10.00		110	70-130				
1,2,3-Trichloropropane	11.5	2.0	µg/L	10.00		115	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.5	1.0	µg/L	10.00		105	70-130				
1,2,4-Trimethylbenzene	10.2	1.0	µg/L	10.00		102	70-130				
1,3,5-Trimethylbenzene	11.0	1.0	µg/L	10.00		110	70-130				
Vinyl Chloride	10.2	2.0	µg/L	10.00		102	40-160				†
m+p Xylene	22.5	2.0	µg/L	20.00		112	70-130				
o-Xylene	10.8	1.0	µg/L	10.00		108	70-130				
Xylenes (total)	33.2	1.0	µg/L	30.00		111	0-200				
Surrogate: 1,2-Dichloroethane-d4	*25.1*		µg/L	25.00		100	70-130				
Surrogate: Toluene-d8	*26.6*		µg/L	25.00		106	70-130				
Surrogate: 4-Bromofluorobenzene	*25.0*		µg/L	25.00		99.8	70-130				
LCS Dup (B390686-BSD1)				Prepared: 10/28/24 Analyzed: 10/29/24							
Acetone	105	50	µg/L	100.0		105	70-160	8.50	25		†
Benzene	11.0	1.0	µg/L	10.00		110	70-130	2.48	25		
Bromochloromethane	11.6	1.0	µg/L	10.00		116	70-130	4.73	25		
Bromodichloromethane	10.8	0.50	µg/L	10.00		108	70-130	4.19	25		
Bromoform	8.73	1.0	µg/L	10.00		87.3	70-130	0.229	25		
Bromomethane	13.1	2.0	µg/L	10.00		131	40-160	1.23	25	V-20	†
2-Butanone (MEK)	103	20	µg/L	100.0		103	40-160	0.847	25		†
n-Butylbenzene	9.15	1.0	µg/L	10.00		91.5	70-130	5.32	25		
sec-Butylbenzene	9.81	1.0	µg/L	10.00		98.1	70-130	0.508	25		
tert-Butylbenzene	9.76	1.0	µg/L	10.00		97.6	70-130	1.32	25		
Carbon Disulfide	99.7	5.0	µg/L	100.0		99.7	70-130	3.23	25		
Carbon Tetrachloride	10.4	5.0	µg/L	10.00		104	70-130	3.01	25		
Chlorobenzene	10.9	1.0	µg/L	10.00		109	70-130	3.06	25		
Chlorodibromomethane	10.0	0.50	µg/L	10.00		100	70-130	5.15	25		
Chloroethane	10.7	2.0	µg/L	10.00		107	70-130	5.48	25		
Chloroform	10.8	2.0	µg/L	10.00		108	70-130	1.38	25		
Chloromethane	12.0	2.0	µg/L	10.00		120	40-160	0.167	25	V-20	†
Cyclohexane	9.88	5.0	µg/L	10.00		98.8	70-130	8.90	25		
1,2-Dibromo-3-chloropropane (DBCP)	8.12	5.0	µg/L	10.00		81.2	70-130	5.18	25	V-05	
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.00		102	70-130	7.44	25		
1,2-Dichlorobenzene	10.7	1.0	µg/L	10.00		107	70-130	1.86	25		
1,3-Dichlorobenzene	10.6	1.0	µg/L	10.00		106	70-130	1.77	25		
1,4-Dichlorobenzene	9.56	1.0	µg/L	10.00		95.6	70-130	8.13	25		
Dichlorodifluoromethane (Freon 12)	10.2	2.0	µg/L	10.00		102	40-160	3.79	25		†

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B390686 - SW-846 5030B												
LCS Dup (B390686-BSD1)				Prepared: 10/28/24 Analyzed: 10/29/24								
1,1-Dichloroethane	11.4	1.0	µg/L	10.00		114		70-130	6.44	25		
1,2-Dichloroethane	11.2	1.0	µg/L	10.00		112		70-130	6.53	25		
1,1-Dichloroethylene	10.7	1.0	µg/L	10.00		107		70-130	2.47	25		
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.00		106		70-130	2.60	25		
trans-1,2-Dichloroethylene	10.8	1.0	µg/L	10.00		108		70-130	4.84	25		
1,2-Dichloropropane	10.2	1.0	µg/L	10.00		102		70-130	8.56	25		
cis-1,3-Dichloropropene	10.2	0.50	µg/L	10.00		102		70-130	3.46	25		
trans-1,3-Dichloropropene	9.72	0.50	µg/L	10.00		97.2		70-130	5.21	25		
Ethylbenzene	10.6	1.0	µg/L	10.00		106		70-130	4.78	25		
2-Hexanone (MBK)	95.4	10	µg/L	100.0		95.4		70-160	1.64	25		†
Isopropylbenzene (Cumene)	9.94	1.0	µg/L	10.00		99.4		70-130	7.18	25		
p-Isopropyltoluene (p-Cymene)	10.1	1.0	µg/L	10.00		101		70-130	0.0990	25		
Methyl Acetate	15.8	1.0	µg/L	10.00		**158**	*	70-130	14.4	25	L-02, V-20	
Methyl tert-Butyl Ether (MTBE)	10.7	1.0	µg/L	10.00		107		70-130	9.38	25		
Methyl Cyclohexane	11.0	1.0	µg/L	10.00		110		70-130	2.42	25		
Methylene Chloride	10.8	5.0	µg/L	10.00		108		70-130	3.69	25		
4-Methyl-2-pentanone (MIBK)	97.4	10	µg/L	100.0		97.4		70-160	2.46	25		†
Naphthalene	4.61	2.0	µg/L	10.00		46.1		40-130	22.9	25	V-05	†
n-Propylbenzene	10.2	1.0	µg/L	10.00		102		70-130	6.48	25		
Styrene	9.59	1.0	µg/L	10.00		95.9		70-130	8.01	25		
1,1,2,2-Tetrachloroethane	9.71	0.50	µg/L	10.00		97.1		70-130	4.23	25		
Tetrachloroethylene	11.5	1.0	µg/L	10.00		115		70-130	4.92	25		
Toluene	11.0	1.0	µg/L	10.00		110		70-130	5.81	25		
1,2,3-Trichlorobenzene	8.71	5.0	µg/L	10.00		87.1		70-130	7.51	25		
1,2,4-Trichlorobenzene	7.88	1.0	µg/L	10.00		78.8		70-130	7.92	25	V-05	
1,1,1-Trichloroethane	10.6	1.0	µg/L	10.00		106		70-130	0.0944	25		
1,1,2-Trichloroethane	10.6	1.0	µg/L	10.00		106		70-130	8.32	25		
Trichloroethylene	10.8	1.0	µg/L	10.00		108		70-130	1.92	25		
Trichlorofluoromethane (Freon 11)	11.5	2.0	µg/L	10.00		115		70-130	4.25	25		
1,2,3-Trichloropropane	11.4	2.0	µg/L	10.00		114		70-130	1.49	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.3	1.0	µg/L	10.00		113		70-130	6.88	25		
1,2,4-Trimethylbenzene	10.1	1.0	µg/L	10.00		101		70-130	0.691	25		
1,3,5-Trimethylbenzene	10.3	1.0	µg/L	10.00		103		70-130	7.04	25		
Vinyl Chloride	10.2	2.0	µg/L	10.00		102		40-160	0.784	25		†
m+p Xylene	21.2	2.0	µg/L	20.00		106		70-130	5.54	25		
o-Xylene	10.3	1.0	µg/L	10.00		103		70-130	4.37	25		
Xylenes (total)	31.5	1.0	µg/L	30.00		105		0-200	5.16			
Surrogate: 1,2-Dichloroethane-d4	*25.6*		µg/L	25.00		102		70-130				
Surrogate: Toluene-d8	*25.8*		µg/L	25.00		103		70-130				
Surrogate: 4-Bromofluorobenzene	*24.2*		µg/L	25.00		96.8		70-130				
Batch B390914 - SW-846 5030B												
Blank (B390914-BLK1)				Prepared: 10/30/24 Analyzed: 10/31/24								
Acetone	ND	50	µg/L									
Benzene	ND	1.0	µg/L									
Bromochloromethane	ND	1.0	µg/L									
Bromodichloromethane	ND	0.50	µg/L									
Bromoform	ND	1.0	µg/L									
Bromomethane	ND	2.0	µg/L									
2-Butanone (MEK)	ND	20	µg/L									
n-Butylbenzene	ND	1.0	µg/L									

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B390914 - SW-846 5030B										
Blank (B390914-BLK1)				Prepared: 10/30/24 Analyzed: 10/31/24						
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							V-05
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B390914 - SW-846 5030B											
Blank (B390914-BLK1)				Prepared: 10/30/24 Analyzed: 10/31/24							
o-Xylene	ND	1.0	µg/L								
Xylenes (total)	ND	1.0	µg/L								
Surrogate: 1,2-Dichloroethane-d4	*24.8*		µg/L	25.00		99.2	70-130				
Surrogate: Toluene-d8	*24.7*		µg/L	25.00		98.8	70-130				
Surrogate: 4-Bromofluorobenzene	*23.2*		µg/L	25.00		92.7	70-130				
LCS (B390914-BS1)				Prepared: 10/30/24 Analyzed: 10/31/24							
Acetone	108	50	µg/L	100.0		108	70-160				†
Benzene	11.2	1.0	µg/L	10.00		112	70-130				
Bromochloromethane	12.4	1.0	µg/L	10.00		124	70-130				
Bromodichloromethane	11.1	0.50	µg/L	10.00		111	70-130				
Bromoform	8.66	1.0	µg/L	10.00		86.6	70-130				
Bromomethane	14.2	2.0	µg/L	10.00		142	40-160				†
2-Butanone (MEK)	113	20	µg/L	100.0		113	40-160				†
n-Butylbenzene	9.38	1.0	µg/L	10.00		93.8	70-130				
sec-Butylbenzene	9.69	1.0	µg/L	10.00		96.9	70-130				
tert-Butylbenzene	9.67	1.0	µg/L	10.00		96.7	70-130				
Carbon Disulfide	100	5.0	µg/L	100.0		100	70-130				
Carbon Tetrachloride	10.9	5.0	µg/L	10.00		109	70-130				
Chlorobenzene	11.0	1.0	µg/L	10.00		110	70-130				
Chlorodibromomethane	10.5	0.50	µg/L	10.00		105	70-130				
Chloroethane	10.7	2.0	µg/L	10.00		107	70-130				
Chloroform	11.0	2.0	µg/L	10.00		110	70-130				
Chloromethane	11.8	2.0	µg/L	10.00		118	40-160				†
Cyclohexane	10.1	5.0	µg/L	10.00		101	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	8.36	5.0	µg/L	10.00		83.6	70-130			V-05	
1,2-Dibromoethane (EDB)	10.8	0.50	µg/L	10.00		108	70-130				
1,2-Dichlorobenzene	10.8	1.0	µg/L	10.00		108	70-130				
1,3-Dichlorobenzene	10.6	1.0	µg/L	10.00		106	70-130				
1,4-Dichlorobenzene	9.78	1.0	µg/L	10.00		97.8	70-130				
Dichlorodifluoromethane (Freon 12)	10.3	2.0	µg/L	10.00		103	40-160				†
1,1-Dichloroethane	11.2	1.0	µg/L	10.00		112	70-130				
1,2-Dichloroethane	11.5	1.0	µg/L	10.00		115	70-130				
1,1-Dichloroethylene	11.2	1.0	µg/L	10.00		112	70-130				
cis-1,2-Dichloroethylene	11.6	1.0	µg/L	10.00		116	70-130				
trans-1,2-Dichloroethylene	10.9	1.0	µg/L	10.00		109	70-130				
1,2-Dichloropropane	10.4	1.0	µg/L	10.00		104	70-130				
cis-1,3-Dichloropropene	10.4	0.50	µg/L	10.00		104	70-130				
trans-1,3-Dichloropropene	9.91	0.50	µg/L	10.00		99.1	70-130				
Ethylbenzene	10.4	1.0	µg/L	10.00		104	70-130				
2-Hexanone (MBK)	92.5	10	µg/L	100.0		92.5	70-160				†
Isopropylbenzene (Cumene)	10.1	1.0	µg/L	10.00		101	70-130				
p-Isopropyltoluene (p-Cymene)	9.78	1.0	µg/L	10.00		97.8	70-130				
Methyl Acetate	15.2	1.0	µg/L	10.00		**152**	* 70-130			L-02, V-20	
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	µg/L	10.00		106	70-130				
Methyl Cyclohexane	10.6	1.0	µg/L	10.00		106	70-130				
Methylene Chloride	11.3	5.0	µg/L	10.00		113	70-130				
4-Methyl-2-pentanone (MIBK)	102	10	µg/L	100.0		102	70-160				†
Naphthalene	5.82	2.0	µg/L	10.00		58.2	40-130			V-05	†
n-Propylbenzene	10.1	1.0	µg/L	10.00		101	70-130				
Styrene	9.90	1.0	µg/L	10.00		99.0	70-130				
1,1,2,2-Tetrachloroethane	10.2	0.50	µg/L	10.00		102	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B390914 - SW-846 5030B											
LCS (B390914-BS1)				Prepared: 10/30/24 Analyzed: 10/31/24							
Tetrachloroethylene	11.2	1.0	µg/L	10.00		112	70-130				
Toluene	11.1	1.0	µg/L	10.00		111	70-130				
1,2,3-Trichlorobenzene	9.27	5.0	µg/L	10.00		92.7	70-130				
1,2,4-Trichlorobenzene	8.30	1.0	µg/L	10.00		83.0	70-130				
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.00		110	70-130				
1,1,2-Trichloroethane	11.1	1.0	µg/L	10.00		111	70-130				
Trichloroethylene	10.7	1.0	µg/L	10.00		107	70-130				
Trichlorofluoromethane (Freon 11)	11.6	2.0	µg/L	10.00		116	70-130				
1,2,3-Trichloropropane	11.2	2.0	µg/L	10.00		112	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.8	1.0	µg/L	10.00		108	70-130				
1,2,4-Trimethylbenzene	9.80	1.0	µg/L	10.00		98.0	70-130				
1,3,5-Trimethylbenzene	10.4	1.0	µg/L	10.00		104	70-130				
Vinyl Chloride	10.8	2.0	µg/L	10.00		108	40-160				†
m+p Xylene	20.5	2.0	µg/L	20.00		102	70-130				
o-Xylene	10.3	1.0	µg/L	10.00		103	70-130				
Xylenes (total)	30.7	1.0	µg/L	30.00		102	0-200				
Surrogate: 1,2-Dichloroethane-d4	*26.0*		µg/L	25.00		104	70-130				
Surrogate: Toluene-d8	*26.2*		µg/L	25.00		105	70-130				
Surrogate: 4-Bromofluorobenzene	*25.0*		µg/L	25.00		100	70-130				
LCS Dup (B390914-BSD1)				Prepared: 10/30/24 Analyzed: 10/31/24							
Acetone	98.3	50	µg/L	100.0		98.3	70-160	9.08	25		†
Benzene	11.1	1.0	µg/L	10.00		111	70-130	0.990	25		
Bromochloromethane	12.2	1.0	µg/L	10.00		122	70-130	1.71	25		
Bromodichloromethane	11.1	0.50	µg/L	10.00		111	70-130	0.541	25		
Bromoform	8.54	1.0	µg/L	10.00		85.4	70-130	1.40	25		
Bromomethane	13.2	2.0	µg/L	10.00		132	40-160	7.33	25		†
2-Butanone (MEK)	104	20	µg/L	100.0		104	40-160	7.96	25		†
n-Butylbenzene	9.72	1.0	µg/L	10.00		97.2	70-130	3.56	25		
sec-Butylbenzene	10.1	1.0	µg/L	10.00		101	70-130	4.44	25		
tert-Butylbenzene	9.84	1.0	µg/L	10.00		98.4	70-130	1.74	25		
Carbon Disulfide	96.4	5.0	µg/L	100.0		96.4	70-130	3.77	25		
Carbon Tetrachloride	10.5	5.0	µg/L	10.00		105	70-130	3.65	25		
Chlorobenzene	11.1	1.0	µg/L	10.00		111	70-130	0.815	25		
Chlorodibromomethane	10.5	0.50	µg/L	10.00		105	70-130	0.0950	25		
Chloroethane	10.4	2.0	µg/L	10.00		104	70-130	2.18	25		
Chloroform	11.1	2.0	µg/L	10.00		111	70-130	0.992	25		
Chloromethane	11.3	2.0	µg/L	10.00		113	40-160	4.40	25		†
Cyclohexane	10.8	5.0	µg/L	10.00		108	70-130	6.71	25		
1,2-Dibromo-3-chloropropane (DBCP)	7.96	5.0	µg/L	10.00		79.6	70-130	4.90	25	V-05	
1,2-Dibromoethane (EDB)	10.5	0.50	µg/L	10.00		105	70-130	2.82	25		
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.00		104	70-130	3.77	25		
1,3-Dichlorobenzene	10.7	1.0	µg/L	10.00		107	70-130	0.658	25		
1,4-Dichlorobenzene	9.96	1.0	µg/L	10.00		99.6	70-130	1.82	25		
Dichlorodifluoromethane (Freon 12)	9.68	2.0	µg/L	10.00		96.8	40-160	5.82	25		†
1,1-Dichloroethane	10.6	1.0	µg/L	10.00		106	70-130	4.95	25		
1,2-Dichloroethane	11.6	1.0	µg/L	10.00		116	70-130	0.867	25		
1,1-Dichloroethylene	10.8	1.0	µg/L	10.00		108	70-130	3.55	25		
cis-1,2-Dichloroethylene	10.7	1.0	µg/L	10.00		107	70-130	8.13	25		
trans-1,2-Dichloroethylene	10.2	1.0	µg/L	10.00		102	70-130	6.54	25		
1,2-Dichloropropane	11.0	1.0	µg/L	10.00		110	70-130	5.33	25		
cis-1,3-Dichloropropene	10.5	0.50	µg/L	10.00		105	70-130	1.05	25		

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B390914 - SW-846 5030B												
LCS Dup (B390914-BSD1)				Prepared: 10/30/24 Analyzed: 10/31/24								
trans-1,3-Dichloropropene	9.80	0.50	µg/L	10.00		98.0		70-130	1.12	25		
Ethylbenzene	10.7	1.0	µg/L	10.00		107		70-130	3.22	25		
2-Hexanone (MBK)	97.7	10	µg/L	100.0		97.7		70-160	5.42	25		†
Isopropylbenzene (Cumene)	10.4	1.0	µg/L	10.00		104		70-130	3.41	25		
p-Isopropyltoluene (p-Cymene)	10.2	1.0	µg/L	10.00		102		70-130	4.40	25		
Methyl Acetate	14.1	1.0	µg/L	10.00		**141**	*	70-130	7.66	25	L-02, V-20	
Methyl tert-Butyl Ether (MTBE)	10.0	1.0	µg/L	10.00		100		70-130	5.23	25		
Methyl Cyclohexane	11.0	1.0	µg/L	10.00		110		70-130	3.52	25		
Methylene Chloride	10.6	5.0	µg/L	10.00		106		70-130	6.58	25		
4-Methyl-2-pentanone (MIBK)	100	10	µg/L	100.0		100		70-160	1.49	25		†
Naphthalene	5.69	2.0	µg/L	10.00		56.9		40-130	2.26	25	V-05	†
n-Propylbenzene	10.5	1.0	µg/L	10.00		105		70-130	4.18	25		
Styrene	10.2	1.0	µg/L	10.00		102		70-130	2.49	25		
1,1,2,2-Tetrachloroethane	10.2	0.50	µg/L	10.00		102		70-130	0.490	25		
Tetrachloroethylene	11.6	1.0	µg/L	10.00		116		70-130	3.67	25		
Toluene	11.3	1.0	µg/L	10.00		113		70-130	1.87	25		
1,2,3-Trichlorobenzene	9.49	5.0	µg/L	10.00		94.9		70-130	2.35	25		
1,2,4-Trichlorobenzene	8.83	1.0	µg/L	10.00		88.3		70-130	6.19	25		
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.00		108		70-130	1.19	25		
1,1,2-Trichloroethane	11.1	1.0	µg/L	10.00		111		70-130	0.0898	25		
Trichloroethylene	11.2	1.0	µg/L	10.00		112		70-130	4.56	25		
Trichlorofluoromethane (Freon 11)	11.1	2.0	µg/L	10.00		111		70-130	4.50	25		
1,2,3-Trichloropropane	11.2	2.0	µg/L	10.00		112		70-130	0.446	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.8	1.0	µg/L	10.00		108		70-130	0.556	25		
1,2,4-Trimethylbenzene	9.97	1.0	µg/L	10.00		99.7		70-130	1.72	25		
1,3,5-Trimethylbenzene	10.7	1.0	µg/L	10.00		107		70-130	2.85	25		
Vinyl Chloride	10.7	2.0	µg/L	10.00		107		40-160	0.930	25		†
m+p Xylene	21.6	2.0	µg/L	20.00		108		70-130	5.65	25		
o-Xylene	10.5	1.0	µg/L	10.00		105		70-130	2.02	25		
Xylenes (total)	32.1	1.0	µg/L	30.00		107		0-200	4.45			
Surrogate: 1,2-Dichloroethane-d4	*24.9*		µg/L	25.00		99.4		70-130				
Surrogate: Toluene-d8	*26.1*		µg/L	25.00		104		70-130				
Surrogate: 4-Bromofluorobenzene	*25.1*		µg/L	25.00		100		70-130				
Matrix Spike (B390914-MS1)		**Source: 24J3835-03**		Prepared: 10/30/24 Analyzed: 10/31/24								
Acetone	19700	10000	µg/L	20000	ND	98.6		70-130				
Benzene	2230	200	µg/L	2000	ND	112		70-130				
Bromochloromethane	2560	200	µg/L	2000	ND	128		70-130				
Bromodichloromethane	2380	100	µg/L	2000	ND	119		70-130				
Bromoform	1740	200	µg/L	2000	ND	86.9		70-130				
Bromomethane	2990	400	µg/L	2000	ND	**150**	*	70-130			MS-15	
2-Butanone (MEK)	20800	4000	µg/L	20000	ND	104		70-130				
n-Butylbenzene	1560	200	µg/L	2000	ND	78.1		70-130				
sec-Butylbenzene	1810	200	µg/L	2000	ND	90.6		70-130				
tert-Butylbenzene	1820	200	µg/L	2000	ND	90.9		70-130				
Carbon Disulfide	20400	1000	µg/L	20000	ND	102		70-130				
Carbon Tetrachloride	2190	1000	µg/L	2000	ND	109		70-130				
Chlorobenzene	2220	200	µg/L	2000	ND	111		70-130				
Chlorodibromomethane	2150	100	µg/L	2000	ND	108		70-130				
Chloroethane	2340	400	µg/L	2000	ND	117		70-130				
Chloroform	2330	400	µg/L	2000	ND	116		70-130				
Chloromethane	2600	400	µg/L	2000	ND	130		70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B390914 - SW-846 5030B											
Matrix Spike (B390914-MS1)	**Source: 24J3835-03**			Prepared: 10/30/24 Analyzed: 10/31/24							
Cyclohexane	2200	1000	µg/L	2000	ND	110		70-130			
1,2-Dibromo-3-chloropropane (DBCP)	1410	1000	µg/L	2000	ND	70.3		70-130			V-05
1,2-Dibromoethane (EDB)	2110	100	µg/L	2000	ND	106		70-130			
1,2-Dichlorobenzene	2020	200	µg/L	2000	ND	101		70-130			
1,3-Dichlorobenzene	1950	200	µg/L	2000	ND	97.6		70-130			
1,4-Dichlorobenzene	1800	200	µg/L	2000	ND	89.9		70-130			
Dichlorodifluoromethane (Freon 12)	2150	400	µg/L	2000	ND	108		70-130			
1,1-Dichloroethane	2290	200	µg/L	2000	ND	115		70-130			
1,2-Dichloroethane	2470	200	µg/L	2000	ND	124		70-130			
1,1-Dichloroethylene	2290	200	µg/L	2000	ND	114		70-130			
cis-1,2-Dichloroethylene	3310	200	µg/L	2000	946	118		70-130			
trans-1,2-Dichloroethylene	2160	200	µg/L	2000	ND	108		70-130			
1,2-Dichloropropane	2230	200	µg/L	2000	ND	112		70-130			
cis-1,3-Dichloropropene	1930	100	µg/L	2000	ND	96.6		70-130			
trans-1,3-Dichloropropene	1840	100	µg/L	2000	ND	92.2		70-130			
Ethylbenzene	2070	200	µg/L	2000	ND	104		70-130			
2-Hexanone (MBK)	17400	2000	µg/L	20000	ND	86.8		70-130			
Isopropylbenzene (Cumene)	1920	200	µg/L	2000	ND	95.8		70-130			
p-Isopropyltoluene (p-Cymene)	1820	200	µg/L	2000	ND	90.8		70-130			
Methyl Acetate	3040	200	µg/L	2000	ND	**152**	*	70-130			L-02, MS-15, V-20
Methyl tert-Butyl Ether (MTBE)	1940	200	µg/L	2000	ND	96.8		70-130			
Methyl Cyclohexane	2200	200	µg/L	2000	ND	110		70-130			
Methylene Chloride	2260	1000	µg/L	2000	ND	113		70-130			
4-Methyl-2-pentanone (MIBK)	19000	2000	µg/L	20000	ND	94.9		70-130			
Naphthalene	482	400	µg/L	2000	ND	**24.1**	*	70-130			MS-07A, R-06, V-05
n-Propylbenzene	1940	200	µg/L	2000	ND	97.0		70-130			
Styrene	1890	200	µg/L	2000	ND	94.3		70-130			
1,1,2,2-Tetrachloroethane	1970	100	µg/L	2000	ND	98.6		70-130			
Tetrachloroethylene	2380	200	µg/L	2000	ND	119		70-130			
Toluene	2360	200	µg/L	2000	ND	118		70-130			
1,2,3-Trichlorobenzene	1200	1000	µg/L	2000	ND	**59.8**	*	70-130			MS-24
1,2,4-Trichlorobenzene	1080	200	µg/L	2000	ND	**54.1**	*	70-130			MS-07A
1,1,1-Trichloroethane	2290	200	µg/L	2000	ND	115		70-130			
1,1,2-Trichloroethane	2310	200	µg/L	2000	ND	116		70-130			
Trichloroethylene	21700	200	µg/L	2000	18800	**149**	*	70-130			MS-24
Trichlorofluoromethane (Freon 11)	2440	400	µg/L	2000	ND	122		70-130			
1,2,3-Trichloropropane	2110	400	µg/L	2000	ND	105		70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	2200	200	µg/L	2000	ND	110		70-130			
1,2,4-Trimethylbenzene	1850	200	µg/L	2000	ND	92.5		70-130			
1,3,5-Trimethylbenzene	2010	200	µg/L	2000	ND	100		70-130			
Vinyl Chloride	2140	400	µg/L	2000	ND	107		70-130			
m+p Xylene	4110	400	µg/L	4000	ND	103		70-130			
o-Xylene	1980	200	µg/L	2000	ND	98.8		70-130			
Xylenes (total)	6080	200	µg/L	6000	ND	101		0-200			
Surrogate: 1,2-Dichloroethane-d4	*25.3*		µg/L	25.00		101		70-130			
Surrogate: Toluene-d8	*27.0*		µg/L	25.00		108		70-130			
Surrogate: 4-Bromofluorobenzene	*23.8*		µg/L	25.00		95.2		70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B390914 - SW-846 5030B												
Matrix Spike Dup (B390914-MSD1)	**Source: 24J3835-03**			Prepared: 10/30/24 Analyzed: 10/31/24								
Acetone	19200	10000	µg/L	20000	ND	95.8		70-130	2.94		30	
Benzene	2250	200	µg/L	2000	ND	112		70-130	0.893		30	
Bromochloromethane	2470	200	µg/L	2000	ND	124		70-130	3.42		30	
Bromodichloromethane	2410	100	µg/L	2000	ND	120		70-130	1.17		30	
Bromoform	1800	200	µg/L	2000	ND	90.0		70-130	3.50		30	
Bromomethane	2900	400	µg/L	2000	ND	**145**	*	70-130	3.26		30	MS-15
2-Butanone (MEK)	20200	4000	µg/L	20000	ND	101		70-130	3.15		30	
n-Butylbenzene	1800	200	µg/L	2000	ND	89.8		70-130	13.9		30	
sec-Butylbenzene	1960	200	µg/L	2000	ND	98.0		70-130	7.85		30	
tert-Butylbenzene	1890	200	µg/L	2000	ND	94.6		70-130	3.99		30	
Carbon Disulfide	19700	1000	µg/L	20000	ND	98.7		70-130	3.21		30	
Carbon Tetrachloride	2250	1000	µg/L	2000	ND	112		70-130	2.71		30	
Chlorobenzene	2300	200	µg/L	2000	ND	115		70-130	3.72		30	
Chlorodibromomethane	2220	100	µg/L	2000	ND	111		70-130	3.29		30	
Chloroethane	2190	400	µg/L	2000	ND	110		70-130	6.79		30	
Chloroform	2310	400	µg/L	2000	ND	116		70-130	0.603		30	
Chloromethane	2300	400	µg/L	2000	ND	115		70-130	11.9		30	
Cyclohexane	2180	1000	µg/L	2000	ND	109		70-130	1.01		30	
1,2-Dibromo-3-chloropropane (DBCP)	1530	1000	µg/L	2000	ND	76.4		70-130	8.32		30	V-05
1,2-Dibromoethane (EDB)	2170	100	µg/L	2000	ND	109		70-130	2.71		30	
1,2-Dichlorobenzene	2080	200	µg/L	2000	ND	104		70-130	3.22		30	
1,3-Dichlorobenzene	2130	200	µg/L	2000	ND	107		70-130	8.91		30	
1,4-Dichlorobenzene	2170	200	µg/L	2000	ND	108		70-130	18.7		30	
Dichlorodifluoromethane (Freon 12)	1800	400	µg/L	2000	ND	89.9		70-130	18.0		30	
1,1-Dichloroethane	2280	200	µg/L	2000	ND	114		70-130	0.612		30	
1,2-Dichloroethane	2500	200	µg/L	2000	ND	125		70-130	1.05		30	
1,1-Dichloroethylene	2240	200	µg/L	2000	ND	112		70-130	1.85		30	
cis-1,2-Dichloroethylene	3180	200	µg/L	2000	946	112		70-130	3.94		30	
trans-1,2-Dichloroethylene	2140	200	µg/L	2000	ND	107		70-130	0.929		30	
1,2-Dichloropropane	2320	200	µg/L	2000	ND	116		70-130	3.60		30	
cis-1,3-Dichloropropene	2020	100	µg/L	2000	ND	101		70-130	4.55		30	
trans-1,3-Dichloropropene	1920	100	µg/L	2000	ND	96.0		70-130	4.04		30	
Ethylbenzene	2170	200	µg/L	2000	ND	108		70-130	4.43		30	
2-Hexanone (MBK)	18600	2000	µg/L	20000	ND	92.8		70-130	6.66		30	
Isopropylbenzene (Cumene)	2000	200	µg/L	2000	ND	99.8		70-130	4.09		30	
p-Isopropyltoluene (p-Cymene)	1880	200	µg/L	2000	ND	93.9		70-130	3.36		30	
Methyl Acetate	2730	200	µg/L	2000	ND	**136**	*	70-130	10.9		30	L-02, MS-15, V-20
Methyl tert-Butyl Ether (MTBE)	1920	200	µg/L	2000	ND	96.0		70-130	0.830		30	
Methyl Cyclohexane	2110	200	µg/L	2000	ND	105		70-130	4.27		30	
Methylene Chloride	2220	1000	µg/L	2000	ND	111		70-130	2.05		30	
4-Methyl-2-pentanone (MIBK)	19600	2000	µg/L	20000	ND	97.8		70-130	2.93		30	
Naphthalene	750	400	µg/L	2000	ND	**37.5**	*	70-130	**43.5**	*	30	MS-07A, R-06, V-05
n-Propylbenzene	2060	200	µg/L	2000	ND	103		70-130	5.90		30	
Styrene	2000	200	µg/L	2000	ND	100		70-130	5.87		30	
1,1,2,2-Tetrachloroethane	2050	100	µg/L	2000	ND	102		70-130	3.88		30	
Tetrachloroethylene	2390	200	µg/L	2000	ND	120		70-130	0.587		30	
Toluene	2450	200	µg/L	2000	ND	122		70-130	3.83		30	
1,2,3-Trichlorobenzene	1540	1000	µg/L	2000	ND	77.0		70-130	25.1		30	
1,2,4-Trichlorobenzene	1330	200	µg/L	2000	ND	**66.7**	*	70-130	20.9		30	MS-07A
1,1,1-Trichloroethane	2280	200	µg/L	2000	ND	114		70-130	0.788		30	
1,1,2-Trichloroethane	2420	200	µg/L	2000	ND	121		70-130	4.40		30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B390914 - SW-846 5030B										
Matrix Spike Dup (B390914-MSD1)		**Source: 24J3835-03**		Prepared: 10/30/24 Analyzed: 10/31/24						
Trichloroethylene	20800	200	µg/L	2000	18800	99.7	70-130	4.62	30	
Trichlorofluoromethane (Freon 11)	2300	400	µg/L	2000	ND	115	70-130	6.24	30	
1,2,3-Trichloropropane	2140	400	µg/L	2000	ND	107	70-130	1.41	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	2020	200	µg/L	2000	ND	101	70-130	8.44	30	
1,2,4-Trimethylbenzene	1940	200	µg/L	2000	ND	97.1	70-130	4.85	30	
1,3,5-Trimethylbenzene	2060	200	µg/L	2000	ND	103	70-130	2.46	30	
Vinyl Chloride	2080	400	µg/L	2000	ND	104	70-130	3.13	30	
m+p Xylene	4320	400	µg/L	4000	ND	108	70-130	5.13	20	
o-Xylene	2050	200	µg/L	2000	ND	102	70-130	3.68	30	
Xylenes (total)	6370	200	µg/L	6000	ND	106	0-200	4.66		
Surrogate: 1,2-Dichloroethane-d4	*24.2*		µg/L	25.00		97.0	70-130			
Surrogate: Toluene-d8	*27.0*		µg/L	25.00		108	70-130			
Surrogate: 4-Bromofluorobenzene	*24.9*		µg/L	25.00		99.5	70-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391310 - Draft Method 1633										
Blank (B391310-BLK1)				Prepared: 11/04/24 Analyzed: 11/05/24						
Perfluorobutanoic acid (PFBA)	ND	3.9	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.98	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.98	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.98	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.98	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.98	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.98	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.98	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.98	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.98	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.98	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.98	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.98	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.98	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.98	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.98	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.98	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.98	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.98	ng/L							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.98	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.98	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.98	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.98	ng/L							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.8	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.8	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	3.9	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	3.9	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.8	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L							
Surrogate: 13C4-PFBA	*87.7*		ng/L	98.09		89.4	10-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391310 - Draft Method 1633										
Blank (B391310-BLK1)				Prepared: 11/04/24 Analyzed: 11/05/24						
Surrogate: 13C5-PFPeA	*37.6*		ng/L	49.04		76.6	35-150			
Surrogate: 13C5-PFHxA	*18.5*		ng/L	24.52		75.3	55-150			
Surrogate: 13C4-PFHpA	*17.0*		ng/L	24.52		69.2	55-150			
Surrogate: 13C8-PFOA	*18.8*		ng/L	24.52		76.8	60-140			
Surrogate: 13C9-PFNA	*9.31*		ng/L	12.26		75.9	55-140			
Surrogate: 13C6-PFDA	*10.0*		ng/L	12.26		81.7	50-140			
Surrogate: 13C7-PFUnA	*9.95*		ng/L	12.26		81.2	30-140			
Surrogate: 13C2-PFDoA	*9.55*		ng/L	12.26		77.9	10-150			
Surrogate: 13C2-PFTeDA	*9.17*		ng/L	12.26		74.8	10-130			
Surrogate: 13C3-PFBS	*23.0*		ng/L	24.52		93.7	55-150			
Surrogate: 13C3-PFHxS	*19.7*		ng/L	24.52		80.4	55-150			
Surrogate: 13C8-PFOS	*17.7*		ng/L	24.52		72.2	45-140			
Surrogate: 13C2-4:2FTS	*46.2*		ng/L	49.04		94.1	60-200			
Surrogate: 13C2-6:2FTS	*42.8*		ng/L	49.04		87.2	60-200			
Surrogate: 13C2-8:2FTS	*41.4*		ng/L	49.04		84.4	50-200			
Surrogate: 13C8-PFOSA	*16.1*		ng/L	24.52		65.6	30-130			
Surrogate: D3-NMeFOSA	*14.9*		ng/L	24.52		60.8	15-130			
Surrogate: D5-NEtFOSA	*15.8*		ng/L	24.52		64.3	10-130			
Surrogate: D3-NMeFOSAA	*37.8*		ng/L	49.04		77.2	45-200			
Surrogate: D5-NEtFOSAA	*38.4*		ng/L	49.04		78.2	10-200			
Surrogate: D7-NMeFOSE	*170*		ng/L	245.2		69.3	10-150			
Surrogate: D9-NEtFOSE	*165*		ng/L	245.2		67.4	10-150			
Surrogate: 13C3-HFPO-DA	*82.3*		ng/L	98.09		83.9	25-160			
LCS (B391310-BS1)				Prepared: 11/04/24 Analyzed: 11/05/24						
Perfluorobutanoic acid (PFBA)	95.8	3.9	ng/L	94.12		102	58-148			
Perfluoropentanoic acid (PFPeA)	47.9	2.0	ng/L	47.06		102	54-152			
Perfluorohexanoic acid (PFHxA)	25.5	0.98	ng/L	23.53		108	55-152			
Perfluoroheptanoic acid (PFHpA)	24.7	0.98	ng/L	23.53		105	54-154			
Perfluorooctanoic acid (PFOA)	24.4	0.98	ng/L	23.53		104	52-161			
Perfluorononanoic acid (PFNA)	24.7	0.98	ng/L	23.53		105	59-149			
Perfluorodecanoic acid (PFDA)	23.3	0.98	ng/L	23.53		98.9	52-147			
Perfluoroundecanoic acid (PFUnA)	23.9	0.98	ng/L	23.53		102	48-159			
Perfluorododecanoic acid (PFDoA)	24.7	0.98	ng/L	23.53		105	64-142			
Perfluorotridecanoic acid (PFTrDA)	24.2	0.98	ng/L	23.53		103	49-148			
Perfluorotetradecanoic acid (PFTeDA)	25.8	0.98	ng/L	23.53		110	47-161			
Perfluorobutanesulfonic acid (PFBS)	21.5	0.98	ng/L	20.87		103	62-144			
Perfluoropentanesulfonic acid (PFPeS)	23.6	0.98	ng/L	22.14		106	59-151			
Perfluorohexanesulfonic acid (PFHxS)	26.2	0.98	ng/L	21.51		122	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	23.4	0.98	ng/L	22.42		104	55-152			
Perfluorooctanesulfonic acid (PFOS)	27.1	0.98	ng/L	21.84		124	58-149			
Perfluorononanesulfonic acid (PFNS)	22.7	0.98	ng/L	22.64		100	52-148			
Perfluorodecanesulfonic acid (PFDS)	22.0	0.98	ng/L	22.71		96.8	51-147			
Perfluorododecanesulfonic acid (PFDoS)	21.3	0.98	ng/L	22.82		93.4	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	100	3.9	ng/L	88.24		113	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	99.5	3.9	ng/L	89.42		111	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	103	3.9	ng/L	90.36		114	63-152			
Perfluorooctanesulfonamide (PFOSA)	24.4	0.98	ng/L	23.53		104	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	23.9	0.98	ng/L	23.53		102	63-145			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391310 - Draft Method 1633										
LCS (B391310-BS1)				Prepared: 11/04/24 Analyzed: 11/05/24						
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	22.5	0.98	ng/L	23.53		95.8	65-139			
N-MeFOSAA (NMeFOSAA)	29.7	0.98	ng/L	23.53		126	58-144			
N-EtFOSAA (NEtFOSAA)	26.5	0.98	ng/L	23.53		113	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	244	9.8	ng/L	235.3		104	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	246	9.8	ng/L	235.3		105	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	93.4	3.9	ng/L	94.12		99.3	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	77.4	3.9	ng/L	88.94		87.0	68-146			
9Cl-PF3ONS (F53B Minor)	73.3	3.9	ng/L	88.00		83.3	56-156			
11Cl-PF3OUdS (F53B Major)	75.5	3.9	ng/L	88.94		84.9	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	223	9.8	ng/L	235.3		94.9	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1120	49	ng/L	1177		95.2	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1040	49	ng/L	1177		88.4	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	44.7	2.0	ng/L	41.88		107	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	45.7	2.0	ng/L	47.06		97.0	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	47.4	2.0	ng/L	47.06		101	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	53.9	2.0	ng/L	47.06		114	48-161			
Surrogate: 13C4-PFBA	*80.5*		ng/L	98.04		82.2	10-130			
Surrogate: 13C5-PFPeA	*38.8*		ng/L	49.02		79.2	35-150			
Surrogate: 13C5-PFHxA	*18.5*		ng/L	24.51		75.5	55-150			
Surrogate: 13C4-PFHpA	*18.3*		ng/L	24.51		74.5	55-150			
Surrogate: 13C8-PFOA	*20.1*		ng/L	24.51		82.1	60-140			
Surrogate: 13C9-PFNA	*9.80*		ng/L	12.26		80.0	55-140			
Surrogate: 13C6-PFDA	*10.4*		ng/L	12.26		84.7	50-140			
Surrogate: 13C7-PFUnA	*9.68*		ng/L	12.26		78.9	30-140			
Surrogate: 13C2-PFDoA	*8.94*		ng/L	12.26		72.9	10-150			
Surrogate: 13C2-PFTeDA	*8.89*		ng/L	12.26		72.6	10-130			
Surrogate: 13C3-PFBS	*21.3*		ng/L	24.51		86.8	55-150			
Surrogate: 13C3-PFHxS	*19.7*		ng/L	24.51		80.2	55-150			
Surrogate: 13C8-PFOS	*19.6*		ng/L	24.51		79.8	45-140			
Surrogate: 13C2-4:2FTS	*42.6*		ng/L	49.02		87.0	60-200			
Surrogate: 13C2-6:2FTS	*40.8*		ng/L	49.02		83.2	60-200			
Surrogate: 13C2-8:2FTS	*38.0*		ng/L	49.02		77.6	50-200			
Surrogate: 13C8-PFOSA	*17.4*		ng/L	24.51		71.0	30-130			
Surrogate: D3-NMeFOSA	*15.4*		ng/L	24.51		62.9	15-130			
Surrogate: D5-NEtFOSA	*16.4*		ng/L	24.51		67.0	10-130			
Surrogate: D3-NMeFOSAA	*40.3*		ng/L	49.02		82.3	45-200			
Surrogate: D5-NEtFOSAA	*39.2*		ng/L	49.02		80.1	10-200			
Surrogate: D7-NMeFOSE	*178*		ng/L	245.1		72.7	10-150			
Surrogate: D9-NEtFOSE	*177*		ng/L	245.1		72.1	10-150			
Surrogate: 13C3-HFPO-DA	*85.9*		ng/L	98.04		87.7	25-160			
MRL Check (B391310-MRL1)				Prepared: 11/04/24 Analyzed: 11/05/24						
Perfluorobutanoic acid (PFBA)	8.83	3.9	ng/L	7.841		113	44-157			
Perfluoropentanoic acid (PFPeA)	4.49	2.0	ng/L	3.920		115	57-148			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391310 - Draft Method 1633										
MRL Check (B391310-MRL1)				Prepared: 11/04/24 Analyzed: 11/05/24						
Perfluorohexanoic acid (PFHxA)	2.38	0.98	ng/L	1.960		122	62-149			
Perfluoroheptanoic acid (PFHpA)	2.19	0.98	ng/L	1.960		112	56-150			
Perfluorooctanoic acid (PFOA)	2.38	0.98	ng/L	1.960		121	57-161			
Perfluorononanoic acid (PFNA)	2.05	0.98	ng/L	1.960		105	53-157			
Perfluorodecanoic acid (PFDA)	2.25	0.98	ng/L	1.960		115	43-158			
Perfluoroundecanoic acid (PFUnA)	2.07	0.98	ng/L	1.960		105	50-155			
Perfluorododecanoic acid (PFDoA)	2.17	0.98	ng/L	1.960		111	60-141			
Perfluorotridecanoic acid (PFTrDA)	2.19	0.98	ng/L	1.960		112	52-140			
Perfluorotetradecanoic acid (PFTeDA)	2.33	0.98	ng/L	1.960		119	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.98	0.98	ng/L	1.739		114	63-145			
Perfluoropentanesulfonic acid (PFPeS)	2.13	0.98	ng/L	1.844		116	58-144			
Perfluorohexanesulfonic acid (PFHxS)	2.60	0.98	ng/L	1.792		145	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	2.37	0.98	ng/L	1.868		127	51-150			
Perfluorooctanesulfonic acid (PFOS)	2.75	0.98	ng/L	1.819		151	43-162			
Perfluorononanesulfonic acid (PFNS)	2.21	0.98	ng/L	1.886		117	46-151			
Perfluorodecanesulfonic acid (PFDS)	2.27	0.98	ng/L	1.892		120	50-144			
Perfluorododecanesulfonic acid (PFDoS)	2.00	0.98	ng/L	1.901		105	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	9.43	3.9	ng/L	7.350		128	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	9.64	3.9	ng/L	7.448		129	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	8.62	3.9	ng/L	7.527		115	46-165			
Perfluorooctanesulfonamide (PFOSA)	2.23	0.98	ng/L	1.960		114	47-163			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.11	0.98	ng/L	1.960		108	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.20	0.98	ng/L	1.960		112	49-156			
N-MeFOSAA (NMeFOSAA)	3.04	0.98	ng/L	1.960		155	32-160			
N-EtFOSAA (NEtFOSAA)	2.29	0.98	ng/L	1.960		117	51-154			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	22.7	9.8	ng/L	19.60		116	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	23.0	9.8	ng/L	19.60		117	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.30	3.9	ng/L	7.841		106	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	6.41	3.9	ng/L	7.409		86.5	61-148			
9Cl-PF3ONS (F53B Minor)	6.58	3.9	ng/L	7.331		89.7	44-167			
11Cl-PF3OUdS (F53B Major)	6.26	3.9	ng/L	7.409		84.4	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	17.1	9.8	ng/L	19.60		87.4	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	88.0	49	ng/L	98.01		89.8	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	78.6	49	ng/L	98.01		80.2	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.73	2.0	ng/L	3.489		107	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.65	2.0	ng/L	3.920		93.1	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.83	2.0	ng/L	3.920		97.8	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.61	2.0	ng/L	3.920		118	47-160			
Surrogate: 13C4-PFBA	*83.9*		ng/L	98.01		85.6	10-130			
Surrogate: 13C5-PFPeA	*39.5*		ng/L	49.00		80.6	35-150			
Surrogate: 13C5-PFHxA	*18.9*		ng/L	24.50		77.1	55-150			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391310 - Draft Method 1633										
MRL Check (B391310-MRL1)				Prepared: 11/04/24 Analyzed: 11/05/24						
Surrogate: 13C4-PFHpA	*18.0*		ng/L	24.50		73.7	55-150			
Surrogate: 13C8-PFOA	*19.5*		ng/L	24.50		79.4	60-140			
Surrogate: 13C9-PFNA	*10.0*		ng/L	12.25		81.7	55-140			
Surrogate: 13C6-PFDA	*10.3*		ng/L	12.25		83.7	50-140			
Surrogate: 13C7-PFUnA	*10.4*		ng/L	12.25		84.9	30-140			
Surrogate: 13C2-PFDoA	*10.4*		ng/L	12.25		85.0	10-150			
Surrogate: 13C2-PFTeDA	*9.93*		ng/L	12.25		81.0	10-130			
Surrogate: 13C3-PFBS	*22.3*		ng/L	24.50		90.9	55-150			
Surrogate: 13C3-PFHxS	*20.2*		ng/L	24.50		82.4	55-150			
Surrogate: 13C8-PFOS	*19.3*		ng/L	24.50		78.7	45-140			
Surrogate: 13C2-4:2FTS	*46.5*		ng/L	49.00		95.0	60-200			
Surrogate: 13C2-6:2FTS	*43.1*		ng/L	49.00		87.9	60-200			
Surrogate: 13C2-8:2FTS	*44.4*		ng/L	49.00		90.6	50-200			
Surrogate: 13C8-PFOSA	*18.9*		ng/L	24.50		77.0	30-130			
Surrogate: D3-NMeFOSA	*18.9*		ng/L	24.50		77.3	15-130			
Surrogate: D5-NEtFOSA	*19.3*		ng/L	24.50		78.8	10-130			
Surrogate: D3-NMeFOSAA	*42.8*		ng/L	49.00		87.3	45-200			
Surrogate: D5-NEtFOSAA	*45.3*		ng/L	49.00		92.4	10-200			
Surrogate: D7-NMeFOSE	*228*		ng/L	245.0		93.0	10-150			
Surrogate: D9-NEtFOSE	*238*		ng/L	245.0		97.0	10-150			
Surrogate: 13C3-HFPO-DA	*85.7*		ng/L	98.01		87.4	25-160			
Matrix Spike (B391310-MS1)		**Source: 24J3835-03**		Prepared: 11/04/24 Analyzed: 11/06/24						
Perfluorobutanoic acid (PFBA)	86.2	3.9	ng/L	93.92	ND	91.8	58-148			
Perfluoropentanoic acid (PFPeA)	52.3	2.0	ng/L	46.96	ND	111	54-152			
Perfluorohexanoic acid (PFHxA)	26.5	0.98	ng/L	23.48	1.50	107	55-152			
Perfluoroheptanoic acid (PFHpA)	26.5	0.98	ng/L	23.48	0.902	109	54-154			
Perfluorooctanoic acid (PFOA)	27.1	0.98	ng/L	23.48	3.26	102	52-161			
Perfluorononanoic acid (PFNA)	25.0	0.98	ng/L	23.48	0.471	105	59-149			
Perfluorodecanoic acid (PFDA)	25.1	0.98	ng/L	23.48	ND	107	52-147			
Perfluoroundecanoic acid (PFUnA)	24.2	0.98	ng/L	23.48	ND	103	48-159			
Perfluorododecanoic acid (PFDoA)	23.3	0.98	ng/L	23.48	ND	99.3	64-142			
Perfluorotridecanoic acid (PFTrDA)	24.4	0.98	ng/L	23.48	ND	104	49-148			
Perfluorotetradecanoic acid (PFTeDA)	25.0	0.98	ng/L	23.48	ND	107	47-161			
Perfluorobutanesulfonic acid (PFBS)	21.6	0.98	ng/L	20.83	0.760	99.8	62-144			
Perfluoropentanesulfonic acid (PFPeS)	25.7	0.98	ng/L	22.09	ND	116	59-151			
Perfluorohexanesulfonic acid (PFHxS)	23.6	0.98	ng/L	21.46	1.76	102	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	24.1	0.98	ng/L	22.38	ND	108	55-152			
Perfluorooctanesulfonic acid (PFOS)	26.0	0.98	ng/L	21.79	3.28	104	58-149			
Perfluorononanesulfonic acid (PFNS)	22.4	0.98	ng/L	22.59	ND	99.4	52-148			
Perfluorodecanesulfonic acid (PFDS)	22.9	0.98	ng/L	22.66	ND	101	51-147			
Perfluorododecanesulfonic acid (PFDoS)	23.1	0.98	ng/L	22.77	ND	101	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	104	3.9	ng/L	88.05	ND	118	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	107	3.9	ng/L	89.22	ND	120	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	112	3.9	ng/L	90.16	ND	125	63-152			
Perfluorooctanesulfonamide (PFOSA)	24.6	0.98	ng/L	23.48	ND	105	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	25.0	0.98	ng/L	23.48	ND	107	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	24.4	0.98	ng/L	23.48	ND	104	65-139			
N-MeFOSAA (NMeFOSAA)	23.3	0.98	ng/L	23.48	ND	99.3	58-144			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B391310 - Draft Method 1633											
Matrix Spike (B391310-MS1)		**Source: 24J3835-03**		Prepared: 11/04/24 Analyzed: 11/06/24							
N-EtFOSAA (NEtFOSAA)	23.9	0.98	ng/L	23.48	ND	102		59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	259	9.8	ng/L	234.8	ND	110		71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	253	9.8	ng/L	234.8	ND	108		69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	96.5	3.9	ng/L	93.92	ND	103		63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	79.3	3.9	ng/L	88.75	ND	89.3		68-146			
9Cl-PF3ONS (F53B Minor)	78.4	3.9	ng/L	87.81	ND	89.3		56-156			
11Cl-PF3OUdS (F53B Major)	78.3	3.9	ng/L	88.75	ND	88.2		46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	181	9.8	ng/L	234.8	ND	76.9		62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1140	49	ng/L	1174	ND	96.7		63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1070	49	ng/L	1174	ND	91.5		50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	48.0	2.0	ng/L	41.79	ND	115		56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	18.3	2.0	ng/L	46.96	ND	**39.0**	*	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	52.2	2.0	ng/L	46.96	ND	111		55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	51.3	2.0	ng/L	46.96	ND	109		48-161			
Surrogate: 13C4-PFBA	*6.82*		ng/L	97.83		**6.97**	*	10-130			
Surrogate: 13C5-PFPeA	*31.1*		ng/L	48.92		63.5		35-150			
Surrogate: 13C5-PFHxA	*17.3*		ng/L	24.46		70.6		55-150			
Surrogate: 13C4-PFHpA	*15.5*		ng/L	24.46		63.4		55-150			
Surrogate: 13C8-PFOA	*17.9*		ng/L	24.46		73.3		60-140			
Surrogate: 13C9-PFNA	*8.94*		ng/L	12.23		73.1		55-140			
Surrogate: 13C6-PFDA	*9.15*		ng/L	12.23		74.8		50-140			
Surrogate: 13C7-PFUnA	*8.92*		ng/L	12.23		73.0		30-140			
Surrogate: 13C2-PFDoA	*8.82*		ng/L	12.23		72.1		10-150			
Surrogate: 13C2-PFTeDA	*8.75*		ng/L	12.23		71.6		10-130			
Surrogate: 13C3-PFBS	*20.7*		ng/L	24.46		84.5		55-150			
Surrogate: 13C3-PFHxS	*17.8*		ng/L	24.46		73.0		55-150			
Surrogate: 13C8-PFOS	*17.7*		ng/L	24.46		72.3		45-140			
Surrogate: 13C2-4:2FTS	*84.8*		ng/L	48.92		173		60-200			
Surrogate: 13C2-6:2FTS	*64.4*		ng/L	48.92		132		60-200			
Surrogate: 13C2-8:2FTS	*47.3*		ng/L	48.92		96.8		50-200			
Surrogate: 13C8-PFOSA	*15.4*		ng/L	24.46		63.0		30-130			
Surrogate: D3-NMeFOSA	*13.8*		ng/L	24.46		56.4		15-130			
Surrogate: D5-NEtFOSA	*14.6*		ng/L	24.46		59.6		10-130			
Surrogate: D3-NMeFOSAA	*43.8*		ng/L	48.92		89.5		45-200			
Surrogate: D5-NEtFOSAA	*39.9*		ng/L	48.92		81.5		10-200			
Surrogate: D7-NMeFOSE	*133*		ng/L	244.6		54.5		10-150			
Surrogate: D9-NEtFOSE	*141*		ng/L	244.6		57.6		10-150			
Surrogate: 13C3-HFPO-DA	*72.4*		ng/L	97.83		74.0		25-160			
Matrix Spike Dup (B391310-MSD1)		**Source: 24J3835-03**		Prepared: 11/04/24 Analyzed: 11/06/24							
Perfluorobutanoic acid (PFBA)	98.4	4.0	ng/L	95.92	ND	103		58-148	13.2	20	
Perfluoropentanoic acid (PFPeA)	53.8	2.0	ng/L	47.96	ND	112		54-152	2.85	20	
Perfluorohexanoic acid (PFHxA)	27.0	1.0	ng/L	23.98	1.50	106		55-152	1.88	25	
Perfluoroheptanoic acid (PFHpA)	26.1	1.0	ng/L	23.98	0.902	105		54-154	1.47	25	
Perfluorooctanoic acid (PFOA)	27.8	1.0	ng/L	23.98	3.26	102		52-161	2.34	25	

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B391310 - Draft Method 1633											
Matrix Spike Dup (B391310-MSD1)	**Source: 24J3835-03**			Prepared: 11/04/24 Analyzed: 11/06/24							
Perfluorononanoic acid (PFNA)	26.3	1.0	ng/L	23.98	0.471	108		59-149	5.16	25	
Perfluorodecanoic acid (PFDA)	24.6	1.0	ng/L	23.98	ND	103		52-147	1.81	25	
Perfluoroundecanoic acid (PFUnA)	25.1	1.0	ng/L	23.98	ND	105		48-159	3.84	30	
Perfluorododecanoic acid (PFDoA)	25.6	1.0	ng/L	23.98	ND	107		64-142	9.20	25	
Perfluorotridecanoic acid (PFTrDA)	26.1	1.0	ng/L	23.98	ND	109		49-148	6.50	25	
Perfluorotetradecanoic acid (PFTeDA)	24.8	1.0	ng/L	23.98	ND	103		47-161	0.914	25	
Perfluorobutanesulfonic acid (PFBS)	22.1	1.0	ng/L	21.27	0.760	100		62-144	2.44	20	
Perfluoropentanesulfonic acid (PFPeS)	25.7	1.0	ng/L	22.56	ND	114		59-151	0.325	25	
Perfluorohexanesulfonic acid (PFHxS)	24.3	1.0	ng/L	21.92	1.76	103		57-146	3.17	25	
Perfluoroheptanesulfonic acid (PFHpS)	25.1	1.0	ng/L	22.85	ND	110		55-152	4.15	25	
Perfluorooctanesulfonic acid (PFOS)	26.1	1.0	ng/L	22.25	3.28	102		58-149	0.344	20	
Perfluorononanesulfonic acid (PFNS)	22.9	1.0	ng/L	23.07	ND	99.4		52-148	2.16	25	
Perfluorodecanesulfonic acid (PFDS)	22.5	1.0	ng/L	23.14	ND	97.0		51-147	1.92	25	
Perfluorododecanesulfonic acid (PFDoS)	22.2	1.0	ng/L	23.26	ND	95.3		36-145	4.14	30	
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	105	4.0	ng/L	89.92	ND	117		67-146	1.30	25	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	110	4.0	ng/L	91.12	ND	121		61-151	2.81	30	
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	113	4.0	ng/L	92.08	ND	123		63-152	0.699	30	
Perfluorooctanesulfonamide (PFOSA)	24.5	1.0	ng/L	23.98	ND	102		61-148	0.392	20	
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	24.5	1.0	ng/L	23.98	ND	102		63-145	2.30	25	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	24.8	1.0	ng/L	23.98	ND	103		65-139	1.57	25	
N-MeFOSAA (NMeFOSAA)	24.5	1.0	ng/L	23.98	ND	102		58-144	5.03	25	
N-EtFOSAA (NEtFOSAA)	24.5	1.0	ng/L	23.98	ND	102		59-146	2.30	25	
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	256	10	ng/L	239.8	ND	107		71-136	1.38	20	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	254	10	ng/L	239.8	ND	106		69-137	0.513	25	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	98.8	4.0	ng/L	95.92	ND	103		63-144	2.26	25	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	82.6	4.0	ng/L	90.64	ND	91.2		68-146	4.15	20	
9Cl-PF3ONS (F53B Minor)	78.9	4.0	ng/L	89.68	ND	87.9		56-156	0.553	30	
11Cl-PF3OUdS (F53B Major)	77.3	4.0	ng/L	90.64	ND	85.3		46-156	1.24	35	
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	200	10	ng/L	239.8	ND	83.3		62-129	10.0	20	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1160	50	ng/L	1199	ND	96.6		63-134	1.98	20	
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1090	50	ng/L	1199	ND	90.6		50-138	1.11	25	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	49.4	2.0	ng/L	42.68	ND	116		56-151	2.90	20	
Perfluoro-3-methoxypropanoic acid (PFMPA)	23.3	2.0	ng/L	47.96	ND	**48.7**	*	51-145	24.1	25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	53.4	2.0	ng/L	47.96	ND	111		55-148	2.26	20	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	53.9	2.0	ng/L	47.96	ND	112		48-161	5.02	35	
Surrogate: 13C4-PFBA	*9.41*		ng/L	99.91		**9.41**	*	10-130			
Surrogate: 13C5-PFPeA	*32.3*		ng/L	49.96		64.7		35-150			
Surrogate: 13C5-PFHxA	*17.9*		ng/L	24.98		71.7		55-150			
Surrogate: 13C4-PFHpA	*16.1*		ng/L	24.98		64.6		55-150			
Surrogate: 13C8-PFOA	*18.4*		ng/L	24.98		73.6		60-140			
Surrogate: 13C9-PFNA	*8.94*		ng/L	12.49		71.6		55-140			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391310 - Draft Method 1633										
Matrix Spike Dup (B391310-MSD1)	**Source: 24J3835-03**			Prepared: 11/04/24 Analyzed: 11/06/24						
Surrogate: 13C6-PFDA	*9.48*		ng/L	12.49		75.9	50-140			
Surrogate: 13C7-PFUnA	*8.95*		ng/L	12.49		71.6	30-140			
Surrogate: 13C2-PFDoA	*8.34*		ng/L	12.49		66.8	10-150			
Surrogate: 13C2-PFTeDA	*8.41*		ng/L	12.49		67.4	10-130			
Surrogate: 13C3-PFBS	*21.2*		ng/L	24.98		84.9	55-150			
Surrogate: 13C3-PFHxS	*19.0*		ng/L	24.98		75.9	55-150			
Surrogate: 13C8-PFOS	*18.0*		ng/L	24.98		72.0	45-140			
Surrogate: 13C2-4:2FTS	*89.1*		ng/L	49.96		178	60-200			
Surrogate: 13C2-6:2FTS	*68.0*		ng/L	49.96		136	60-200			
Surrogate: 13C2-8:2FTS	*46.4*		ng/L	49.96		92.8	50-200			
Surrogate: 13C8-PFOSA	*15.2*		ng/L	24.98		60.7	30-130			
Surrogate: D3-NMeFOSA	*14.5*		ng/L	24.98		58.0	15-130			
Surrogate: D5-NEtFOSA	*15.0*		ng/L	24.98		60.1	10-130			
Surrogate: D3-NMeFOSAA	*42.6*		ng/L	49.96		85.2	45-200			
Surrogate: D5-NEtFOSAA	*39.2*		ng/L	49.96		78.5	10-200			
Surrogate: D7-NMeFOSE	*137*		ng/L	249.8		54.9	10-150			
Surrogate: D9-NEtFOSE	*147*		ng/L	249.8		58.9	10-150			
Surrogate: 13C3-HFPO-DA	*74.2*		ng/L	99.91		74.2	25-160			
Batch B391701 - Draft Method 1633										
Blank (B391701-BLK1)				Prepared: 11/08/24 Analyzed: 11/09/24						
Perfluorobutanoic acid (PFBA)	ND	3.9	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.98	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.98	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.98	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.98	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.98	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.98	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.98	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.98	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.98	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.98	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.98	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.98	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.98	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.98	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.98	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.98	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.98	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.98	ng/L							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.98	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.98	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.98	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.98	ng/L							

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391701 - Draft Method 1633										
Blank (B391701-BLK1)				Prepared: 11/08/24 Analyzed: 11/09/24						
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.8	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.8	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	3.9	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	3.9	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.8	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L							
Surrogate: 13C4-PFBA	*84.4*		ng/L	97.57		86.5	10-130			
Surrogate: 13C5-PFPeA	*41.8*		ng/L	48.78		85.8	35-150			
Surrogate: 13C5-PFHxA	*20.1*		ng/L	24.39		82.6	55-150			
Surrogate: 13C4-PFHpA	*19.2*		ng/L	24.39		78.7	55-150			
Surrogate: 13C8-PFOA	*20.3*		ng/L	24.39		83.3	60-140			
Surrogate: 13C9-PFNA	*9.69*		ng/L	12.20		79.4	55-140			
Surrogate: 13C6-PFDA	*10.6*		ng/L	12.20		87.0	50-140			
Surrogate: 13C7-PFUnA	*10.4*		ng/L	12.20		84.9	30-140			
Surrogate: 13C2-PFDoA	*10.4*		ng/L	12.20		85.1	10-150			
Surrogate: 13C2-PFTeDA	*10.9*		ng/L	12.20		89.3	10-130			
Surrogate: 13C3-PFBS	*24.6*		ng/L	24.39		101	55-150			
Surrogate: 13C3-PFHxS	*20.9*		ng/L	24.39		85.6	55-150			
Surrogate: 13C8-PFOS	*20.4*		ng/L	24.39		83.7	45-140			
Surrogate: 13C2-4:2FTS	*42.4*		ng/L	48.78		86.9	60-200			
Surrogate: 13C2-6:2FTS	*38.9*		ng/L	48.78		79.8	60-200			
Surrogate: 13C2-8:2FTS	*36.0*		ng/L	48.78		73.8	50-200			
Surrogate: 13C8-PFOSA	*17.4*		ng/L	24.39		71.4	30-130			
Surrogate: D3-NMeFOSA	*14.5*		ng/L	24.39		59.6	15-130			
Surrogate: D5-NEtFOSA	*16.1*		ng/L	24.39		66.1	10-130			
Surrogate: D3-NMeFOSAA	*38.0*		ng/L	48.78		78.0	45-200			
Surrogate: D5-NEtFOSAA	*36.9*		ng/L	48.78		75.7	10-200			
Surrogate: D7-NMeFOSE	*173*		ng/L	243.9		70.7	10-150			
Surrogate: D9-NEtFOSE	*166*		ng/L	243.9		68.0	10-150			
Surrogate: 13C3-HFPO-DA	*86.2*		ng/L	97.57		88.3	25-160			
LCS (B391701-BS1)				Prepared: 11/08/24 Analyzed: 11/09/24						
Perfluorobutanoic acid (PFBA)	108	3.9	ng/L	93.61		115	58-148			
Perfluoropentanoic acid (PFPeA)	52.2	2.0	ng/L	46.80		112	54-152			
Perfluorohexanoic acid (PFHxA)	26.4	0.98	ng/L	23.40		113	55-152			
Perfluoroheptanoic acid (PFHpA)	26.1	0.98	ng/L	23.40		112	54-154			
Perfluorooctanoic acid (PFOA)	25.7	0.98	ng/L	23.40		110	52-161			
Perfluorononanoic acid (PFNA)	26.1	0.98	ng/L	23.40		111	59-149			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391701 - Draft Method 1633										
LCS (B391701-BS1)				Prepared: 11/08/24 Analyzed: 11/09/24						
Perfluorodecanoic acid (PFDA)	25.0	0.98	ng/L	23.40		107	52-147			
Perfluoroundecanoic acid (PFUnA)	26.0	0.98	ng/L	23.40		111	48-159			
Perfluorododecanoic acid (PFDoA)	27.2	0.98	ng/L	23.40		116	64-142			
Perfluorotridecanoic acid (PFTrDA)	26.7	0.98	ng/L	23.40		114	49-148			
Perfluorotetradecanoic acid (PFTeDA)	27.4	0.98	ng/L	23.40		117	47-161			
Perfluorobutanesulfonic acid (PFBS)	22.6	0.98	ng/L	20.76		109	62-144			
Perfluoropentanesulfonic acid (PFPeS)	26.2	0.98	ng/L	22.02		119	59-151			
Perfluorohexanesulfonic acid (PFHxS)	24.4	0.98	ng/L	21.39		114	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	25.3	0.98	ng/L	22.30		113	55-152			
Perfluorooctanesulfonic acid (PFOS)	25.1	0.98	ng/L	21.72		115	58-149			
Perfluorononanesulfonic acid (PFNS)	25.3	0.98	ng/L	22.51		112	52-148			
Perfluorodecanesulfonic acid (PFDS)	27.6	0.98	ng/L	22.58		122	51-147			
Perfluorododecanesulfonic acid (PFDoS)	27.0	0.98	ng/L	22.70		119	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	116	3.9	ng/L	87.76		133	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	119	3.9	ng/L	88.93		134	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	114	3.9	ng/L	89.86		127	63-152			
Perfluorooctanesulfonamide (PFOSA)	26.1	0.98	ng/L	23.40		111	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	26.3	0.98	ng/L	23.40		112	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	26.3	0.98	ng/L	23.40		112	65-139			
N-MeFOSAA (NMeFOSAA)	25.3	0.98	ng/L	23.40		108	58-144			
N-EtFOSAA (NEtFOSAA)	29.3	0.98	ng/L	23.40		125	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	265	9.8	ng/L	234.0		113	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	267	9.8	ng/L	234.0		114	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	104	3.9	ng/L	93.61		111	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	77.5	3.9	ng/L	88.46		87.6	68-146			
9Cl-PF3ONS (F53B Minor)	77.8	3.9	ng/L	87.52		88.9	56-156			
11Cl-PF3OUdS (F53B Major)	82.7	3.9	ng/L	88.46		93.5	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	287	9.8	ng/L	234.0		123	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1320	49	ng/L	1170		113	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1100	49	ng/L	1170		93.7	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	47.2	2.0	ng/L	41.66		113	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	47.7	2.0	ng/L	46.80		102	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	49.4	2.0	ng/L	46.80		105	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	56.2	2.0	ng/L	46.80		120	48-161			
Surrogate: 13C4-PFBA	*82.2*		ng/L	97.51		84.3	10-130			
Surrogate: 13C5-PFPeA	*37.0*		ng/L	48.75		76.0	35-150			
Surrogate: 13C5-PFHxA	*17.9*		ng/L	24.38		73.3	55-150			
Surrogate: 13C4-PFHpA	*17.3*		ng/L	24.38		70.9	55-150			
Surrogate: 13C8-PFOA	*19.3*		ng/L	24.38		79.0	60-140			
Surrogate: 13C9-PFNA	*9.51*		ng/L	12.19		78.1	55-140			
Surrogate: 13C6-PFDA	*9.63*		ng/L	12.19		79.0	50-140			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391701 - Draft Method 1633										
LCS (B391701-BS1)				Prepared: 11/08/24 Analyzed: 11/09/24						
Surrogate: 13C7-PFUnA	*9.57*		ng/L	12.19		78.5	30-140			
Surrogate: 13C2-PFDoA	*9.21*		ng/L	12.19		75.6	10-150			
Surrogate: 13C2-PFTeDA	*8.59*		ng/L	12.19		70.5	10-130			
Surrogate: 13C3-PFBS	*22.4*		ng/L	24.38		91.8	55-150			
Surrogate: 13C3-PFHxS	*18.9*		ng/L	24.38		77.7	55-150			
Surrogate: 13C8-PFOS	*18.8*		ng/L	24.38		77.0	45-140			
Surrogate: 13C2-4:2FTS	*36.0*		ng/L	48.75		73.8	60-200			
Surrogate: 13C2-6:2FTS	*34.2*		ng/L	48.75		70.0	60-200			
Surrogate: 13C2-8:2FTS	*33.0*		ng/L	48.75		67.6	50-200			
Surrogate: 13C8-PFOSA	*17.1*		ng/L	24.38		70.1	30-130			
Surrogate: D3-NMeFOSA	*15.6*		ng/L	24.38		64.1	15-130			
Surrogate: D5-NEtFOSA	*16.8*		ng/L	24.38		69.0	10-130			
Surrogate: D3-NMeFOSAA	*38.6*		ng/L	48.75		79.1	45-200			
Surrogate: D5-NEtFOSAA	*32.8*		ng/L	48.75		67.2	10-200			
Surrogate: D7-NMeFOSE	*172*		ng/L	243.8		70.7	10-150			
Surrogate: D9-NEtFOSE	*171*		ng/L	243.8		70.0	10-150			
Surrogate: 13C3-HFPO-DA	*80.2*		ng/L	97.51		82.2	25-160			
MRL Check (B391701-MRL1)				Prepared: 11/08/24 Analyzed: 11/09/24						
Perfluorobutanoic acid (PFBA)	6.86	3.9	ng/L	7.898		86.8	44-157			
Perfluoropentanoic acid (PFPeA)	3.47	2.0	ng/L	3.949		87.9	57-148			
Perfluorohexanoic acid (PFHxA)	1.82	0.99	ng/L	1.974		92.0	62-149			
Perfluoroheptanoic acid (PFHpA)	1.77	0.99	ng/L	1.974		89.9	56-150			
Perfluorooctanoic acid (PFOA)	1.77	0.99	ng/L	1.974		89.7	57-161			
Perfluorononanoic acid (PFNA)	1.85	0.99	ng/L	1.974		93.9	53-157			
Perfluorodecanoic acid (PFDA)	1.69	0.99	ng/L	1.974		85.7	43-158			
Perfluoroundecanoic acid (PFUnA)	1.60	0.99	ng/L	1.974		81.1	50-155			
Perfluorododecanoic acid (PFDoA)	1.67	0.99	ng/L	1.974		84.5	60-141			
Perfluorotridecanoic acid (PFTrDA)	1.70	0.99	ng/L	1.974		86.2	52-140			
Perfluorotetradecanoic acid (PFTeDA)	1.82	0.99	ng/L	1.974		92.1	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.53	0.99	ng/L	1.751		87.2	63-145			
Perfluoropentanesulfonic acid (PFPeS)	1.76	0.99	ng/L	1.858		94.8	58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.79	0.99	ng/L	1.805		99.2	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	1.74	0.99	ng/L	1.882		92.6	51-150			
Perfluorooctanesulfonic acid (PFOS)	1.72	0.99	ng/L	1.832		94.0	43-162			
Perfluorononanesulfonic acid (PFNS)	1.62	0.99	ng/L	1.899		85.3	46-151			
Perfluorodecanesulfonic acid (PFDS)	1.82	0.99	ng/L	1.905		95.5	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.86	0.99	ng/L	1.915		97.1	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	7.45	3.9	ng/L	7.404		101	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	7.68	3.9	ng/L	7.503		102	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	8.42	3.9	ng/L	7.582		111	46-165			
Perfluorooctanesulfonamide (PFOSA)	1.81	0.99	ng/L	1.974		91.7	47-163			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	1.60	0.99	ng/L	1.974		81.1	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	1.67	0.99	ng/L	1.974		84.7	49-156			
N-MeFOSAA (NMeFOSAA)	1.87	0.99	ng/L	1.974		94.5	32-160			
N-EtFOSAA (NEtFOSAA)	2.07	0.99	ng/L	1.974		105	51-154			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	17.8	9.9	ng/L	19.74		90.1	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	18.0	9.9	ng/L	19.74		91.3	60-147			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B391701 - Draft Method 1633										
MRL Check (B391701-MRL1)				Prepared: 11/08/24 Analyzed: 11/09/24						
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.77	3.9	ng/L	7.898		98.3	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	6.11	3.9	ng/L	7.464		81.8	61-148			
9Cl-PF3ONS (F53B Minor)	6.04	3.9	ng/L	7.385		81.8	44-167			
11Cl-PF3OUdS (F53B Major)	6.49	3.9	ng/L	7.464		87.0	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	19.9	9.9	ng/L	19.74		101	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	87.8	49	ng/L	98.72		88.9	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	77.3	49	ng/L	98.72		78.3	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.90	2.0	ng/L	3.515		111	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.98	2.0	ng/L	3.949		101	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.88	2.0	ng/L	3.949		98.3	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.82	2.0	ng/L	3.949		122	47-160			
Surrogate: 13C4-PFBA	*83.8*		ng/L	98.72		84.9	10-130			
Surrogate: 13C5-PFPeA	*38.8*		ng/L	49.36		78.6	35-150			
Surrogate: 13C5-PFHxA	*18.7*		ng/L	24.68		75.9	55-150			
Surrogate: 13C4-PFHpA	*17.7*		ng/L	24.68		71.5	55-150			
Surrogate: 13C8-PFOA	*19.6*		ng/L	24.68		79.3	60-140			
Surrogate: 13C9-PFNA	*9.23*		ng/L	12.34		74.8	55-140			
Surrogate: 13C6-PFDA	*10.1*		ng/L	12.34		81.6	50-140			
Surrogate: 13C7-PFUnA	*9.80*		ng/L	12.34		79.4	30-140			
Surrogate: 13C2-PFDoA	*9.88*		ng/L	12.34		80.1	10-150			
Surrogate: 13C2-PFTeDA	*8.82*		ng/L	12.34		71.5	10-130			
Surrogate: 13C3-PFBS	*22.7*		ng/L	24.68		92.1	55-150			
Surrogate: 13C3-PFHxS	*19.8*		ng/L	24.68		80.3	55-150			
Surrogate: 13C8-PFOS	*18.7*		ng/L	24.68		76.0	45-140			
Surrogate: 13C2-4:2FTS	*38.5*		ng/L	49.36		78.0	60-200			
Surrogate: 13C2-6:2FTS	*35.8*		ng/L	49.36		72.6	60-200			
Surrogate: 13C2-8:2FTS	*33.0*		ng/L	49.36		66.8	50-200			
Surrogate: 13C8-PFOSA	*16.1*		ng/L	24.68		65.4	30-130			
Surrogate: D3-NMeFOSA	*15.8*		ng/L	24.68		63.9	15-130			
Surrogate: D5-NEtFOSA	*17.6*		ng/L	24.68		71.2	10-130			
Surrogate: D3-NMeFOSAA	*36.9*		ng/L	49.36		74.7	45-200			
Surrogate: D5-NEtFOSAA	*36.3*		ng/L	49.36		73.5	10-200			
Surrogate: D7-NMeFOSE	*177*		ng/L	246.8		71.7	10-150			
Surrogate: D9-NEtFOSE	*175*		ng/L	246.8		70.7	10-150			
Surrogate: 13C3-HFPO-DA	*82.5*		ng/L	98.72		83.6	25-160			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B390768 - Draft Method 1633										
Blank (B390768-BLK1)				Prepared & Analyzed: 10/30/24						
Total Suspended Solids	ND	5.0	mg/L							
LCS (B390768-BS1)				Prepared & Analyzed: 10/30/24						
Total Suspended Solids	164	5.0	mg/L	200.0		82.0	51.5-130			
Batch B390903 - Draft Method 1633										
Blank (B390903-BLK1)				Prepared: 10/30/24 Analyzed: 10/31/24						
Total Suspended Solids	ND	5.0	mg/L							
LCS (B390903-BS1)				Prepared: 10/30/24 Analyzed: 10/31/24						
Total Suspended Solids	195	5.0	mg/L	200.0		97.5	51.5-130			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-01	Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-15	Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.
MS-24	Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.
PF-17	Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
PF-18	Re-analysis confirmed Extracted Internal Standard failure due to matrix effects.
PF-22	Qualifier ion ratio >150% of associated calibration. Detection is suspect.
PF-23	Qualifier ion ratio <50% of associated calibration. Detection is suspect.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
RL-11	Elevated reporting limit due to high concentration of target compounds.
S-29	Extracted Internal Standard is outside of control limits.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
Draft Method 1633 in Water	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV,CT
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV,CT
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV,CT
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV,CT
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV,CT
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV,CT
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV,CT
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV,CT
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV,CT
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV,CT
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV,CT
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV,CT
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV,CT
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV,CT
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV,CT
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV,CT
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV,CT
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV,CT
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV,CT
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV,CT
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV,CT
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV,CT
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV,CT
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV,CT
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV,CT
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV,CT
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV,CT
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV,CT
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,NY,PA,WV,CT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV,CT
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV,CT
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
Cyclohexane	ME,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Ethylbenzene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2025
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2025
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2025
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2025
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2025
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2025

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39 Spruce St
East Longmeadow, MA 01028

24J3835 https://www.pacelabs.com/ KM

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: NYS DEC | Consultant: Groundwater & Environmental

Consultant Address: 6010 North Bailey Ave., Suite 1 Amherst, NY 14226

Consultant Phone: 716-796-3827

Callout Project Name: Keywell LLC Vac-Air Division

Project Location: Frewsburg, NY

Callout Number: 151686

Site/Spill Number: 907016

Project Manager: Steven Moeller

Pace Analytical Quote Name/Number:

Invoice Recipient:

Sampled By: Owen Ogiony

Requested Turnaround Time

DEC Standard 30-calendar day ☐

Due Date:

Rush (Prior Approval Required)

1-Day ☐ 2-Day ☐ 3-Day ☐

4-Day ☐ 5-Day ☐ 10-Day ☑

Data Delivery

Format: PDF ☑ EXCEL ☑

Other:

CLP Like (Level 4) Data Pkg Required: ☐

Email To:

Fax To #:

3						3										# of Containers
H						NA										[2] Preservation Code
V						ST										[3] Container Code

ANALYSIS REQUESTED (Circle Requested Analyses/Reporting List)

Pace Analytical Work Order#	Client Sample ID / Description	Date	Time	Composite	Grab	[1]Matrix Code	Conc Code	8260: DER TCL / Oxygenates / CP-51	8270: DER TCL / CP-51	1,4-Dioxane SIM | 8082 PCBs	8081 Pesticide | 8151 Herbicide	TAL Total Metals | TCLP RCRA 8 Metals	PFAS 1633 | PFAS 537 ID	MS/MSD				
1	MW-2	10/21	1130		X	GW	U	X					X					
2	MW-3	10/22	1010		X	GW	U	X					X					
3	MW-4	10/22	1130		X	GW	U	X					X	X				
4	MW-9R	10/21	1520		X	GW	U	X					X					
5	MW-11R	10/21	1300		X	GW	U	X					X					
6	MW-12	10/22	1400		X	GW	U	X					X					
7	MW-13	10/23	1530		X	GW	U	X					X					
X	~~MW-14~~				X	GW	U	X					X					
8	DUP	10/21	1130		X	GW	U	X					X					
9	TRIP BLANK	10/23	1540		X	GW	U	X					X					

Dissolved Metals Samples

☐ Field Filtered

☐ Lab to Filter

Orthophosphate Samples

☐ Field Filtered

☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments:

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) GES	Date/Time: 10/24 8:45	
Received by: (signature) to Sample Fridge	Date/Time: 10-24 1845	
Relinquished by: (signature) GES	Date/Time: 10-24-24 1410	
Received by: (signature)	Date/Time: 10-24-24 14:10	
Relinquished by: (signature)	Date/Time: 10-24-24 14:40	
Received by: (signature) 2.9	Date/Time: 10/25/24 10:41	

Program & Regulatory Information

☐ AWQ STDS ☒ NY TOGS

☐ NYC Sewer Discharge ☐ NY CP-51

☐ Part 360 GW (Landfill)

☐ NY Restricted Use

☐ NY Unrestricted Use

☐ NY Part 375

Other:

Deliverables

☐ Enhanced Data Package

☑ NYSDEC EQuIS EDD

☐ EQuIS (Standard) EDD

☐ NY Regulatory EDD

☐ NY Regs Hits-Only EDD

Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity

☑ Government ☐ Municipality ☐ MWRA ☐ WRTA

☐ Federal ☐ 21 J ☐ School

☐ City ☐ Brownfield ☐ MBTA

Other

☐ Chromatogram

☐ AIHA-LAP,LLC

PCB ONLY

☐ Soxhlet

☐ Non Soxhlet

Table of Contents

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Log In Back-Sheet

Client GES (DEC)

Project Keywell LLC Vac-Air Division

MCP/RCP Required no

Deliverable Package Requirement NY Cat B

Location Frewsburg, NY

PWSID# (When Applicable) n/a

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time RJ 10/25/24 1041

Back-Sheet By / Date / Time Mm 10/25/24 1634

Temperature Method Gun # 6

WV samples: Yes (see note*) / No (follow normal procedure)

Temp < 6° C Actual Temperature 2.9

Rush Samples: Yes / No Notify No

Short Hold: Yes / No Notify No

Notes regarding Samples/COC outside of SOP:

* Equipment blank not on COC.

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☐	☑
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☑	☐
Trip Blanks	☑	☐
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client ☑ Analysis ☑ Sampler Name ☑

Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: (N/A) ☐ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Qualtrax ID: 120836

	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
Pace ANALYTICAL SERVICES	Effective Date: 06/11/2024

Sample			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
16oz Amb/Clear	(Circle Amb/Clear)	Soils Jars																				
8oz Amb/Clear																						
4oz Amb/Clear																						
2oz Amb/Clear																						
Unpreserved	1 Liter	Ambers																				
HCL																						
Sulfuric																						
Sulfuric	250mL																					
Phosphoric																						
HCl																						
Unpreserved	100mL																					
Unpreserved	1 Liter	Plastics																				
Sulfuric																						
Unpreserved	500mL		2	2	2	2			2	2		2										
Sulfuric																						
Unpreserved	250mL																					
Trizma																						
Sulfuric																						
Nitric																						
NaOH																						
Ammonium Acetate																						
NaOH/Zinc																						
Unpreserved	VOA Vials																					
HCl			3	3	3	3			3	3	3											
MeOH																						
D.I. Water																						
BiSulfate																						
Col/Bact	Other / Fill in																					
125ml plastic			1		1	1			1	1												

Qualtrax ID: 120836

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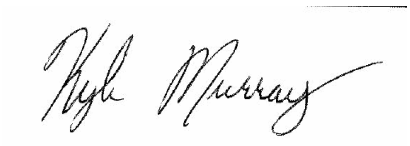
December 4, 2024

Steven Moeller
NYDEC_GES - Amherst, NY
6010 North Bailey Ave., Suite 1
Amherst, NY 14226

Project Location: Frewsburg, NY
Client Job Number:
Project Number: 907016
Laboratory Work Order Number: 24K1020

Enclosed are results of analyses for samples as received by the laboratory on November 13, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 5

24K1020-01 5

Sample Preparation Information 9

QC Data 10

Volatile Organic Compounds by GC/MS 10

B392356 10

Semivolatile Organic Compounds by - LC/MS-MS 14

B392841 14

B393056 18

Flag/Qualifier Summary 23

Certifications 24

Chain of Custody/Sample Receipt 27

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

NYDEC_GES - Amherst, NY
6010 North Bailey Ave., Suite 1
Amherst, NY 14226
ATTN: Steven Moeller

REPORT DATE: 12/4/2024

PURCHASE ORDER NUMBER: 151686

PROJECT NUMBER: 907016

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24K1020

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Frewsburg, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-14	24K1020-01	Ground Water		Draft Method 1633 SW-846 8260D	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Draft Method 1633

Qualifications:

Z-01

Non-extracted internal standard compound recovery <50%. Re-extracted sample exhibited similar results. Possible high bias present on associated extracted internal standard recoveries.

Analyte & Samples(s) Qualified:

13C3-PFBA
24K1020-01[MW-14]

13C4-PFBA
24K1020-01[MW-14]

SW-846 8260D

Qualifications:

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Methyl Acetate
B392356-BSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

24K1020-01[MW-14]

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Bromomethane
B392356-BS1, B392356-BSD1, S114115-CCV1

Methyl Acetate
B392356-BS1, B392356-BSD1, S114115-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Frewsburg, NY | Sample Description: | Work Order: 24K1020

Date Received: 11/13/2024

Field Sample #: MW-14 | Sampled: 11/12/2024 10:45

Sample ID: 24K1020-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	41	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Benzene	ND	20	2.9	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Bromochloromethane	ND	20	6.4	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Bromodichloromethane	ND	10	3.7	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Bromoform	ND	20	6.0	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Bromomethane	ND	40	30	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
2-Butanone (MEK)	ND	400	28	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
n-Butylbenzene	ND	20	3.1	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
sec-Butylbenzene	ND	20	3.3	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
tert-Butylbenzene	ND	20	3.3	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Carbon Disulfide	ND	100	31	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Carbon Tetrachloride	ND	100	3.9	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Chlorobenzene	ND	20	3.5	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Chlorodibromomethane	ND	10	2.6	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Chloroethane	ND	40	9.2	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Chloroform	ND	40	3.8	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Chloromethane	ND	40	9.9	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Cyclohexane	ND	100	35	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	13	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,2-Dibromoethane (EDB)	ND	10	2.5	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,2-Dichlorobenzene	ND	20	3.5	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,3-Dichlorobenzene	ND	20	3.1	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,4-Dichlorobenzene	ND	20	3.3	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Dichlorodifluoromethane (Freon 12)	ND	40	4.0	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,1-Dichloroethane	ND	20	3.0	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,2-Dichloroethane	ND	20	2.5	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,1-Dichloroethylene	ND	20	3.6	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
cis-1,2-Dichloroethylene	700	20	4.0	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
trans-1,2-Dichloroethylene	4.4	20	3.1	µg/L	20	J	SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,2-Dichloropropane	ND	20	3.4	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
cis-1,3-Dichloropropene	ND	10	2.6	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
trans-1,3-Dichloropropene	ND	10	2.9	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Ethylbenzene	ND	20	2.7	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
2-Hexanone (MBK)	ND	200	27	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Isopropylbenzene (Cumene)	ND	20	3.1	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
p-Isopropyltoluene (p-Cymene)	ND	20	3.1	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Methyl Acetate	ND	20	9.6	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Methyl tert-Butyl Ether (MTBE)	ND	20	3.3	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Methyl Cyclohexane	ND	20	2.7	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Methylene Chloride	ND	100	3.8	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
4-Methyl-2-pentanone (MIBK)	ND	200	27	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Naphthalene	ND	40	4.9	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
n-Propylbenzene	ND	20	2.2	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Styrene	ND	20	2.6	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24K1020

Date Received: 11/13/2024

Field Sample #: MW-14 | Sampled: 11/12/2024 10:45

Sample ID: 24K1020-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	10	2.0	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Tetrachloroethylene	4.8	20	3.3	µg/L	20	J	SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Toluene	ND	20	2.3	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,2,3-Trichlorobenzene	ND	100	4.3	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,2,4-Trichlorobenzene	ND	20	3.9	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,1,1-Trichloroethane	ND	20	2.8	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,1,2-Trichloroethane	ND	20	3.6	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Trichloroethylene	2200	20	3.3	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Trichlorofluoromethane (Freon 11)	ND	40	2.9	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,2,3-Trichloropropane	ND	40	5.4	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	20	3.2	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,2,4-Trimethylbenzene	ND	20	3.1	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
1,3,5-Trimethylbenzene	ND	20	3.4	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Vinyl Chloride	ND	40	3.9	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
m+p Xylene	ND	40	4.9	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
o-Xylene	ND	20	3.1	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF
Xylenes (total)	ND	20	20	µg/L	20		SW-846 8260D	11/15/24	11/18/24 18:31	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	105	70-130		11/18/24 18:31
Toluene-d8	98.2	70-130		11/18/24 18:31
4-Bromofluorobenzene	82.2	70-130		11/18/24 18:31

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24K1020

Date Received: 11/13/2024

Field Sample #: MW-14 | Sampled: 11/12/2024 10:45

Sample ID: 24K1020-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	6.1	0.76	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluoropentanoic acid (PFPeA)	ND	3.0	0.42	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorohexanoic acid (PFHxA)	1.3	1.5	0.26	ng/L	1	J	Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluoroheptanoic acid (PFHpA)	1.0	1.5	0.27	ng/L	1	J	Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorooctanoic acid (PFOA)	3.0	1.5	0.40	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorononanoic acid (PFNA)	ND	1.5	0.62	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorodecanoic acid (PFDA)	ND	1.5	0.37	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.5	0.49	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.5	0.33	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.5	0.46	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.5	0.15	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	1.5	0.33	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.5	0.44	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorohexanesulfonic acid (PFHxS)	1.0	1.5	0.59	ng/L	1	J	Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.5	0.80	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorooctanesulfonic acid (PFOS)	4.2	1.5	0.38	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.5	0.44	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.5	0.48	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.5	0.68	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	6.1	1.3	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	6.1	2.8	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	6.1	3.1	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.5	0.53	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.5	0.26	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.5	0.31	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.5	1.4	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.5	0.61	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	15	1.2	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	15	1.6	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	6.1	1.4	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	6.1	0.81	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
9Cl-PF3ONS (F53B Minor)	ND	6.1	0.89	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
11Cl-PF3OUdS (F53B Major)	ND	6.1	1.6	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	7.6	2.1	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	38	6.7	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	38	8.5	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	3.0	0.54	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	3.0	0.44	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS

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Project Location: Frewsburg, NY | Sample Description: | Work Order: 24K1020

Date Received: 11/13/2024

Field Sample #: MW-14 | Sampled: 11/12/2024 10:45

Sample ID: 24K1020-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	3.0	0.41	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	3.0	2.0	ng/L	1		Draft Method 1633	11/21/24	11/26/24 18:59	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	72.2	5-130	Z-01	11/26/24 18:59
13C5-PFPeA	82.3	40-130		11/26/24 18:59
13C5-PFHxA	80.9	40-130		11/26/24 18:59
13C4-PFHpA	75.9	40-130		11/26/24 18:59
13C8-PFOA	84.6	40-130		11/26/24 18:59
13C9-PFNA	77.4	40-130		11/26/24 18:59
13C6-PFDA	74.5	40-130		11/26/24 18:59
13C7-PFUnA	76.6	30-130		11/26/24 18:59
13C2-PFDoA	74.6	10-130		11/26/24 18:59
13C2-PFTeDA	71.5	10-130		11/26/24 18:59
13C3-PFBS	74.0	40-135		11/26/24 18:59
13C3-PFHxS	80.6	40-130		11/26/24 18:59
13C8-PFOS	83.0	40-130		11/26/24 18:59
13C2-4:2FTS	106	40-200		11/26/24 18:59
13C2-6:2FTS	102	40-200		11/26/24 18:59
13C2-8:2FTS	91.1	40-300		11/26/24 18:59
13C8-PFOSA	67.7	40-130		11/26/24 18:59
D3-NMeFOSA	61.7	10-130		11/26/24 18:59
D5-NEtFOSA	57.6	10-130		11/26/24 18:59
D3-NMeFOSAA	62.1	40-170		11/26/24 18:59
D5-NEtFOSAA	65.1	25-135		11/26/24 18:59
D7-NMeFOSE	60.9	10-130		11/26/24 18:59
D9-NEtFOSE	61.2	10-130		11/26/24 18:59
13C3-HFPO-DA	79.3	40-130		11/26/24 18:59

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Sample Extraction Data

Prep Method:EPA 1633 **Analytical Method:Draft Method 1633**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24K1020-01 [MW-14]	B392841	526	4.00	11/21/24

Prep Method:SW-846 5030B **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24K1020-01 [MW-14]	B392356	0.25	5.00	11/15/24

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B392356 - SW-846 5030B										
Blank (B392356-BLK1)				Prepared: 11/15/24 Analyzed: 11/18/24						
Acetone	ND	50	µg/L							
Benzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B392356 - SW-846 5030B											
Blank (B392356-BLK1)				Prepared: 11/15/24 Analyzed: 11/18/24							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L								
1,2,3-Trichloropropane	ND	2.0	µg/L								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L								
1,2,4-Trimethylbenzene	ND	1.0	µg/L								
1,3,5-Trimethylbenzene	ND	1.0	µg/L								
Vinyl Chloride	ND	2.0	µg/L								
m+p Xylene	ND	2.0	µg/L								
o-Xylene	ND	1.0	µg/L								
Xylenes (total)	ND	1.0	µg/L								
Surrogate: 1,2-Dichloroethane-d4	*26.6*		µg/L	25.00		106	70-130				
Surrogate: Toluene-d8	*24.5*		µg/L	25.00		97.9	70-130				
Surrogate: 4-Bromofluorobenzene	*21.8*		µg/L	25.00		87.2	70-130				
LCS (B392356-BS1)				Prepared: 11/15/24 Analyzed: 11/18/24							
Acetone	93.0	50	µg/L	100.0		93.0	70-160				†
Benzene	10.7	1.0	µg/L	10.00		107	70-130				
Bromochloromethane	11.7	1.0	µg/L	10.00		117	70-130				
Bromodichloromethane	9.83	0.50	µg/L	10.00		98.3	70-130				
Bromoform	7.98	1.0	µg/L	10.00		79.8	70-130				
Bromomethane	11.1	2.0	µg/L	10.00		111	40-160			V-20	†
2-Butanone (MEK)	96.7	20	µg/L	100.0		96.7	40-160				†
n-Butylbenzene	9.53	1.0	µg/L	10.00		95.3	70-130				
sec-Butylbenzene	9.12	1.0	µg/L	10.00		91.2	70-130				
tert-Butylbenzene	8.92	1.0	µg/L	10.00		89.2	70-130				
Carbon Disulfide	91.4	5.0	µg/L	100.0		91.4	70-130				
Carbon Tetrachloride	9.83	5.0	µg/L	10.00		98.3	70-130				
Chlorobenzene	10.4	1.0	µg/L	10.00		104	70-130				
Chlorodibromomethane	9.23	0.50	µg/L	10.00		92.3	70-130				
Chloroethane	9.82	2.0	µg/L	10.00		98.2	70-130				
Chloroform	10.5	2.0	µg/L	10.00		105	70-130				
Chloromethane	10.5	2.0	µg/L	10.00		105	40-160				†
Cyclohexane	10.8	5.0	µg/L	10.00		108	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	8.56	5.0	µg/L	10.00		85.6	70-130				
1,2-Dibromoethane (EDB)	9.07	0.50	µg/L	10.00		90.7	70-130				
1,2-Dichlorobenzene	10.1	1.0	µg/L	10.00		101	70-130				
1,3-Dichlorobenzene	9.57	1.0	µg/L	10.00		95.7	70-130				
1,4-Dichlorobenzene	9.64	1.0	µg/L	10.00		96.4	70-130				
Dichlorodifluoromethane (Freon 12)	9.20	2.0	µg/L	10.00		92.0	40-160				†
1,1-Dichloroethane	10.1	1.0	µg/L	10.00		101	70-130				
1,2-Dichloroethane	10.6	1.0	µg/L	10.00		106	70-130				
1,1-Dichloroethylene	9.94	1.0	µg/L	10.00		99.4	70-130				
cis-1,2-Dichloroethylene	10.4	1.0	µg/L	10.00		104	70-130				
trans-1,2-Dichloroethylene	9.46	1.0	µg/L	10.00		94.6	70-130				
1,2-Dichloropropane	9.51	1.0	µg/L	10.00		95.1	70-130				
cis-1,3-Dichloropropene	9.10	0.50	µg/L	10.00		91.0	70-130				
trans-1,3-Dichloropropene	8.53	0.50	µg/L	10.00		85.3	70-130				
Ethylbenzene	10.0	1.0	µg/L	10.00		100	70-130				
2-Hexanone (MBK)	78.5	10	µg/L	100.0		78.5	70-160				†
Isopropylbenzene (Cumene)	9.38	1.0	µg/L	10.00		93.8	70-130				
p-Isopropyltoluene (p-Cymene)	9.25	1.0	µg/L	10.00		92.5	70-130				
Methyl Acetate	12.5	1.0	µg/L	10.00		125	70-130			V-20	
Methyl tert-Butyl Ether (MTBE)	9.99	1.0	µg/L	10.00		99.9	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B392356 - SW-846 5030B											
LCS (B392356-BS1)				Prepared: 11/15/24 Analyzed: 11/18/24							
Methyl Cyclohexane	10.6	1.0	µg/L	10.00		106	70-130				
Methylene Chloride	10.2	5.0	µg/L	10.00		102	70-130				
4-Methyl-2-pentanone (MIBK)	87.4	10	µg/L	100.0		87.4	70-160				†
Naphthalene	6.49	2.0	µg/L	10.00		64.9	40-130				†
n-Propylbenzene	9.62	1.0	µg/L	10.00		96.2	70-130				
Styrene	9.01	1.0	µg/L	10.00		90.1	70-130				
1,1,2,2-Tetrachloroethane	8.87	0.50	µg/L	10.00		88.7	70-130				
Tetrachloroethylene	10.2	1.0	µg/L	10.00		102	70-130				
Toluene	10.2	1.0	µg/L	10.00		102	70-130				
1,2,3-Trichlorobenzene	9.32	5.0	µg/L	10.00		93.2	70-130				
1,2,4-Trichlorobenzene	8.44	1.0	µg/L	10.00		84.4	70-130				
1,1,1-Trichloroethane	10.0	1.0	µg/L	10.00		100	70-130				
1,1,2-Trichloroethane	9.43	1.0	µg/L	10.00		94.3	70-130				
Trichloroethylene	9.93	1.0	µg/L	10.00		99.3	70-130				
Trichlorofluoromethane (Freon 11)	10.2	2.0	µg/L	10.00		102	70-130				
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.00		102	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	1.0	µg/L	10.00		103	70-130				
1,2,4-Trimethylbenzene	9.60	1.0	µg/L	10.00		96.0	70-130				
1,3,5-Trimethylbenzene	9.69	1.0	µg/L	10.00		96.9	70-130				
Vinyl Chloride	9.71	2.0	µg/L	10.00		97.1	40-160				†
m+p Xylene	20.2	2.0	µg/L	20.00		101	70-130				
o-Xylene	9.82	1.0	µg/L	10.00		98.2	70-130				
Xylenes (total)	30.0	1.0	µg/L	30.00		100	0-200				
Surrogate: 1,2-Dichloroethane-d4	*26.6*		µg/L	25.00		106	70-130				
Surrogate: Toluene-d8	*24.5*		µg/L	25.00		97.9	70-130				
Surrogate: 4-Bromofluorobenzene	*24.4*		µg/L	25.00		97.6	70-130				
LCS Dup (B392356-BSD1)				Prepared: 11/15/24 Analyzed: 11/18/24							
Acetone	102	50	µg/L	100.0		102	70-160	9.13	25		†
Benzene	11.4	1.0	µg/L	10.00		114	70-130	6.71	25		
Bromochloromethane	12.2	1.0	µg/L	10.00		122	70-130	4.02	25		
Bromodichloromethane	9.54	0.50	µg/L	10.00		95.4	70-130	2.99	25		
Bromoform	7.96	1.0	µg/L	10.00		79.6	70-130	0.251	25		
Bromomethane	12.2	2.0	µg/L	10.00		122	40-160	9.61	25	V-20	†
2-Butanone (MEK)	110	20	µg/L	100.0		110	40-160	12.5	25		†
n-Butylbenzene	9.70	1.0	µg/L	10.00		97.0	70-130	1.77	25		
sec-Butylbenzene	9.29	1.0	µg/L	10.00		92.9	70-130	1.85	25		
tert-Butylbenzene	9.24	1.0	µg/L	10.00		92.4	70-130	3.52	25		
Carbon Disulfide	95.6	5.0	µg/L	100.0		95.6	70-130	4.45	25		
Carbon Tetrachloride	10.4	5.0	µg/L	10.00		104	70-130	5.73	25		
Chlorobenzene	10.6	1.0	µg/L	10.00		106	70-130	2.57	25		
Chlorodibromomethane	9.34	0.50	µg/L	10.00		93.4	70-130	1.18	25		
Chloroethane	9.77	2.0	µg/L	10.00		97.7	70-130	0.510	25		
Chloroform	10.6	2.0	µg/L	10.00		106	70-130	1.23	25		
Chloromethane	10.5	2.0	µg/L	10.00		105	40-160	0.0951	25		†
Cyclohexane	11.5	5.0	µg/L	10.00		115	70-130	6.56	25		
1,2-Dibromo-3-chloropropane (DBCP)	8.77	5.0	µg/L	10.00		87.7	70-130	2.42	25		
1,2-Dibromoethane (EDB)	9.18	0.50	µg/L	10.00		91.8	70-130	1.21	25		
1,2-Dichlorobenzene	9.99	1.0	µg/L	10.00		99.9	70-130	1.29	25		
1,3-Dichlorobenzene	9.76	1.0	µg/L	10.00		97.6	70-130	1.97	25		
1,4-Dichlorobenzene	9.00	1.0	µg/L	10.00		90.0	70-130	6.87	25		
Dichlorodifluoromethane (Freon 12)	9.38	2.0	µg/L	10.00		93.8	40-160	1.94	25		†

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B392356 - SW-846 5030B												
LCS Dup (B392356-BSD1)				Prepared: 11/15/24 Analyzed: 11/18/24								
1,1-Dichloroethane	10.4	1.0	µg/L	10.00		104		70-130	2.74	25		
1,2-Dichloroethane	10.6	1.0	µg/L	10.00		106		70-130	0.283	25		
1,1-Dichloroethylene	10.3	1.0	µg/L	10.00		103		70-130	3.17	25		
cis-1,2-Dichloroethylene	11.0	1.0	µg/L	10.00		110		70-130	5.61	25		
trans-1,2-Dichloroethylene	9.99	1.0	µg/L	10.00		99.9		70-130	5.45	25		
1,2-Dichloropropane	11.0	1.0	µg/L	10.00		110		70-130	14.1	25		
cis-1,3-Dichloropropene	9.20	0.50	µg/L	10.00		92.0		70-130	1.09	25		
trans-1,3-Dichloropropene	8.78	0.50	µg/L	10.00		87.8		70-130	2.89	25		
Ethylbenzene	10.1	1.0	µg/L	10.00		101		70-130	0.797	25		
2-Hexanone (MBK)	92.1	10	µg/L	100.0		92.1		70-160	16.0	25		†
Isopropylbenzene (Cumene)	9.61	1.0	µg/L	10.00		96.1		70-130	2.42	25		
p-Isopropyltoluene (p-Cymene)	9.35	1.0	µg/L	10.00		93.5		70-130	1.08	25		
Methyl Acetate	13.7	1.0	µg/L	10.00		**137**	*	70-130	9.08	25	L-07, V-20	
Methyl tert-Butyl Ether (MTBE)	10.3	1.0	µg/L	10.00		103		70-130	2.86	25		
Methyl Cyclohexane	12.0	1.0	µg/L	10.00		120		70-130	11.6	25		
Methylene Chloride	10.7	5.0	µg/L	10.00		107		70-130	4.89	25		
4-Methyl-2-pentanone (MIBK)	94.9	10	µg/L	100.0		94.9		70-160	8.25	25		†
Naphthalene	6.90	2.0	µg/L	10.00		69.0		40-130	6.12	25		†
n-Propylbenzene	9.92	1.0	µg/L	10.00		99.2		70-130	3.07	25		
Styrene	9.43	1.0	µg/L	10.00		94.3		70-130	4.56	25		
1,1,2,2-Tetrachloroethane	9.48	0.50	µg/L	10.00		94.8		70-130	6.65	25		
Tetrachloroethylene	10.3	1.0	µg/L	10.00		103		70-130	0.978	25		
Toluene	10.3	1.0	µg/L	10.00		103		70-130	0.489	25		
1,2,3-Trichlorobenzene	9.87	5.0	µg/L	10.00		98.7		70-130	5.73	25		
1,2,4-Trichlorobenzene	8.97	1.0	µg/L	10.00		89.7		70-130	6.09	25		
1,1,1-Trichloroethane	10.6	1.0	µg/L	10.00		106		70-130	5.92	25		
1,1,2-Trichloroethane	10.0	1.0	µg/L	10.00		100		70-130	6.27	25		
Trichloroethylene	10.6	1.0	µg/L	10.00		106		70-130	6.90	25		
Trichlorofluoromethane (Freon 11)	10.6	2.0	µg/L	10.00		106		70-130	3.85	25		
1,2,3-Trichloropropane	11.0	2.0	µg/L	10.00		110		70-130	7.52	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.5	1.0	µg/L	10.00		105		70-130	1.35	25		
1,2,4-Trimethylbenzene	9.73	1.0	µg/L	10.00		97.3		70-130	1.35	25		
1,3,5-Trimethylbenzene	9.84	1.0	µg/L	10.00		98.4		70-130	1.54	25		
Vinyl Chloride	10.1	2.0	µg/L	10.00		101		40-160	4.23	25		†
m+p Xylene	20.4	2.0	µg/L	20.00		102		70-130	0.886	25		
o-Xylene	9.78	1.0	µg/L	10.00		97.8		70-130	0.408	25		
Xylenes (total)	30.2	1.0	µg/L	30.00		101		0-200	0.465			
Surrogate: 1,2-Dichloroethane-d4	*26.2*		µg/L	25.00		105		70-130				
Surrogate: Toluene-d8	*24.2*		µg/L	25.00		96.6		70-130				
Surrogate: 4-Bromofluorobenzene	*24.4*		µg/L	25.00		97.5		70-130				

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B392841 - EPA 1633										
Blank (B392841-BLK1)				Prepared: 11/22/24 Analyzed: 11/26/24						
Perfluorobutanoic acid (PFBA)	ND	6.3	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	3.1	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	1.6	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	1.6	ng/L							
Perfluorooctanoic acid (PFOA)	ND	1.6	ng/L							
Perfluorononanoic acid (PFNA)	ND	1.6	ng/L							
Perfluorodecanoic acid (PFDA)	ND	1.6	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	1.6	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	1.6	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	1.6	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	1.6	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	1.6	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	1.6	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	1.6	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.6	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	1.6	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	1.6	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	1.6	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	1.6	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	6.3	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	6.3	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	6.3	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	1.6	ng/L							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.6	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.6	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	1.6	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	1.6	ng/L							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	16	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	16	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	6.3	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	6.3	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	6.3	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	6.3	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	7.8	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	39	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	39	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	3.1	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	3.1	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	3.1	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	3.1	ng/L							
Surrogate: 13C4-PFBA	*80.4*		ng/L	78.48		102	5-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B392841 - EPA 1633										
Blank (B392841-BLK1)				Prepared: 11/22/24 Analyzed: 11/26/24						
Surrogate: 13C5-PFPeA	*39.2*		ng/L	39.24		100	40-130			
Surrogate: 13C5-PFHxA	*19.7*		ng/L	19.62		100	40-130			
Surrogate: 13C4-PFHpA	*18.0*		ng/L	19.62		91.6	40-130			
Surrogate: 13C8-PFOA	*21.4*		ng/L	19.62		109	40-130			
Surrogate: 13C9-PFNA	*9.11*		ng/L	9.810		92.9	40-130			
Surrogate: 13C6-PFDA	*9.96*		ng/L	9.810		102	40-130			
Surrogate: 13C7-PFUnA	*9.92*		ng/L	9.810		101	30-130			
Surrogate: 13C2-PFDoA	*9.55*		ng/L	9.810		97.4	10-130			
Surrogate: 13C2-PFTeDA	*9.42*		ng/L	9.810		96.0	10-130			
Surrogate: 13C3-PFBS	*20.1*		ng/L	19.62		103	40-135			
Surrogate: 13C3-PFHxS	*21.2*		ng/L	19.62		108	40-130			
Surrogate: 13C8-PFOS	*18.3*		ng/L	19.62		93.5	40-130			
Surrogate: 13C2-4:2FTS	*45.2*		ng/L	39.24		115	40-200			
Surrogate: 13C2-6:2FTS	*39.9*		ng/L	39.24		102	40-200			
Surrogate: 13C2-8:2FTS	*41.2*		ng/L	39.24		105	40-300			
Surrogate: 13C8-PFOSA	*15.7*		ng/L	19.62		80.1	40-130			
Surrogate: D3-NMeFOSA	*14.8*		ng/L	19.62		75.5	10-130			
Surrogate: D5-NEtFOSA	*14.1*		ng/L	19.62		71.9	10-130			
Surrogate: D3-NMeFOSAA	*34.3*		ng/L	39.24		87.4	40-170			
Surrogate: D5-NEtFOSAA	*35.5*		ng/L	39.24		90.6	25-135			
Surrogate: D7-NMeFOSE	*159*		ng/L	196.2		81.0	10-130			
Surrogate: D9-NEtFOSE	*158*		ng/L	196.2		80.5	10-130			
Surrogate: 13C3-HFPO-DA	*76.9*		ng/L	78.48		98.0	40-130			
LCS (B392841-BS1)				Prepared: 11/22/24 Analyzed: 11/26/24						
Perfluorobutanoic acid (PFBA)	67.9	6.3	ng/L	79.16		85.7	70-140			
Perfluoropentanoic acid (PFPeA)	36.8	3.2	ng/L	39.58		93.0	65-135			
Perfluorohexanoic acid (PFHxA)	17.9	1.6	ng/L	19.79		90.5	70-145			
Perfluoroheptanoic acid (PFHpA)	17.9	1.6	ng/L	19.79		90.4	70-150			
Perfluorooctanoic acid (PFOA)	17.9	1.6	ng/L	19.79		90.6	70-150			
Perfluorononanoic acid (PFNA)	18.3	1.6	ng/L	19.79		92.3	70-150			
Perfluorodecanoic acid (PFDA)	18.0	1.6	ng/L	19.79		91.2	70-140			
Perfluoroundecanoic acid (PFUnA)	17.0	1.6	ng/L	19.79		85.8	70-145			
Perfluorododecanoic acid (PFDoA)	18.4	1.6	ng/L	19.79		92.9	70-140			
Perfluorotridecanoic acid (PFTrDA)	18.4	1.6	ng/L	19.79		93.0	65-140			
Perfluorotetradecanoic acid (PFTeDA)	18.3	1.6	ng/L	19.79		92.5	60-140			
Perfluorobutanesulfonic acid (PFBS)	14.8	1.6	ng/L	17.57		84.0	60-145			
Perfluoropentanesulfonic acid (PFPeS)	16.9	1.6	ng/L	18.60		90.8	65-140			
Perfluorohexanesulfonic acid (PFHxS)	14.9	1.6	ng/L	18.05		82.7	65-145			
Perfluoroheptanesulfonic acid (PFHpS)	16.8	1.6	ng/L	18.84		89.4	70-150			
Perfluorooctanesulfonic acid (PFOS)	17.0	1.6	ng/L	18.36		92.6	55-150			
Perfluorononanesulfonic acid (PFNS)	15.9	1.6	ng/L	19.00		83.5	65-145			
Perfluorodecanesulfonic acid (PFDS)	16.5	1.6	ng/L	19.08		86.6	60-145			
Perfluorododecanesulfonic acid (PFDoS)	15.5	1.6	ng/L	19.16		80.9	50-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	73.1	6.3	ng/L	74.17		98.5	70-145			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	66.0	6.3	ng/L	75.28		87.6	65-155			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	69.2	6.3	ng/L	75.99		91.1	60-150			
Perfluorooctanesulfonamide (PFOSA)	17.5	1.6	ng/L	19.79		88.3	70-145			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	18.3	1.6	ng/L	19.79		92.4	60-150			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B392841 - EPA 1633										
LCS (B392841-BS1)				Prepared: 11/22/24 Analyzed: 11/26/24						
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	19.2	1.6	ng/L	19.79		96.8	65-145			
N-MeFOSAA (NMeFOSAA)	17.8	1.6	ng/L	19.79		89.9	50-140			
N-EtFOSAA (NEtFOSAA)	17.1	1.6	ng/L	19.79		86.5	70-145			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	181	16	ng/L	197.9		91.3	70-145			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	179	16	ng/L	197.9		90.2	70-135			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	69.8	6.3	ng/L	79.16		88.2	70-140			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	70.8	6.3	ng/L	74.81		94.7	65-145			
9Cl-PF3ONS (F53B Minor)	64.5	6.3	ng/L	73.86		87.3	70-155			
11Cl-PF3OUdS (F53B Major)	63.5	6.3	ng/L	73.93		85.9	55-160			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	76.2	7.9	ng/L	98.95		77.0	65-130			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	405	40	ng/L	494.7		81.8	70-135			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	403	40	ng/L	494.7		81.5	50-145			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	32.4	3.2	ng/L	35.31		91.7	70-140			
Perfluoro-3-methoxypropanoic acid (PFMPA)	32.5	3.2	ng/L	39.58		82.2	55-140			
Perfluoro-4-methoxybutanoic acid (PFMBA)	34.8	3.2	ng/L	39.58		87.9	60-150			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	33.9	3.2	ng/L	39.58		85.8	50-150			
Surrogate: 13C4-PFBA	*78.2*		ng/L	79.16		98.8	5-130			
Surrogate: 13C5-PFPeA	*38.5*		ng/L	39.58		97.3	40-130			
Surrogate: 13C5-PFHxA	*19.3*		ng/L	19.79		97.4	40-130			
Surrogate: 13C4-PFHpA	*17.7*		ng/L	19.79		89.5	40-130			
Surrogate: 13C8-PFOA	*20.4*		ng/L	19.79		103	40-130			
Surrogate: 13C9-PFNA	*9.77*		ng/L	9.895		98.8	40-130			
Surrogate: 13C6-PFDA	*9.27*		ng/L	9.895		93.7	40-130			
Surrogate: 13C7-PFUnA	*9.62*		ng/L	9.895		97.2	30-130			
Surrogate: 13C2-PFDoA	*8.93*		ng/L	9.895		90.2	10-130			
Surrogate: 13C2-PFTeDA	*8.64*		ng/L	9.895		87.4	10-130			
Surrogate: 13C3-PFBS	*18.6*		ng/L	19.79		94.0	40-135			
Surrogate: 13C3-PFHxS	*19.4*		ng/L	19.79		98.0	40-130			
Surrogate: 13C8-PFOS	*19.5*		ng/L	19.79		98.5	40-130			
Surrogate: 13C2-4:2FTS	*43.0*		ng/L	39.58		109	40-200			
Surrogate: 13C2-6:2FTS	*36.8*		ng/L	39.58		92.9	40-200			
Surrogate: 13C2-8:2FTS	*37.7*		ng/L	39.58		95.2	40-300			
Surrogate: 13C8-PFOSA	*16.0*		ng/L	19.79		80.8	40-130			
Surrogate: D3-NMeFOSA	*14.3*		ng/L	19.79		72.1	10-130			
Surrogate: D5-NEtFOSA	*13.0*		ng/L	19.79		65.6	10-130			
Surrogate: D3-NMeFOSAA	*35.0*		ng/L	39.58		88.5	40-170			
Surrogate: D5-NEtFOSAA	*35.4*		ng/L	39.58		89.4	25-135			
Surrogate: D7-NMeFOSE	*159*		ng/L	197.9		80.5	10-130			
Surrogate: D9-NEtFOSE	*157*		ng/L	197.9		79.3	10-130			
Surrogate: 13C3-HFPO-DA	*79.2*		ng/L	79.16		100	40-130			
MRL Check (B392841-MRL1)				Prepared: 11/22/24 Analyzed: 11/27/24						
Perfluorobutanoic acid (PFBA)	5.98	6.3	ng/L	6.301		94.9	70-140			J
Perfluoropentanoic acid (PFPeA)	2.81	3.2	ng/L	3.150		89.2	65-135			J

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B392841 - EPA 1633										
MRL Check (B392841-MRL1)				Prepared: 11/22/24 Analyzed: 11/27/24						
Perfluorohexanoic acid (PFHxA)	1.45	1.6	ng/L	1.575		92.1	70-145			J
Perfluoroheptanoic acid (PFHpA)	1.34	1.6	ng/L	1.575		85.3	70-150			J
Perfluorooctanoic acid (PFOA)	1.59	1.6	ng/L	1.575		101	70-150			
Perfluorononanoic acid (PFNA)	1.58	1.6	ng/L	1.575		100	70-150			
Perfluorodecanoic acid (PFDA)	1.42	1.6	ng/L	1.575		90.2	70-140			J
Perfluoroundecanoic acid (PFUnA)	1.63	1.6	ng/L	1.575		103	70-145			
Perfluorododecanoic acid (PFDoA)	1.40	1.6	ng/L	1.575		88.9	70-140			J
Perfluorotridecanoic acid (PFTrDA)	1.39	1.6	ng/L	1.575		88.5	65-140			J
Perfluorotetradecanoic acid (PFTeDA)	1.33	1.6	ng/L	1.575		84.5	60-140			J
Perfluorobutanesulfonic acid (PFBS)	1.17	1.6	ng/L	1.399		83.6	60-145			J
Perfluoropentanesulfonic acid (PFPeS)	1.47	1.6	ng/L	1.481		99.6	65-140			J
Perfluorohexanesulfonic acid (PFHxS)	1.38	1.6	ng/L	1.437		96.0	65-145			J
Perfluoroheptanesulfonic acid (PFHpS)	1.41	1.6	ng/L	1.500		94.2	70-150			J
Perfluorooctanesulfonic acid (PFOS)	1.29	1.6	ng/L	1.462		88.5	55-150			J
Perfluorononanesulfonic acid (PFNS)	1.30	1.6	ng/L	1.512		86.2	65-145			J
Perfluorodecanesulfonic acid (PFDS)	1.44	1.6	ng/L	1.518		94.6	60-145			J
Perfluorododecanesulfonic acid (PFDoS)	1.45	1.6	ng/L	1.525		95.3	50-145			J
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	5.01	6.3	ng/L	5.904		84.9	70-145			J
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	5.55	6.3	ng/L	5.992		92.6	65-155			J
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	4.91	6.3	ng/L	6.049		81.1	60-150			J
Perfluorooctanesulfonamide (PFOSA)	1.40	1.6	ng/L	1.575		89.1	70-145			J
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	1.46	1.6	ng/L	1.575		92.5	60-150			J
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	1.53	1.6	ng/L	1.575		97.0	65-145			J
N-MeFOSAA (NMeFOSAA)	1.19	1.6	ng/L	1.575		75.4	50-140			J
N-EtFOSAA (NEtFOSAA)	1.41	1.6	ng/L	1.575		89.2	70-145			J
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	14.0	16	ng/L	15.75		88.9	70-145			J
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	13.7	16	ng/L	15.75		87.0	70-135			J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	5.82	6.3	ng/L	6.301		92.3	70-140			J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	5.85	6.3	ng/L	5.954		98.2	65-145			J
9Cl-PF3ONS (F53B Minor)	4.88	6.3	ng/L	5.878		83.1	70-155			J
11Cl-PF3OUdS (F53B Major)	5.25	6.3	ng/L	5.941		88.3	55-160			J
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	6.77	7.9	ng/L	7.876		86.0	65-130			J
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	32.5	39	ng/L	39.38		82.6	70-135			J
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	32.0	39	ng/L	39.38		81.4	50-145			J
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.41	3.2	ng/L	2.810		85.7	70-140			J
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.57	3.2	ng/L	3.150		81.7	55-140			J
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.86	3.2	ng/L	3.150		90.9	60-150			J
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.60	3.2	ng/L	3.150		82.5	50-150			J
Surrogate: 13C4-PFBA	*61.3*		ng/L	78.76		77.8	5-130			
Surrogate: 13C5-PFPeA	*29.9*		ng/L	39.38		75.9	40-130			
Surrogate: 13C5-PFHxA	*14.8*		ng/L	19.69		75.2	40-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B392841 - EPA 1633										
MRL Check (B392841-MRL1)				Prepared: 11/22/24 Analyzed: 11/27/24						
Surrogate: 13C4-PFHpA	*13.6*		ng/L	19.69		69.1	40-130			
Surrogate: 13C8-PFOA	*16.1*		ng/L	19.69		81.8	40-130			
Surrogate: 13C9-PFNA	*7.45*		ng/L	9.845		75.7	40-130			
Surrogate: 13C6-PFDA	*7.33*		ng/L	9.845		74.4	40-130			
Surrogate: 13C7-PFUnA	*7.30*		ng/L	9.845		74.2	30-130			
Surrogate: 13C2-PFDoA	*7.76*		ng/L	9.845		78.8	10-130			
Surrogate: 13C2-PFTeDA	*7.82*		ng/L	9.845		79.4	10-130			
Surrogate: 13C3-PFBS	*13.5*		ng/L	19.69		68.4	40-135			
Surrogate: 13C3-PFHxS	*13.8*		ng/L	19.69		70.0	40-130			
Surrogate: 13C8-PFOS	*15.0*		ng/L	19.69		76.0	40-130			
Surrogate: 13C2-4:2FTS	*35.8*		ng/L	39.38		90.8	40-200			
Surrogate: 13C2-6:2FTS	*28.9*		ng/L	39.38		73.3	40-200			
Surrogate: 13C2-8:2FTS	*29.6*		ng/L	39.38		75.1	40-300			
Surrogate: 13C8-PFOSA	*14.0*		ng/L	19.69		70.9	40-130			
Surrogate: D3-NMeFOSA	*12.7*		ng/L	19.69		64.6	10-130			
Surrogate: D5-NEtFOSA	*12.0*		ng/L	19.69		61.1	10-130			
Surrogate: D3-NMeFOSAA	*25.6*		ng/L	39.38		64.9	40-170			
Surrogate: D5-NEtFOSAA	*25.3*		ng/L	39.38		64.2	25-135			
Surrogate: D7-NMeFOSE	*138*		ng/L	196.9		70.0	10-130			
Surrogate: D9-NEtFOSE	*141*		ng/L	196.9		71.8	10-130			
Surrogate: 13C3-HFPO-DA	*61.8*		ng/L	78.76		78.5	40-130			
Batch B393056 - EPA 1633										
Blank (B393056-BLK1)				Prepared: 12/01/24 Analyzed: 12/03/24						
Perfluorobutanoic acid (PFBA)	ND	6.3	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	3.1	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	1.6	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	1.6	ng/L							
Perfluorooctanoic acid (PFOA)	ND	1.6	ng/L							
Perfluorononanoic acid (PFNA)	ND	1.6	ng/L							
Perfluorodecanoic acid (PFDA)	ND	1.6	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	1.6	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	1.6	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	1.6	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	1.6	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	1.6	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	1.6	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	1.6	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.6	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	1.6	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	1.6	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	1.6	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	1.6	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	6.3	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	6.3	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	6.3	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	1.6	ng/L							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.6	ng/L							

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B393056 - EPA 1633										
Blank (B393056-BLK1)				Prepared: 12/01/24 Analyzed: 12/03/24						
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.6	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	1.6	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	1.6	ng/L							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	16	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	16	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	6.3	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	6.3	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	6.3	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	6.3	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	7.8	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	39	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	39	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	3.1	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	3.1	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	3.1	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	3.1	ng/L							
Surrogate: 13C4-PFBA	*82.2*		ng/L	78.20		105	5-130			
Surrogate: 13C5-PFPeA	*40.4*		ng/L	39.10		103	40-130			
Surrogate: 13C5-PFHxA	*20.5*		ng/L	19.55		105	40-130			
Surrogate: 13C4-PFHpA	*20.4*		ng/L	19.55		104	40-130			
Surrogate: 13C8-PFOA	*20.2*		ng/L	19.55		103	40-130			
Surrogate: 13C9-PFNA	*9.98*		ng/L	9.775		102	40-130			
Surrogate: 13C6-PFDA	*10.3*		ng/L	9.775		105	40-130			
Surrogate: 13C7-PFUnA	*10.1*		ng/L	9.775		104	30-130			
Surrogate: 13C2-PFDoA	*8.75*		ng/L	9.775		89.5	10-130			
Surrogate: 13C2-PFTeDA	*7.84*		ng/L	9.775		80.2	10-130			
Surrogate: 13C3-PFBS	*20.2*		ng/L	19.55		103	40-135			
Surrogate: 13C3-PFHxS	*21.7*		ng/L	19.55		111	40-130			
Surrogate: 13C8-PFOS	*20.4*		ng/L	19.55		104	40-130			
Surrogate: 13C2-4:2FTS	*47.0*		ng/L	39.10		120	40-200			
Surrogate: 13C2-6:2FTS	*42.9*		ng/L	39.10		110	40-200			
Surrogate: 13C2-8:2FTS	*47.6*		ng/L	39.10		122	40-300			
Surrogate: 13C8-PFOSA	*17.2*		ng/L	19.55		88.1	40-130			
Surrogate: D3-NMeFOSA	*11.5*		ng/L	19.55		58.8	10-130			
Surrogate: D5-NEtFOSA	*11.6*		ng/L	19.55		59.4	10-130			
Surrogate: D3-NMeFOSAA	*39.0*		ng/L	39.10		99.6	40-170			
Surrogate: D5-NEtFOSAA	*36.3*		ng/L	39.10		92.9	25-135			
Surrogate: D7-NMeFOSE	*157*		ng/L	195.5		80.5	10-130			
Surrogate: D9-NEtFOSE	*148*		ng/L	195.5		75.9	10-130			
Surrogate: 13C3-HFPO-DA	*83.1*		ng/L	78.20		106	40-130			
LCS (B393056-BS1)				Prepared: 12/01/24 Analyzed: 12/03/24						
Perfluorobutanoic acid (PFBA)	78.3	6.3	ng/L	78.25		100	70-140			
Perfluoropentanoic acid (PFPeA)	39.5	3.1	ng/L	39.13		101	65-135			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B393056 - EPA 1633										
LCS (B393056-BS1)				Prepared: 12/01/24 Analyzed: 12/03/24						
Perfluorohexanoic acid (PFHxA)	19.8	1.6	ng/L	19.56		101	70-145			
Perfluoroheptanoic acid (PFHpA)	20.3	1.6	ng/L	19.56		104	70-150			
Perfluorooctanoic acid (PFOA)	20.7	1.6	ng/L	19.56		106	70-150			
Perfluorononanoic acid (PFNA)	19.1	1.6	ng/L	19.56		97.4	70-150			
Perfluorodecanoic acid (PFDA)	21.7	1.6	ng/L	19.56		111	70-140			
Perfluoroundecanoic acid (PFUnA)	20.5	1.6	ng/L	19.56		105	70-145			
Perfluorododecanoic acid (PFDoA)	20.5	1.6	ng/L	19.56		105	70-140			
Perfluorotridecanoic acid (PFTrDA)	18.7	1.6	ng/L	19.56		95.6	65-140			
Perfluorotetradecanoic acid (PFTeDA)	21.1	1.6	ng/L	19.56		108	60-140			
Perfluorobutanesulfonic acid (PFBS)	17.3	1.6	ng/L	17.37		99.5	60-145			
Perfluoropentanesulfonic acid (PFPeS)	18.8	1.6	ng/L	18.39		102	65-140			
Perfluorohexanesulfonic acid (PFHxS)	17.6	1.6	ng/L	17.84		98.7	65-145			
Perfluoroheptanesulfonic acid (PFHpS)	20.6	1.6	ng/L	18.62		110	70-150			
Perfluorooctanesulfonic acid (PFOS)	18.7	1.6	ng/L	18.15		103	55-150			
Perfluorononanesulfonic acid (PFNS)	18.2	1.6	ng/L	18.78		97.0	65-145			
Perfluorodecanesulfonic acid (PFDS)	17.9	1.6	ng/L	18.86		94.7	60-145			
Perfluorododecanesulfonic acid (PFDoS)	15.6	1.6	ng/L	18.94		82.6	50-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	81.6	6.3	ng/L	73.32		111	70-145			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	86.6	6.3	ng/L	74.42		116	65-155			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	78.9	6.3	ng/L	75.12		105	60-150			
Perfluorooctanesulfonamide (PFOSA)	20.8	1.6	ng/L	19.56		106	70-145			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	20.4	1.6	ng/L	19.56		104	60-150			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	21.7	1.6	ng/L	19.56		111	65-145			
N-MeFOSAA (NMeFOSAA)	17.5	1.6	ng/L	19.56		89.6	50-140			
N-EtFOSAA (NEtFOSAA)	20.4	1.6	ng/L	19.56		104	70-145			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	207	16	ng/L	195.6		106	70-145			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	206	16	ng/L	195.6		106	70-135			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	81.8	6.3	ng/L	78.25		105	70-140			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	74.3	6.3	ng/L	73.95		100	65-145			
9Cl-PF3ONS (F53B Minor)	77.2	6.3	ng/L	73.01		106	70-155			
11Cl-PF3OUdS (F53B Major)	73.8	6.3	ng/L	73.09		101	55-160			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	77.3	7.8	ng/L	97.82		79.0	65-130			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	458	39	ng/L	489.1		93.6	70-135			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	415	39	ng/L	489.1		84.8	50-145			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	37.0	3.1	ng/L	34.90		106	70-140			
Perfluoro-3-methoxypropanoic acid (PFMPA)	43.1	3.1	ng/L	39.13		110	55-140			
Perfluoro-4-methoxybutanoic acid (PFMBA)	40.1	3.1	ng/L	39.13		103	60-150			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	41.0	3.1	ng/L	39.13		105	50-150			
Surrogate: 13C4-PFBA	*78.4*		ng/L	78.25		100	5-130			
Surrogate: 13C5-PFPeA	*39.6*		ng/L	39.13		101	40-130			
Surrogate: 13C5-PFHxA	*20.0*		ng/L	19.56		102	40-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B393056 - EPA 1633										
LCS (B393056-BS1)				Prepared: 12/01/24 Analyzed: 12/03/24						
Surrogate: 13C4-PFHpA	*19.9*		ng/L	19.56		102	40-130			
Surrogate: 13C8-PFOA	*18.6*		ng/L	19.56		95.2	40-130			
Surrogate: 13C9-PFNA	*9.77*		ng/L	9.782		99.9	40-130			
Surrogate: 13C6-PFDA	*8.78*		ng/L	9.782		89.7	40-130			
Surrogate: 13C7-PFUnA	*9.05*		ng/L	9.782		92.5	30-130			
Surrogate: 13C2-PFDoA	*8.52*		ng/L	9.782		87.1	10-130			
Surrogate: 13C2-PFTeDA	*7.45*		ng/L	9.782		76.2	10-130			
Surrogate: 13C3-PFBS	*18.4*		ng/L	19.56		94.1	40-135			
Surrogate: 13C3-PFHxS	*18.5*		ng/L	19.56		94.5	40-130			
Surrogate: 13C8-PFOS	*18.8*		ng/L	19.56		96.0	40-130			
Surrogate: 13C2-4:2FTS	*38.8*		ng/L	39.13		99.2	40-200			
Surrogate: 13C2-6:2FTS	*35.3*		ng/L	39.13		90.2	40-200			
Surrogate: 13C2-8:2FTS	*41.8*		ng/L	39.13		107	40-300			
Surrogate: 13C8-PFOSA	*15.7*		ng/L	19.56		80.4	40-130			
Surrogate: D3-NMeFOSA	*11.8*		ng/L	19.56		60.1	10-130			
Surrogate: D5-NEtFOSA	*11.8*		ng/L	19.56		60.2	10-130			
Surrogate: D3-NMeFOSAA	*35.3*		ng/L	39.13		90.2	40-170			
Surrogate: D5-NEtFOSAA	*34.7*		ng/L	39.13		88.7	25-135			
Surrogate: D7-NMeFOSE	*148*		ng/L	195.6		75.7	10-130			
Surrogate: D9-NEtFOSE	*142*		ng/L	195.6		72.6	10-130			
Surrogate: 13C3-HFPO-DA	*80.8*		ng/L	78.25		103	40-130			
MRL Check (B393056-MRL1)				Prepared: 12/01/24 Analyzed: 12/03/24						
Perfluorobutanoic acid (PFBA)	6.98	6.3	ng/L	6.277		111	70-140			
Perfluoropentanoic acid (PFPeA)	3.21	3.1	ng/L	3.139		102	65-135			
Perfluorohexanoic acid (PFHxA)	1.63	1.6	ng/L	1.569		104	70-145			
Perfluoroheptanoic acid (PFHpA)	1.60	1.6	ng/L	1.569		102	70-150			
Perfluorooctanoic acid (PFOA)	1.32	1.6	ng/L	1.569		84.1	70-150			J
Perfluorononanoic acid (PFNA)	1.45	1.6	ng/L	1.569		92.4	70-150			J
Perfluorodecanoic acid (PFDA)	1.56	1.6	ng/L	1.569		99.2	70-140			J
Perfluoroundecanoic acid (PFUnA)	1.48	1.6	ng/L	1.569		94.6	70-145			J
Perfluorododecanoic acid (PFDoA)	1.67	1.6	ng/L	1.569		106	70-140			
Perfluorotridecanoic acid (PFTrDA)	1.43	1.6	ng/L	1.569		91.1	65-140			J
Perfluorotetradecanoic acid (PFTeDA)	1.56	1.6	ng/L	1.569		99.4	60-140			J
Perfluorobutanesulfonic acid (PFBS)	1.37	1.6	ng/L	1.394		98.2	60-145			J
Perfluoropentanesulfonic acid (PFPeS)	1.34	1.6	ng/L	1.475		90.7	65-140			J
Perfluorohexanesulfonic acid (PFHxS)	1.50	1.6	ng/L	1.431		105	65-145			J
Perfluoroheptanesulfonic acid (PFHpS)	1.86	1.6	ng/L	1.494		124	70-150			
Perfluorooctanesulfonic acid (PFOS)	1.44	1.6	ng/L	1.456		98.7	55-150			J
Perfluorononanesulfonic acid (PFNS)	1.53	1.6	ng/L	1.507		102	65-145			J
Perfluorodecanesulfonic acid (PFDS)	1.41	1.6	ng/L	1.513		93.2	60-145			J
Perfluorododecanesulfonic acid (PFDoS)	1.14	1.6	ng/L	1.519		75.0	50-145			J
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	5.86	6.3	ng/L	5.882		99.7	70-145			J
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	5.60	6.3	ng/L	5.970		93.9	65-155			J
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	5.85	6.3	ng/L	6.026		97.1	60-150			J
Perfluorooctanesulfonamide (PFOSA)	1.55	1.6	ng/L	1.569		98.6	70-145			J
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	1.39	1.6	ng/L	1.569		88.4	60-150			J
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	1.48	1.6	ng/L	1.569		94.4	65-145			J
N-MeFOSAA (NMeFOSAA)	1.70	1.6	ng/L	1.569		108	50-140			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B393056 - EPA 1633										
MRL Check (B393056-MRL1)				Prepared: 12/01/24 Analyzed: 12/03/24						
N-EtFOSAA (NEtFOSAA)	1.53	1.6	ng/L	1.569		97.8	70-145			J
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	15.4	16	ng/L	15.69		98.3	70-145			J
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	15.2	16	ng/L	15.69		96.6	70-135			J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	6.27	6.3	ng/L	6.277		99.9	70-140			J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	5.75	6.3	ng/L	5.932		97.0	65-145			J
9Cl-PF3ONS (F53B Minor)	6.10	6.3	ng/L	5.857		104	70-155			J
11Cl-PF3OUdS (F53B Major)	5.88	6.3	ng/L	5.919		99.3	55-160			J
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	6.77	7.8	ng/L	7.846		86.3	65-130			J
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	37.5	39	ng/L	39.23		95.6	70-135			J
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	30.6	39	ng/L	39.23		78.1	50-145			J
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.70	3.1	ng/L	2.800		96.5	70-140			J
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.76	3.1	ng/L	3.139		120	55-140			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.12	3.1	ng/L	3.139		99.5	60-150			J
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.06	3.1	ng/L	3.139		97.4	50-150			J
Surrogate: 13C4-PFBA	*78.9*		ng/L	78.46		101	5-130			
Surrogate: 13C5-PFPeA	*40.0*		ng/L	39.23		102	40-130			
Surrogate: 13C5-PFHxA	*20.0*		ng/L	19.62		102	40-130			
Surrogate: 13C4-PFHpA	*20.8*		ng/L	19.62		106	40-130			
Surrogate: 13C8-PFOA	*20.0*		ng/L	19.62		102	40-130			
Surrogate: 13C9-PFNA	*10.0*		ng/L	9.808		102	40-130			
Surrogate: 13C6-PFDA	*10.1*		ng/L	9.808		103	40-130			
Surrogate: 13C7-PFUnA	*9.87*		ng/L	9.808		101	30-130			
Surrogate: 13C2-PFDoA	*9.29*		ng/L	9.808		94.7	10-130			
Surrogate: 13C2-PFTeDA	*8.08*		ng/L	9.808		82.4	10-130			
Surrogate: 13C3-PFBS	*18.9*		ng/L	19.62		96.4	40-135			
Surrogate: 13C3-PFHxS	*21.6*		ng/L	19.62		110	40-130			
Surrogate: 13C8-PFOS	*19.9*		ng/L	19.62		101	40-130			
Surrogate: 13C2-4:2FTS	*43.8*		ng/L	39.23		112	40-200			
Surrogate: 13C2-6:2FTS	*41.5*		ng/L	39.23		106	40-200			
Surrogate: 13C2-8:2FTS	*72.0*		ng/L	39.23		183	40-300			
Surrogate: 13C8-PFOSA	*16.8*		ng/L	19.62		85.7	40-130			
Surrogate: D3-NMeFOSA	*10.4*		ng/L	19.62		52.8	10-130			
Surrogate: D5-NEtFOSA	*10.7*		ng/L	19.62		54.7	10-130			
Surrogate: D3-NMeFOSAA	*38.4*		ng/L	39.23		97.8	40-170			
Surrogate: D5-NEtFOSAA	*38.9*		ng/L	39.23		99.1	25-135			
Surrogate: D7-NMeFOSE	*152*		ng/L	196.2		77.4	10-130			
Surrogate: D9-NEtFOSE	*144*		ng/L	196.2		73.5	10-130			
Surrogate: 13C3-HFPO-DA	*81.9*		ng/L	78.46		104	40-130			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
Z-01	Non-extracted internal standard compound recovery <50%. Re-extracted sample exhibited similar results. Possible high bias present on associated extracted internal standard recoveries.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
Draft Method 1633 in Water	
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV,CT
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV,CT
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV,CT
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV,CT
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV,CT
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV,CT
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV,CT
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV,CT
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV,CT
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV,CT
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV,CT
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV,CT
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV,CT
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV,CT
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV,CT
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV,CT
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV,CT
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV,CT
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV,CT
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV,CT
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV,CT
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV,CT
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV,CT
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV,CT
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV,CT
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV,CT
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV,CT
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV,CT
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,NY,PA,WV,CT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV,CT
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV,CT
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
Cyclohexane	ME,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Ethylbenzene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2025
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2025
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2025
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2025
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2025

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Phone: 413-525-2332
39 Spruce St
East Longmeadow, MA 01028

24K1020

https://www.pacelabs.com/ KM

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

11/12/24

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: NYS DEC	Consultant: Groundwater & Environmental
Consultant Address: 6010 North Bailey Ave., Suite 1 Amherst, NY 14226	
Consultant Phone: 716-796-3827	
Callout Project Name:	Keywell LLC Vac-Air Division
Project Location:	Frewsburg, NY
Callout Number:	151686
Site/Spill Number:	907016
Project Manager:	Steven Moeller
Pace Analytical Quote Name/Number:	
Invoice Recipient:	
Sampled By:	Owen Ogiony

Requested Turnaround Time
DEC Standard 30-calendar day ☐
Due Date:

Rush (Prior Approval Required)
1-Day ☐ 2-Day ☐ 3-Day ☐
4-Day ☐ 5-Day ☐ 10-Day ☑

Data Delivery
Format: PDF ☑ EXCEL ☑
Other:
CLP Like (Level 4) Data Pkg Required: ☐
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Date	Time	Composite	Grab	[1]Matrix Code	Conc Code	8260: DER TCL / Oxygenates / CP-51	8270: DER TCL / CP-51	1,4-Dioxane SIM | 8082 PCBs	8081 Pesticide | 8151 Herbicide	TAL Total Metals | TCLP RCRA 8 Metals	PFAS 1633 | PFAS 537 ID					
	[redacted]				X	GW	U	X					X					
	[redacted]				X	GW	U	X					X					
	[redacted]				X	GW	U	X					X					
	[redacted]				X	GW	U	X					X					
	[redacted]				X	GW	U	X					X					
	[redacted]				X	GW	U	X					X					
	[redacted]				X	GW	U	X					X					
1	MW-14	11/12	1045		X	GW	U	X					X					
	[redacted]				X	GW	U	X					X					
	[redacted]				X	GW	U	X					X					

ANALYSIS REQUESTED (Circle Requested Analyses/Reporting List)

3						3												# of Containers
H						NA												[2] Preservation Code
V						ST												[3] Container Code

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

Comments:

Please use the following codes to indicate possible sample concentration within the **Conc Code** column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Relinquished by: (signature) CTR to fridge	Date/Time: 11/12 1630
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time: 11/13 1218
Received by: (signature) Rodney Riley (PACE)	Date/Time: 11/13/24 12:15
Relinquished by: (signature) Rodney Riley (PACE)	Date/Time: 11/13/24 12:15
Received by: (signature) Buffalo Service Center	Date/Time: 11/13/24 12:15

Program & Regulatory Information
☐ AWQ STDS ☒ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables
☐ Enhanced Data Package
☑ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☑ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ *AIHA-LAP,LLC*

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Page 27 of 29

Table of Contents

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Log In Back-Sheet

Client GES (DEC)

Project Keywell LLC Vac-Air Division

MCP/RCP Required no

Deliverable Package Requirement NY Cat B

Location Frewsburg, NY

PWSID# (When Applicable) n/a

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐ /

Received By / Date / Time Mcm 11/13/24 1215

Back-Sheet By / Date / Time Mcm 11/15/24 0912

Temperature Method Gun # 4

WV samples: Yes (see note*) / No (follow normal procedure)

Temp < 6° C Actual Temperature 2.0

Rush Samples: Yes / No Notify No

Short Hold: Yes / No Notify No

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client	☑	Analysis	☑	Sampler Name	☑
Project	☑	IDs	☑	Collection Date/Time	☑

All Samples Proper pH: N/A ☐ ☐

Additional Container Notes

**Note: West Virginia requires all samples to have their temperature taken. Note any outliers.*

Qualtrax ID: 120836

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Sample				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
16oz Amb/Clear	(Circle Amb/Clear)	Soils Jars																					
8oz Amb/Clear																							
4oz Amb/Clear																							
2oz Amb/Clear																							
Unpreserved	1 Liter	Ambers																					
HCL																							
Sulfuric																							
Sulfuric	250mL																						
Phosphoric																							
HCl																							
Unpreserved	100mL																						
Unpreserved	1 Liter	Plastics																					
Sulfuric																							
Unpreserved	500mL			2																			
Sulfuric																							
Unpreserved	250mL																						
Trizma																							
Sulfuric																							
Nitric																							
NaOH																							
Ammonium Acetate																							
NaOH/Zinc																							
Unpreserved		VOA Vials																					
HCl				3																			
MeOH																							
D.I. Water																							
BiSulfate																							
Col/Bact		Other / Fill in																					
125ml plastic unp				1																			

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 3/12/2024 8:10:01 AM

JOB DESCRIPTION

NYSDEC Frewsburg Site - Falconer St

JOB NUMBER

480-217569-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 17
Lab Chronicle 18
Certification Summary 19
Method Summary 20
Sample Summary 21
Chain of Custody 22
Receipt Checklists 23

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-217569-1 Eurofins Buffalo

Job Narrative
480-217569-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/6/2024 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: TREATMENT INFLUENT (480-217569-2). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: TREATMENT EFFLUENT (480-217569-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-703122 recovered outside control limits for the following analytes: Chloromethane and Dichlorodifluoromethane. These analytes were biased high in the LCS/LCSD and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: TREATMENT EFFLUENT (480-217569-1), TREATMENT INFLUENT (480-217569-2) and TRIP BLANK (480-217569-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-217569-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	2.1		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0090	J	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-217569-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2700		50	41	ug/L	50		8260C	Total/NA
Trichloroethene	3000		50	23	ug/L	50		8260C	Total/NA
Vinyl chloride	160		50	45	ug/L	50		8260C	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-217569-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-217569-1
Date Collected: 03/05/24 10:00
Matrix: Water
Date Received: 03/06/24 09:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			03/09/24 01:14	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			03/09/24 01:14	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			03/09/24 01:14	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			03/09/24 01:14	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			03/09/24 01:14	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			03/09/24 01:14	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			03/09/24 01:14	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			03/09/24 01:14	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			03/09/24 01:14	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			03/09/24 01:14	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			03/09/24 01:14	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			03/09/24 01:14	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			03/09/24 01:14	4
2-Butanone (MEK)	ND		40	5.3	ug/L			03/09/24 01:14	4
2-Hexanone	ND		20	5.0	ug/L			03/09/24 01:14	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			03/09/24 01:14	4
Acetone	ND		40	12	ug/L			03/09/24 01:14	4
Benzene	ND		4.0	1.6	ug/L			03/09/24 01:14	4
Bromodichloromethane	ND		4.0	1.6	ug/L			03/09/24 01:14	4
Bromoform	ND		4.0	1.0	ug/L			03/09/24 01:14	4
Bromomethane	ND		4.0	2.8	ug/L			03/09/24 01:14	4
Carbon disulfide	ND		4.0	0.76	ug/L			03/09/24 01:14	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			03/09/24 01:14	4
Chlorobenzene	ND		4.0	3.0	ug/L			03/09/24 01:14	4
Dibromochloromethane	ND		4.0	1.3	ug/L			03/09/24 01:14	4
Chloroethane	ND		4.0	1.3	ug/L			03/09/24 01:14	4
Chloroform	ND		4.0	1.4	ug/L			03/09/24 01:14	4
Chloromethane	ND	*+	4.0	1.4	ug/L			03/09/24 01:14	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			03/09/24 01:14	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			03/09/24 01:14	4
Cyclohexane	ND		4.0	0.72	ug/L			03/09/24 01:14	4
Dichlorodifluoromethane	ND	*+	4.0	2.7	ug/L			03/09/24 01:14	4
Ethylbenzene	ND		4.0	3.0	ug/L			03/09/24 01:14	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			03/09/24 01:14	4
Isopropylbenzene	ND		4.0	3.2	ug/L			03/09/24 01:14	4
Methyl acetate	ND		10	5.2	ug/L			03/09/24 01:14	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			03/09/24 01:14	4
Methylcyclohexane	ND		4.0	0.64	ug/L			03/09/24 01:14	4
Methylene Chloride	ND		4.0	1.8	ug/L			03/09/24 01:14	4
Styrene	ND		4.0	2.9	ug/L			03/09/24 01:14	4
Tetrachloroethene	ND		4.0	1.4	ug/L			03/09/24 01:14	4
Toluene	ND		4.0	2.0	ug/L			03/09/24 01:14	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			03/09/24 01:14	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			03/09/24 01:14	4
Trichloroethene	ND		4.0	1.8	ug/L			03/09/24 01:14	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			03/09/24 01:14	4
Vinyl chloride	ND		4.0	3.6	ug/L			03/09/24 01:14	4
Xylenes, Total	ND		8.0	2.6	ug/L			03/09/24 01:14	4

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-217569-1
Date Collected: 03/05/24 10:00
Matrix: Water
Date Received: 03/06/24 09:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/09/24 01:14*	*4*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*03/09/24 01:14*	*4*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*03/09/24 01:14*	*4*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*03/09/24 01:14*	*4*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		03/07/24 11:55	03/11/24 13:01	1
Iron	**2.1**		0.050	0.019	mg/L		03/07/24 11:55	03/11/24 13:01	1
Zinc	**0.0090**	**J**	0.010	0.0015	mg/L		03/07/24 11:55	03/11/24 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		4.7	1.3	mg/L		03/08/24 07:11	03/08/24 08:23	1

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-217569-2
Date Collected: 03/05/24 10:10
Matrix: Water
Date Received: 03/06/24 09:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			03/09/24 01:37	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			03/09/24 01:37	50
1,1,2-Trichloroethane	ND		50	12	ug/L			03/09/24 01:37	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16	ug/L			03/09/24 01:37	50
1,1-Dichloroethane	ND		50	19	ug/L			03/09/24 01:37	50
1,1-Dichloroethene	ND		50	15	ug/L			03/09/24 01:37	50
1,2,4-Trichlorobenzene	ND		50	21	ug/L			03/09/24 01:37	50
1,2-Dibromo-3-Chloropropane	ND		50	20	ug/L			03/09/24 01:37	50
1,2-Dichlorobenzene	ND		50	40	ug/L			03/09/24 01:37	50
1,2-Dichloroethane	ND		50	11	ug/L			03/09/24 01:37	50
1,2-Dichloropropane	ND		50	36	ug/L			03/09/24 01:37	50
1,3-Dichlorobenzene	ND		50	39	ug/L			03/09/24 01:37	50
1,4-Dichlorobenzene	ND		50	42	ug/L			03/09/24 01:37	50
2-Butanone (MEK)	ND		500	66	ug/L			03/09/24 01:37	50
2-Hexanone	ND		250	62	ug/L			03/09/24 01:37	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			03/09/24 01:37	50
Acetone	ND		500	150	ug/L			03/09/24 01:37	50
Benzene	ND		50	21	ug/L			03/09/24 01:37	50
Bromodichloromethane	ND		50	20	ug/L			03/09/24 01:37	50
Bromoform	ND		50	13	ug/L			03/09/24 01:37	50
Bromomethane	ND		50	35	ug/L			03/09/24 01:37	50
Carbon disulfide	ND		50	9.5	ug/L			03/09/24 01:37	50
Carbon tetrachloride	ND		50	14	ug/L			03/09/24 01:37	50
Chlorobenzene	ND		50	38	ug/L			03/09/24 01:37	50
Dibromochloromethane	ND		50	16	ug/L			03/09/24 01:37	50
Chloroethane	ND		50	16	ug/L			03/09/24 01:37	50
Chloroform	ND		50	17	ug/L			03/09/24 01:37	50
Chloromethane	ND	*+	50	18	ug/L			03/09/24 01:37	50
cis-1,2-Dichloroethene	**2700**		50	41	ug/L			03/09/24 01:37	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			03/09/24 01:37	50

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-217569-2
Date Collected: 03/05/24 10:10
Matrix: Water
Date Received: 03/06/24 09:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		50	9.0	ug/L			03/09/24 01:37	50
Dichlorodifluoromethane	ND	*+	50	34	ug/L			03/09/24 01:37	50
Ethylbenzene	ND		50	37	ug/L			03/09/24 01:37	50
1,2-Dibromoethane	ND		50	37	ug/L			03/09/24 01:37	50
Isopropylbenzene	ND		50	40	ug/L			03/09/24 01:37	50
Methyl acetate	ND		130	65	ug/L			03/09/24 01:37	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			03/09/24 01:37	50
Methylcyclohexane	ND		50	8.0	ug/L			03/09/24 01:37	50
Methylene Chloride	ND		50	22	ug/L			03/09/24 01:37	50
Styrene	ND		50	37	ug/L			03/09/24 01:37	50
Tetrachloroethene	ND		50	18	ug/L			03/09/24 01:37	50
Toluene	ND		50	26	ug/L			03/09/24 01:37	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			03/09/24 01:37	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			03/09/24 01:37	50
Trichloroethene	**3000**		50	23	ug/L			03/09/24 01:37	50
Trichlorofluoromethane	ND		50	44	ug/L			03/09/24 01:37	50
Vinyl chloride	**160**		50	45	ug/L			03/09/24 01:37	50
Xylenes, Total	ND		100	33	ug/L			03/09/24 01:37	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*03/09/24 01:37*	*50*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*03/09/24 01:37*	*50*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*03/09/24 01:37*	*50*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*03/09/24 01:37*	*50*

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-217569-3
Date Collected: 03/05/24 00:00
Matrix: Water
Date Received: 03/06/24 09:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/09/24 02:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/09/24 02:01	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/09/24 02:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/09/24 02:01	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/09/24 02:01	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/09/24 02:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/09/24 02:01	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/09/24 02:01	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/09/24 02:01	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/09/24 02:01	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/09/24 02:01	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/09/24 02:01	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/09/24 02:01	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/09/24 02:01	1
2-Hexanone	ND		5.0	1.2	ug/L			03/09/24 02:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/09/24 02:01	1
Acetone	ND		10	3.0	ug/L			03/09/24 02:01	1
Benzene	ND		1.0	0.41	ug/L			03/09/24 02:01	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/09/24 02:01	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-217569-3
Date Collected: 03/05/24 00:00
Matrix: Water
Date Received: 03/06/24 09:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			03/09/24 02:01	1
Bromomethane	ND		1.0	0.69	ug/L			03/09/24 02:01	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/09/24 02:01	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/09/24 02:01	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/09/24 02:01	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/09/24 02:01	1
Chloroethane	ND		1.0	0.32	ug/L			03/09/24 02:01	1
Chloroform	ND		1.0	0.34	ug/L			03/09/24 02:01	1
Chloromethane	ND	*+	1.0	0.35	ug/L			03/09/24 02:01	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/09/24 02:01	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/09/24 02:01	1
Cyclohexane	ND		1.0	0.18	ug/L			03/09/24 02:01	1
Dichlorodifluoromethane	ND	*+	1.0	0.68	ug/L			03/09/24 02:01	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/09/24 02:01	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/09/24 02:01	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/09/24 02:01	1
Methyl acetate	ND		2.5	1.3	ug/L			03/09/24 02:01	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/09/24 02:01	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/09/24 02:01	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/09/24 02:01	1
Styrene	ND		1.0	0.73	ug/L			03/09/24 02:01	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/09/24 02:01	1
Toluene	ND		1.0	0.51	ug/L			03/09/24 02:01	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/09/24 02:01	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/09/24 02:01	1
Trichloroethene	ND		1.0	0.46	ug/L			03/09/24 02:01	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/09/24 02:01	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/09/24 02:01	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/09/24 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/09/24 02:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*03/09/24 02:01*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*03/09/24 02:01*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*03/09/24 02:01*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-217569-1	TREATMENT EFFLUENT	97	105	93	101
480-217569-2	TREATMENT INFLUENT	98	103	99	99
480-217569-3	TRIP BLANK	97	100	94	98
LCS 480-703122/6	Lab Control Sample	99	99	97	99
LCSD 480-703122/50	Lab Control Sample Dup	98	101	95	99
MB 480-703122/8	Method Blank	101	107	99	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-703122/8
Matrix: Water
Analysis Batch: 703122

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/08/24 23:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/08/24 23:18	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/08/24 23:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/08/24 23:18	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/08/24 23:18	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/08/24 23:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/08/24 23:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/08/24 23:18	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/08/24 23:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/08/24 23:18	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/08/24 23:18	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/08/24 23:18	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/08/24 23:18	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/08/24 23:18	1
2-Hexanone	ND		5.0	1.2	ug/L			03/08/24 23:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/08/24 23:18	1
Acetone	ND		10	3.0	ug/L			03/08/24 23:18	1
Benzene	ND		1.0	0.41	ug/L			03/08/24 23:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/08/24 23:18	1
Bromoform	ND		1.0	0.26	ug/L			03/08/24 23:18	1
Bromomethane	ND		1.0	0.69	ug/L			03/08/24 23:18	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/08/24 23:18	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/08/24 23:18	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/08/24 23:18	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/08/24 23:18	1
Chloroethane	ND		1.0	0.32	ug/L			03/08/24 23:18	1
Chloroform	ND		1.0	0.34	ug/L			03/08/24 23:18	1
Chloromethane	ND		1.0	0.35	ug/L			03/08/24 23:18	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/08/24 23:18	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/08/24 23:18	1
Cyclohexane	ND		1.0	0.18	ug/L			03/08/24 23:18	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/08/24 23:18	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/08/24 23:18	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/08/24 23:18	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/08/24 23:18	1
Methyl acetate	ND		2.5	1.3	ug/L			03/08/24 23:18	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/08/24 23:18	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/08/24 23:18	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/08/24 23:18	1
Styrene	ND		1.0	0.73	ug/L			03/08/24 23:18	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/08/24 23:18	1
Toluene	ND		1.0	0.51	ug/L			03/08/24 23:18	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/08/24 23:18	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/08/24 23:18	1
Trichloroethene	ND		1.0	0.46	ug/L			03/08/24 23:18	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/08/24 23:18	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/08/24 23:18	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/08/24 23:18	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-703122/8
Matrix: Water
Analysis Batch: 703122

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/08/24 23:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*03/08/24 23:18*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*03/08/24 23:18*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*03/08/24 23:18*	*1*

Lab Sample ID: LCS 480-703122/6
Matrix: Water
Analysis Batch: 703122

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	24.6		ug/L		98	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.9		ug/L		95	76 - 120
1,1,2-Trichloroethane	25.0	23.2		ug/L		93	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.0		ug/L		96	61 - 148
1,1-Dichloroethane	25.0	24.3		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	22.8		ug/L		91	66 - 127
1,2,4-Trichlorobenzene	25.0	22.5		ug/L		90	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.5		ug/L		98	56 - 134
1,2-Dichlorobenzene	25.0	22.6		ug/L		90	80 - 124
1,2-Dichloroethane	25.0	23.3		ug/L		93	75 - 120
1,2-Dichloropropane	25.0	24.4		ug/L		98	76 - 120
1,3-Dichlorobenzene	25.0	22.9		ug/L		92	77 - 120
1,4-Dichlorobenzene	25.0	22.3		ug/L		89	80 - 120
2-Butanone (MEK)	125	134		ug/L		107	57 - 140
2-Hexanone	125	133		ug/L		107	65 - 127
4-Methyl-2-pentanone (MIBK)	125	129		ug/L		103	71 - 125
Acetone	125	124		ug/L		99	56 - 142
Benzene	25.0	23.1		ug/L		93	71 - 124
Bromodichloromethane	25.0	23.7		ug/L		95	80 - 122
Bromoform	25.0	23.3		ug/L		93	61 - 132
Bromomethane	25.0	26.2		ug/L		105	55 - 144
Carbon disulfide	25.0	23.6		ug/L		95	59 - 134
Carbon tetrachloride	25.0	24.6		ug/L		98	72 - 134
Chlorobenzene	25.0	22.7		ug/L		91	80 - 120
Dibromochloromethane	25.0	23.3		ug/L		93	75 - 125
Chloroethane	25.0	26.0		ug/L		104	69 - 136
Chloroform	25.0	23.7		ug/L		95	73 - 127
Chloromethane	25.0	31.6	*+	ug/L		126	68 - 124
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	74 - 124
cis-1,3-Dichloropropene	25.0	23.2		ug/L		93	74 - 124
Cyclohexane	25.0	27.3		ug/L		109	59 - 135
Dichlorodifluoromethane	25.0	34.1	*+	ug/L		136	59 - 135
Ethylbenzene	25.0	24.2		ug/L		97	77 - 123
1,2-Dibromoethane	25.0	23.3		ug/L		93	77 - 120
Isopropylbenzene	25.0	24.8		ug/L		99	77 - 122
Methyl acetate	50.0	48.7		ug/L		97	74 - 133
Methyl tert-butyl ether	25.0	22.5		ug/L		90	77 - 120
Methylcyclohexane	25.0	25.5		ug/L		102	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-703122/6
Matrix: Water
Analysis Batch: 703122

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	21.2		ug/L		85	75 - 124
Styrene	25.0	23.5		ug/L		94	80 - 120
Tetrachloroethene	25.0	24.4		ug/L		98	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	23.7		ug/L		95	73 - 127
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	80 - 120
Trichloroethene	25.0	23.5		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	25.1		ug/L		100	62 - 150
Vinyl chloride	25.0	29.3		ug/L		117	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Lab Sample ID: LCSD 480-703122/50
Matrix: Water
Analysis Batch: 703122

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	25.0	24.9		ug/L		100	73 - 126	1	15
1,1,2,2-Tetrachloroethane	25.0	23.9		ug/L		96	76 - 120	0	15
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	76 - 122	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.6		ug/L		90	61 - 148	6	20
1,1-Dichloroethane	25.0	24.4		ug/L		98	77 - 120	0	20
1,1-Dichloroethene	25.0	21.3		ug/L		85	66 - 127	7	16
1,2,4-Trichlorobenzene	25.0	21.5		ug/L		86	79 - 122	5	20
1,2-Dibromo-3-Chloropropane	25.0	24.5		ug/L		98	56 - 134	0	15
1,2-Dichlorobenzene	25.0	22.5		ug/L		90	80 - 124	0	20
1,2-Dichloroethane	25.0	23.6		ug/L		95	75 - 120	1	20
1,2-Dichloropropane	25.0	24.5		ug/L		98	76 - 120	0	20
1,3-Dichlorobenzene	25.0	22.4		ug/L		89	77 - 120	3	20
1,4-Dichlorobenzene	25.0	22.1		ug/L		89	80 - 120	1	20
2-Butanone (MEK)	125	139		ug/L		111	57 - 140	4	20
2-Hexanone	125	144		ug/L		115	65 - 127	8	15
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	71 - 125	3	35
Acetone	125	123		ug/L		99	56 - 142	0	15
Benzene	25.0	23.0		ug/L		92	71 - 124	1	13
Bromodichloromethane	25.0	23.3		ug/L		93	80 - 122	2	15
Bromoform	25.0	21.2		ug/L		85	61 - 132	9	15
Bromomethane	25.0	25.0		ug/L		100	55 - 144	4	15
Carbon disulfide	25.0	21.4		ug/L		86	59 - 134	10	15
Carbon tetrachloride	25.0	24.3		ug/L		97	72 - 134	1	15
Chlorobenzene	25.0	22.2		ug/L		89	80 - 120	2	25
Dibromochloromethane	25.0	22.8		ug/L		91	75 - 125	2	15
Chloroethane	25.0	25.2		ug/L		101	69 - 136	3	15
Chloroform	25.0	23.1		ug/L		93	73 - 127	2	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-703122/50
Matrix: Water
Analysis Batch: 703122

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloromethane	25.0	32.4	*+	ug/L		130	68 - 124	3	15
cis-1,2-Dichloroethene	25.0	22.2		ug/L		89	74 - 124	5	15
cis-1,3-Dichloropropene	25.0	22.1		ug/L		88	74 - 124	5	15
Cyclohexane	25.0	27.0		ug/L		108	59 - 135	1	20
Dichlorodifluoromethane	25.0	31.2		ug/L		125	59 - 135	9	20
Ethylbenzene	25.0	23.1		ug/L		93	77 - 123	5	15
1,2-Dibromoethane	25.0	22.6		ug/L		90	77 - 120	3	15
Isopropylbenzene	25.0	23.6		ug/L		95	77 - 122	5	20
Methyl acetate	50.0	51.1		ug/L		102	74 - 133	5	20
Methyl tert-butyl ether	25.0	22.1		ug/L		88	77 - 120	2	37
Methylcyclohexane	25.0	23.3		ug/L		93	68 - 134	9	20
Methylene Chloride	25.0	22.8		ug/L		91	75 - 124	7	15
Styrene	25.0	23.0		ug/L		92	80 - 120	2	20
Tetrachloroethene	25.0	23.5		ug/L		94	74 - 122	4	20
Toluene	25.0	23.5		ug/L		94	80 - 122	5	15
trans-1,2-Dichloroethene	25.0	23.6		ug/L		94	73 - 127	1	20
trans-1,3-Dichloropropene	25.0	21.2		ug/L		85	80 - 120	13	15
Trichloroethene	25.0	23.7		ug/L		95	74 - 123	1	16
Trichlorofluoromethane	25.0	25.4		ug/L		102	62 - 150	1	20
Vinyl chloride	25.0	29.0		ug/L		116	65 - 133	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: LCS 480-702828/2-A
Matrix: Water
Analysis Batch: 703236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.500	0.501		mg/L		100	85 - 115

Lab Sample ID: 480-217569-1 MS
Matrix: Water
Analysis Batch: 703297

Client Sample ID: TREATMENT EFFLUENT
Prep Type: Total/NA
Prep Batch: 702828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	ND		5.10	5.07		mg/L		99	70 - 130
Iron	2.1		5.10	7.31		mg/L		102	70 - 130
Zinc	0.0090	J	0.500	0.503		mg/L		99	70 - 130

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 480-217569-1 MSD — **Client Sample ID: TREATMENT EFFLUENT**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 703297 — **Prep Batch: 702828**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	ND		5.10	4.93		mg/L		97	70 - 130	3	20
Iron	2.1		5.10	7.17		mg/L		99	70 - 130	2	20
Zinc	0.0090	J	0.500	0.501		mg/L		98	70 - 130	0	20

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-703015/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 703023 — **Prep Batch: 703015**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		03/08/24 07:11	03/08/24 08:23	1

Lab Sample ID: LCS 480-703015/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 703023 — **Prep Batch: 703015**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.1	44.90		mg/L		112	78 - 114

Lab Sample ID: 480-217569-1 MS — **Client Sample ID: TREATMENT EFFLUENT**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 703023 — **Prep Batch: 703015**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	ND		37.7	31.54		mg/L		84	78 - 114

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

GC/MS VOA

Analysis Batch: 703122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217569-1	TREATMENT EFFLUENT	Total/NA	Water	8260C	
480-217569-2	TREATMENT INFLUENT	Total/NA	Water	8260C	
480-217569-3	TRIP BLANK	Total/NA	Water	8260C	
MB 480-703122/8	Method Blank	Total/NA	Water	8260C	
LCS 480-703122/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-703122/50	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 702828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217569-1	TREATMENT EFFLUENT	Total/NA	Water	200.7	
LCS 480-702828/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-217569-1 MS	TREATMENT EFFLUENT	Total/NA	Water	200.7	
480-217569-1 MSD	TREATMENT EFFLUENT	Total/NA	Water	200.7	

Analysis Batch: 703236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-702828/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	702828

Analysis Batch: 703297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217569-1	TREATMENT EFFLUENT	Total/NA	Water	200.7 Rev 4.4	702828
480-217569-1 MS	TREATMENT EFFLUENT	Total/NA	Water	200.7 Rev 4.4	702828
480-217569-1 MSD	TREATMENT EFFLUENT	Total/NA	Water	200.7 Rev 4.4	702828

General Chemistry

Prep Batch: 703015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217569-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	
MB 480-703015/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-703015/2-A	Lab Control Sample	Total/NA	Water	1664B	
480-217569-1 MS	TREATMENT EFFLUENT	Total/NA	Water	1664B	

Analysis Batch: 703023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217569-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	703015
MB 480-703015/1-A	Method Blank	Total/NA	Water	1664B	703015
LCS 480-703015/2-A	Lab Control Sample	Total/NA	Water	1664B	703015
480-217569-1 MS	TREATMENT EFFLUENT	Total/NA	Water	1664B	703015

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-217569-1
Date Collected: 03/05/24 10:00
Matrix: Water
Date Received: 03/06/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	703122	ZN	EET BUF	03/09/24 01:14
Total/NA	Prep	200.7			702828	ESB	EET BUF	03/07/24 11:55
Total/NA	Analysis	200.7 Rev 4.4		1	703297	BMB	EET BUF	03/11/24 13:01
Total/NA	Prep	1664B			703015	KM	EET BUF	03/08/24 07:11
Total/NA	Analysis	1664B		1	703023	KM	EET BUF	03/08/24 08:23

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-217569-2
Date Collected: 03/05/24 10:10
Matrix: Water
Date Received: 03/06/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		50	703122	ZN	EET BUF	03/09/24 01:37

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-217569-3
Date Collected: 03/05/24 00:00
Matrix: Water
Date Received: 03/06/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	703122	ZN	EET BUF	03/09/24 02:01

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217569-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-217569-1	TREATMENT EFFLUENT	Water	03/05/24 10:00	03/06/24 09:30
480-217569-2	TREATMENT INFLUENT	Water	03/05/24 10:10	03/06/24 09:30
480-217569-3	TRIP BLANK	Water	03/05/24 00:00	03/06/24 09:30

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

3/5/24

FED-EX Tracking # | Bottle Order Control #

Lab Quote # | Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax #N/A 866-902-2187	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name: | Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent	NA	3/5/24	1000	MR	WG	6	3		1	2						X	X	X	
	Treatment Influent	NA	1	1010	MR	WG	3	3									X	X	X	
	Trip Blank	NA	1			WG	2	2									X			

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days _____/_____
- [ ] _____/_____
- [ ] Other _____ _____/_____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: John.beninati@ET.EurofinsUS.com

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other

Sample Custody must be documented below each time samples change possession, including courier.		
Relinquished by Sampler: 1	Date / Time: 1 3/5 1600	Received By: 1
Relinquished by: 2	Date / Time: 2 3/6 0930	Received By: 2
Relinquished by: 3 Yun TAB	Date / Time: 3 3-6-930	Received By: 3
Custody Seal Number: [ ] Intact [ ] Not Intact	[ ] Preserved where applicable [ ] On Ice	Cooler Temp 3.0 # 1 ICE

480-217569 Chain of Custody

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-217569-1

Login Number: 217569
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 4/18/2024 4:45:58 PM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-218643-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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4/18/2024 4:45:58 PM

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Designee for
John Beninati, Project Manager I
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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 7
Client Sample Results 8
Surrogate Summary 12
QC Sample Results 13
QC Association Summary 21
Lab Chronicle 22
Certification Summary 23
Method Summary 24
Sample Summary 25
Chain of Custody 26
Receipt Checklists 28

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-218643-1 Eurofins Buffalo

Job Narrative
480-218643-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 4/10/2024 11:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-707072 recovered above the upper control limit for Chloromethane, Isopropylbenzene, 1,1,2-Trichloro-1,2,2-trifluoroethane, trans-1,2-Dichloroethene, Trichlorofluoromethane and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TREATMENT EFFLUENT (480-218643-1).

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: TREATMENT EFFLUENT (480-218643-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-707385 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TRIP BLANK (480-218643-3).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-707385 recovered outside acceptance criteria, low biased, for Methyl acetate. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260C: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for analytical batch 480-707385 recovered outside control limits for the following analyte(s): Methyl acetate. Methyl acetate has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-707554 recovered above the upper control limit for Carbon tetrachloride and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TREATMENT INFLUENT (480-218643-2).

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: TREATMENT INFLUENT (480-218643-2). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-707554 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 480-707554 was outside the method criteria for the following analyte(s): Vinyl chloride. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Buffalo

Job ID: 480-218643-1 (Continued) Eurofins Buffalo

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-218643-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.6	J	4.0	3.2	ug/L	4		8260C	Total/NA
Methylene Chloride	7.0	B	4.0	1.8	ug/L	4		8260C	Total/NA
Iron	1.6		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.016		0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-218643-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3100		50	41	ug/L	50		8260C	Total/NA
Trichloroethene	2400		50	23	ug/L	50		8260C	Total/NA
Vinyl chloride	120		50	45	ug/L	50		8260C	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-218643-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-218643-1

Date Collected: 04/08/24 11:00
Matrix: Water
Date Received: 04/10/24 11:50

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			04/11/24 05:45	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			04/11/24 05:45	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			04/11/24 05:45	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			04/11/24 05:45	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			04/11/24 05:45	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			04/11/24 05:45	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			04/11/24 05:45	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			04/11/24 05:45	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			04/11/24 05:45	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			04/11/24 05:45	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			04/11/24 05:45	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			04/11/24 05:45	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			04/11/24 05:45	4
2-Butanone (MEK)	ND		40	5.3	ug/L			04/11/24 05:45	4
2-Hexanone	ND		20	5.0	ug/L			04/11/24 05:45	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			04/11/24 05:45	4
Acetone	ND		40	12	ug/L			04/11/24 05:45	4
Benzene	ND		4.0	1.6	ug/L			04/11/24 05:45	4
Bromodichloromethane	ND		4.0	1.6	ug/L			04/11/24 05:45	4
Bromoform	ND		4.0	1.0	ug/L			04/11/24 05:45	4
Bromomethane	ND		4.0	2.8	ug/L			04/11/24 05:45	4
Carbon disulfide	ND		4.0	0.76	ug/L			04/11/24 05:45	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			04/11/24 05:45	4
Chlorobenzene	ND		4.0	3.0	ug/L			04/11/24 05:45	4
Dibromochloromethane	ND		4.0	1.3	ug/L			04/11/24 05:45	4
Chloroethane	ND		4.0	1.3	ug/L			04/11/24 05:45	4
Chloroform	ND		4.0	1.4	ug/L			04/11/24 05:45	4
Chloromethane	ND		4.0	1.4	ug/L			04/11/24 05:45	4
cis-1,2-Dichloroethene	**3.6**	**J**	4.0	3.2	ug/L			04/11/24 05:45	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			04/11/24 05:45	4
Cyclohexane	ND		4.0	0.72	ug/L			04/11/24 05:45	4
Dichlorodifluoromethane	ND	*+	4.0	2.7	ug/L			04/11/24 05:45	4
Ethylbenzene	ND		4.0	3.0	ug/L			04/11/24 05:45	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			04/11/24 05:45	4
Isopropylbenzene	ND		4.0	3.2	ug/L			04/11/24 05:45	4
Methyl acetate	ND	*-	10	5.2	ug/L			04/11/24 05:45	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			04/11/24 05:45	4
Methylcyclohexane	ND		4.0	0.64	ug/L			04/11/24 05:45	4
Methylene Chloride	**7.0**	**B**	4.0	1.8	ug/L			04/11/24 05:45	4
Styrene	ND		4.0	2.9	ug/L			04/11/24 05:45	4
Tetrachloroethene	ND		4.0	1.4	ug/L			04/11/24 05:45	4
Toluene	ND		4.0	2.0	ug/L			04/11/24 05:45	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			04/11/24 05:45	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			04/11/24 05:45	4
Trichloroethene	ND		4.0	1.8	ug/L			04/11/24 05:45	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			04/11/24 05:45	4
Vinyl chloride	ND	*+	4.0	3.6	ug/L			04/11/24 05:45	4
Xylenes, Total	ND		8.0	2.6	ug/L			04/11/24 05:45	4

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-218643-1
Date Collected: 04/08/24 11:00
Matrix: Water
Date Received: 04/10/24 11:50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/11/24 05:45*	*4*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*04/11/24 05:45*	*4*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*04/11/24 05:45*	*4*
Dibromofluoromethane (Surr)	*112*		*75 - 123*		*04/11/24 05:45*	*4*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		04/11/24 09:54	04/11/24 22:47	1
Iron	**1.6**		0.050	0.019	mg/L		04/11/24 09:54	04/11/24 22:47	1
Zinc	**0.016**		0.010	0.0015	mg/L		04/11/24 09:54	04/11/24 22:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		5.2	1.5	mg/L		04/11/24 09:06	04/11/24 10:52	1

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-218643-2
Date Collected: 04/08/24 11:10
Matrix: Water
Date Received: 04/10/24 11:50

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			04/13/24 16:12	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			04/13/24 16:12	50
1,1,2-Trichloroethane	ND		50	12	ug/L			04/13/24 16:12	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16	ug/L			04/13/24 16:12	50
1,1-Dichloroethane	ND		50	19	ug/L			04/13/24 16:12	50
1,1-Dichloroethene	ND		50	15	ug/L			04/13/24 16:12	50
1,2,4-Trichlorobenzene	ND		50	21	ug/L			04/13/24 16:12	50
1,2-Dibromo-3-Chloropropane	ND		50	20	ug/L			04/13/24 16:12	50
1,2-Dichlorobenzene	ND		50	40	ug/L			04/13/24 16:12	50
1,2-Dichloroethane	ND		50	11	ug/L			04/13/24 16:12	50
1,2-Dichloropropane	ND		50	36	ug/L			04/13/24 16:12	50
1,3-Dichlorobenzene	ND		50	39	ug/L			04/13/24 16:12	50
1,4-Dichlorobenzene	ND		50	42	ug/L			04/13/24 16:12	50
2-Butanone (MEK)	ND		500	66	ug/L			04/13/24 16:12	50
2-Hexanone	ND		250	62	ug/L			04/13/24 16:12	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			04/13/24 16:12	50
Acetone	ND		500	150	ug/L			04/13/24 16:12	50
Benzene	ND		50	21	ug/L			04/13/24 16:12	50
Bromodichloromethane	ND		50	20	ug/L			04/13/24 16:12	50
Bromoform	ND		50	13	ug/L			04/13/24 16:12	50
Bromomethane	ND		50	35	ug/L			04/13/24 16:12	50
Carbon disulfide	ND		50	9.5	ug/L			04/13/24 16:12	50
Carbon tetrachloride	ND		50	14	ug/L			04/13/24 16:12	50
Chlorobenzene	ND		50	38	ug/L			04/13/24 16:12	50
Dibromochloromethane	ND		50	16	ug/L			04/13/24 16:12	50
Chloroethane	ND		50	16	ug/L			04/13/24 16:12	50
Chloroform	ND		50	17	ug/L			04/13/24 16:12	50
Chloromethane	ND		50	18	ug/L			04/13/24 16:12	50
cis-1,2-Dichloroethene	**3100**		50	41	ug/L			04/13/24 16:12	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			04/13/24 16:12	50

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-218643-2
Date Collected: 04/08/24 11:10
Matrix: Water
Date Received: 04/10/24 11:50

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		50	9.0	ug/L			04/13/24 16:12	50
Dichlorodifluoromethane	ND		50	34	ug/L			04/13/24 16:12	50
Ethylbenzene	ND		50	37	ug/L			04/13/24 16:12	50
1,2-Dibromoethane	ND		50	37	ug/L			04/13/24 16:12	50
Isopropylbenzene	ND		50	40	ug/L			04/13/24 16:12	50
Methyl acetate	ND		130	65	ug/L			04/13/24 16:12	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			04/13/24 16:12	50
Methylcyclohexane	ND		50	8.0	ug/L			04/13/24 16:12	50
Methylene Chloride	ND		50	22	ug/L			04/13/24 16:12	50
Styrene	ND		50	37	ug/L			04/13/24 16:12	50
Tetrachloroethene	ND		50	18	ug/L			04/13/24 16:12	50
Toluene	ND		50	26	ug/L			04/13/24 16:12	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			04/13/24 16:12	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			04/13/24 16:12	50
Trichloroethene	**2400**		50	23	ug/L			04/13/24 16:12	50
Trichlorofluoromethane	ND		50	44	ug/L			04/13/24 16:12	50
Vinyl chloride	**120**		50	45	ug/L			04/13/24 16:12	50
Xylenes, Total	ND		100	33	ug/L			04/13/24 16:12	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*		*04/13/24 16:12*	*50*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*04/13/24 16:12*	*50*
4-Bromofluorobenzene (Surr)	*119*		*73 - 120*		*04/13/24 16:12*	*50*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*04/13/24 16:12*	*50*

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-218643-3
Date Collected: 04/08/24 00:00
Matrix: Water
Date Received: 04/10/24 11:50

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/12/24 14:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/12/24 14:14	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/12/24 14:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/12/24 14:14	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/12/24 14:14	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/12/24 14:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/12/24 14:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/12/24 14:14	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/12/24 14:14	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/12/24 14:14	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/12/24 14:14	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/12/24 14:14	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/12/24 14:14	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/12/24 14:14	1
2-Hexanone	ND		5.0	1.2	ug/L			04/12/24 14:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/12/24 14:14	1
Acetone	ND		10	3.0	ug/L			04/12/24 14:14	1
Benzene	ND		1.0	0.41	ug/L			04/12/24 14:14	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/12/24 14:14	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-218643-3
Date Collected: 04/08/24 00:00
Matrix: Water
Date Received: 04/10/24 11:50

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			04/12/24 14:14	1
Bromomethane	ND		1.0	0.69	ug/L			04/12/24 14:14	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/12/24 14:14	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/12/24 14:14	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/12/24 14:14	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/12/24 14:14	1
Chloroethane	ND		1.0	0.32	ug/L			04/12/24 14:14	1
Chloroform	ND		1.0	0.34	ug/L			04/12/24 14:14	1
Chloromethane	ND		1.0	0.35	ug/L			04/12/24 14:14	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/12/24 14:14	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/12/24 14:14	1
Cyclohexane	ND		1.0	0.18	ug/L			04/12/24 14:14	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/12/24 14:14	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/12/24 14:14	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/12/24 14:14	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/12/24 14:14	1
Methyl acetate	ND	*-	2.5	1.3	ug/L			04/12/24 14:14	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/12/24 14:14	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/12/24 14:14	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/12/24 14:14	1
Styrene	ND		1.0	0.73	ug/L			04/12/24 14:14	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/12/24 14:14	1
Toluene	ND		1.0	0.51	ug/L			04/12/24 14:14	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/12/24 14:14	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/12/24 14:14	1
Trichloroethene	ND		1.0	0.46	ug/L			04/12/24 14:14	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/12/24 14:14	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/12/24 14:14	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/12/24 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*04/12/24 14:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*04/12/24 14:14*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*04/12/24 14:14*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*04/12/24 14:14*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-218643-1	TREATMENT EFFLUENT	102	103	98	112
480-218643-2	TREATMENT INFLUENT	103	99	119	109
480-218643-3	TRIP BLANK	93	99	88	101
LCS 480-707072/6	Lab Control Sample	103	103	93	106
LCS 480-707385/6	Lab Control Sample	94	99	91	98
LCS 480-707554/7	Lab Control Sample	102	98	116	105
MB 480-707072/8	Method Blank	104	105	97	108
MB 480-707385/8	Method Blank	95	99	94	104
MB 480-707554/9	Method Blank	102	98	119	105

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-707072/8
Matrix: Water
Analysis Batch: 707072

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/11/24 00:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/11/24 00:07	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/11/24 00:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/11/24 00:07	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/11/24 00:07	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/11/24 00:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/11/24 00:07	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/11/24 00:07	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/11/24 00:07	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/11/24 00:07	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/11/24 00:07	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/11/24 00:07	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/11/24 00:07	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/11/24 00:07	1
2-Hexanone	ND		5.0	1.2	ug/L			04/11/24 00:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/11/24 00:07	1
Acetone	ND		10	3.0	ug/L			04/11/24 00:07	1
Benzene	ND		1.0	0.41	ug/L			04/11/24 00:07	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/11/24 00:07	1
Bromoform	ND		1.0	0.26	ug/L			04/11/24 00:07	1
Bromomethane	ND		1.0	0.69	ug/L			04/11/24 00:07	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/11/24 00:07	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/11/24 00:07	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/11/24 00:07	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/11/24 00:07	1
Chloroethane	ND		1.0	0.32	ug/L			04/11/24 00:07	1
Chloroform	ND		1.0	0.34	ug/L			04/11/24 00:07	1
Chloromethane	ND		1.0	0.35	ug/L			04/11/24 00:07	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/11/24 00:07	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/11/24 00:07	1
Cyclohexane	ND		1.0	0.18	ug/L			04/11/24 00:07	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/11/24 00:07	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/11/24 00:07	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/11/24 00:07	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/11/24 00:07	1
Methyl acetate	ND		2.5	1.3	ug/L			04/11/24 00:07	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/11/24 00:07	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/11/24 00:07	1
Methylene Chloride	0.621	J	1.0	0.44	ug/L			04/11/24 00:07	1
Styrene	ND		1.0	0.73	ug/L			04/11/24 00:07	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/11/24 00:07	1
Toluene	ND		1.0	0.51	ug/L			04/11/24 00:07	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/11/24 00:07	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/11/24 00:07	1
Trichloroethene	ND		1.0	0.46	ug/L			04/11/24 00:07	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/11/24 00:07	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/11/24 00:07	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/11/24 00:07	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-707072/8
Matrix: Water
Analysis Batch: 707072

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*104*		*80 - 120*		*04/11/24 00:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*04/11/24 00:07*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*04/11/24 00:07*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*04/11/24 00:07*	*1*

Lab Sample ID: LCS 480-707072/6
Matrix: Water
Analysis Batch: 707072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	29.1		ug/L		117	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		104	76 - 120
1,1,2-Trichloroethane	25.0	25.2		ug/L		101	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	32.8		ug/L		131	61 - 148
1,1-Dichloroethane	25.0	27.8		ug/L		111	77 - 120
1,1-Dichloroethene	25.0	29.0		ug/L		116	66 - 127
1,2,4-Trichlorobenzene	25.0	26.9		ug/L		108	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.0		ug/L		100	56 - 134
1,2-Dichlorobenzene	25.0	27.8		ug/L		111	80 - 124
1,2-Dichloroethane	25.0	26.5		ug/L		106	75 - 120
1,2-Dichloropropane	25.0	27.0		ug/L		108	76 - 120
1,3-Dichlorobenzene	25.0	26.6		ug/L		107	77 - 120
1,4-Dichlorobenzene	25.0	26.5		ug/L		106	80 - 120
2-Butanone (MEK)	125	130		ug/L		104	57 - 140
2-Hexanone	125	112		ug/L		89	65 - 127
4-Methyl-2-pentanone (MIBK)	125	126		ug/L		101	71 - 125
Acetone	125	165		ug/L		132	56 - 142
Benzene	25.0	28.3		ug/L		113	71 - 124
Bromodichloromethane	25.0	26.9		ug/L		108	80 - 122
Bromoform	25.0	23.6		ug/L		95	61 - 132
Bromomethane	25.0	34.0		ug/L		136	55 - 144
Carbon disulfide	25.0	30.0		ug/L		120	59 - 134
Carbon tetrachloride	25.0	28.2		ug/L		113	72 - 134
Chlorobenzene	25.0	27.2		ug/L		109	80 - 120
Dibromochloromethane	25.0	25.9		ug/L		103	75 - 125
Chloroethane	25.0	28.4		ug/L		114	69 - 136
Chloroform	25.0	26.8		ug/L		107	73 - 127
Chloromethane	25.0	29.5		ug/L		118	68 - 124
cis-1,2-Dichloroethene	25.0	29.7		ug/L		119	74 - 124
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	74 - 124
Cyclohexane	25.0	28.5		ug/L		114	59 - 135
Dichlorodifluoromethane	25.0	33.9	*+	ug/L		136	59 - 135
Ethylbenzene	25.0	27.5		ug/L		110	77 - 123
1,2-Dibromoethane	25.0	25.8		ug/L		103	77 - 120
Isopropylbenzene	25.0	29.1		ug/L		116	77 - 122
Methyl acetate	50.0	20.5	*-	ug/L		41	74 - 133
Methyl tert-butyl ether	25.0	27.7		ug/L		111	77 - 120
Methylcyclohexane	25.0	29.7		ug/L		119	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-707072/6
Matrix: Water
Analysis Batch: 707072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	28.7		ug/L		115	75 - 124
Styrene	25.0	26.9		ug/L		108	80 - 120
Tetrachloroethene	25.0	28.4		ug/L		114	74 - 122
Toluene	25.0	27.5		ug/L		110	80 - 122
trans-1,2-Dichloroethene	25.0	30.1		ug/L		120	73 - 127
trans-1,3-Dichloropropene	25.0	23.7		ug/L		95	80 - 120
Trichloroethene	25.0	29.3		ug/L		117	74 - 123
Trichlorofluoromethane	25.0	34.8		ug/L		139	62 - 150
Vinyl chloride	25.0	34.4	*+	ug/L		138	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*
Dibromofluoromethane (Surr)	*106*		*75 - 123*

Lab Sample ID: MB 480-707385/8
Matrix: Water
Analysis Batch: 707385

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/12/24 13:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/12/24 13:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/12/24 13:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/12/24 13:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/12/24 13:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/12/24 13:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/12/24 13:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/12/24 13:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/12/24 13:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/12/24 13:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/12/24 13:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/12/24 13:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/12/24 13:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/12/24 13:37	1
2-Hexanone	ND		5.0	1.2	ug/L			04/12/24 13:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/12/24 13:37	1
Acetone	ND		10	3.0	ug/L			04/12/24 13:37	1
Benzene	ND		1.0	0.41	ug/L			04/12/24 13:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/12/24 13:37	1
Bromoform	ND		1.0	0.26	ug/L			04/12/24 13:37	1
Bromomethane	ND		1.0	0.69	ug/L			04/12/24 13:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/12/24 13:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/12/24 13:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/12/24 13:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/12/24 13:37	1
Chloroethane	ND		1.0	0.32	ug/L			04/12/24 13:37	1
Chloroform	ND		1.0	0.34	ug/L			04/12/24 13:37	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-707385/8
Matrix: Water
Analysis Batch: 707385

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.35	ug/L			04/12/24 13:37	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/12/24 13:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/12/24 13:37	1
Cyclohexane	ND		1.0	0.18	ug/L			04/12/24 13:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/12/24 13:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/12/24 13:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/12/24 13:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/12/24 13:37	1
Methyl acetate	ND		2.5	1.3	ug/L			04/12/24 13:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/12/24 13:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/12/24 13:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/12/24 13:37	1
Styrene	ND		1.0	0.73	ug/L			04/12/24 13:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/12/24 13:37	1
Toluene	ND		1.0	0.51	ug/L			04/12/24 13:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/12/24 13:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/12/24 13:37	1
Trichloroethene	ND		1.0	0.46	ug/L			04/12/24 13:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/12/24 13:37	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/12/24 13:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/12/24 13:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*04/12/24 13:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*04/12/24 13:37*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*04/12/24 13:37*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*04/12/24 13:37*	*1*

Lab Sample ID: LCS 480-707385/6
Matrix: Water
Analysis Batch: 707385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	76 - 120
1,1,2-Trichloroethane	25.0	24.6		ug/L		98	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	33.2		ug/L		133	61 - 148
1,1-Dichloroethane	25.0	27.5		ug/L		110	77 - 120
1,1-Dichloroethene	25.0	29.5		ug/L		118	66 - 127
1,2,4-Trichlorobenzene	25.0	24.2		ug/L		97	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.9		ug/L		92	56 - 134
1,2-Dichlorobenzene	25.0	27.0		ug/L		108	80 - 124
1,2-Dichloroethane	25.0	26.0		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	26.9		ug/L		107	76 - 120
1,3-Dichlorobenzene	25.0	26.7		ug/L		107	77 - 120
1,4-Dichlorobenzene	25.0	26.6		ug/L		106	80 - 120
2-Butanone (MEK)	125	130		ug/L		104	57 - 140
2-Hexanone	125	112		ug/L		90	65 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-707385/6
Matrix: Water
Analysis Batch: 707385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Methyl-2-pentanone (MIBK)	125	112		ug/L		90	71 - 125
Acetone	125	159		ug/L		127	56 - 142
Benzene	25.0	28.4		ug/L		114	71 - 124
Bromodichloromethane	25.0	27.1		ug/L		108	80 - 122
Bromoform	25.0	22.2		ug/L		89	61 - 132
Bromomethane	25.0	24.5		ug/L		98	55 - 144
Carbon disulfide	25.0	31.1		ug/L		124	59 - 134
Carbon tetrachloride	25.0	27.5		ug/L		110	72 - 134
Chlorobenzene	25.0	27.3		ug/L		109	80 - 120
Dibromochloromethane	25.0	25.3		ug/L		101	75 - 125
Chloroethane	25.0	26.1		ug/L		104	69 - 136
Chloroform	25.0	25.8		ug/L		103	73 - 127
Chloromethane	25.0	29.0		ug/L		116	68 - 124
cis-1,2-Dichloroethene	25.0	27.8		ug/L		111	74 - 124
cis-1,3-Dichloropropene	25.0	27.0		ug/L		108	74 - 124
Cyclohexane	25.0	28.3		ug/L		113	59 - 135
Dichlorodifluoromethane	25.0	32.3		ug/L		129	59 - 135
Ethylbenzene	25.0	26.2		ug/L		105	77 - 123
1,2-Dibromoethane	25.0	25.9		ug/L		104	77 - 120
Isopropylbenzene	25.0	28.4		ug/L		114	77 - 122
Methyl acetate	50.0	21.0	*-	ug/L		42	74 - 133
Methyl tert-butyl ether	25.0	25.5		ug/L		102	77 - 120
Methylcyclohexane	25.0	28.9		ug/L		116	68 - 134
Methylene Chloride	25.0	27.0		ug/L		108	75 - 124
Styrene	25.0	26.3		ug/L		105	80 - 120
Tetrachloroethene	25.0	27.3		ug/L		109	74 - 122
Toluene	25.0	26.4		ug/L		106	80 - 122
trans-1,2-Dichloroethene	25.0	29.2		ug/L		117	73 - 127
trans-1,3-Dichloropropene	25.0	24.8		ug/L		99	80 - 120
Trichloroethene	25.0	29.0		ug/L		116	74 - 123
Trichlorofluoromethane	25.0	31.6		ug/L		126	62 - 150
Vinyl chloride	25.0	30.0		ug/L		120	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*

Lab Sample ID: MB 480-707554/9
Matrix: Water
Analysis Batch: 707554

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/13/24 13:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/13/24 13:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/13/24 13:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/13/24 13:48	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-707554/9
Matrix: Water
Analysis Batch: 707554

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/13/24 13:48	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/13/24 13:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/13/24 13:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/13/24 13:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/13/24 13:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/13/24 13:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/13/24 13:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/13/24 13:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/13/24 13:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/13/24 13:48	1
2-Hexanone	ND		5.0	1.2	ug/L			04/13/24 13:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/13/24 13:48	1
Acetone	ND		10	3.0	ug/L			04/13/24 13:48	1
Benzene	ND		1.0	0.41	ug/L			04/13/24 13:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/13/24 13:48	1
Bromoform	ND		1.0	0.26	ug/L			04/13/24 13:48	1
Bromomethane	ND		1.0	0.69	ug/L			04/13/24 13:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/13/24 13:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/13/24 13:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/13/24 13:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/13/24 13:48	1
Chloroethane	ND		1.0	0.32	ug/L			04/13/24 13:48	1
Chloroform	ND		1.0	0.34	ug/L			04/13/24 13:48	1
Chloromethane	ND		1.0	0.35	ug/L			04/13/24 13:48	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/13/24 13:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/13/24 13:48	1
Cyclohexane	ND		1.0	0.18	ug/L			04/13/24 13:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/13/24 13:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/13/24 13:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/13/24 13:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/13/24 13:48	1
Methyl acetate	ND		2.5	1.3	ug/L			04/13/24 13:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/13/24 13:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/13/24 13:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/13/24 13:48	1
Styrene	ND		1.0	0.73	ug/L			04/13/24 13:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/13/24 13:48	1
Toluene	ND		1.0	0.51	ug/L			04/13/24 13:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/13/24 13:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/13/24 13:48	1
Trichloroethene	ND		1.0	0.46	ug/L			04/13/24 13:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/13/24 13:48	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/13/24 13:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/13/24 13:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/13/24 13:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*04/13/24 13:48*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-707554/9
Matrix: Water
Analysis Batch: 707554

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*119*		*73 - 120*		*04/13/24 13:48*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*04/13/24 13:48*	*1*

Lab Sample ID: LCS 480-707554/7
Matrix: Water
Analysis Batch: 707554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	26.0		ug/L		104	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.0		ug/L		96	76 - 120
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.1		ug/L		97	61 - 148
1,1-Dichloroethane	25.0	22.2		ug/L		89	77 - 120
1,1-Dichloroethene	25.0	21.6		ug/L		87	66 - 127
1,2,4-Trichlorobenzene	25.0	24.2		ug/L		97	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	26.0		ug/L		104	56 - 134
1,2-Dichlorobenzene	25.0	24.3		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	22.5		ug/L		90	75 - 120
1,2-Dichloropropane	25.0	23.8		ug/L		95	76 - 120
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	77 - 120
1,4-Dichlorobenzene	25.0	23.7		ug/L		95	80 - 120
2-Butanone (MEK)	125	136		ug/L		109	57 - 140
2-Hexanone	125	144		ug/L		115	65 - 127
4-Methyl-2-pentanone (MIBK)	125	124		ug/L		99	71 - 125
Acetone	125	130		ug/L		104	56 - 142
Benzene	25.0	23.5		ug/L		94	71 - 124
Bromodichloromethane	25.0	26.0		ug/L		104	80 - 122
Bromoform	25.0	31.8		ug/L		127	61 - 132
Bromomethane	25.0	21.4		ug/L		85	55 - 144
Carbon disulfide	25.0	22.4		ug/L		89	59 - 134
Carbon tetrachloride	25.0	29.5		ug/L		118	72 - 134
Chlorobenzene	25.0	24.2		ug/L		97	80 - 120
Dibromochloromethane	25.0	27.7		ug/L		111	75 - 125
Chloroethane	25.0	19.4		ug/L		78	69 - 136
Chloroform	25.0	23.3		ug/L		93	73 - 127
Chloromethane	25.0	18.9		ug/L		76	68 - 124
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	74 - 124
cis-1,3-Dichloropropene	25.0	26.2		ug/L		105	74 - 124
Cyclohexane	25.0	22.6		ug/L		90	59 - 135
Dichlorodifluoromethane	25.0	32.0		ug/L		128	59 - 135
Ethylbenzene	25.0	24.5		ug/L		98	77 - 123
1,2-Dibromoethane	25.0	26.3		ug/L		105	77 - 120
Isopropylbenzene	25.0	23.2		ug/L		93	77 - 122
Methyl acetate	50.0	39.6		ug/L		79	74 - 133
Methyl tert-butyl ether	25.0	22.7		ug/L		91	77 - 120
Methylcyclohexane	25.0	26.1		ug/L		105	68 - 134
Methylene Chloride	25.0	24.6		ug/L		98	75 - 124
Styrene	25.0	25.8		ug/L		103	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-707554/7
Matrix: Water
Analysis Batch: 707554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	25.0	27.0		ug/L		108	74 - 122
Toluene	25.0	23.7		ug/L		95	80 - 122
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	73 - 127
trans-1,3-Dichloropropene	25.0	25.4		ug/L		102	80 - 120
Trichloroethene	25.0	25.6		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	31.3		ug/L		125	62 - 150
Vinyl chloride	25.0	20.3		ug/L		81	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
4-Bromofluorobenzene (Surr)	*116*		*73 - 120*
Dibromofluoromethane (Surr)	*105*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-707123/1-A
Matrix: Water
Analysis Batch: 707460

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707123

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		04/11/24 09:54	04/11/24 21:56	1
Iron	ND		0.050	0.019	mg/L		04/11/24 09:54	04/11/24 21:56	1
Zinc	ND		0.010	0.0015	mg/L		04/11/24 09:54	04/11/24 21:56	1

Lab Sample ID: LCS 480-707123/2-A
Matrix: Water
Analysis Batch: 707460

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707123

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	5.13		mg/L		101	85 - 115
Iron	5.10	5.13		mg/L		101	85 - 115
Zinc	0.500	0.506		mg/L		101	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-707170/1-A
Matrix: Water
Analysis Batch: 707213

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707170

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		04/11/24 09:06	04/11/24 10:52	1

Lab Sample ID: LCS 480-707170/2-A
Matrix: Water
Analysis Batch: 707213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707170

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.1	34.10		mg/L		85	78 - 114

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 707072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218643-1	TREATMENT EFFLUENT	Total/NA	Water	8260C	
MB 480-707072/8	Method Blank	Total/NA	Water	8260C	
LCS 480-707072/6	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 707385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218643-3	TRIP BLANK	Total/NA	Water	8260C	
MB 480-707385/8	Method Blank	Total/NA	Water	8260C	
LCS 480-707385/6	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 707554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218643-2	TREATMENT INFLUENT	Total/NA	Water	8260C	
MB 480-707554/9	Method Blank	Total/NA	Water	8260C	
LCS 480-707554/7	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 707123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218643-1	TREATMENT EFFLUENT	Total/NA	Water	200.7	
MB 480-707123/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-707123/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 707460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218643-1	TREATMENT EFFLUENT	Total/NA	Water	200.7 Rev 4.4	707123
MB 480-707123/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	707123
LCS 480-707123/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	707123

General Chemistry

Prep Batch: 707170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218643-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	
MB 480-707170/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-707170/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 707213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218643-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	707170
MB 480-707170/1-A	Method Blank	Total/NA	Water	1664B	707170
LCS 480-707170/2-A	Lab Control Sample	Total/NA	Water	1664B	707170

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-218643-1
Date Collected: 04/08/24 11:00
Matrix: Water
Date Received: 04/10/24 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	707072	CC	EET BUF	04/11/24 05:45
Total/NA	Prep	200.7			707123	EMO	EET BUF	04/11/24 09:54
Total/NA	Analysis	200.7 Rev 4.4		1	707460	NZG	EET BUF	04/11/24 22:47
Total/NA	Prep	1664B			707170	KM	EET BUF	04/11/24 09:06
Total/NA	Analysis	1664B		1	707213	KM	EET BUF	04/11/24 10:52

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-218643-2
Date Collected: 04/08/24 11:10
Matrix: Water
Date Received: 04/10/24 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		50	707554	AXK	EET BUF	04/13/24 16:12

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-218643-3
Date Collected: 04/08/24 00:00
Matrix: Water
Date Received: 04/10/24 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	707385	AXK	EET BUF	04/12/24 14:14

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218643-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-218643-1	TREATMENT EFFLUENT	Water	04/08/24 11:00	04/10/24 11:50
480-218643-2	TREATMENT INFLUENT	Water	04/08/24 11:10	04/10/24 11:50
480-218643-3	TRIP BLANK	Water	04/08/24 00:00	04/10/24 11:50

CHAIN OF CUSTODY

Client: New York State Dept. of Environ

4/8/24

PAGE 1 OF 1

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer TPalmer@gesonline.com **Phone #:** 800-287-7857 fax 866-902-2187 #N/A	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name:	Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent	NA	4/8	1100	MK	WG	6	3		1	2						X	X	X	
	Treatment Influent	NA	4/8	1110	MK	WG	3	3									X	X	X	
	Trip Blank	NA	4/8	-	MK	WG	2	2									X			

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days _____/_____
- [ ] 1 day RUSH _____/_____
- [ ] Other _____ _____/_____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: John.Beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

Relinquished By Sampler:	Date / Time	Received By:
1 [signature] to fridge	1 4/8 1630	1 [signature] TAB 4-9-24 1150
Relinquished By: 2 [signature]	Date / Time 2 4/9 1150	Received By: 2
Relinquished By: 3	Date / Time 3	Received By: 3

Custody Seal Number: _____ [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice Cooler Temp _____

480-218643 Chain of Custody

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

4/8/24

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 300-287-7857 TPalmer@gesonline.com fax #N/A 866-902-2187	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent	NA	4/8	1100	MR	WG	6	3		1	2						X	X	X	
	Treatment Influent	NA	4/8	1110	MR	WG	3	3									X	X	X	
	Trip Blank	NA	4/8	–	MR	WG	2	2									X			

Turnaround Time (Business Days) Approved By (Lab PM) / Date

- ☑ Standard 14 Days _____/_____
- ☐ 1 day RUSH _____/_____
- ☐ Other _____ _____/_____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Data Deliverable Information

- ☐ Commercial 'A' (Level 1) = Results Only
- ☐ Commercial 'B' (Level 2) = Results + QC Summary
- ☐ FULLT1 (Level 3 & 4)
- ☐ NJ Reduced = Results + QC Summary + Partial Raw Data
- ☐ Commercial 'C'
- ☐ *NJ Data of Known Quality Protocol Reporting*
- ☐ NYASP Category A
- ☑ NYASP Category B
- ☐ State Forms
- ☑ EDD Format NYS DEC EDD
- ☐ Other _____

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By:	Date / Time:	Received By:
1	to Fedex	4/8 1630	TAB 4-9-24 1150
2		4/9 1150	
3			

Custody Seal Number: ☐ Intact ☐ Not Intact ☐ Preserved where applicable ☐ On Ice Cooler Temp _____

480-218643 Chain of Custody

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-218643-1

Login Number: 218643
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 5/16/2024 8:15:11 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-219652-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
5/16/2024 8:15:11 AM

Authorized for release by
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 16
Lab Chronicle 17
Certification Summary 18
Method Summary 19
Sample Summary 20
Chain of Custody 21
Receipt Checklists 24

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-219652-1 Eurofins Buffalo

Job Narrative
480-219652-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 5/8/2024 1:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-711361 recovered outside acceptance criteria, low biased, for 2-Hexanone. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte, the data are reported. The associated samples are impacted: TREATMENT EFFLUENT (480-219652-1), TREATMENT INFLUENT (480-219652-2) and TRIP BLANK (480-219652-3).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-711361 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TREATMENT EFFLUENT (480-219652-1), TREATMENT INFLUENT (480-219652-2) and TRIP BLANK (480-219652-3).

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: TREATMENT INFLUENT (480-219652-2). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: TREATMENT EFFLUENT (480-219652-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT — Lab Sample ID: 480-219652-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	2.1		0.15	0.077	mg/L	1		200.7 Rev 4.4	Total Recoverable
Zinc	0.014	J	0.030	0.0045	mg/L	1		200.7 Rev 4.4	Total Recoverable

Client Sample ID: TREATMENT INFLUENT — Lab Sample ID: 480-219652-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2300		50	41	ug/L	50		8260C	Total/NA
Trichloroethene	2200		50	23	ug/L	50		8260C	Total/NA
Vinyl chloride	110		50	45	ug/L	50		8260C	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-219652-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-219652-1
Date Collected: 05/07/24 11:45
Matrix: Water
Date Received: 05/08/24 13:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			05/10/24 04:12	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			05/10/24 04:12	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			05/10/24 04:12	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			05/10/24 04:12	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			05/10/24 04:12	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			05/10/24 04:12	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			05/10/24 04:12	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			05/10/24 04:12	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			05/10/24 04:12	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			05/10/24 04:12	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			05/10/24 04:12	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			05/10/24 04:12	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			05/10/24 04:12	4
2-Butanone (MEK)	ND		40	5.3	ug/L			05/10/24 04:12	4
2-Hexanone	ND		20	5.0	ug/L			05/10/24 04:12	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			05/10/24 04:12	4
Acetone	ND		40	12	ug/L			05/10/24 04:12	4
Benzene	ND		4.0	1.6	ug/L			05/10/24 04:12	4
Bromodichloromethane	ND		4.0	1.6	ug/L			05/10/24 04:12	4
Bromoform	ND		4.0	1.0	ug/L			05/10/24 04:12	4
Bromomethane	ND		4.0	2.8	ug/L			05/10/24 04:12	4
Carbon disulfide	ND		4.0	0.76	ug/L			05/10/24 04:12	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			05/10/24 04:12	4
Chlorobenzene	ND		4.0	3.0	ug/L			05/10/24 04:12	4
Dibromochloromethane	ND		4.0	1.3	ug/L			05/10/24 04:12	4
Chloroethane	ND		4.0	1.3	ug/L			05/10/24 04:12	4
Chloroform	ND		4.0	1.4	ug/L			05/10/24 04:12	4
Chloromethane	ND		4.0	1.4	ug/L			05/10/24 04:12	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			05/10/24 04:12	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			05/10/24 04:12	4
Cyclohexane	ND		4.0	0.72	ug/L			05/10/24 04:12	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			05/10/24 04:12	4
Ethylbenzene	ND		4.0	3.0	ug/L			05/10/24 04:12	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			05/10/24 04:12	4
Isopropylbenzene	ND		4.0	3.2	ug/L			05/10/24 04:12	4
Methyl acetate	ND		10	5.2	ug/L			05/10/24 04:12	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			05/10/24 04:12	4
Methylcyclohexane	ND		4.0	0.64	ug/L			05/10/24 04:12	4
Methylene Chloride	ND		4.0	1.8	ug/L			05/10/24 04:12	4
Styrene	ND		4.0	2.9	ug/L			05/10/24 04:12	4
Tetrachloroethene	ND		4.0	1.4	ug/L			05/10/24 04:12	4
Toluene	ND		4.0	2.0	ug/L			05/10/24 04:12	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			05/10/24 04:12	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			05/10/24 04:12	4
Trichloroethene	ND		4.0	1.8	ug/L			05/10/24 04:12	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			05/10/24 04:12	4
Vinyl chloride	ND		4.0	3.6	ug/L			05/10/24 04:12	4
Xylenes, Total	ND		8.0	2.6	ug/L			05/10/24 04:12	4

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-219652-1
Date Collected: 05/07/24 11:45
Matrix: Water
Date Received: 05/08/24 13:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/10/24 04:12*	*4*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*05/10/24 04:12*	*4*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/10/24 04:12*	*4*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/10/24 04:12*	*4*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.093	mg/L		05/10/24 21:25	05/14/24 15:28	1
Iron	**2.1**		0.15	0.077	mg/L		05/10/24 21:25	05/14/24 15:28	1
Zinc	**0.014**	**J**	0.030	0.0045	mg/L		05/10/24 21:25	05/14/24 15:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		5.0	1.4	mg/L		05/09/24 07:24	05/09/24 08:31	1

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-219652-2
Date Collected: 05/07/24 11:50
Matrix: Water
Date Received: 05/08/24 13:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			05/10/24 04:34	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			05/10/24 04:34	50
1,1,2-Trichloroethane	ND		50	12	ug/L			05/10/24 04:34	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16	ug/L			05/10/24 04:34	50
1,1-Dichloroethane	ND		50	19	ug/L			05/10/24 04:34	50
1,1-Dichloroethene	ND		50	15	ug/L			05/10/24 04:34	50
1,2,4-Trichlorobenzene	ND		50	21	ug/L			05/10/24 04:34	50
1,2-Dibromo-3-Chloropropane	ND		50	20	ug/L			05/10/24 04:34	50
1,2-Dichlorobenzene	ND		50	40	ug/L			05/10/24 04:34	50
1,2-Dichloroethane	ND		50	11	ug/L			05/10/24 04:34	50
1,2-Dichloropropane	ND		50	36	ug/L			05/10/24 04:34	50
1,3-Dichlorobenzene	ND		50	39	ug/L			05/10/24 04:34	50
1,4-Dichlorobenzene	ND		50	42	ug/L			05/10/24 04:34	50
2-Butanone (MEK)	ND		500	66	ug/L			05/10/24 04:34	50
2-Hexanone	ND		250	62	ug/L			05/10/24 04:34	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			05/10/24 04:34	50
Acetone	ND		500	150	ug/L			05/10/24 04:34	50
Benzene	ND		50	21	ug/L			05/10/24 04:34	50
Bromodichloromethane	ND		50	20	ug/L			05/10/24 04:34	50
Bromoform	ND		50	13	ug/L			05/10/24 04:34	50
Bromomethane	ND		50	35	ug/L			05/10/24 04:34	50
Carbon disulfide	ND		50	9.5	ug/L			05/10/24 04:34	50
Carbon tetrachloride	ND		50	14	ug/L			05/10/24 04:34	50
Chlorobenzene	ND		50	38	ug/L			05/10/24 04:34	50
Dibromochloromethane	ND		50	16	ug/L			05/10/24 04:34	50
Chloroethane	ND		50	16	ug/L			05/10/24 04:34	50
Chloroform	ND		50	17	ug/L			05/10/24 04:34	50
Chloromethane	ND		50	18	ug/L			05/10/24 04:34	50
cis-1,2-Dichloroethene	**2300**		50	41	ug/L			05/10/24 04:34	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			05/10/24 04:34	50

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-219652-2
Date Collected: 05/07/24 11:50
Matrix: Water
Date Received: 05/08/24 13:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		50	9.0	ug/L			05/10/24 04:34	50
Dichlorodifluoromethane	ND		50	34	ug/L			05/10/24 04:34	50
Ethylbenzene	ND		50	37	ug/L			05/10/24 04:34	50
1,2-Dibromoethane	ND		50	37	ug/L			05/10/24 04:34	50
Isopropylbenzene	ND		50	40	ug/L			05/10/24 04:34	50
Methyl acetate	ND		130	65	ug/L			05/10/24 04:34	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			05/10/24 04:34	50
Methylcyclohexane	ND		50	8.0	ug/L			05/10/24 04:34	50
Methylene Chloride	ND		50	22	ug/L			05/10/24 04:34	50
Styrene	ND		50	37	ug/L			05/10/24 04:34	50
Tetrachloroethene	ND		50	18	ug/L			05/10/24 04:34	50
Toluene	ND		50	26	ug/L			05/10/24 04:34	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			05/10/24 04:34	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			05/10/24 04:34	50
Trichloroethene	**2200**		50	23	ug/L			05/10/24 04:34	50
Trichlorofluoromethane	ND		50	44	ug/L			05/10/24 04:34	50
Vinyl chloride	**110**		50	45	ug/L			05/10/24 04:34	50
Xylenes, Total	ND		100	33	ug/L			05/10/24 04:34	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*05/10/24 04:34*	*50*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*05/10/24 04:34*	*50*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/10/24 04:34*	*50*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*05/10/24 04:34*	*50*

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-219652-3
Date Collected: 05/07/24 00:00
Matrix: Water
Date Received: 05/08/24 13:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/10/24 04:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/10/24 04:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/10/24 04:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/10/24 04:56	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/10/24 04:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/10/24 04:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/10/24 04:56	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/10/24 04:56	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/10/24 04:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/10/24 04:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/10/24 04:56	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/10/24 04:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/10/24 04:56	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/10/24 04:56	1
2-Hexanone	ND		5.0	1.2	ug/L			05/10/24 04:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/10/24 04:56	1
Acetone	ND		10	3.0	ug/L			05/10/24 04:56	1
Benzene	ND		1.0	0.41	ug/L			05/10/24 04:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/10/24 04:56	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-219652-3
Date Collected: 05/07/24 00:00
Matrix: Water
Date Received: 05/08/24 13:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			05/10/24 04:56	1
Bromomethane	ND		1.0	0.69	ug/L			05/10/24 04:56	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/10/24 04:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/10/24 04:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/10/24 04:56	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/10/24 04:56	1
Chloroethane	ND		1.0	0.32	ug/L			05/10/24 04:56	1
Chloroform	ND		1.0	0.34	ug/L			05/10/24 04:56	1
Chloromethane	ND		1.0	0.35	ug/L			05/10/24 04:56	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/10/24 04:56	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/10/24 04:56	1
Cyclohexane	ND		1.0	0.18	ug/L			05/10/24 04:56	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/10/24 04:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/10/24 04:56	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/10/24 04:56	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/10/24 04:56	1
Methyl acetate	ND		2.5	1.3	ug/L			05/10/24 04:56	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/10/24 04:56	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/10/24 04:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/10/24 04:56	1
Styrene	ND		1.0	0.73	ug/L			05/10/24 04:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/10/24 04:56	1
Toluene	ND		1.0	0.51	ug/L			05/10/24 04:56	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/10/24 04:56	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/10/24 04:56	1
Trichloroethene	ND		1.0	0.46	ug/L			05/10/24 04:56	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/10/24 04:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/10/24 04:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/10/24 04:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/10/24 04:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*05/10/24 04:56*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*05/10/24 04:56*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/10/24 04:56*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-219652-1	TREATMENT EFFLUENT	101	98	100	100
480-219652-2	TREATMENT INFLUENT	95	94	97	99
480-219652-3	TRIP BLANK	98	96	96	100
LCS 480-711361/6	Lab Control Sample	97	96	92	96
MB 480-711361/8	Method Blank	97	96	99	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-711361/8
Matrix: Water
Analysis Batch: 711361

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/09/24 23:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/09/24 23:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/09/24 23:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/09/24 23:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/09/24 23:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/09/24 23:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/09/24 23:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/09/24 23:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/09/24 23:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/09/24 23:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/09/24 23:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/09/24 23:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/09/24 23:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/09/24 23:20	1
2-Hexanone	ND		5.0	1.2	ug/L			05/09/24 23:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/09/24 23:20	1
Acetone	ND		10	3.0	ug/L			05/09/24 23:20	1
Benzene	ND		1.0	0.41	ug/L			05/09/24 23:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/09/24 23:20	1
Bromoform	ND		1.0	0.26	ug/L			05/09/24 23:20	1
Bromomethane	ND		1.0	0.69	ug/L			05/09/24 23:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/09/24 23:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/09/24 23:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/09/24 23:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/09/24 23:20	1
Chloroethane	ND		1.0	0.32	ug/L			05/09/24 23:20	1
Chloroform	ND		1.0	0.34	ug/L			05/09/24 23:20	1
Chloromethane	ND		1.0	0.35	ug/L			05/09/24 23:20	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/09/24 23:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/09/24 23:20	1
Cyclohexane	ND		1.0	0.18	ug/L			05/09/24 23:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/09/24 23:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/09/24 23:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/09/24 23:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/09/24 23:20	1
Methyl acetate	ND		2.5	1.3	ug/L			05/09/24 23:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/09/24 23:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/09/24 23:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/09/24 23:20	1
Styrene	ND		1.0	0.73	ug/L			05/09/24 23:20	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/09/24 23:20	1
Toluene	ND		1.0	0.51	ug/L			05/09/24 23:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/09/24 23:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/09/24 23:20	1
Trichloroethene	ND		1.0	0.46	ug/L			05/09/24 23:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/09/24 23:20	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/09/24 23:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/09/24 23:20	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-711361/8
Matrix: Water
Analysis Batch: 711361

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/09/24 23:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*05/09/24 23:20*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/09/24 23:20*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*05/09/24 23:20*	*1*

Lab Sample ID: LCS 480-711361/6
Matrix: Water
Analysis Batch: 711361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	24.3		ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	76 - 120
1,1,2-Trichloroethane	25.0	23.1		ug/L		93	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.9		ug/L		104	61 - 148
1,1-Dichloroethane	25.0	23.8		ug/L		95	77 - 120
1,1-Dichloroethene	25.0	23.8		ug/L		95	66 - 127
1,2,4-Trichlorobenzene	25.0	25.7		ug/L		103	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.2		ug/L		101	56 - 134
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	25.0		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	25.1		ug/L		100	76 - 120
1,3-Dichlorobenzene	25.0	25.5		ug/L		102	77 - 120
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 120
2-Butanone (MEK)	125	120		ug/L		96	57 - 140
2-Hexanone	125	106		ug/L		85	65 - 127
4-Methyl-2-pentanone (MIBK)	125	109		ug/L		87	71 - 125
Acetone	125	115		ug/L		92	56 - 142
Benzene	25.0	24.1		ug/L		96	71 - 124
Bromodichloromethane	25.0	24.5		ug/L		98	80 - 122
Bromoform	25.0	21.7		ug/L		87	61 - 132
Bromomethane	25.0	17.3		ug/L		69	55 - 144
Carbon disulfide	25.0	23.8		ug/L		95	59 - 134
Carbon tetrachloride	25.0	24.5		ug/L		98	72 - 134
Chlorobenzene	25.0	24.6		ug/L		99	80 - 120
Dibromochloromethane	25.0	24.9		ug/L		100	75 - 125
Chloroethane	25.0	20.9		ug/L		84	69 - 136
Chloroform	25.0	22.6		ug/L		90	73 - 127
Chloromethane	25.0	22.3		ug/L		89	68 - 124
cis-1,2-Dichloroethene	25.0	22.6		ug/L		90	74 - 124
cis-1,3-Dichloropropene	25.0	25.9		ug/L		104	74 - 124
Cyclohexane	25.0	23.5		ug/L		94	59 - 135
Dichlorodifluoromethane	25.0	23.6		ug/L		94	59 - 135
Ethylbenzene	25.0	24.2		ug/L		97	77 - 123
1,2-Dibromoethane	25.0	25.9		ug/L		104	77 - 120
Isopropylbenzene	25.0	27.7		ug/L		111	77 - 122
Methyl acetate	50.0	45.2		ug/L		90	74 - 133
Methyl tert-butyl ether	25.0	22.6		ug/L		90	77 - 120
Methylcyclohexane	25.0	25.0		ug/L		100	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-711361/6
Matrix: Water
Analysis Batch: 711361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	22.3		ug/L		89	75 - 124
Styrene	25.0	24.3		ug/L		97	80 - 120
Tetrachloroethene	25.0	26.4		ug/L		106	74 - 122
Toluene	25.0	24.0		ug/L		96	80 - 122
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	73 - 127
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	80 - 120
Trichloroethene	25.0	25.2		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	23.7		ug/L		95	62 - 150
Vinyl chloride	25.0	22.7		ug/L		91	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 460-974251/1-A
Matrix: Water
Analysis Batch: 974774

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 974251

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.093	mg/L		05/10/24 21:25	05/14/24 14:13	1
Iron	ND		0.15	0.077	mg/L		05/10/24 21:25	05/14/24 14:13	1
Zinc	ND		0.030	0.0045	mg/L		05/10/24 21:25	05/14/24 14:13	1

Lab Sample ID: LCS 460-974251/2-A
Matrix: Water
Analysis Batch: 974774

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 974251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2.00	1.98		mg/L		99	85 - 115
Iron	1.00	1.01		mg/L		101	85 - 115
Zinc	0.500	0.530		mg/L		106	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-711266/1-A
Matrix: Water
Analysis Batch: 711280

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 711266

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		05/09/24 07:24	05/09/24 08:31	1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 480-711266/2-A
Matrix: Water
Analysis Batch: 711280

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 711266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.0	36.80		mg/L		92	78 - 114

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 711361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219652-1	TREATMENT EFFLUENT	Total/NA	Water	8260C	
480-219652-2	TREATMENT INFLUENT	Total/NA	Water	8260C	
480-219652-3	TRIP BLANK	Total/NA	Water	8260C	
MB 480-711361/8	Method Blank	Total/NA	Water	8260C	
LCS 480-711361/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 974251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219652-1	TREATMENT EFFLUENT	Total Recoverable	Water	200.7	
MB 460-974251/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 460-974251/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 974774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219652-1	TREATMENT EFFLUENT	Total Recoverable	Water	200.7 Rev 4.4	974251
MB 460-974251/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	974251
LCS 460-974251/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	974251

General Chemistry

Prep Batch: 711266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219652-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	
MB 480-711266/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-711266/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 711280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219652-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	711266
MB 480-711266/1-A	Method Blank	Total/NA	Water	1664B	711266
LCS 480-711266/2-A	Lab Control Sample	Total/NA	Water	1664B	711266

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-219652-1
Date Collected: 05/07/24 11:45
Matrix: Water
Date Received: 05/08/24 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	711361	CC	EET BUF	05/10/24 04:12
Total Recoverable	Prep	200.7			974251	GAE	EET EDI	05/10/24 21:25
Total Recoverable	Analysis	200.7 Rev 4.4		1	974774	CDC	EET EDI	05/14/24 15:28
Total/NA	Prep	1664B			711266	KM	EET BUF	05/09/24 07:24
Total/NA	Analysis	1664B		1	711280	KM	EET BUF	05/09/24 08:31

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-219652-2
Date Collected: 05/07/24 11:50
Matrix: Water
Date Received: 05/08/24 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		50	711361	CC	EET BUF	05/10/24 04:34

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-219652-3
Date Collected: 05/07/24 00:00
Matrix: Water
Date Received: 05/08/24 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	711361	CC	EET BUF	05/10/24 04:56

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-02-25
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-25
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET EDI
1664B	HEM and SGT-HEM	1664B	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Recoverable Metals	EPA	EET EDI
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219652-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-219652-1	TREATMENT EFFLUENT	Water	05/07/24 11:45	05/08/24 13:30
480-219652-2	TREATMENT INFLUENT	Water	05/07/24 11:50	05/08/24 13:30
480-219652-3	TRIP BLANK	Water	05/07/24 00:00	05/08/24 13:30

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

5/7/24

PAGE | OF

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer — **Phone #:** 800-287-7857 TPalmer@gesonline.com — fax #N/A — 866-902-2187	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent	NA	5/7	1145	MW2	WG		3		1	2						X	X	X	
	Treatment Influent	NA	5/7	1150	MW2	WG	3	3									X	X	X	
	Trip Blank	NA	5/7	-	-	WG	2	2									X			

480-219652 Chain of Custody

Page 21 of 25

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other _____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	to Cindy	5/7/24 1745	
2		5/8 1330	
3			5/8/24 1330

Custody Seal Number: [ ] Intact [ ] Not Intact — [ ] Preserved where applicable [ ] On Ice — Cooler Temp 510 #1 ICE

5/16/2024

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler	Lab PM: Beninati John	Carrier Tracking No(s):	COC No: 480-87168 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP New York		Job #: 480-219652-1
Address: 777 New Durham Road	Due Date Requested: 5/21/2024			
City: Edison	TAT Requested (days):			
State, Zip: NJ 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Frewsburg Site Monthly Analysis	Project #: 48027424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P TR Metals ICP Al,Fe,Zn	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
TREATMENT EFFLUENT (480-219652-1)	5/7/24	11:45 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment: FedEx

Relinquished by: Unreadable	Date/Time: 05/09/24 16:00	Company: EA	Received by: Blan	Date/Time: 5/10/24 10:20	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company	

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:
		IR9 0.8c 1.2c 1.5c 11.9c

Ver: 06/08/2021

5/16/2024

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691 7991

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler	Lab PM: Beninati John	Carrier Tracking No(s):	COC No: 480-87168.1
Client Contact: Sh pping/Receiving	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP New York		Job #: 480-219652-1
Address: 777 New Durham Road	Due Date Requested: 5/21/2024			
City: Edison	TAT Requested (days):			
State, Zip: NJ 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #			
Email:	WO #			
Project Name: Frewsburg Site Monthly Analysis	Project #: 48027424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wewater, Sesolid, Oiwastetis, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P TR Metals ICP Al,Fe,Zn	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
TREATMENT EFFLUENT 480-219652-1)	5/7/24	11:45 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing Northeast LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. All requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested I II IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by	Date:	Time	Method of Shipment: Fedex

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Matthew Arnold	05/09/24 1600	EA	BRac	5/10/24 0:25	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

IR-90.8i 11.2i 1.5i 11.9c

06.08 02

Page 23 of 25

5/16/2024

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-219652-1

Login Number: 219652
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-219652-1

Login Number: 219652
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 05/10/24 12:24 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8/1.2, 1.5/1.9°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 6/19/2024 4:21:33 PM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-220755-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
6/19/2024 4:21:33 PM

Authorized for release by
Wyatt Watson, Project Management Assistant I
Wyatt.Watson@et.eurofinsus.com
Designee for
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 16
Lab Chronicle 17
Certification Summary 18
Method Summary 19
Sample Summary 20
Chain of Custody 21
Receipt Checklists 22

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-220755-1 Eurofins Buffalo

Job Narrative
480-220755-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/12/2024 9:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: TREATMENT EFFLUENT (480-220755-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: TREATMENT INFLUENT (480-220755-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-220755-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1.6		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.016		0.010	0.0068	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-220755-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3300		50	41	ug/L	50		8260C	Total/NA
Trichloroethene	4000		50	23	ug/L	50		8260C	Total/NA
Vinyl chloride	210		50	45	ug/L	50		8260C	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220755-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-220755-1
Date Collected: 06/11/24 12:10
Matrix: Water
Date Received: 06/12/24 09:25

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			06/13/24 17:26	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			06/13/24 17:26	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			06/13/24 17:26	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			06/13/24 17:26	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			06/13/24 17:26	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			06/13/24 17:26	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			06/13/24 17:26	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			06/13/24 17:26	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			06/13/24 17:26	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			06/13/24 17:26	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			06/13/24 17:26	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			06/13/24 17:26	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			06/13/24 17:26	4
2-Butanone (MEK)	ND		40	5.3	ug/L			06/13/24 17:26	4
2-Hexanone	ND		20	5.0	ug/L			06/13/24 17:26	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			06/13/24 17:26	4
Acetone	ND		40	12	ug/L			06/13/24 17:26	4
Benzene	ND		4.0	1.6	ug/L			06/13/24 17:26	4
Bromodichloromethane	ND		4.0	1.6	ug/L			06/13/24 17:26	4
Bromoform	ND		4.0	1.0	ug/L			06/13/24 17:26	4
Bromomethane	ND		4.0	2.8	ug/L			06/13/24 17:26	4
Carbon disulfide	ND		4.0	0.76	ug/L			06/13/24 17:26	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			06/13/24 17:26	4
Chlorobenzene	ND		4.0	3.0	ug/L			06/13/24 17:26	4
Dibromochloromethane	ND		4.0	1.3	ug/L			06/13/24 17:26	4
Chloroethane	ND		4.0	1.3	ug/L			06/13/24 17:26	4
Chloroform	ND		4.0	1.4	ug/L			06/13/24 17:26	4
Chloromethane	ND		4.0	1.4	ug/L			06/13/24 17:26	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			06/13/24 17:26	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			06/13/24 17:26	4
Cyclohexane	ND		4.0	0.72	ug/L			06/13/24 17:26	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			06/13/24 17:26	4
Ethylbenzene	ND		4.0	3.0	ug/L			06/13/24 17:26	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			06/13/24 17:26	4
Isopropylbenzene	ND		4.0	3.2	ug/L			06/13/24 17:26	4
Methyl acetate	ND		10	5.2	ug/L			06/13/24 17:26	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			06/13/24 17:26	4
Methylcyclohexane	ND		4.0	0.64	ug/L			06/13/24 17:26	4
Methylene Chloride	ND		4.0	1.8	ug/L			06/13/24 17:26	4
Styrene	ND		4.0	2.9	ug/L			06/13/24 17:26	4
Tetrachloroethene	ND		4.0	1.4	ug/L			06/13/24 17:26	4
Toluene	ND		4.0	2.0	ug/L			06/13/24 17:26	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			06/13/24 17:26	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			06/13/24 17:26	4
Trichloroethene	ND		4.0	1.8	ug/L			06/13/24 17:26	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			06/13/24 17:26	4
Vinyl chloride	ND		4.0	3.6	ug/L			06/13/24 17:26	4
Xylenes, Total	ND		8.0	2.6	ug/L			06/13/24 17:26	4

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-220755-1
Date Collected: 06/11/24 12:10
Matrix: Water
Date Received: 06/12/24 09:25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/13/24 17:26*	*4*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/13/24 17:26*	*4*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/13/24 17:26*	*4*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/13/24 17:26*	*4*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		06/14/24 08:49	06/14/24 14:19	1
Iron	**1.6**		0.050	0.026	mg/L		06/14/24 08:49	06/14/24 14:19	1
Zinc	**0.016**		0.010	0.0068	mg/L		06/14/24 08:49	06/14/24 14:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		4.8	1.3	mg/L		06/13/24 10:59	06/13/24 13:15	1

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-220755-2
Date Collected: 06/11/24 12:15
Matrix: Water
Date Received: 06/12/24 09:25

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			06/13/24 17:48	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			06/13/24 17:48	50
1,1,2-Trichloroethane	ND		50	12	ug/L			06/13/24 17:48	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16	ug/L			06/13/24 17:48	50
1,1-Dichloroethane	ND		50	19	ug/L			06/13/24 17:48	50
1,1-Dichloroethene	ND		50	15	ug/L			06/13/24 17:48	50
1,2,4-Trichlorobenzene	ND		50	21	ug/L			06/13/24 17:48	50
1,2-Dibromo-3-Chloropropane	ND		50	20	ug/L			06/13/24 17:48	50
1,2-Dichlorobenzene	ND		50	40	ug/L			06/13/24 17:48	50
1,2-Dichloroethane	ND		50	11	ug/L			06/13/24 17:48	50
1,2-Dichloropropane	ND		50	36	ug/L			06/13/24 17:48	50
1,3-Dichlorobenzene	ND		50	39	ug/L			06/13/24 17:48	50
1,4-Dichlorobenzene	ND		50	42	ug/L			06/13/24 17:48	50
2-Butanone (MEK)	ND		500	66	ug/L			06/13/24 17:48	50
2-Hexanone	ND		250	62	ug/L			06/13/24 17:48	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			06/13/24 17:48	50
Acetone	ND		500	150	ug/L			06/13/24 17:48	50
Benzene	ND		50	21	ug/L			06/13/24 17:48	50
Bromodichloromethane	ND		50	20	ug/L			06/13/24 17:48	50
Bromoform	ND		50	13	ug/L			06/13/24 17:48	50
Bromomethane	ND		50	35	ug/L			06/13/24 17:48	50
Carbon disulfide	ND		50	9.5	ug/L			06/13/24 17:48	50
Carbon tetrachloride	ND		50	14	ug/L			06/13/24 17:48	50
Chlorobenzene	ND		50	38	ug/L			06/13/24 17:48	50
Dibromochloromethane	ND		50	16	ug/L			06/13/24 17:48	50
Chloroethane	ND		50	16	ug/L			06/13/24 17:48	50
Chloroform	ND		50	17	ug/L			06/13/24 17:48	50
Chloromethane	ND		50	18	ug/L			06/13/24 17:48	50
cis-1,2-Dichloroethene	**3300**		50	41	ug/L			06/13/24 17:48	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			06/13/24 17:48	50

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-220755-2
Date Collected: 06/11/24 12:15
Matrix: Water
Date Received: 06/12/24 09:25

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		50	9.0	ug/L			06/13/24 17:48	50
Dichlorodifluoromethane	ND		50	34	ug/L			06/13/24 17:48	50
Ethylbenzene	ND		50	37	ug/L			06/13/24 17:48	50
1,2-Dibromoethane	ND		50	37	ug/L			06/13/24 17:48	50
Isopropylbenzene	ND		50	40	ug/L			06/13/24 17:48	50
Methyl acetate	ND		130	65	ug/L			06/13/24 17:48	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			06/13/24 17:48	50
Methylcyclohexane	ND		50	8.0	ug/L			06/13/24 17:48	50
Methylene Chloride	ND		50	22	ug/L			06/13/24 17:48	50
Styrene	ND		50	37	ug/L			06/13/24 17:48	50
Tetrachloroethene	ND		50	18	ug/L			06/13/24 17:48	50
Toluene	ND		50	26	ug/L			06/13/24 17:48	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			06/13/24 17:48	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			06/13/24 17:48	50
Trichloroethene	**4000**		50	23	ug/L			06/13/24 17:48	50
Trichlorofluoromethane	ND		50	44	ug/L			06/13/24 17:48	50
Vinyl chloride	**210**		50	45	ug/L			06/13/24 17:48	50
Xylenes, Total	ND		100	33	ug/L			06/13/24 17:48	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/13/24 17:48*	*50*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/13/24 17:48*	*50*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/13/24 17:48*	*50*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*06/13/24 17:48*	*50*

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220755-3
Date Collected: 06/11/24 00:00
Matrix: Water
Date Received: 06/12/24 09:25

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/13/24 18:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/13/24 18:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/13/24 18:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/13/24 18:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/13/24 18:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/13/24 18:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/13/24 18:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/13/24 18:10	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/13/24 18:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/13/24 18:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/13/24 18:10	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/13/24 18:10	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/13/24 18:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/13/24 18:10	1
2-Hexanone	ND		5.0	1.2	ug/L			06/13/24 18:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/13/24 18:10	1
Acetone	ND		10	3.0	ug/L			06/13/24 18:10	1
Benzene	ND		1.0	0.41	ug/L			06/13/24 18:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/13/24 18:10	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220755-3
Date Collected: 06/11/24 00:00
Matrix: Water
Date Received: 06/12/24 09:25

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			06/13/24 18:10	1
Bromomethane	ND		1.0	0.69	ug/L			06/13/24 18:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/13/24 18:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/13/24 18:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/13/24 18:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/13/24 18:10	1
Chloroethane	ND		1.0	0.32	ug/L			06/13/24 18:10	1
Chloroform	ND		1.0	0.34	ug/L			06/13/24 18:10	1
Chloromethane	ND		1.0	0.35	ug/L			06/13/24 18:10	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/13/24 18:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/13/24 18:10	1
Cyclohexane	ND		1.0	0.18	ug/L			06/13/24 18:10	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/13/24 18:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/13/24 18:10	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/13/24 18:10	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/13/24 18:10	1
Methyl acetate	ND		2.5	1.3	ug/L			06/13/24 18:10	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/13/24 18:10	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/13/24 18:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/13/24 18:10	1
Styrene	ND		1.0	0.73	ug/L			06/13/24 18:10	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/13/24 18:10	1
Toluene	ND		1.0	0.51	ug/L			06/13/24 18:10	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/13/24 18:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/13/24 18:10	1
Trichloroethene	ND		1.0	0.46	ug/L			06/13/24 18:10	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/13/24 18:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/13/24 18:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/13/24 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/13/24 18:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*06/13/24 18:10*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*06/13/24 18:10*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*06/13/24 18:10*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-220755-1	TREATMENT EFFLUENT	97	103	100	107
480-220755-2	TREATMENT INFLUENT	99	105	100	108
480-220755-3	TRIP BLANK	99	107	102	109
LCS 480-715463/6	Lab Control Sample	103	103	104	107
MB 480-715463/8	Method Blank	98	103	103	105

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-715463/8
Matrix: Water
Analysis Batch: 715463

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/13/24 13:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/13/24 13:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/13/24 13:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/13/24 13:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/13/24 13:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/13/24 13:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/13/24 13:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/13/24 13:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/13/24 13:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/13/24 13:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/13/24 13:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/13/24 13:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/13/24 13:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/13/24 13:03	1
2-Hexanone	ND		5.0	1.2	ug/L			06/13/24 13:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/13/24 13:03	1
Acetone	ND		10	3.0	ug/L			06/13/24 13:03	1
Benzene	ND		1.0	0.41	ug/L			06/13/24 13:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/13/24 13:03	1
Bromoform	ND		1.0	0.26	ug/L			06/13/24 13:03	1
Bromomethane	ND		1.0	0.69	ug/L			06/13/24 13:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/13/24 13:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/13/24 13:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/13/24 13:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/13/24 13:03	1
Chloroethane	ND		1.0	0.32	ug/L			06/13/24 13:03	1
Chloroform	ND		1.0	0.34	ug/L			06/13/24 13:03	1
Chloromethane	ND		1.0	0.35	ug/L			06/13/24 13:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/13/24 13:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/13/24 13:03	1
Cyclohexane	ND		1.0	0.18	ug/L			06/13/24 13:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/13/24 13:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/13/24 13:03	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/13/24 13:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/13/24 13:03	1
Methyl acetate	ND		2.5	1.3	ug/L			06/13/24 13:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/13/24 13:03	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/13/24 13:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/13/24 13:03	1
Styrene	ND		1.0	0.73	ug/L			06/13/24 13:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/13/24 13:03	1
Toluene	ND		1.0	0.51	ug/L			06/13/24 13:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/13/24 13:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/13/24 13:03	1
Trichloroethene	ND		1.0	0.46	ug/L			06/13/24 13:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/13/24 13:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/13/24 13:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/13/24 13:03	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-715463/8
Matrix: Water
Analysis Batch: 715463

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/13/24 13:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/13/24 13:03*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/13/24 13:03*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*06/13/24 13:03*	*1*

Lab Sample ID: LCS 480-715463/6
Matrix: Water
Analysis Batch: 715463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	29.0		ug/L		116	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.2		ug/L		89	76 - 120
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.3		ug/L		105	61 - 148
1,1-Dichloroethane	25.0	26.5		ug/L		106	77 - 120
1,1-Dichloroethene	25.0	27.8		ug/L		111	66 - 127
1,2,4-Trichlorobenzene	25.0	26.8		ug/L		107	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.2		ug/L		97	56 - 134
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	25.4		ug/L		102	75 - 120
1,2-Dichloropropane	25.0	25.2		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 120
2-Butanone (MEK)	125	122		ug/L		98	57 - 140
2-Hexanone	125	132		ug/L		106	65 - 127
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	71 - 125
Acetone	125	133		ug/L		107	56 - 142
Benzene	25.0	25.1		ug/L		100	71 - 124
Bromodichloromethane	25.0	27.0		ug/L		108	80 - 122
Bromoform	25.0	27.4		ug/L		109	61 - 132
Bromomethane	25.0	27.6		ug/L		111	55 - 144
Carbon disulfide	25.0	26.9		ug/L		108	59 - 134
Carbon tetrachloride	25.0	30.9		ug/L		123	72 - 134
Chlorobenzene	25.0	25.1		ug/L		100	80 - 120
Dibromochloromethane	25.0	28.1		ug/L		112	75 - 125
Chloroethane	25.0	31.3		ug/L		125	69 - 136
Chloroform	25.0	26.0		ug/L		104	73 - 127
Chloromethane	25.0	23.2		ug/L		93	68 - 124
cis-1,2-Dichloroethene	25.0	26.5		ug/L		106	74 - 124
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	74 - 124
Cyclohexane	25.0	26.1		ug/L		104	59 - 135
Dichlorodifluoromethane	25.0	20.6		ug/L		83	59 - 135
Ethylbenzene	25.0	25.7		ug/L		103	77 - 123
1,2-Dibromoethane	25.0	25.8		ug/L		103	77 - 120
Isopropylbenzene	25.0	24.8		ug/L		99	77 - 122
Methyl acetate	50.0	54.2		ug/L		108	74 - 133
Methyl tert-butyl ether	25.0	25.3		ug/L		101	77 - 120
Methylcyclohexane	25.0	27.3		ug/L		109	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-715463/6
Matrix: Water
Analysis Batch: 715463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	27.3		ug/L		109	75 - 124
Styrene	25.0	26.9		ug/L		108	80 - 120
Tetrachloroethene	25.0	28.6		ug/L		114	74 - 122
Toluene	25.0	25.9		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	27.4		ug/L		110	73 - 127
trans-1,3-Dichloropropene	25.0	28.2		ug/L		113	80 - 120
Trichloroethene	25.0	26.5		ug/L		106	74 - 123
Trichlorofluoromethane	25.0	30.2		ug/L		121	62 - 150
Vinyl chloride	25.0	26.4		ug/L		106	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-715530/1-A
Matrix: Water
Analysis Batch: 715684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715530

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		06/14/24 08:49	06/14/24 13:57	1
Iron	ND		0.050	0.026	mg/L		06/14/24 08:49	06/14/24 13:57	1
Zinc	ND		0.010	0.0068	mg/L		06/14/24 08:49	06/14/24 13:57	1

Lab Sample ID: LCS 480-715530/2-A
Matrix: Water
Analysis Batch: 715684

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715530

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	4.97		mg/L		97	85 - 115
Iron	5.10	5.25		mg/L		103	85 - 115
Zinc	0.500	0.514		mg/L		103	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-715484/1-A
Matrix: Water
Analysis Batch: 715497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715484

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/13/24 10:59	06/13/24 13:15	1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 480-715484/2-A
Matrix: Water
Analysis Batch: 715497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715484

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.0	31.50		mg/L		79	78 - 114

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 715463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220755-1	TREATMENT EFFLUENT	Total/NA	Water	8260C	
480-220755-2	TREATMENT INFLUENT	Total/NA	Water	8260C	
480-220755-3	TRIP BLANK	Total/NA	Water	8260C	
MB 480-715463/8	Method Blank	Total/NA	Water	8260C	
LCS 480-715463/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 715530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220755-1	TREATMENT EFFLUENT	Total/NA	Water	200.7	
MB 480-715530/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-715530/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 715684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220755-1	TREATMENT EFFLUENT	Total/NA	Water	200.7 Rev 4.4	715530
MB 480-715530/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	715530
LCS 480-715530/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	715530

General Chemistry

Prep Batch: 715484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220755-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	
MB 480-715484/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-715484/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 715497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220755-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	715484
MB 480-715484/1-A	Method Blank	Total/NA	Water	1664B	715484
LCS 480-715484/2-A	Lab Control Sample	Total/NA	Water	1664B	715484

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-220755-1
Date Collected: 06/11/24 12:10
Matrix: Water
Date Received: 06/12/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		4	715463	AXK	EET BUF	06/13/24 17:26
Total/NA	Prep	200.7			715530	ET	EET BUF	06/14/24 08:49
Total/NA	Analysis	200.7 Rev 4.4		1	715684	NZG	EET BUF	06/14/24 14:19
Total/NA	Prep	1664B			715484	KM	EET BUF	06/13/24 10:59
Total/NA	Analysis	1664B		1	715497	KM	EET BUF	06/13/24 13:15

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-220755-2
Date Collected: 06/11/24 12:15
Matrix: Water
Date Received: 06/12/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		50	715463	AXK	EET BUF	06/13/24 17:48

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220755-3
Date Collected: 06/11/24 00:00
Matrix: Water
Date Received: 06/12/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	715463	AXK	EET BUF	06/13/24 18:10

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220755-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-220755-1	TREATMENT EFFLUENT	Water	06/11/24 12:10	06/12/24 09:25
480-220755-2	TREATMENT INFLUENT	Water	06/11/24 12:15	06/12/24 09:25
480-220755-3	TRIP BLANK	Water	06/11/24 00:00	06/12/24 09:25

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

6/11/24

PAGE 1 OF 1

FED-EX Tracking #

Bottle Order Control #

Lab Quote #

Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax 866-902-2187 #N/A	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name:

Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent	NA	6/11	1210	MR	WG	6	3		1	2						X	X	X	
	Treatment Influent	NA	6/11	1215	MR	WG	3	3									X	X	X	
	Trip Blank	NA	6/11			WG	2	2									X			

Turnaround Time (Business Days) — Approved By (Lab PM) / Date

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Repo*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other

480-220755 Chain of Custody

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	GVL to Eurofins	6/11 1700	1
2	GVL	6/12 0925	2
3	Relinquished By :	Date / Time:	Received By: 6/12/24 925 MRB

Custody Seal Number: [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice Cooler Temp _____

3.3 ICE

Page 21 of 22

6/19/2024

N:\Buffalo\Projects\Projects\NYSDEC Contract\PROJECTS\Frewsburg, Former Vac-Air Specialty Alloys\Old Data Tables\Archive\Ogiony\Frewsburg PSID with COC

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-220755-1

Login Number: 220755
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 7/29/2024 11:37:21 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-221756-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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Authorization



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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 18
Lab Chronicle 19
Certification Summary 20
Method Summary 21
Sample Summary 22
Chain of Custody 23
Receipt Checklists 24

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-221756-1 Eurofins Buffalo

Job Narrative
480-221756-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 7/18/2024 3:16 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 8.9º C.

GC/MS VOA
Method 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) associated with batch 480-718816 . The following sample was affected : TRIP BLANK (480-221756-3).

Method 8260C: The laboratory control sample (LCS) for analytical batch 480-718816 recovered outside control limits for the following analyte: Dichlorodifluoromethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The associated sample is impacted: TRIP BLANK (480-221756-3).

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: TREATMENT INFLUENT (480-221756-2). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: TREATMENT EFFLUENT (480-221756-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 480-719137 was outside criteria for the following analyte(s): Tetrachloroethene. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated. The following samples were affected : TREATMENT EFFLUENT (480-221756-1) and TREATMENT INFLUENT (480-221756-2).

Method 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) associated with batch 480-719137 . The following samples were affected : TREATMENT EFFLUENT (480-221756-1) and TREATMENT INFLUENT (480-221756-2).

Method 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 480-718816 was outside criteria for the following analyte(s): Tetrachloroethene. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated. The associated sample is impacted: TRIP BLANK (480-221756-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-221756-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	13.2		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.020		0.010	0.0068	mg/L	1		200.7 Rev 4.4	Total/NA
Oil & Grease	1.6	J	4.8	1.3	mg/L	1		1664B	Total/NA

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-221756-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1600		50	41	ug/L	50		8260C	Total/NA
Trichloroethene	2700		50	23	ug/L	50		8260C	Total/NA
Vinyl chloride	81		50	45	ug/L	50		8260C	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-221756-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-221756-1
Date Collected: 07/16/24 09:30
Matrix: Water
Date Received: 07/18/24 15:16

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			07/22/24 21:41	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			07/22/24 21:41	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			07/22/24 21:41	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			07/22/24 21:41	10
1,1-Dichloroethane	ND		10	3.8	ug/L			07/22/24 21:41	10
1,1-Dichloroethene	ND		10	2.9	ug/L			07/22/24 21:41	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			07/22/24 21:41	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			07/22/24 21:41	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			07/22/24 21:41	10
1,2-Dichloroethane	ND		10	2.1	ug/L			07/22/24 21:41	10
1,2-Dichloropropane	ND		10	7.2	ug/L			07/22/24 21:41	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			07/22/24 21:41	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			07/22/24 21:41	10
2-Butanone (MEK)	ND	*+	100	13	ug/L			07/22/24 21:41	10
2-Hexanone	ND		50	12	ug/L			07/22/24 21:41	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			07/22/24 21:41	10
Acetone	ND		100	30	ug/L			07/22/24 21:41	10
Benzene	ND		10	4.1	ug/L			07/22/24 21:41	10
Bromodichloromethane	ND		10	3.9	ug/L			07/22/24 21:41	10
Bromoform	ND		10	2.6	ug/L			07/22/24 21:41	10
Bromomethane	ND		10	6.9	ug/L			07/22/24 21:41	10
Carbon disulfide	ND		10	1.9	ug/L			07/22/24 21:41	10
Carbon tetrachloride	ND		10	2.7	ug/L			07/22/24 21:41	10
Chlorobenzene	ND		10	7.5	ug/L			07/22/24 21:41	10
Dibromochloromethane	ND		10	3.2	ug/L			07/22/24 21:41	10
Chloroethane	ND		10	3.2	ug/L			07/22/24 21:41	10
Chloroform	ND		10	3.4	ug/L			07/22/24 21:41	10
Chloromethane	ND		10	3.5	ug/L			07/22/24 21:41	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			07/22/24 21:41	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			07/22/24 21:41	10
Cyclohexane	ND		10	1.8	ug/L			07/22/24 21:41	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			07/22/24 21:41	10
Ethylbenzene	ND		10	7.4	ug/L			07/22/24 21:41	10
1,2-Dibromoethane	ND		10	7.3	ug/L			07/22/24 21:41	10
Isopropylbenzene	ND		10	7.9	ug/L			07/22/24 21:41	10
Methyl acetate	ND		25	13	ug/L			07/22/24 21:41	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			07/22/24 21:41	10
Methylcyclohexane	ND		10	1.6	ug/L			07/22/24 21:41	10
Methylene Chloride	ND		10	4.4	ug/L			07/22/24 21:41	10
Styrene	ND		10	7.3	ug/L			07/22/24 21:41	10
Tetrachloroethene	ND		10	3.6	ug/L			07/22/24 21:41	10
Toluene	ND		10	5.1	ug/L			07/22/24 21:41	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			07/22/24 21:41	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			07/22/24 21:41	10
Trichloroethene	ND		10	4.6	ug/L			07/22/24 21:41	10
Trichlorofluoromethane	ND		10	8.8	ug/L			07/22/24 21:41	10
Vinyl chloride	ND		10	9.0	ug/L			07/22/24 21:41	10
Xylenes, Total	ND		20	6.6	ug/L			07/22/24 21:41	10

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-221756-1

Date Collected: 07/16/24 09:30
Matrix: Water
Date Received: 07/18/24 15:16

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/22/24 21:41*	*10*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*07/22/24 21:41*	*10*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*07/22/24 21:41*	*10*
Dibromofluoromethane (Surr)	*89*		*75 - 123*		*07/22/24 21:41*	*10*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		07/19/24 08:56	07/19/24 14:35	1
Iron	**13.2**		0.050	0.026	mg/L		07/19/24 08:56	07/19/24 14:35	1
Zinc	**0.020**		0.010	0.0068	mg/L		07/19/24 08:56	07/19/24 14:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	**1.6**	**J**	4.8	1.3	mg/L		07/20/24 08:56	07/20/24 10:15	1

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-221756-2

Date Collected: 07/16/24 09:40
Matrix: Water
Date Received: 07/18/24 15:16

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			07/22/24 22:05	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			07/22/24 22:05	50
1,1,2-Trichloroethane	ND		50	12	ug/L			07/22/24 22:05	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16	ug/L			07/22/24 22:05	50
1,1-Dichloroethane	ND		50	19	ug/L			07/22/24 22:05	50
1,1-Dichloroethene	ND		50	15	ug/L			07/22/24 22:05	50
1,2,4-Trichlorobenzene	ND		50	21	ug/L			07/22/24 22:05	50
1,2-Dibromo-3-Chloropropane	ND		50	20	ug/L			07/22/24 22:05	50
1,2-Dichlorobenzene	ND		50	40	ug/L			07/22/24 22:05	50
1,2-Dichloroethane	ND		50	11	ug/L			07/22/24 22:05	50
1,2-Dichloropropane	ND		50	36	ug/L			07/22/24 22:05	50
1,3-Dichlorobenzene	ND		50	39	ug/L			07/22/24 22:05	50
1,4-Dichlorobenzene	ND		50	42	ug/L			07/22/24 22:05	50
2-Butanone (MEK)	ND	*+	500	66	ug/L			07/22/24 22:05	50
2-Hexanone	ND		250	62	ug/L			07/22/24 22:05	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			07/22/24 22:05	50
Acetone	ND		500	150	ug/L			07/22/24 22:05	50
Benzene	ND		50	21	ug/L			07/22/24 22:05	50
Bromodichloromethane	ND		50	20	ug/L			07/22/24 22:05	50
Bromoform	ND		50	13	ug/L			07/22/24 22:05	50
Bromomethane	ND		50	35	ug/L			07/22/24 22:05	50
Carbon disulfide	ND		50	9.5	ug/L			07/22/24 22:05	50
Carbon tetrachloride	ND		50	14	ug/L			07/22/24 22:05	50
Chlorobenzene	ND		50	38	ug/L			07/22/24 22:05	50
Dibromochloromethane	ND		50	16	ug/L			07/22/24 22:05	50
Chloroethane	ND		50	16	ug/L			07/22/24 22:05	50
Chloroform	ND		50	17	ug/L			07/22/24 22:05	50
Chloromethane	ND		50	18	ug/L			07/22/24 22:05	50
cis-1,2-Dichloroethene	**1600**		50	41	ug/L			07/22/24 22:05	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			07/22/24 22:05	50

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-221756-2
Date Collected: 07/16/24 09:40
Matrix: Water
Date Received: 07/18/24 15:16

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		50	9.0	ug/L			07/22/24 22:05	50
Dichlorodifluoromethane	ND		50	34	ug/L			07/22/24 22:05	50
Ethylbenzene	ND		50	37	ug/L			07/22/24 22:05	50
1,2-Dibromoethane	ND		50	37	ug/L			07/22/24 22:05	50
Isopropylbenzene	ND		50	40	ug/L			07/22/24 22:05	50
Methyl acetate	ND		130	65	ug/L			07/22/24 22:05	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			07/22/24 22:05	50
Methylcyclohexane	ND		50	8.0	ug/L			07/22/24 22:05	50
Methylene Chloride	ND		50	22	ug/L			07/22/24 22:05	50
Styrene	ND		50	37	ug/L			07/22/24 22:05	50
Tetrachloroethene	ND		50	18	ug/L			07/22/24 22:05	50
Toluene	ND		50	26	ug/L			07/22/24 22:05	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			07/22/24 22:05	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			07/22/24 22:05	50
Trichloroethene	**2700**		50	23	ug/L			07/22/24 22:05	50
Trichlorofluoromethane	ND		50	44	ug/L			07/22/24 22:05	50
Vinyl chloride	**81**		50	45	ug/L			07/22/24 22:05	50
Xylenes, Total	ND		100	33	ug/L			07/22/24 22:05	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*07/22/24 22:05*	*50*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*07/22/24 22:05*	*50*
4-Bromofluorobenzene (Surr)	*84*		*73 - 120*		*07/22/24 22:05*	*50*
Dibromofluoromethane (Surr)	*89*		*75 - 123*		*07/22/24 22:05*	*50*

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-221756-3
Date Collected: 07/16/24 00:00
Matrix: Water
Date Received: 07/18/24 15:16

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/18/24 19:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/24 19:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/24 19:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/24 19:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/18/24 19:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/18/24 19:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/24 19:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/24 19:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/24 19:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/24 19:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/24 19:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/24 19:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/24 19:32	1
2-Butanone (MEK)	ND	*+	10	1.3	ug/L			07/18/24 19:32	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/24 19:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/24 19:32	1
Acetone	ND		10	3.0	ug/L			07/18/24 19:32	1
Benzene	ND		1.0	0.41	ug/L			07/18/24 19:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/24 19:32	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-221756-3
Date Collected: 07/16/24 00:00
Matrix: Water
Date Received: 07/18/24 15:16

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			07/18/24 19:32	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/24 19:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/24 19:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/24 19:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/24 19:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/18/24 19:32	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/24 19:32	1
Chloroform	ND		1.0	0.34	ug/L			07/18/24 19:32	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/24 19:32	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/24 19:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/24 19:32	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/24 19:32	1
Dichlorodifluoromethane	ND	*+	1.0	0.68	ug/L			07/18/24 19:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/24 19:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/24 19:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/24 19:32	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/24 19:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/24 19:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/24 19:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/24 19:32	1
Styrene	ND		1.0	0.73	ug/L			07/18/24 19:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/24 19:32	1
Toluene	ND		1.0	0.51	ug/L			07/18/24 19:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/24 19:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/24 19:32	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/24 19:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/24 19:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/24 19:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/24 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/18/24 19:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*07/18/24 19:32*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*07/18/24 19:32*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*07/18/24 19:32*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-221756-1	TREATMENT EFFLUENT	96	98	93	89
480-221756-2	TREATMENT INFLUENT	95	95	84	89
480-221756-3	TRIP BLANK	99	97	95	90
LCS 480-718816/6	Lab Control Sample	94	95	86	90
LCS 480-719137/8	Lab Control Sample	92	96	90	90
MB 480-718816/9	Method Blank	96	93	89	88
MB 480-719137/11	Method Blank	94	96	92	91

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-718816/9
Matrix: Water
Analysis Batch: 718816

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/18/24 13:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/24 13:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/24 13:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/24 13:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/18/24 13:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/18/24 13:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/24 13:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/24 13:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/24 13:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/24 13:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/24 13:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/24 13:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/24 13:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/24 13:29	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/24 13:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/24 13:29	1
Acetone	ND		10	3.0	ug/L			07/18/24 13:29	1
Benzene	ND		1.0	0.41	ug/L			07/18/24 13:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/24 13:29	1
Bromoform	ND		1.0	0.26	ug/L			07/18/24 13:29	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/24 13:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/24 13:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/24 13:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/24 13:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/18/24 13:29	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/24 13:29	1
Chloroform	ND		1.0	0.34	ug/L			07/18/24 13:29	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/24 13:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/24 13:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/24 13:29	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/24 13:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/24 13:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/24 13:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/24 13:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/24 13:29	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/24 13:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/24 13:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/24 13:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/24 13:29	1
Styrene	ND		1.0	0.73	ug/L			07/18/24 13:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/24 13:29	1
Toluene	ND		1.0	0.51	ug/L			07/18/24 13:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/24 13:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/24 13:29	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/24 13:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/24 13:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/24 13:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/24 13:29	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-718816/9
Matrix: Water
Analysis Batch: 718816

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/18/24 13:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*		*07/18/24 13:29*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*07/18/24 13:29*	*1*
Dibromofluoromethane (Surr)	*88*		*75 - 123*		*07/18/24 13:29*	*1*

Lab Sample ID: LCS 480-718816/6
Matrix: Water
Analysis Batch: 718816

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	24.0		ug/L		96	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		98	76 - 120
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.7		ug/L		95	61 - 148
1,1-Dichloroethane	25.0	25.3		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	24.5		ug/L		98	66 - 127
1,2,4-Trichlorobenzene	25.0	22.8		ug/L		91	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	28.0		ug/L		112	56 - 134
1,2-Dichlorobenzene	25.0	22.9		ug/L		92	80 - 124
1,2-Dichloroethane	25.0	23.2		ug/L		93	75 - 120
1,2-Dichloropropane	25.0	23.4		ug/L		93	76 - 120
1,3-Dichlorobenzene	25.0	23.2		ug/L		93	77 - 120
1,4-Dichlorobenzene	25.0	22.7		ug/L		91	80 - 120
2-Butanone (MEK)	125	222	*+	ug/L		178	57 - 140
2-Hexanone	125	131		ug/L		104	65 - 127
4-Methyl-2-pentanone (MIBK)	125	130		ug/L		104	71 - 125
Acetone	125	130		ug/L		104	56 - 142
Benzene	25.0	22.8		ug/L		91	71 - 124
Bromodichloromethane	25.0	23.9		ug/L		96	80 - 122
Bromoform	25.0	26.0		ug/L		104	61 - 132
Bromomethane	25.0	25.4		ug/L		101	55 - 144
Carbon disulfide	25.0	23.8		ug/L		95	59 - 134
Carbon tetrachloride	25.0	26.0		ug/L		104	72 - 134
Chlorobenzene	25.0	23.3		ug/L		93	80 - 120
Dibromochloromethane	25.0	25.2		ug/L		101	75 - 125
Chloroethane	25.0	27.6		ug/L		110	69 - 136
Chloroform	25.0	21.5		ug/L		86	73 - 127
Chloromethane	25.0	30.6		ug/L		122	68 - 124
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	74 - 124
cis-1,3-Dichloropropene	25.0	24.5		ug/L		98	74 - 124
Cyclohexane	25.0	26.9		ug/L		107	59 - 135
Dichlorodifluoromethane	25.0	34.2	*+	ug/L		137	59 - 135
Ethylbenzene	25.0	24.3		ug/L		97	77 - 123
1,2-Dibromoethane	25.0	24.2		ug/L		97	77 - 120
Isopropylbenzene	25.0	25.0		ug/L		100	77 - 122
Methyl acetate	50.0	50.1		ug/L		100	74 - 133
Methyl tert-butyl ether	25.0	23.2		ug/L		93	77 - 120
Methylcyclohexane	25.0	24.8		ug/L		99	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-718816/6
Matrix: Water
Analysis Batch: 718816

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	24.2		ug/L		97	75 - 124
Styrene	25.0	24.1		ug/L		96	80 - 120
Tetrachloroethene	25.0	23.6		ug/L		94	74 - 122
Toluene	25.0	23.5		ug/L		94	80 - 122
trans-1,2-Dichloroethene	25.0	23.6		ug/L		94	73 - 127
trans-1,3-Dichloropropene	25.0	26.6		ug/L		106	80 - 120
Trichloroethene	25.0	23.1		ug/L		92	74 - 123
Trichlorofluoromethane	25.0	26.9		ug/L		108	62 - 150
Vinyl chloride	25.0	30.0		ug/L		120	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*
Dibromofluoromethane (Surr)	*90*		*75 - 123*

Lab Sample ID: MB 480-719137/11
Matrix: Water
Analysis Batch: 719137

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/22/24 14:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/22/24 14:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/22/24 14:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/22/24 14:33	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/22/24 14:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/22/24 14:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/22/24 14:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/22/24 14:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/22/24 14:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/22/24 14:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/22/24 14:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/22/24 14:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/22/24 14:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/22/24 14:33	1
2-Hexanone	ND		5.0	1.2	ug/L			07/22/24 14:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/22/24 14:33	1
Acetone	ND		10	3.0	ug/L			07/22/24 14:33	1
Benzene	ND		1.0	0.41	ug/L			07/22/24 14:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/22/24 14:33	1
Bromoform	ND		1.0	0.26	ug/L			07/22/24 14:33	1
Bromomethane	ND		1.0	0.69	ug/L			07/22/24 14:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/22/24 14:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/22/24 14:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/22/24 14:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/22/24 14:33	1
Chloroethane	ND		1.0	0.32	ug/L			07/22/24 14:33	1
Chloroform	ND		1.0	0.34	ug/L			07/22/24 14:33	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-719137/11
Matrix: Water
Analysis Batch: 719137

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.35	ug/L			07/22/24 14:33	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/22/24 14:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/22/24 14:33	1
Cyclohexane	ND		1.0	0.18	ug/L			07/22/24 14:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/22/24 14:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/22/24 14:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/22/24 14:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/22/24 14:33	1
Methyl acetate	ND		2.5	1.3	ug/L			07/22/24 14:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/22/24 14:33	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/22/24 14:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/22/24 14:33	1
Styrene	ND		1.0	0.73	ug/L			07/22/24 14:33	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/22/24 14:33	1
Toluene	ND		1.0	0.51	ug/L			07/22/24 14:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/22/24 14:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/22/24 14:33	1
Trichloroethene	ND		1.0	0.46	ug/L			07/22/24 14:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/22/24 14:33	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/22/24 14:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/22/24 14:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*07/22/24 14:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/22/24 14:33*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*07/22/24 14:33*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*07/22/24 14:33*	*1*

Lab Sample ID: LCS 480-719137/8
Matrix: Water
Analysis Batch: 719137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	25.0		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.1		ug/L		100	76 - 120
1,1,2-Trichloroethane	25.0	24.5		ug/L		98	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.1		ug/L		97	61 - 148
1,1-Dichloroethane	25.0	25.5		ug/L		102	77 - 120
1,1-Dichloroethene	25.0	25.0		ug/L		100	66 - 127
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		95	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	29.0		ug/L		116	56 - 134
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 124
1,2-Dichloroethane	25.0	23.7		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	24.4		ug/L		98	76 - 120
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 120
2-Butanone (MEK)	125	227	*+	ug/L		181	57 - 140
2-Hexanone	125	134		ug/L		107	65 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-719137/8
Matrix: Water
Analysis Batch: 719137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	71 - 125
Acetone	125	136		ug/L		109	56 - 142
Benzene	25.0	23.5		ug/L		94	71 - 124
Bromodichloromethane	25.0	24.4		ug/L		98	80 - 122
Bromoform	25.0	27.4		ug/L		109	61 - 132
Bromomethane	25.0	23.7		ug/L		95	55 - 144
Carbon disulfide	25.0	24.2		ug/L		97	59 - 134
Carbon tetrachloride	25.0	26.9		ug/L		108	72 - 134
Chlorobenzene	25.0	23.5		ug/L		94	80 - 120
Dibromochloromethane	25.0	26.1		ug/L		104	75 - 125
Chloroethane	25.0	25.7		ug/L		103	69 - 136
Chloroform	25.0	21.8		ug/L		87	73 - 127
Chloromethane	25.0	26.8		ug/L		107	68 - 124
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	74 - 124
cis-1,3-Dichloropropene	25.0	25.6		ug/L		102	74 - 124
Cyclohexane	25.0	27.2		ug/L		109	59 - 135
Dichlorodifluoromethane	25.0	28.4		ug/L		114	59 - 135
Ethylbenzene	25.0	24.3		ug/L		97	77 - 123
1,2-Dibromoethane	25.0	24.4		ug/L		98	77 - 120
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 122
Methyl acetate	50.0	51.1		ug/L		102	74 - 133
Methyl tert-butyl ether	25.0	23.1		ug/L		92	77 - 120
Methylcyclohexane	25.0	26.1		ug/L		104	68 - 134
Methylene Chloride	25.0	23.8		ug/L		95	75 - 124
Styrene	25.0	24.2		ug/L		97	80 - 120
Tetrachloroethene	25.0	24.1		ug/L		96	74 - 122
Toluene	25.0	23.3		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	23.9		ug/L		95	73 - 127
trans-1,3-Dichloropropene	25.0	26.2		ug/L		105	80 - 120
Trichloroethene	25.0	23.6		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	25.6		ug/L		102	62 - 150
Vinyl chloride	25.0	27.4		ug/L		110	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*92*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*
Dibromofluoromethane (Surr)	*90*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-718911/1-A
Matrix: Water
Analysis Batch: 719053

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 718911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		07/19/24 08:56	07/19/24 14:01	1
Iron	ND		0.050	0.026	mg/L		07/19/24 08:56	07/19/24 14:01	1
Zinc	ND		0.010	0.0068	mg/L		07/19/24 08:56	07/19/24 14:01	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: LCS 480-718911/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 719053
Prep Batch: 718911

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	5.03		mg/L		99	85 - 115
Iron	5.10	5.48		mg/L		108	85 - 115
Zinc	0.500	0.542		mg/L		108	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-719072/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 719079
Prep Batch: 719072

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		07/20/24 08:56	07/20/24 10:15	1

Lab Sample ID: LCS 480-719072/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 719079
Prep Batch: 719072

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.0	33.50		mg/L		84	78 - 114

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 718816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221756-3	TRIP BLANK	Total/NA	Water	8260C	
MB 480-718816/9	Method Blank	Total/NA	Water	8260C	
LCS 480-718816/6	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 719137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221756-1	TREATMENT EFFLUENT	Total/NA	Water	8260C	
480-221756-2	TREATMENT INFLUENT	Total/NA	Water	8260C	
MB 480-719137/11	Method Blank	Total/NA	Water	8260C	
LCS 480-719137/8	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 718911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221756-1	TREATMENT EFFLUENT	Total/NA	Water	200.7	
MB 480-718911/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-718911/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 719053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221756-1	TREATMENT EFFLUENT	Total/NA	Water	200.7 Rev 4.4	718911
MB 480-718911/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	718911
LCS 480-718911/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	718911

General Chemistry

Prep Batch: 719072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221756-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	
MB 480-719072/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-719072/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 719079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221756-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	719072
MB 480-719072/1-A	Method Blank	Total/NA	Water	1664B	719072
LCS 480-719072/2-A	Lab Control Sample	Total/NA	Water	1664B	719072

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-221756-1
Date Collected: 07/16/24 09:30
Matrix: Water
Date Received: 07/18/24 15:16

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		10	719137	ERS	EET BUF	07/22/24 21:41
Total/NA	Prep	200.7			718911	ET	EET BUF	07/19/24 08:56
Total/NA	Analysis	200.7 Rev 4.4		1	719053	NZG	EET BUF	07/19/24 14:35
Total/NA	Prep	1664B			719072	KM	EET BUF	07/20/24 08:56
Total/NA	Analysis	1664B		1	719079	KM	EET BUF	07/20/24 10:15

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-221756-2
Date Collected: 07/16/24 09:40
Matrix: Water
Date Received: 07/18/24 15:16

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		50	719137	ERS	EET BUF	07/22/24 22:05

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-221756-3
Date Collected: 07/16/24 00:00
Matrix: Water
Date Received: 07/18/24 15:16

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	718816	ERS	EET BUF	07/18/24 19:32

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221756-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-221756-1	TREATMENT EFFLUENT	Water	07/16/24 09:30	07/18/24 15:16
480-221756-2	TREATMENT INFLUENT	Water	07/16/24 09:40	07/18/24 15:16
480-221756-3	TRIP BLANK	Water	07/16/24 00:00	07/18/24 15:16

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

7/16/24

FED-EX Tracking # | Bottle Order Control #

Lab Quote # | Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax #N/A **866-902-2187**	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name: | Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent	NA	7/16	0930	MR	WG	6	3		1	2						X	X	X	
	Treatment Influent	NA	7/16	0940	MR	WG	3	3									X	X	X	
	Trip Blank	NA	7/16			WG	2	2									X			

480-221756 Chain of Custody

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other _____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B" (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	to fridge	7/16 1630	
2	Relinquished By :	Date / Time:	Received By: 7/17/24 1516
3	Relinquished By :	Date / Time:	Received By:

Custody Seal Number: [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice **Cooler Temp** 0.9# ICE

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-221756-1

Login Number: 221756
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 8/26/2024 1:56:07 PM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-222728-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 19
Lab Chronicle 20
Certification Summary 21
Method Summary 22
Sample Summary 23
Chain of Custody 24
Receipt Checklists 25

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-222728-1 Eurofins Buffalo

Job Narrative
480-222728-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 8/21/2024 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.1° C.

GC/MS VOA
Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: Treatment Effluent (480-222728-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-722566 recovered outside control limits for the following analytes: Acetone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: Treatment Effluent (480-222728-1) and Trip Blank (480-222728-3).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-722566 recovered above the upper control limit for Acetone and Carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: Treatment Effluent (480-222728-1) and Trip Blank (480-222728-3).

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 480-722566 recovered outside control limits for the following analytes: Acetone. The associated samples are impacted: Treatment Effluent (480-222728-1) and Trip Blank (480-222728-3).

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Treatment Influent (480-222728-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Treatment Effluent — Lab Sample ID: 480-222728-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	2.9		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA
Oil & Grease	2.7	J	4.7	1.3	mg/L	1		1664B	Total/NA

Client Sample ID: Treatment Influent — Lab Sample ID: 480-222728-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	830		20	16	ug/L	20		8260C	Total/NA
Vinyl chloride	93		20	18	ug/L	20		8260C	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-222728-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Treatment Effluent
Lab Sample ID: 480-222728-1
Date Collected: 08/20/24 09:30
Matrix: Water
Date Received: 08/21/24 09:55

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			08/21/24 15:02	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			08/21/24 15:02	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			08/21/24 15:02	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			08/21/24 15:02	10
1,1-Dichloroethane	ND		10	3.8	ug/L			08/21/24 15:02	10
1,1-Dichloroethene	ND		10	2.9	ug/L			08/21/24 15:02	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			08/21/24 15:02	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			08/21/24 15:02	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			08/21/24 15:02	10
1,2-Dichloroethane	ND		10	2.1	ug/L			08/21/24 15:02	10
1,2-Dichloropropane	ND		10	7.2	ug/L			08/21/24 15:02	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			08/21/24 15:02	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			08/21/24 15:02	10
2-Butanone (MEK)	ND		100	13	ug/L			08/21/24 15:02	10
2-Hexanone	ND		50	12	ug/L			08/21/24 15:02	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			08/21/24 15:02	10
Acetone	ND	*+ *1	100	30	ug/L			08/21/24 15:02	10
Benzene	ND		10	4.1	ug/L			08/21/24 15:02	10
Bromodichloromethane	ND		10	3.9	ug/L			08/21/24 15:02	10
Bromoform	ND		10	2.6	ug/L			08/21/24 15:02	10
Bromomethane	ND		10	6.9	ug/L			08/21/24 15:02	10
Carbon disulfide	ND		10	1.9	ug/L			08/21/24 15:02	10
Carbon tetrachloride	ND		10	2.7	ug/L			08/21/24 15:02	10
Chlorobenzene	ND		10	7.5	ug/L			08/21/24 15:02	10
Dibromochloromethane	ND		10	3.2	ug/L			08/21/24 15:02	10
Chloroethane	ND		10	3.2	ug/L			08/21/24 15:02	10
Chloroform	ND		10	3.4	ug/L			08/21/24 15:02	10
Chloromethane	ND		10	3.5	ug/L			08/21/24 15:02	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			08/21/24 15:02	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			08/21/24 15:02	10
Cyclohexane	ND		10	1.8	ug/L			08/21/24 15:02	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			08/21/24 15:02	10
Ethylbenzene	ND		10	7.4	ug/L			08/21/24 15:02	10
1,2-Dibromoethane	ND		10	7.3	ug/L			08/21/24 15:02	10
Isopropylbenzene	ND		10	7.9	ug/L			08/21/24 15:02	10
Methyl acetate	ND		25	13	ug/L			08/21/24 15:02	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			08/21/24 15:02	10
Methylcyclohexane	ND		10	1.6	ug/L			08/21/24 15:02	10
Methylene Chloride	ND		10	4.4	ug/L			08/21/24 15:02	10
Styrene	ND		10	7.3	ug/L			08/21/24 15:02	10
Tetrachloroethene	ND		10	3.6	ug/L			08/21/24 15:02	10
Toluene	ND		10	5.1	ug/L			08/21/24 15:02	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			08/21/24 15:02	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			08/21/24 15:02	10
Trichloroethene	ND		10	4.6	ug/L			08/21/24 15:02	10
Trichlorofluoromethane	ND		10	8.8	ug/L			08/21/24 15:02	10
Vinyl chloride	ND		10	9.0	ug/L			08/21/24 15:02	10
Xylenes, Total	ND		20	6.6	ug/L			08/21/24 15:02	10

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Treatment Effluent
Lab Sample ID: 480-222728-1
Date Collected: 08/20/24 09:30
Matrix: Water
Date Received: 08/21/24 09:55

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*08/21/24 15:02*	*10*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*08/21/24 15:02*	*10*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*08/21/24 15:02*	*10*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*08/21/24 15:02*	*10*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		08/22/24 08:25	08/22/24 21:58	1
Iron	**2.9**		0.050	0.026	mg/L		08/22/24 08:25	08/22/24 21:58	1
Zinc	ND		0.010	0.0068	mg/L		08/22/24 08:25	08/22/24 21:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	**2.7**	**J**	4.7	1.3	mg/L		08/22/24 08:56	08/22/24 09:52	1

Client Sample ID: Treatment Influent
Lab Sample ID: 480-222728-2
Date Collected: 08/20/24 09:45
Matrix: Water
Date Received: 08/21/24 09:55

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			08/22/24 17:02	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			08/22/24 17:02	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			08/22/24 17:02	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			08/22/24 17:02	20
1,1-Dichloroethane	ND		20	7.6	ug/L			08/22/24 17:02	20
1,1-Dichloroethene	ND		20	5.8	ug/L			08/22/24 17:02	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			08/22/24 17:02	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			08/22/24 17:02	20
1,2-Dichlorobenzene	ND		20	16	ug/L			08/22/24 17:02	20
1,2-Dichloroethane	ND		20	4.2	ug/L			08/22/24 17:02	20
1,2-Dichloropropane	ND		20	14	ug/L			08/22/24 17:02	20
1,3-Dichlorobenzene	ND		20	16	ug/L			08/22/24 17:02	20
1,4-Dichlorobenzene	ND		20	17	ug/L			08/22/24 17:02	20
2-Butanone (MEK)	ND		200	26	ug/L			08/22/24 17:02	20
2-Hexanone	ND		100	25	ug/L			08/22/24 17:02	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			08/22/24 17:02	20
Acetone	ND		200	60	ug/L			08/22/24 17:02	20
Benzene	ND		20	8.2	ug/L			08/22/24 17:02	20
Bromodichloromethane	ND		20	7.8	ug/L			08/22/24 17:02	20
Bromoform	ND		20	5.2	ug/L			08/22/24 17:02	20
Bromomethane	ND		20	14	ug/L			08/22/24 17:02	20
Carbon disulfide	ND		20	3.8	ug/L			08/22/24 17:02	20
Carbon tetrachloride	ND		20	5.4	ug/L			08/22/24 17:02	20
Chlorobenzene	ND		20	15	ug/L			08/22/24 17:02	20
Dibromochloromethane	ND		20	6.4	ug/L			08/22/24 17:02	20
Chloroethane	ND		20	6.4	ug/L			08/22/24 17:02	20
Chloroform	ND		20	6.8	ug/L			08/22/24 17:02	20
Chloromethane	ND		20	7.0	ug/L			08/22/24 17:02	20
cis-1,2-Dichloroethene	**830**		20	16	ug/L			08/22/24 17:02	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			08/22/24 17:02	20

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Treatment Influent
Lab Sample ID: 480-222728-2
Date Collected: 08/20/24 09:45
Matrix: Water
Date Received: 08/21/24 09:55

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		20	3.6	ug/L			08/22/24 17:02	20
Dichlorodifluoromethane	ND		20	14	ug/L			08/22/24 17:02	20
Ethylbenzene	ND		20	15	ug/L			08/22/24 17:02	20
1,2-Dibromoethane	ND		20	15	ug/L			08/22/24 17:02	20
Isopropylbenzene	ND		20	16	ug/L			08/22/24 17:02	20
Methyl acetate	ND		50	26	ug/L			08/22/24 17:02	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			08/22/24 17:02	20
Methylcyclohexane	ND		20	3.2	ug/L			08/22/24 17:02	20
Methylene Chloride	ND		20	8.8	ug/L			08/22/24 17:02	20
Styrene	ND		20	15	ug/L			08/22/24 17:02	20
Tetrachloroethene	ND		20	7.2	ug/L			08/22/24 17:02	20
Toluene	ND		20	10	ug/L			08/22/24 17:02	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			08/22/24 17:02	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			08/22/24 17:02	20
Trichloroethene	ND		20	9.2	ug/L			08/22/24 17:02	20
Trichlorofluoromethane	ND		20	18	ug/L			08/22/24 17:02	20
Vinyl chloride	**93**		20	18	ug/L			08/22/24 17:02	20
Xylenes, Total	ND		40	13	ug/L			08/22/24 17:02	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*80 - 120*		*08/22/24 17:02*	*20*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*08/22/24 17:02*	*20*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*08/22/24 17:02*	*20*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*08/22/24 17:02*	*20*

Client Sample ID: Trip Blank
Lab Sample ID: 480-222728-3
Date Collected: 08/20/24 00:00
Matrix: Water
Date Received: 08/21/24 09:55

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/21/24 15:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/21/24 15:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/21/24 15:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/21/24 15:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/21/24 15:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/21/24 15:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/21/24 15:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/21/24 15:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/21/24 15:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/21/24 15:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/21/24 15:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/21/24 15:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/21/24 15:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/21/24 15:51	1
2-Hexanone	ND		5.0	1.2	ug/L			08/21/24 15:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/21/24 15:51	1
Acetone	ND	*+ *1	10	3.0	ug/L			08/21/24 15:51	1
Benzene	ND		1.0	0.41	ug/L			08/21/24 15:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/21/24 15:51	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Trip Blank
Lab Sample ID: 480-222728-3
Date Collected: 08/20/24 00:00
Matrix: Water
Date Received: 08/21/24 09:55

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			08/21/24 15:51	1
Bromomethane	ND		1.0	0.69	ug/L			08/21/24 15:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/21/24 15:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/21/24 15:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/21/24 15:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/21/24 15:51	1
Chloroethane	ND		1.0	0.32	ug/L			08/21/24 15:51	1
Chloroform	ND		1.0	0.34	ug/L			08/21/24 15:51	1
Chloromethane	ND		1.0	0.35	ug/L			08/21/24 15:51	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/21/24 15:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/21/24 15:51	1
Cyclohexane	ND		1.0	0.18	ug/L			08/21/24 15:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/21/24 15:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/21/24 15:51	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/21/24 15:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/21/24 15:51	1
Methyl acetate	ND		2.5	1.3	ug/L			08/21/24 15:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/21/24 15:51	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/21/24 15:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/21/24 15:51	1
Styrene	ND		1.0	0.73	ug/L			08/21/24 15:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/21/24 15:51	1
Toluene	ND		1.0	0.51	ug/L			08/21/24 15:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/21/24 15:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/21/24 15:51	1
Trichloroethene	ND		1.0	0.46	ug/L			08/21/24 15:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/21/24 15:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/21/24 15:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/21/24 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/21/24 15:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*08/21/24 15:51*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*08/21/24 15:51*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*08/21/24 15:51*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-222728-1	Treatment Effluent	101	108	97	99
480-222728-2	Treatment Influent	106	104	95	102
480-222728-3	Trip Blank	98	106	96	100
LCS 480-722566/6	Lab Control Sample	101	110	100	106
LCS 480-722678/6	Lab Control Sample	108	97	95	99
LCSD 480-722566/15	Lab Control Sample Dup	103	111	105	107
MB 480-722566/8	Method Blank	102	103	97	101
MB 480-722678/8	Method Blank	100	98	86	95

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-722566/8
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/21/24 12:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/21/24 12:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/21/24 12:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/21/24 12:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/21/24 12:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/21/24 12:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/21/24 12:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/21/24 12:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/21/24 12:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/21/24 12:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/21/24 12:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/21/24 12:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/21/24 12:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/21/24 12:26	1
2-Hexanone	ND		5.0	1.2	ug/L			08/21/24 12:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/21/24 12:26	1
Acetone	ND		10	3.0	ug/L			08/21/24 12:26	1
Benzene	ND		1.0	0.41	ug/L			08/21/24 12:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/21/24 12:26	1
Bromoform	ND		1.0	0.26	ug/L			08/21/24 12:26	1
Bromomethane	ND		1.0	0.69	ug/L			08/21/24 12:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/21/24 12:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/21/24 12:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/21/24 12:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/21/24 12:26	1
Chloroethane	ND		1.0	0.32	ug/L			08/21/24 12:26	1
Chloroform	ND		1.0	0.34	ug/L			08/21/24 12:26	1
Chloromethane	ND		1.0	0.35	ug/L			08/21/24 12:26	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/21/24 12:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/21/24 12:26	1
Cyclohexane	ND		1.0	0.18	ug/L			08/21/24 12:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/21/24 12:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/21/24 12:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/21/24 12:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/21/24 12:26	1
Methyl acetate	ND		2.5	1.3	ug/L			08/21/24 12:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/21/24 12:26	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/21/24 12:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/21/24 12:26	1
Styrene	ND		1.0	0.73	ug/L			08/21/24 12:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/21/24 12:26	1
Toluene	ND		1.0	0.51	ug/L			08/21/24 12:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/21/24 12:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/21/24 12:26	1
Trichloroethene	ND		1.0	0.46	ug/L			08/21/24 12:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/21/24 12:26	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/21/24 12:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/21/24 12:26	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-722566/8
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*102*		*80 - 120*		*08/21/24 12:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*08/21/24 12:26*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*08/21/24 12:26*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*08/21/24 12:26*	*1*

Lab Sample ID: LCS 480-722566/6
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	29.6		ug/L		118	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.2		ug/L		101	76 - 120
1,1,2-Trichloroethane	25.0	25.7		ug/L		103	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.6		ug/L		110	61 - 148
1,1-Dichloroethane	25.0	25.2		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	25.8		ug/L		103	66 - 127
1,2,4-Trichlorobenzene	25.0	26.4		ug/L		106	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	27.1		ug/L		109	56 - 134
1,2-Dichlorobenzene	25.0	25.9		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	26.9		ug/L		108	75 - 120
1,2-Dichloropropane	25.0	24.7		ug/L		99	76 - 120
1,3-Dichlorobenzene	25.0	25.7		ug/L		103	77 - 120
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 120
2-Butanone (MEK)	125	145		ug/L		116	57 - 140
2-Hexanone	125	136		ug/L		109	65 - 127
4-Methyl-2-pentanone (MIBK)	125	127		ug/L		101	71 - 125
Acetone	125	193	*+	ug/L		154	56 - 142
Benzene	25.0	25.0		ug/L		100	71 - 124
Bromodichloromethane	25.0	26.7		ug/L		107	80 - 122
Bromoform	25.0	22.9		ug/L		92	61 - 132
Bromomethane	25.0	25.6		ug/L		102	55 - 144
Carbon disulfide	25.0	24.4		ug/L		98	59 - 134
Carbon tetrachloride	25.0	32.5		ug/L		130	72 - 134
Chlorobenzene	25.0	25.3		ug/L		101	80 - 120
Dibromochloromethane	25.0	27.7		ug/L		111	75 - 125
Chloroethane	25.0	23.9		ug/L		96	69 - 136
Chloroform	25.0	25.2		ug/L		101	73 - 127
Chloromethane	25.0	23.0		ug/L		92	68 - 124
cis-1,2-Dichloroethene	25.0	25.6		ug/L		103	74 - 124
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	74 - 124
Cyclohexane	25.0	25.1		ug/L		101	59 - 135
Dichlorodifluoromethane	25.0	30.6		ug/L		122	59 - 135
Ethylbenzene	25.0	25.9		ug/L		103	77 - 123
1,2-Dibromoethane	25.0	26.3		ug/L		105	77 - 120
Isopropylbenzene	25.0	26.0		ug/L		104	77 - 122
Methyl acetate	50.0	51.1		ug/L		102	74 - 133
Methyl tert-butyl ether	25.0	28.3		ug/L		113	77 - 120
Methylcyclohexane	25.0	26.7		ug/L		107	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-722566/6
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	27.5		ug/L		110	75 - 124
Styrene	25.0	27.1		ug/L		108	80 - 120
Tetrachloroethene	25.0	26.3		ug/L		105	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	26.2		ug/L		105	73 - 127
trans-1,3-Dichloropropene	25.0	25.4		ug/L		102	80 - 120
Trichloroethene	25.0	25.9		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	25.3		ug/L		101	62 - 150
Vinyl chloride	25.0	25.4		ug/L		102	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*106*		*75 - 123*

Lab Sample ID: LCSD 480-722566/15
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	25.0	29.7		ug/L		119	73 - 126	0	15
1,1,2,2-Tetrachloroethane	25.0	25.2		ug/L		101	76 - 120	0	15
1,1,2-Trichloroethane	25.0	25.6		ug/L		103	76 - 122	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.1		ug/L		108	61 - 148	2	20
1,1-Dichloroethane	25.0	25.0		ug/L		100	77 - 120	0	20
1,1-Dichloroethene	25.0	25.3		ug/L		101	66 - 127	2	16
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	79 - 122	13	20
1,2-Dibromo-3-Chloropropane	25.0	24.9		ug/L		100	56 - 134	9	15
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 124	3	20
1,2-Dichloroethane	25.0	25.7		ug/L		103	75 - 120	5	20
1,2-Dichloropropane	25.0	25.3		ug/L		101	76 - 120	3	20
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	77 - 120	1	20
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	80 - 120	1	20
2-Butanone (MEK)	125	138		ug/L		111	57 - 140	4	20
2-Hexanone	125	131		ug/L		105	65 - 127	4	15
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		97	71 - 125	4	35
Acetone	125	161	*1	ug/L		128	56 - 142	18	15
Benzene	25.0	24.9		ug/L		100	71 - 124	0	13
Bromodichloromethane	25.0	26.5		ug/L		106	80 - 122	1	15
Bromoform	25.0	21.9		ug/L		88	61 - 132	4	15
Bromomethane	25.0	26.4		ug/L		106	55 - 144	3	15
Carbon disulfide	25.0	24.0		ug/L		96	59 - 134	2	15
Carbon tetrachloride	25.0	32.0		ug/L		128	72 - 134	2	15
Chlorobenzene	25.0	25.0		ug/L		100	80 - 120	1	25
Dibromochloromethane	25.0	27.3		ug/L		109	75 - 125	1	15
Chloroethane	25.0	25.4		ug/L		102	69 - 136	6	15
Chloroform	25.0	24.7		ug/L		99	73 - 127	2	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-722566/15
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloromethane			25.0	22.9		ug/L		92	68 - 124	0	15
cis-1,2-Dichloroethene			25.0	25.5		ug/L		102	74 - 124	1	15
cis-1,3-Dichloropropene			25.0	25.1		ug/L		100	74 - 124	2	15
Cyclohexane			25.0	25.0		ug/L		100	59 - 135	0	20
Dichlorodifluoromethane			25.0	29.6		ug/L		118	59 - 135	3	20
Ethylbenzene			25.0	25.4		ug/L		101	77 - 123	2	15
1,2-Dibromoethane			25.0	25.4		ug/L		101	77 - 120	4	15
Isopropylbenzene			25.0	25.5		ug/L		102	77 - 122	2	20
Methyl acetate			50.0	49.2		ug/L		98	74 - 133	4	20
Methyl tert-butyl ether			25.0	25.8		ug/L		103	77 - 120	9	37
Methylcyclohexane			25.0	26.2		ug/L		105	68 - 134	2	20
Methylene Chloride			25.0	26.3		ug/L		105	75 - 124	4	15
Styrene			25.0	26.5		ug/L		106	80 - 120	2	20
Tetrachloroethene			25.0	25.8		ug/L		103	74 - 122	2	20
Toluene			25.0	24.2		ug/L		97	80 - 122	2	15
trans-1,2-Dichloroethene			25.0	26.1		ug/L		104	73 - 127	0	20
trans-1,3-Dichloropropene			25.0	24.5		ug/L		98	80 - 120	4	15
Trichloroethene			25.0	26.0		ug/L		104	74 - 123	0	16
Trichlorofluoromethane			25.0	26.2		ug/L		105	62 - 150	4	20
Vinyl chloride			25.0	25.5		ug/L		102	65 - 133	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*

Lab Sample ID: MB 480-722678/8
Matrix: Water
Analysis Batch: 722678

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/22/24 12:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/22/24 12:05	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/22/24 12:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/22/24 12:05	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/22/24 12:05	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/22/24 12:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/22/24 12:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/22/24 12:05	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/22/24 12:05	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/22/24 12:05	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/22/24 12:05	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/22/24 12:05	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/22/24 12:05	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/22/24 12:05	1
2-Hexanone	ND		5.0	1.2	ug/L			08/22/24 12:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/22/24 12:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-722678/8
Matrix: Water
Analysis Batch: 722678

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			08/22/24 12:05	1
Benzene	ND		1.0	0.41	ug/L			08/22/24 12:05	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/22/24 12:05	1
Bromoform	ND		1.0	0.26	ug/L			08/22/24 12:05	1
Bromomethane	ND		1.0	0.69	ug/L			08/22/24 12:05	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/22/24 12:05	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/22/24 12:05	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/22/24 12:05	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/22/24 12:05	1
Chloroethane	ND		1.0	0.32	ug/L			08/22/24 12:05	1
Chloroform	ND		1.0	0.34	ug/L			08/22/24 12:05	1
Chloromethane	ND		1.0	0.35	ug/L			08/22/24 12:05	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/22/24 12:05	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/22/24 12:05	1
Cyclohexane	ND		1.0	0.18	ug/L			08/22/24 12:05	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/22/24 12:05	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/22/24 12:05	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/22/24 12:05	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/22/24 12:05	1
Methyl acetate	ND		2.5	1.3	ug/L			08/22/24 12:05	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/22/24 12:05	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/22/24 12:05	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/22/24 12:05	1
Styrene	ND		1.0	0.73	ug/L			08/22/24 12:05	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/22/24 12:05	1
Toluene	ND		1.0	0.51	ug/L			08/22/24 12:05	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/22/24 12:05	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/22/24 12:05	1
Trichloroethene	ND		1.0	0.46	ug/L			08/22/24 12:05	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/22/24 12:05	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/22/24 12:05	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/22/24 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/22/24 12:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*08/22/24 12:05*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*08/22/24 12:05*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*08/22/24 12:05*	*1*

Lab Sample ID: LCS 480-722678/6
Matrix: Water
Analysis Batch: 722678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	24.8		ug/L		99	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	76 - 120
1,1,2-Trichloroethane	25.0	26.0		ug/L		104	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.8		ug/L		95	61 - 148

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-722678/6
Matrix: Water
Analysis Batch: 722678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	25.0	26.3		ug/L		105	77 - 120
1,1-Dichloroethene	25.0	27.0		ug/L		108	66 - 127
1,2,4-Trichlorobenzene	25.0	27.6		ug/L		111	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.4		ug/L		98	56 - 134
1,2-Dichlorobenzene	25.0	26.3		ug/L		105	80 - 124
1,2-Dichloroethane	25.0	23.3		ug/L		93	75 - 120
1,2-Dichloropropane	25.0	26.4		ug/L		106	76 - 120
1,3-Dichlorobenzene	25.0	25.1		ug/L		100	77 - 120
1,4-Dichlorobenzene	25.0	24.1		ug/L		96	80 - 120
2-Butanone (MEK)	125	142		ug/L		113	57 - 140
2-Hexanone	125	124		ug/L		99	65 - 127
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		105	71 - 125
Acetone	125	130		ug/L		104	56 - 142
Benzene	25.0	26.1		ug/L		104	71 - 124
Bromodichloromethane	25.0	24.5		ug/L		98	80 - 122
Bromoform	25.0	23.0		ug/L		92	61 - 132
Bromomethane	25.0	23.8		ug/L		95	55 - 144
Carbon disulfide	25.0	27.3		ug/L		109	59 - 134
Carbon tetrachloride	25.0	25.4		ug/L		102	72 - 134
Chlorobenzene	25.0	26.1		ug/L		104	80 - 120
Dibromochloromethane	25.0	25.5		ug/L		102	75 - 125
Chloroethane	25.0	24.3		ug/L		97	69 - 136
Chloroform	25.0	24.4		ug/L		97	73 - 127
Chloromethane	25.0	26.0		ug/L		104	68 - 124
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124
Cyclohexane	25.0	26.5		ug/L		106	59 - 135
Dichlorodifluoromethane	25.0	22.8		ug/L		91	59 - 135
Ethylbenzene	25.0	26.2		ug/L		105	77 - 123
1,2-Dibromoethane	25.0	25.7		ug/L		103	77 - 120
Isopropylbenzene	25.0	25.4		ug/L		102	77 - 122
Methyl acetate	50.0	48.5		ug/L		97	74 - 133
Methyl tert-butyl ether	25.0	24.6		ug/L		98	77 - 120
Methylcyclohexane	25.0	26.4		ug/L		106	68 - 134
Methylene Chloride	25.0	26.4		ug/L		106	75 - 124
Styrene	25.0	25.6		ug/L		102	80 - 120
Tetrachloroethene	25.0	26.7		ug/L		107	74 - 122
Toluene	25.0	26.8		ug/L		107	80 - 122
trans-1,2-Dichloroethene	25.0	26.7		ug/L		107	73 - 127
trans-1,3-Dichloropropene	25.0	25.5		ug/L		102	80 - 120
Trichloroethene	25.0	25.8		ug/L		103	74 - 123
Trichlorofluoromethane	25.0	22.2		ug/L		89	62 - 150
Vinyl chloride	25.0	25.6		ug/L		102	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*108*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-722678/6
Matrix: Water
Analysis Batch: 722678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-722648/1-A
Matrix: Water
Analysis Batch: 722859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 722648

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		08/22/24 08:25	08/22/24 21:43	1
Iron	ND		0.050	0.026	mg/L		08/22/24 08:25	08/22/24 21:43	1
Zinc	ND		0.010	0.0068	mg/L		08/22/24 08:25	08/22/24 21:43	1

Lab Sample ID: LCS 480-722648/2-A
Matrix: Water
Analysis Batch: 722859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 722648

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	4.91		mg/L		96	85 - 115
Iron	5.10	5.38		mg/L		105	85 - 115
Zinc	0.500	0.545		mg/L		109	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-722699/1-A
Matrix: Water
Analysis Batch: 722714

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 722699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		08/22/24 08:56	08/22/24 09:52	1

Lab Sample ID: LCS 480-722699/2-A
Matrix: Water
Analysis Batch: 722714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 722699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.0	31.30		mg/L		78	78 - 114

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 722566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222728-1	Treatment Effluent	Total/NA	Water	8260C	
480-222728-3	Trip Blank	Total/NA	Water	8260C	
MB 480-722566/8	Method Blank	Total/NA	Water	8260C	
LCS 480-722566/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-722566/15	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 722678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222728-2	Treatment Influent	Total/NA	Water	8260C	
MB 480-722678/8	Method Blank	Total/NA	Water	8260C	
LCS 480-722678/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 722648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222728-1	Treatment Effluent	Total/NA	Water	200.7	
MB 480-722648/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-722648/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 722859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222728-1	Treatment Effluent	Total/NA	Water	200.7 Rev 4.4	722648
MB 480-722648/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	722648
LCS 480-722648/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	722648

General Chemistry

Prep Batch: 722699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222728-1	Treatment Effluent	Total/NA	Water	1664B	
MB 480-722699/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-722699/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 722714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222728-1	Treatment Effluent	Total/NA	Water	1664B	722699
MB 480-722699/1-A	Method Blank	Total/NA	Water	1664B	722699
LCS 480-722699/2-A	Lab Control Sample	Total/NA	Water	1664B	722699

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Treatment Effluent
Lab Sample ID: 480-222728-1
Date Collected: 08/20/24 09:30
Matrix: Water
Date Received: 08/21/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		10	722566	ERS	EET BUF	08/21/24 15:02
Total/NA	Prep	200.7			722648	EMO	EET BUF	08/22/24 08:25
Total/NA	Analysis	200.7 Rev 4.4		1	722859	BMB	EET BUF	08/22/24 21:58
Total/NA	Prep	1664B			722699	KM	EET BUF	08/22/24 08:56
Total/NA	Analysis	1664B		1	722714	KM	EET BUF	08/22/24 09:52

Client Sample ID: Treatment Influent
Lab Sample ID: 480-222728-2
Date Collected: 08/20/24 09:45
Matrix: Water
Date Received: 08/21/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		20	722678	ZN	EET BUF	08/22/24 17:02

Client Sample ID: Trip Blank
Lab Sample ID: 480-222728-3
Date Collected: 08/20/24 00:00
Matrix: Water
Date Received: 08/21/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	722566	ERS	EET BUF	08/21/24 15:51

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222728-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-222728-1	Treatment Effluent	Water	08/20/24 09:30	08/21/24 09:55
480-222728-2	Treatment Influent	Water	08/20/24 09:45	08/21/24 09:55
480-222728-3	Trip Blank	Water	08/20/24 00:00	08/21/24 09:55

CHAIN OF CUSTODY

Client: New York State Dept. of Environmental Conservation 8/20/24

DEC Site #: 907016

FED-EX Tracking # | Bottle Order Control #

Lab Quote # | Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 415 Lawrence Bell Drive, Williamsville, NY 14221 **Project Manager:** Thomas Palmer TPalmer@gesonline.com GESInbox@GESOnline.com **Phone #:** 800-287-7857 fax 866-902-2187	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:**	**DEC Lab Callout ID: 142802** **DEC PM: Daminaos Skaros** **Invoice Instructions (Project #/ Phase / Task / Altorg)** **NYSDEC Site No.** 907016 **Lab Project Manager:** Michel Buttrick

Sampler(s) Name:

Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	8260 - TCLVOCs OLM04.2 list	1664A_calc - oil & grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent		8/20/24	0930	MR	WG	6	3		1	2						X	X	X	
	Treatment Influent		8/20/24	0945	MR	WG	3	3									X			
	Trip Blank		8/20			WG	2	2									X			

480-222728 Chain of Custody

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other _____

Laboratory Information

Lab: Pace Analytical Services
Address: 39 Spruce St, East Longmeadow, MA 01028
Phone: 518-608-1036
Lab PM: Michael Buttrick
Lab PM Email:

Please Email the EQ EDD Package to ges@equisonline.com
EQEDD Name: NYSDEC/Buffalo/NY/MainSt/2929-2939_LabReport#.30987.EQEDD.zip

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [x] Other NYSDEC EDD FOR NYSDEC EQUIS

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	[signature] to Fedex	8/20/24 1630	
2	[signature] TVL	8/21 0955	MS 8/21/24 955
3			

Custody Seal Number: [ ] Intact [ ] Preserved where applicable

Temp 4.1 #1 ICE

8/26/2024

C:\Users\oogiony\Documents\Frewsburg EFF INF COC

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-222728-1

Login Number: 222728
List Number: 1
Creator: Stapleton, Kaitlyn

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1 #1 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Groundwater & Environmental Services
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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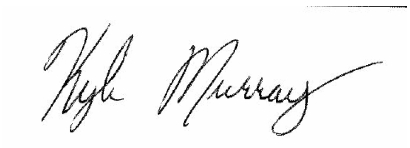
October 22, 2024

Steven Moeller
NYDEC_GES - Amherst, NY
6010 North Bailey Ave., Suite 1
Amherst, NY 14226

Project Location: 300 Falconer St, Frewsburh, NY
Client Job Number:
Project Number: 907016
Laboratory Work Order Number: 24I4051

Enclosed are results of analyses for samples as received by the laboratory on September 27, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 5

24I4051-01 5

24I4051-02 9

24I4051-03 11

Sample Preparation Information 13

QC Data 14

Volatile Organic Compounds by GC/MS 14

B387821 14

Metals Analyses (Total) 18

B387663 18

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) 19

B389902 19

Flag/Qualifier Summary 20

Certifications 21

Chain of Custody/Sample Receipt 23

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

NYDEC_GES - Amherst, NY
6010 North Bailey Ave., Suite 1
Amherst, NY 14226
ATTN: Steven Moeller

REPORT DATE: 10/22/2024

PURCHASE ORDER NUMBER: 151686

PROJECT NUMBER: 907016

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24I4051

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: 300 Falconer St, Frewsburh, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Treatment Effluent	24I4051-01	Ground Water		EPA 1664B	
				EPA 200.7	
				SW-846 8260D	
Treatment Influent	24I4051-02	Ground Water		SW-846 8260D	
Trip Blank	24I4051-03	Trip Blank Water		SW-846 8260D	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA 1664B

Qualifications:

H-01

Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Analyte & Samples(s) Qualified:

Oil & Grease (HEM)
24I4051-01[Treatment Effluent]

SW-846 8260D

Qualifications:

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

24I4051-02[Treatment Influent]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

2-Hexanone (MBK)
24I4051-01[Treatment Effluent], 24I4051-02[Treatment Influent], 24I4051-03[Trip Blank], B387821-BLK1, B387821-BS1, B387821-BSD1, S111437-CCV1

Bromoform
24I4051-01[Treatment Effluent], 24I4051-02[Treatment Influent], 24I4051-03[Trip Blank], B387821-BLK1, B387821-BS1, B387821-BSD1, S111437-CCV1

Naphthalene
24I4051-01[Treatment Effluent], 24I4051-02[Treatment Influent], 24I4051-03[Trip Blank], B387821-BLK1, B387821-BS1, B387821-BSD1, S111437-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Bromomethane
B387821-BS1, B387821-BSD1, S111437-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 300 Falconer St, Frewsburh, NY Sample Description: Work Order: 24I4051

Date Received: 9/27/2024

Field Sample #: Treatment Effluent Sampled: 9/24/2024 10:00

Sample ID: 24I4051-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	3.4	50	2.0	µg/L	1	J	SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Bromoform	ND	1.0	0.30	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
2-Hexanone (MBK)	ND	10	1.3	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Methyl Acetate	ND	1.0	0.48	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Naphthalene	ND	2.0	0.25	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 18:04	MFF
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF

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Project Location: 300 Falconer St, Frewsburh, NY Sample Description: Work Order: 24I4051

Date Received: 9/27/2024

Field Sample #: Treatment Effluent Sampled: 9/24/2024 10:00

Sample ID: 24I4051-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Vinyl Chloride	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	10/1/24	10/1/24 18:04	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	98.8	70-130		10/1/24 18:04
Toluene-d8	95.9	70-130		10/1/24 18:04
4-Bromofluorobenzene	81.1	70-130		10/1/24 18:04

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Project Location: 300 Falconer St, Frewsburh, NY Sample Description: Work Order: 24I4051

Date Received: 9/27/2024

Field Sample #: Treatment Effluent Sampled: 9/24/2024 10:00

Sample ID: 24I4051-01

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	0.023	mg/L	1		EPA 200.7	10/1/24	10/2/24 18:42	HNN
Iron	3.7	0.050	0.014	mg/L	1		EPA 200.7	10/1/24	10/2/24 18:42	HNN
Zinc	0.013	0.010	0.0085	mg/L	1		EPA 200.7	10/1/24	10/2/24 18:42	HNN

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Project Location: 300 Falconer St, Frewsburh, NY Sample Description: Work Order: 24I4051

Date Received: 9/27/2024

Field Sample #: Treatment Effluent Sampled: 9/24/2024 10:00

Sample ID: 24I4051-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Oil & Grease (HEM)	ND	5.0	0.87	mg/L	1	H-01	EPA 1664B	10/22/24	10/22/24 11:38	LL

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Project Location: 300 Falconer St, Frewsburh, NY Sample Description: Work Order: 24I4051

Date Received: 9/27/2024

Field Sample #: Treatment Influent Sampled: 9/24/2024 10:05

Sample ID: 24I4051-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	500	20	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Benzene	ND	10	1.4	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Bromochloromethane	ND	10	3.2	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Bromodichloromethane	ND	5.0	1.9	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Bromoform	ND	10	3.0	µg/L	10	V-05	SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Bromomethane	ND	20	15	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
2-Butanone (MEK)	ND	200	14	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
n-Butylbenzene	ND	10	1.6	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
sec-Butylbenzene	ND	10	1.6	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
tert-Butylbenzene	ND	10	1.7	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Carbon Disulfide	ND	50	15	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Carbon Tetrachloride	ND	50	1.9	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Chlorobenzene	ND	10	1.8	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Chlorodibromomethane	ND	5.0	1.3	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Chloroethane	ND	20	4.6	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Chloroform	ND	20	1.9	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Chloromethane	ND	20	5.0	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Cyclohexane	ND	50	18	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	6.3	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,2-Dibromoethane (EDB)	ND	5.0	1.3	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,2-Dichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,3-Dichlorobenzene	ND	10	1.5	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,4-Dichlorobenzene	ND	10	1.7	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Dichlorodifluoromethane (Freon 12)	ND	20	2.0	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,1-Dichloroethane	ND	10	1.5	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,2-Dichloroethane	ND	10	1.3	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,1-Dichloroethylene	4.1	10	1.8	µg/L	10	J	SW-846 8260D	10/1/24	10/1/24 20:44	MFF
cis-1,2-Dichloroethylene	750	10	2.0	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
trans-1,2-Dichloroethylene	6.9	10	1.6	µg/L	10	J	SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,2-Dichloropropane	ND	10	1.7	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
cis-1,3-Dichloropropene	ND	5.0	1.3	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
trans-1,3-Dichloropropene	ND	5.0	1.4	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Ethylbenzene	ND	10	1.4	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
2-Hexanone (MBK)	ND	100	13	µg/L	10	V-05	SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Isopropylbenzene (Cumene)	ND	10	1.6	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
p-Isopropyltoluene (p-Cymene)	ND	10	1.6	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Methyl Acetate	ND	10	4.8	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Methyl tert-Butyl Ether (MTBE)	ND	10	1.7	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Methyl Cyclohexane	ND	10	1.3	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Methylene Chloride	ND	50	1.9	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
4-Methyl-2-pentanone (MIBK)	ND	100	14	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Naphthalene	ND	20	2.5	µg/L	10	V-05	SW-846 8260D	10/1/24	10/1/24 20:44	MFF
n-Propylbenzene	ND	10	1.1	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Styrene	ND	10	1.3	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 300 Falconer St, Frewsburh, NY Sample Description: Work Order: 24I4051

Date Received: 9/27/2024

Field Sample #: Treatment Influent Sampled: 9/24/2024 10:05

Sample ID: 24I4051-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	5.0	1.0	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Tetrachloroethylene	ND	10	1.7	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Toluene	ND	10	1.1	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,2,3-Trichlorobenzene	ND	50	2.2	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,2,4-Trichlorobenzene	ND	10	1.9	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,1,1-Trichloroethane	ND	10	1.4	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,1,2-Trichloroethane	ND	10	1.8	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Trichloroethylene	1.9	10	1.7	µg/L	10	J	SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Trichlorofluoromethane (Freon 11)	ND	20	1.4	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,2,3-Trichloropropane	ND	20	2.7	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	10	1.6	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,2,4-Trimethylbenzene	ND	10	1.6	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
1,3,5-Trimethylbenzene	ND	10	1.7	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Vinyl Chloride	100	20	1.9	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
m+p Xylene	ND	20	2.5	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
o-Xylene	ND	10	1.6	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF
Xylenes (total)	ND	10	10	µg/L	10		SW-846 8260D	10/1/24	10/1/24 20:44	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	108	70-130		10/1/24 20:44
Toluene-d8	98.0	70-130		10/1/24 20:44
4-Bromofluorobenzene	80.6	70-130		10/1/24 20:44

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Project Location: 300 Falconer St, Frewsburh, NY Sample Description: Work Order: 24I4051

Date Received: 9/27/2024

Field Sample #: Trip Blank Sampled: 9/24/2024 00:00

Sample ID: 24I4051-03

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Bromoform	ND	1.0	0.30	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
2-Hexanone (MBK)	ND	10	1.3	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Methyl Acetate	ND	1.0	0.48	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Naphthalene	ND	2.0	0.25	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 14:03	MFF
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF

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Project Location: 300 Falconer St, Frewsburh, NY Sample Description: Work Order: 24I4051

Date Received: 9/27/2024

Field Sample #: Trip Blank Sampled: 9/24/2024 00:00

Sample ID: 24I4051-03

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Vinyl Chloride	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	10/1/24	10/1/24 14:03	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	108	70-130		10/1/24 14:03
Toluene-d8	97.7	70-130		10/1/24 14:03
4-Bromofluorobenzene	84.0	70-130		10/1/24 14:03

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Sample Extraction Data

EPA 1664B

Lab Number [Field ID]	Batch	Initial [mL]	Date
24I4051-01 [Treatment Effluent]	B389902	1000	10/22/24

Prep Method:EPA 200.7 Analytical Method:EPA 200.7

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I4051-01 [Treatment Effluent]	B387663	50.0	50.0	10/01/24

Prep Method:SW-846 5030B Analytical Method:SW-846 8260D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I4051-01 [Treatment Effluent]	B387821	5	5.00	10/01/24
24I4051-02 [Treatment Influent]	B387821	0.5	5.00	10/01/24
24I4051-03 [Trip Blank]	B387821	5	5.00	10/01/24

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B387821 - SW-846 5030B										
Blank (B387821-BLK1)				Prepared & Analyzed: 10/01/24						
Acetone	ND	50	µg/L							
Benzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							V-05
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							V-05
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							V-05
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B387821 - SW-846 5030B											
Blank (B387821-BLK1)				Prepared & Analyzed: 10/01/24							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L								
1,2,3-Trichloropropane	ND	2.0	µg/L								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L								
1,2,4-Trimethylbenzene	ND	1.0	µg/L								
1,3,5-Trimethylbenzene	ND	1.0	µg/L								
Vinyl Chloride	ND	2.0	µg/L								
m+p Xylene	ND	2.0	µg/L								
o-Xylene	ND	1.0	µg/L								
Xylenes (total)	ND	1.0	µg/L								
Surrogate: 1,2-Dichloroethane-d4	*23.8*		µg/L	25.00		95.1	70-130				
Surrogate: Toluene-d8	*23.6*		µg/L	25.00		94.4	70-130				
Surrogate: 4-Bromofluorobenzene	*21.5*		µg/L	25.00		86.1	70-130				
LCS (B387821-BS1)				Prepared & Analyzed: 10/01/24							
Acetone	90.7	50	µg/L	100.0		90.7	70-160				†
Benzene	11.4	1.0	µg/L	10.00		114	70-130				
Bromochloromethane	11.5	1.0	µg/L	10.00		115	70-130				
Bromodichloromethane	10.5	0.50	µg/L	10.00		105	70-130				
Bromoform	8.52	1.0	µg/L	10.00		85.2	70-130			V-05	
Bromomethane	14.7	2.0	µg/L	10.00		147	40-160			V-20	†
2-Butanone (MEK)	98.4	20	µg/L	100.0		98.4	40-160				†
n-Butylbenzene	9.16	1.0	µg/L	10.00		91.6	70-130				
sec-Butylbenzene	9.21	1.0	µg/L	10.00		92.1	70-130				
tert-Butylbenzene	8.78	1.0	µg/L	10.00		87.8	70-130				
Carbon Disulfide	108	5.0	µg/L	100.0		108	70-130				
Carbon Tetrachloride	9.64	5.0	µg/L	10.00		96.4	70-130				
Chlorobenzene	11.4	1.0	µg/L	10.00		114	70-130				
Chlorodibromomethane	9.79	0.50	µg/L	10.00		97.9	70-130				
Chloroethane	10.3	2.0	µg/L	10.00		103	70-130				
Chloroform	11.1	2.0	µg/L	10.00		111	70-130				
Chloromethane	8.75	2.0	µg/L	10.00		87.5	40-160				†
Cyclohexane	10.7	5.0	µg/L	10.00		107	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	8.18	5.0	µg/L	10.00		81.8	70-130				
1,2-Dibromoethane (EDB)	9.77	0.50	µg/L	10.00		97.7	70-130				
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.00		104	70-130				
1,3-Dichlorobenzene	10.6	1.0	µg/L	10.00		106	70-130				
1,4-Dichlorobenzene	9.92	1.0	µg/L	10.00		99.2	70-130				
Dichlorodifluoromethane (Freon 12)	9.41	2.0	µg/L	10.00		94.1	40-160				†
1,1-Dichloroethane	10.3	1.0	µg/L	10.00		103	70-130				
1,2-Dichloroethane	11.5	1.0	µg/L	10.00		115	70-130				
1,1-Dichloroethylene	10.2	1.0	µg/L	10.00		102	70-130				
cis-1,2-Dichloroethylene	10.7	1.0	µg/L	10.00		107	70-130				
trans-1,2-Dichloroethylene	10.0	1.0	µg/L	10.00		100	70-130				
1,2-Dichloropropane	10.3	1.0	µg/L	10.00		103	70-130				
cis-1,3-Dichloropropene	9.41	0.50	µg/L	10.00		94.1	70-130				
trans-1,3-Dichloropropene	9.06	0.50	µg/L	10.00		90.6	70-130				
Ethylbenzene	10.6	1.0	µg/L	10.00		106	70-130				
2-Hexanone (MBK)	80.2	10	µg/L	100.0		80.2	70-160			V-05	†
Isopropylbenzene (Cumene)	9.69	1.0	µg/L	10.00		96.9	70-130				
p-Isopropyltoluene (p-Cymene)	9.29	1.0	µg/L	10.00		92.9	70-130				
Methyl Acetate	9.39	1.0	µg/L	10.00		93.9	70-130				
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	µg/L	10.00		101	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B387821 - SW-846 5030B											
LCS (B387821-BS1)				Prepared & Analyzed: 10/01/24							
Methyl Cyclohexane	10.8	1.0	µg/L	10.00		108	70-130				
Methylene Chloride	10.1	5.0	µg/L	10.00		101	70-130				
4-Methyl-2-pentanone (MIBK)	85.3	10	µg/L	100.0		85.3	70-160				†
Naphthalene	5.88	2.0	µg/L	10.00		58.8	40-130			V-05	†
n-Propylbenzene	10.2	1.0	µg/L	10.00		102	70-130				
Styrene	10.1	1.0	µg/L	10.00		101	70-130				
1,1,2,2-Tetrachloroethane	10.5	0.50	µg/L	10.00		105	70-130				
Tetrachloroethylene	10.4	1.0	µg/L	10.00		104	70-130				
Toluene	10.4	1.0	µg/L	10.00		104	70-130				
1,2,3-Trichlorobenzene	8.66	5.0	µg/L	10.00		86.6	70-130				
1,2,4-Trichlorobenzene	7.96	1.0	µg/L	10.00		79.6	70-130				
1,1,1-Trichloroethane	10.5	1.0	µg/L	10.00		105	70-130				
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.00		108	70-130				
Trichloroethylene	10.2	1.0	µg/L	10.00		102	70-130				
Trichlorofluoromethane (Freon 11)	10.6	2.0	µg/L	10.00		106	70-130				
1,2,3-Trichloropropane	11.8	2.0	µg/L	10.00		118	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.9	1.0	µg/L	10.00		109	70-130				
1,2,4-Trimethylbenzene	9.33	1.0	µg/L	10.00		93.3	70-130				
1,3,5-Trimethylbenzene	10.4	1.0	µg/L	10.00		104	70-130				
Vinyl Chloride	9.96	2.0	µg/L	10.00		99.6	40-160				†
m+p Xylene	21.1	2.0	µg/L	20.00		106	70-130				
o-Xylene	10.0	1.0	µg/L	10.00		100	70-130				
Xylenes (total)	31.1	1.0	µg/L	30.00		104	0-200				
Surrogate: 1,2-Dichloroethane-d4	*25.9*		µg/L	25.00		104	70-130				
Surrogate: Toluene-d8	*25.0*		µg/L	25.00		100	70-130				
Surrogate: 4-Bromofluorobenzene	*25.3*		µg/L	25.00		101	70-130				
LCS Dup (B387821-BSD1)				Prepared & Analyzed: 10/01/24							
Acetone	102	50	µg/L	100.0		102	70-160	11.6	25		†
Benzene	11.1	1.0	µg/L	10.00		111	70-130	3.28	25		
Bromochloromethane	12.1	1.0	µg/L	10.00		121	70-130	4.74	25		
Bromodichloromethane	10.9	0.50	µg/L	10.00		109	70-130	2.99	25		
Bromoform	8.01	1.0	µg/L	10.00		80.1	70-130	6.17	25	V-05	
Bromomethane	14.9	2.0	µg/L	10.00		149	40-160	1.49	25	V-20	†
2-Butanone (MEK)	108	20	µg/L	100.0		108	40-160	9.32	25		†
n-Butylbenzene	9.15	1.0	µg/L	10.00		91.5	70-130	0.109	25		
sec-Butylbenzene	9.56	1.0	µg/L	10.00		95.6	70-130	3.73	25		
tert-Butylbenzene	9.25	1.0	µg/L	10.00		92.5	70-130	5.21	25		
Carbon Disulfide	116	5.0	µg/L	100.0		116	70-130	7.13	25		
Carbon Tetrachloride	9.80	5.0	µg/L	10.00		98.0	70-130	1.65	25		
Chlorobenzene	11.0	1.0	µg/L	10.00		110	70-130	3.47	25		
Chlorodibromomethane	10.1	0.50	µg/L	10.00		101	70-130	3.41	25		
Chloroethane	11.0	2.0	µg/L	10.00		110	70-130	6.20	25		
Chloroform	11.1	2.0	µg/L	10.00		111	70-130	0.00	25		
Chloromethane	8.86	2.0	µg/L	10.00		88.6	40-160	1.25	25		†
Cyclohexane	10.1	5.0	µg/L	10.00		101	70-130	6.05	25		
1,2-Dibromo-3-chloropropane (DBCP)	8.33	5.0	µg/L	10.00		83.3	70-130	1.82	25		
1,2-Dibromoethane (EDB)	10.0	0.50	µg/L	10.00		100	70-130	2.63	25		
1,2-Dichlorobenzene	10.7	1.0	µg/L	10.00		107	70-130	2.55	25		
1,3-Dichlorobenzene	10.7	1.0	µg/L	10.00		107	70-130	0.941	25		
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.00		101	70-130	1.50	25		
Dichlorodifluoromethane (Freon 12)	10.0	2.0	µg/L	10.00		100	40-160	6.28	25		†

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B387821 - SW-846 5030B											
LCS Dup (B387821-BSD1)				Prepared & Analyzed: 10/01/24							
1,1-Dichloroethane	11.3	1.0	µg/L	10.00		113	70-130	9.14	25		
1,2-Dichloroethane	10.5	1.0	µg/L	10.00		105	70-130	9.20	25		
1,1-Dichloroethylene	11.0	1.0	µg/L	10.00		110	70-130	7.67	25		
cis-1,2-Dichloroethylene	11.7	1.0	µg/L	10.00		117	70-130	9.29	25		
trans-1,2-Dichloroethylene	10.6	1.0	µg/L	10.00		106	70-130	4.95	25		
1,2-Dichloropropane	10.5	1.0	µg/L	10.00		105	70-130	1.92	25		
cis-1,3-Dichloropropene	9.77	0.50	µg/L	10.00		97.7	70-130	3.75	25		
trans-1,3-Dichloropropene	8.82	0.50	µg/L	10.00		88.2	70-130	2.68	25		
Ethylbenzene	10.0	1.0	µg/L	10.00		100	70-130	5.81	25		
2-Hexanone (MBK)	85.0	10	µg/L	100.0		85.0	70-160	5.81	25	V-05	†
Isopropylbenzene (Cumene)	9.32	1.0	µg/L	10.00		93.2	70-130	3.89	25		
p-Isopropyltoluene (p-Cymene)	9.53	1.0	µg/L	10.00		95.3	70-130	2.55	25		
Methyl Acetate	10.2	1.0	µg/L	10.00		102	70-130	7.88	25		
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	µg/L	10.00		106	70-130	4.66	25		
Methyl Cyclohexane	10.6	1.0	µg/L	10.00		106	70-130	1.40	25		
Methylene Chloride	10.7	5.0	µg/L	10.00		107	70-130	5.29	25		
4-Methyl-2-pentanone (MIBK)	88.7	10	µg/L	100.0		88.7	70-160	3.95	25		†
Naphthalene	5.62	2.0	µg/L	10.00		56.2	40-130	4.52	25	V-05	†
n-Propylbenzene	9.90	1.0	µg/L	10.00		99.0	70-130	3.47	25		
Styrene	9.31	1.0	µg/L	10.00		93.1	70-130	8.53	25		
1,1,2,2-Tetrachloroethane	9.90	0.50	µg/L	10.00		99.0	70-130	6.17	25		
Tetrachloroethylene	10.9	1.0	µg/L	10.00		109	70-130	4.49	25		
Toluene	10.9	1.0	µg/L	10.00		109	70-130	4.59	25		
1,2,3-Trichlorobenzene	9.06	5.0	µg/L	10.00		90.6	70-130	4.51	25		
1,2,4-Trichlorobenzene	8.19	1.0	µg/L	10.00		81.9	70-130	2.85	25		
1,1,1-Trichloroethane	10.4	1.0	µg/L	10.00		104	70-130	1.63	25		
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.00		110	70-130	2.38	25		
Trichloroethylene	10.7	1.0	µg/L	10.00		107	70-130	4.51	25		
Trichlorofluoromethane (Freon 11)	11.6	2.0	µg/L	10.00		116	70-130	8.19	25		
1,2,3-Trichloropropane	11.7	2.0	µg/L	10.00		117	70-130	0.511	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.8	1.0	µg/L	10.00		118	70-130	7.56	25		
1,2,4-Trimethylbenzene	9.62	1.0	µg/L	10.00		96.2	70-130	3.06	25		
1,3,5-Trimethylbenzene	9.76	1.0	µg/L	10.00		97.6	70-130	5.96	25		
Vinyl Chloride	10.6	2.0	µg/L	10.00		106	40-160	6.70	25		†
m+p Xylene	20.2	2.0	µg/L	20.00		101	70-130	4.26	25		
o-Xylene	9.33	1.0	µg/L	10.00		93.3	70-130	7.03	25		
Xylenes (total)	29.6	1.0	µg/L	30.00		98.5	0-200	5.14			
Surrogate: 1,2-Dichloroethane-d4	*25.5*		µg/L	25.00		102	70-130				
Surrogate: Toluene-d8	*26.7*		µg/L	25.00		107	70-130				
Surrogate: 4-Bromofluorobenzene	*24.1*		µg/L	25.00		96.5	70-130				

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B387663 - EPA 200.7										
Blank (B387663-BLK1)				Prepared: 10/01/24 Analyzed: 10/02/24						
Aluminum	ND	0.050	mg/L							
Iron	0.016	0.050	mg/L							J
Blank (B387663-BLK2)				Prepared: 10/01/24 Analyzed: 10/03/24						
Zinc	ND	0.010	mg/L							
LCS (B387663-BS1)				Prepared: 10/01/24 Analyzed: 10/02/24						
Aluminum	4.41	0.050	mg/L	4.500		98.0	85-115			
Iron	4.75	0.050	mg/L	4.500		106	85-115			
Zinc	0.535	0.010	mg/L	0.5000		107	85-115			
LCS Dup (B387663-BSD1)				Prepared: 10/01/24 Analyzed: 10/02/24						
Aluminum	4.40	0.050	mg/L	4.500		97.7	85-115	0.360	20	
Iron	4.92	0.050	mg/L	4.500		109	85-115	3.57	20	
Zinc	0.521	0.010	mg/L	0.5000		104	85-115	2.68	20	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B389902 - EPA 1664B										
Blank (B389902-BLK1)				Prepared & Analyzed: 10/22/24						
Oil & Grease (HEM)	ND	5.0	mg/L							
Blank (B389902-BLK2)				Prepared & Analyzed: 10/22/24						
Oil & Grease (HEM)	ND	91	mg/L							
LCS (B389902-BS1)				Prepared & Analyzed: 10/22/24						
Oil & Grease (HEM)	20	5.0	mg/L	20.00		99.0	78-114			
LCS (B389902-BS2)				Prepared & Analyzed: 10/22/24						
Oil & Grease (HEM)	280	91	mg/L	363.6		78.0	78-114			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-01	Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 1664B in Water	
Oil & Grease (HEM)	CT,MA,NH,NY,RI,NC,ME,VA
EPA 200.7 in Water	
Aluminum	CT,NY,MA,NH,RI,NC,ME,VA
Iron	CT,MA,NH,NY,RI,NC,ME,VA
Zinc	CT,MA,NH,NY,RI,NC,ME,VA
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
Cyclohexane	ME,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Ethylbenzene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2025
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2025
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2025
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024

24E405| KAM

9/24/24

CHAIN OF CUSTODY

Client: New York State Dept. of Environmental Conservation

DEC Site #: 907016

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 415 Lawrence Bell Drive, Williamsville, NY 14221 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax GESInbox@GESOnline.com **866-902-2187**	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:**	**DEC Lab Callout ID:** ~~142802~~ 151686 **DEC PM:** Daminaos Skaros **Invoice Instructions (Project #/ Phase / Task / Altorg)** **NYSDEC Site No.** 907016 **Lab Project Manager:** Michel Buttrick

Sampler(s) Name:

Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260 - TCLVOCs OLM04.2 list	1664A_calc - oil & grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent		9/24	1000	MR	WG	6	3		1	2						X	X	X	
	Treatment Influent		9/24	1005	MR	WG	3	3									X			
	Trip Blank		9/24			WG	2	2									X			

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other _____

Laboratory Information

Lab: Pace Analytical Services
Address: 39 Spruce St, East Longmeadow, MA 01028
Phone: 518-608-1036
Lab PM: Michael Buttrick
Lab PM Email:

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [ ] EDD Format _____
- [x] Other NYSDEC EDD FOR NYSDEC EQUIS

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Buffalo/NY/MainSt/2929-2939_LabReport#.30987.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

Relinquished By Sampler:	Date / Time:	Received By:
1	1 9/24 1630	1 B. Mikolin/GES 9/25 1200
Relinquished By: 2 B. McFadin/GES	Date / Time: 2 9/25 1240	Received By: 2 B. Mikolin/GES
Relinquished By: 3	Date / Time: 3 ~~8AM~~	Received By: 3 Jocelyn Foley (PACE) 9/25/24 12:40

Custody Seal Number: [ ] Intact [ ] Preserved where applicable

RELINQUISHED BY: Jocelyn Foley (PACE) 9/25/24 12:40 Buffalo Service Center 9/25/24 12:40

Russell B Bisby 9-25-24 16:03 1.8/2.0 9/26/24 [illegible]

Table of Contents

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Log In Back-Sheet

Client GES (DEC)

Project Frewsburg / Falconer St.

MCP/RCP Required no

Deliverable Package Requirement NY Cat. B

Location 300 Falconer St, Frewsburg, NY

PWSID# (When Applicable) n/a

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time RL 9/26/24 1317

Back-Sheet By / Date / Time MMD 9/27/24 0336

Temperature Method Gun # 6

WV samples: Yes (see note*) / No (follow normal procedure)

Temp < 6° C Actual Temperature 18, 20

Rush Samples: Yes / No Notify No

Short Hold: Yes / No Notify No

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☐	☑
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☑	☐
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client ☑ Analysis ☑ Sampler Name ☑

Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: N/A ☑ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Qualtrax ID: 120836

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist

Effective Date: 06/11/2024

Sample	Soils Jars (Circle Amb/Clear)				Ambers							Plastics											VOA Vials					Other / Fill in						
					1 Liter			250ml			100mL	1 Liter		500mL		250mL																		
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Sulfuric	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric	NaOH	Ammonium Acetate	NaOH/Zinc	Unpreserved	HCl	MeOH	D.I. Water	BiSulfate	Col/Bact						
1							2												1					3										
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Qualtrax ID: 120836

Table of Contents

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst NY 14226

Generated 10/21/2024 11:06 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-224430-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
10/21/2024 11:06 AM

Authorized for release by
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
716 504-9874

Table of Contents

Cover Title Page 1

Data Summaries 6

Report Narrative 6

Sample Summary 7

Detection Summary 8

Method Summary 9

Client Sample Results 10

Surrogate Summary 14

QC Sample Results 15

Definitions 25

QC Association 26

Chronicle 27

Certification Summary 28

Reagent Traceability 29

COAs 39

Organic Sample Data 117

GC/MS VOA 117

Method 8260C 117

Method 8260C QC Summary 118

Method 8260C Sample Data 138

Standards Data 161

Method 8260C ICAL Data 161

Method 8260C CCAL Data 335

Raw QC Data 363

Method 8260C Tune Data 363

Method 8260C Blank Data 380

Table of Contents

Method 8260C LCS/LCSD Data 396

Method 8260C MS/MSD Data 417

Method 8260C Run Logs 429

Method 8260C Prep Data 433

Inorganic Sample Data 438

Metals Data 438

Met Cover Page 439

Met Sample Data 440

Met QC Data 441

Met ICV/CCV 441

Met Blanks 447

Met ICSA/ICSAB 450

Met LCS/LCSD 452

Met MDL 454

Met IECF 456

Met Linear Ranges 462

Met Preparation Log 463

Met Analysis Run Log 464

Met ICP/MS Int Stds 468

Met Raw Data 469

Met Prep Data 618

General Chemistry Data 619

Gen Chem Cover Page 620

Gen Chem Sample Data 621

Gen Chem QC Data 622

Gen Chem Blanks 622

Table of Contents

Gen Chem MS/MSD/PDS 623

Gen Chem LCS/LCSD 624

Gen Chem MDL 625

Gen Chem Preparation Log 627

Gen Chem Analysis Run Log 628

Gen Chem Raw Data 629

Gen Chem Prep Data 631

Shipping and Receiving Documents 634

Client Chain of Custody 635

Sample Receipt Checklist 636

Job Narrative
480-224430-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/16/2024 2:23 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C.

GC/MS VOA
Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: TREATMENT INFLUENT (480-224430-2), (480-224430-B-2 MS) and (480-224430-B-2 MSD). Elevated reporting limits (RLs) are provided.

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-728892 recovered outside control limits for the following analytes: Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: TREATMENT INFLUENT (480-224430-2) and TRIP BLANK (480-224430-3).

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-728892 were outside control limits for one or more analytes. See QC Sample Results for detail. The associated sample is impacted: (480-224430-B-2 MSD).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-728964 recovered above the upper control limit for Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TREATMENT EFFLUENT (480-224430-1).

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 480-728964 recovered outside control limits for the following analyte: Bromoform. The associated sample is impacted: TREATMENT EFFLUENT (480-224430-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-224430-1	TREATMENT EFFLUENT	Water	10/15/24 13:00	10/16/24 14:23
480-224430-2	TREATMENT INFLUENT	Water	10/15/24 13:10	10/16/24 14:23
480-224430-3	TRIP BLANK	Water	10/15/24 00:00	10/16/24 14:23

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-224430-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.1	J	10	3.0	ug/L	1		8260C	Total/NA
Iron	5.5		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.022		0.010	0.0068	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-224430-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	580		20	16	ug/L	20		8260C	Total/NA
Vinyl chloride	65		20	18	ug/L	20		8260C	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224430-3

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-224430-1

Date Collected: 10/15/24 13:00
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/20/24 01:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/20/24 01:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/20/24 01:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/20/24 01:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/20/24 01:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/20/24 01:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/20/24 01:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/20/24 01:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/20/24 01:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/20/24 01:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/20/24 01:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/20/24 01:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/20/24 01:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/20/24 01:36	1
2-Hexanone	ND		5.0	1.2	ug/L			10/20/24 01:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/20/24 01:36	1
Acetone	**3.1**	**J**	10	3.0	ug/L			10/20/24 01:36	1
Benzene	ND		1.0	0.41	ug/L			10/20/24 01:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/20/24 01:36	1
Bromoform	ND	*1	1.0	0.26	ug/L			10/20/24 01:36	1
Bromomethane	ND		1.0	0.69	ug/L			10/20/24 01:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/20/24 01:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/20/24 01:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/20/24 01:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/20/24 01:36	1
Chloroethane	ND		1.0	0.32	ug/L			10/20/24 01:36	1
Chloroform	ND		1.0	0.34	ug/L			10/20/24 01:36	1
Chloromethane	ND		1.0	0.35	ug/L			10/20/24 01:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/20/24 01:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/20/24 01:36	1
Cyclohexane	ND		1.0	0.18	ug/L			10/20/24 01:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/20/24 01:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/20/24 01:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/20/24 01:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/20/24 01:36	1
Methyl acetate	ND		2.5	1.3	ug/L			10/20/24 01:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/20/24 01:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/20/24 01:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/20/24 01:36	1
Styrene	ND		1.0	0.73	ug/L			10/20/24 01:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/20/24 01:36	1
Toluene	ND		1.0	0.51	ug/L			10/20/24 01:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/20/24 01:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/20/24 01:36	1
Trichloroethene	ND		1.0	0.46	ug/L			10/20/24 01:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/20/24 01:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/20/24 01:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/20/24 01:36	1

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-224430-1

Date Collected: 10/15/24 13:00
Matrix: Water
Date Received: 10/16/24 14:23

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/20/24 01:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*10/20/24 01:36*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*10/20/24 01:36*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*10/20/24 01:36*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		10/18/24 09:09	10/18/24 19:55	1
Iron	**5.5**		0.050	0.026	mg/L		10/18/24 09:09	10/18/24 19:55	1
Zinc	**0.022**		0.010	0.0068	mg/L		10/18/24 09:09	10/18/24 19:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		4.7	1.3	mg/L		10/19/24 08:24	10/19/24 09:59	1

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-224430-2

Date Collected: 10/15/24 13:10
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			10/19/24 02:34	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			10/19/24 02:34	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			10/19/24 02:34	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			10/19/24 02:34	20
1,1-Dichloroethane	ND		20	7.6	ug/L			10/19/24 02:34	20
1,1-Dichloroethene	ND		20	5.8	ug/L			10/19/24 02:34	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			10/19/24 02:34	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			10/19/24 02:34	20
1,2-Dichlorobenzene	ND		20	16	ug/L			10/19/24 02:34	20
1,2-Dichloroethane	ND		20	4.2	ug/L			10/19/24 02:34	20
1,2-Dichloropropane	ND		20	14	ug/L			10/19/24 02:34	20
1,3-Dichlorobenzene	ND		20	16	ug/L			10/19/24 02:34	20
1,4-Dichlorobenzene	ND		20	17	ug/L			10/19/24 02:34	20
2-Butanone (MEK)	ND		200	26	ug/L			10/19/24 02:34	20
2-Hexanone	ND		100	25	ug/L			10/19/24 02:34	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			10/19/24 02:34	20
Acetone	ND		200	60	ug/L			10/19/24 02:34	20
Benzene	ND		20	8.2	ug/L			10/19/24 02:34	20
Bromodichloromethane	ND		20	7.8	ug/L			10/19/24 02:34	20
Bromoform	ND		20	5.2	ug/L			10/19/24 02:34	20
Bromomethane	ND		20	14	ug/L			10/19/24 02:34	20
Carbon disulfide	ND		20	3.8	ug/L			10/19/24 02:34	20
Carbon tetrachloride	ND		20	5.4	ug/L			10/19/24 02:34	20
Chlorobenzene	ND		20	15	ug/L			10/19/24 02:34	20
Dibromochloromethane	ND		20	6.4	ug/L			10/19/24 02:34	20
Chloroethane	ND		20	6.4	ug/L			10/19/24 02:34	20
Chloroform	ND		20	6.8	ug/L			10/19/24 02:34	20
Chloromethane	ND	*+ F1	20	7.0	ug/L			10/19/24 02:34	20
cis-1,2-Dichloroethene	**580**		20	16	ug/L			10/19/24 02:34	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			10/19/24 02:34	20

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-224430-2

Date Collected: 10/15/24 13:10
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		20	3.6	ug/L			10/19/24 02:34	20
Dichlorodifluoromethane	ND		20	14	ug/L			10/19/24 02:34	20
Ethylbenzene	ND		20	15	ug/L			10/19/24 02:34	20
1,2-Dibromoethane	ND		20	15	ug/L			10/19/24 02:34	20
Isopropylbenzene	ND		20	16	ug/L			10/19/24 02:34	20
Methyl acetate	ND		50	26	ug/L			10/19/24 02:34	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			10/19/24 02:34	20
Methylcyclohexane	ND		20	3.2	ug/L			10/19/24 02:34	20
Methylene Chloride	ND		20	8.8	ug/L			10/19/24 02:34	20
Styrene	ND		20	15	ug/L			10/19/24 02:34	20
Tetrachloroethene	ND		20	7.2	ug/L			10/19/24 02:34	20
Toluene	ND		20	10	ug/L			10/19/24 02:34	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			10/19/24 02:34	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			10/19/24 02:34	20
Trichloroethene	ND		20	9.2	ug/L			10/19/24 02:34	20
Trichlorofluoromethane	ND		20	18	ug/L			10/19/24 02:34	20
Vinyl chloride	**65**		20	18	ug/L			10/19/24 02:34	20
Xylenes, Total	ND		40	13	ug/L			10/19/24 02:34	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/19/24 02:34*	*20*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*10/19/24 02:34*	*20*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*10/19/24 02:34*	*20*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*10/19/24 02:34*	*20*

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224430-3

Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/19/24 02:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/19/24 02:57	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/19/24 02:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/19/24 02:57	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/19/24 02:57	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/19/24 02:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/19/24 02:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/19/24 02:57	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/19/24 02:57	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/19/24 02:57	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/19/24 02:57	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/19/24 02:57	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/19/24 02:57	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/19/24 02:57	1
2-Hexanone	ND		5.0	1.2	ug/L			10/19/24 02:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/19/24 02:57	1
Acetone	ND		10	3.0	ug/L			10/19/24 02:57	1
Benzene	ND		1.0	0.41	ug/L			10/19/24 02:57	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/19/24 02:57	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224430-3

Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			10/19/24 02:57	1
Bromomethane	ND		1.0	0.69	ug/L			10/19/24 02:57	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/19/24 02:57	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/19/24 02:57	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/19/24 02:57	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/19/24 02:57	1
Chloroethane	ND		1.0	0.32	ug/L			10/19/24 02:57	1
Chloroform	ND		1.0	0.34	ug/L			10/19/24 02:57	1
Chloromethane	ND	*+	1.0	0.35	ug/L			10/19/24 02:57	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/19/24 02:57	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/19/24 02:57	1
Cyclohexane	ND		1.0	0.18	ug/L			10/19/24 02:57	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/19/24 02:57	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/19/24 02:57	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/19/24 02:57	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/19/24 02:57	1
Methyl acetate	ND		2.5	1.3	ug/L			10/19/24 02:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/19/24 02:57	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/19/24 02:57	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/19/24 02:57	1
Styrene	ND		1.0	0.73	ug/L			10/19/24 02:57	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/19/24 02:57	1
Toluene	ND		1.0	0.51	ug/L			10/19/24 02:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/19/24 02:57	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/19/24 02:57	1
Trichloroethene	ND		1.0	0.46	ug/L			10/19/24 02:57	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/19/24 02:57	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/19/24 02:57	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/19/24 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/19/24 02:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*10/19/24 02:57*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*10/19/24 02:57*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*10/19/24 02:57*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-224430-1	TREATMENT EFFLUENT	95	103	95	95
480-224430-2	TREATMENT INFLUENT	97	102	95	97
480-224430-2 MS	TREATMENT INFLUENT	99	103	92	98
480-224430-2 MSD	TREATMENT INFLUENT	100	104	94	100
480-224430-3	TRIP BLANK	97	103	96	96
LCS 480-728892/6	Lab Control Sample	98	102	94	99
LCS 480-728964/6	Lab Control Sample	100	100	93	96
LCSD 480-728964/46	Lab Control Sample Dup	96	103	92	97
MB 480-728892/8	Method Blank	99	103	92	105
MB 480-728964/8	Method Blank	101	105	93	100

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-728892/8
Matrix: Water
Analysis Batch: 728892

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/18/24 22:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/18/24 22:42	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/18/24 22:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/18/24 22:42	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/18/24 22:42	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/18/24 22:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 22:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/18/24 22:42	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/18/24 22:42	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/18/24 22:42	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/18/24 22:42	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/18/24 22:42	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/18/24 22:42	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/18/24 22:42	1
2-Hexanone	ND		5.0	1.2	ug/L			10/18/24 22:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/18/24 22:42	1
Acetone	ND		10	3.0	ug/L			10/18/24 22:42	1
Benzene	ND		1.0	0.41	ug/L			10/18/24 22:42	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/18/24 22:42	1
Bromoform	ND		1.0	0.26	ug/L			10/18/24 22:42	1
Bromomethane	ND		1.0	0.69	ug/L			10/18/24 22:42	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/18/24 22:42	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/18/24 22:42	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/18/24 22:42	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/18/24 22:42	1
Chloroethane	ND		1.0	0.32	ug/L			10/18/24 22:42	1
Chloroform	ND		1.0	0.34	ug/L			10/18/24 22:42	1
Chloromethane	ND		1.0	0.35	ug/L			10/18/24 22:42	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/18/24 22:42	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/18/24 22:42	1
Cyclohexane	ND		1.0	0.18	ug/L			10/18/24 22:42	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/18/24 22:42	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/18/24 22:42	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/18/24 22:42	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/18/24 22:42	1
Methyl acetate	ND		2.5	1.3	ug/L			10/18/24 22:42	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/18/24 22:42	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/18/24 22:42	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/18/24 22:42	1
Styrene	ND		1.0	0.73	ug/L			10/18/24 22:42	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/18/24 22:42	1
Toluene	ND		1.0	0.51	ug/L			10/18/24 22:42	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/18/24 22:42	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/18/24 22:42	1
Trichloroethene	ND		1.0	0.46	ug/L			10/18/24 22:42	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/18/24 22:42	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/18/24 22:42	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/18/24 22:42	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-728892/8
Matrix: Water
Analysis Batch: 728892

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/18/24 22:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*10/18/24 22:42*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/18/24 22:42*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*10/18/24 22:42*	*1*

Lab Sample ID: LCS 480-728892/6
Matrix: Water
Analysis Batch: 728892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	76 - 120
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.7		ug/L		115	61 - 148
1,1-Dichloroethane	25.0	26.3		ug/L		105	77 - 120
1,1-Dichloroethene	25.0	27.7		ug/L		111	66 - 127
1,2,4-Trichlorobenzene	25.0	25.7		ug/L		103	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.6		ug/L		90	56 - 134
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	25.6		ug/L		102	75 - 120
1,2-Dichloropropane	25.0	25.2		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	80 - 120
2-Butanone (MEK)	125	132		ug/L		105	57 - 140
2-Hexanone	125	145		ug/L		116	65 - 127
4-Methyl-2-pentanone (MIBK)	125	143		ug/L		114	71 - 125
Acetone	125	125		ug/L		100	56 - 142
Benzene	25.0	25.5		ug/L		102	71 - 124
Bromodichloromethane	25.0	25.3		ug/L		101	80 - 122
Bromoform	25.0	24.5		ug/L		98	61 - 132
Bromomethane	25.0	23.3		ug/L		93	55 - 144
Carbon disulfide	25.0	27.2		ug/L		109	59 - 134
Carbon tetrachloride	25.0	27.6		ug/L		111	72 - 134
Chlorobenzene	25.0	24.6		ug/L		98	80 - 120
Dibromochloromethane	25.0	26.6		ug/L		107	75 - 125
Chloroethane	25.0	26.0		ug/L		104	69 - 136
Chloroform	25.0	23.9		ug/L		95	73 - 127
Chloromethane	25.0	31.6	*+	ug/L		127	68 - 124
cis-1,2-Dichloroethene	25.0	26.5		ug/L		106	74 - 124
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	74 - 124
Cyclohexane	25.0	28.6		ug/L		115	59 - 135
Dichlorodifluoromethane	25.0	30.6		ug/L		123	59 - 135
Ethylbenzene	25.0	25.5		ug/L		102	77 - 123
1,2-Dibromoethane	25.0	24.4		ug/L		98	77 - 120
Isopropylbenzene	25.0	26.8		ug/L		107	77 - 122
Methyl acetate	50.0	51.4		ug/L		103	74 - 133
Methyl tert-butyl ether	25.0	24.4		ug/L		98	77 - 120
Methylcyclohexane	25.0	27.0		ug/L		108	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-728892/6
Matrix: Water
Analysis Batch: 728892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	24.5		ug/L		98	75 - 124
Styrene	25.0	24.1		ug/L		96	80 - 120
Tetrachloroethene	25.0	26.0		ug/L		104	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	25.3		ug/L		101	73 - 127
trans-1,3-Dichloropropene	25.0	25.6		ug/L		102	80 - 120
Trichloroethene	25.0	25.3		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	30.6		ug/L		122	62 - 150
Vinyl chloride	25.0	29.3		ug/L		117	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Lab Sample ID: 480-224430-2 MS
Matrix: Water
Analysis Batch: 728892

Client Sample ID: TREATMENT INFLUENT
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		500	518		ug/L		104	73 - 126
1,1,2,2-Tetrachloroethane	ND		500	530		ug/L		106	76 - 120
1,1,2-Trichloroethane	ND		500	494		ug/L		99	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	564		ug/L		113	61 - 148
1,1-Dichloroethane	ND		500	510		ug/L		102	77 - 120
1,1-Dichloroethene	ND		500	534		ug/L		107	66 - 127
1,2,4-Trichlorobenzene	ND		500	503		ug/L		101	79 - 122
1,2-Dibromo-3-Chloropropane	ND		500	440		ug/L		88	56 - 134
1,2-Dichlorobenzene	ND		500	499		ug/L		100	80 - 124
1,2-Dichloroethane	ND		500	504		ug/L		101	75 - 120
1,2-Dichloropropane	ND		500	500		ug/L		100	76 - 120
1,3-Dichlorobenzene	ND		500	491		ug/L		98	77 - 120
1,4-Dichlorobenzene	ND		500	486		ug/L		97	78 - 124
2-Butanone (MEK)	ND		2500	2700		ug/L		108	57 - 140
2-Hexanone	ND		2500	2910		ug/L		116	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		2500	2880		ug/L		115	71 - 125
Acetone	ND		2500	2590		ug/L		104	56 - 142
Benzene	ND		500	497		ug/L		99	71 - 124
Bromodichloromethane	ND		500	501		ug/L		100	80 - 122
Bromoform	ND		500	473		ug/L		95	61 - 132
Bromomethane	ND		500	468		ug/L		94	55 - 144
Carbon disulfide	ND		500	524		ug/L		105	59 - 134
Carbon tetrachloride	ND		500	517		ug/L		103	72 - 134
Chlorobenzene	ND		500	486		ug/L		97	80 - 120
Dibromochloromethane	ND		500	496		ug/L		99	75 - 125
Chloroethane	ND		500	532		ug/L		106	69 - 136
Chloroform	ND		500	470		ug/L		94	73 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-224430-2 MS
Client Sample ID: TREATMENT INFLUENT
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 728892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloromethane	ND	*+ F1	500	592		ug/L		118	68 - 124
cis-1,2-Dichloroethene	580		500	974		ug/L		78	74 - 124
cis-1,3-Dichloropropene	ND		500	490		ug/L		98	74 - 124
Cyclohexane	ND		500	578		ug/L		116	59 - 135
Dichlorodifluoromethane	ND		500	599		ug/L		120	59 - 135
Ethylbenzene	ND		500	495		ug/L		99	77 - 123
1,2-Dibromoethane	ND		500	488		ug/L		98	77 - 120
Isopropylbenzene	ND		500	521		ug/L		104	77 - 122
Methyl acetate	ND		1000	1050		ug/L		105	74 - 133
Methyl tert-butyl ether	ND		500	488		ug/L		98	77 - 120
Methylcyclohexane	ND		500	545		ug/L		109	68 - 134
Methylene Chloride	ND		500	477		ug/L		95	75 - 124
Styrene	ND		500	486		ug/L		97	80 - 120
Tetrachloroethene	ND		500	508		ug/L		102	74 - 122
Toluene	ND		500	477		ug/L		95	80 - 122
trans-1,2-Dichloroethene	ND		500	492		ug/L		98	73 - 127
trans-1,3-Dichloropropene	ND		500	489		ug/L		98	80 - 120
Trichloroethene	ND		500	480		ug/L		96	74 - 123
Trichlorofluoromethane	ND		500	574		ug/L		115	62 - 150
Vinyl chloride	65		500	621		ug/L		111	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*

Lab Sample ID: 480-224430-2 MSD
Client Sample ID: TREATMENT INFLUENT
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 728892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		500	536		ug/L		107	73 - 126	3	15
1,1,2,2-Tetrachloroethane	ND		500	518		ug/L		104	76 - 120	2	15
1,1,2-Trichloroethane	ND		500	492		ug/L		98	76 - 122	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	549		ug/L		110	61 - 148	3	20
1,1-Dichloroethane	ND		500	536		ug/L		107	77 - 120	5	20
1,1-Dichloroethene	ND		500	526		ug/L		105	66 - 127	2	16
1,2,4-Trichlorobenzene	ND		500	512		ug/L		102	79 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND		500	453		ug/L		91	56 - 134	3	15
1,2-Dichlorobenzene	ND		500	499		ug/L		100	80 - 124	0	20
1,2-Dichloroethane	ND		500	518		ug/L		104	75 - 120	3	20
1,2-Dichloropropane	ND		500	507		ug/L		101	76 - 120	1	20
1,3-Dichlorobenzene	ND		500	491		ug/L		98	77 - 120	0	20
1,4-Dichlorobenzene	ND		500	497		ug/L		99	78 - 124	2	20
2-Butanone (MEK)	ND		2500	2730		ug/L		109	57 - 140	1	20
2-Hexanone	ND		2500	2930		ug/L		117	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	ND		2500	2900		ug/L		116	71 - 125	1	35

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-224430-2 MSD
Client Sample ID: TREATMENT INFLUENT
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 728892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND		2500	2610		ug/L		104	56 - 142	1	15
Benzene	ND		500	514		ug/L		103	71 - 124	3	13
Bromodichloromethane	ND		500	515		ug/L		103	80 - 122	3	15
Bromoform	ND		500	468		ug/L		94	61 - 132	1	15
Bromomethane	ND		500	471		ug/L		94	55 - 144	1	15
Carbon disulfide	ND		500	557		ug/L		111	59 - 134	6	15
Carbon tetrachloride	ND		500	544		ug/L		109	72 - 134	5	15
Chlorobenzene	ND		500	497		ug/L		99	80 - 120	2	25
Dibromochloromethane	ND		500	513		ug/L		103	75 - 125	3	15
Chloroethane	ND		500	534		ug/L		107	69 - 136	0	15
Chloroform	ND		500	488		ug/L		98	73 - 127	4	20
Chloromethane	ND	*+ F1	500	631	F1	ug/L		126	68 - 124	6	15
cis-1,2-Dichloroethene	580		500	1010		ug/L		85	74 - 124	3	15
cis-1,3-Dichloropropene	ND		500	506		ug/L		101	74 - 124	3	15
Cyclohexane	ND		500	596		ug/L		119	59 - 135	3	20
Dichlorodifluoromethane	ND		500	632		ug/L		126	59 - 135	5	20
Ethylbenzene	ND		500	510		ug/L		102	77 - 123	3	15
1,2-Dibromoethane	ND		500	500		ug/L		100	77 - 120	2	15
Isopropylbenzene	ND		500	535		ug/L		107	77 - 122	3	20
Methyl acetate	ND		1000	1060		ug/L		106	74 - 133	1	20
Methyl tert-butyl ether	ND		500	495		ug/L		99	77 - 120	2	37
Methylcyclohexane	ND		500	557		ug/L		111	68 - 134	2	20
Methylene Chloride	ND		500	490		ug/L		98	75 - 124	3	15
Styrene	ND		500	484		ug/L		97	80 - 120	1	20
Tetrachloroethene	ND		500	508		ug/L		102	74 - 122	0	20
Toluene	ND		500	495		ug/L		99	80 - 122	4	15
trans-1,2-Dichloroethene	ND		500	515		ug/L		103	73 - 127	5	20
trans-1,3-Dichloropropene	ND		500	505		ug/L		101	80 - 120	3	15
Trichloroethene	ND		500	512		ug/L		102	74 - 123	6	16
Trichlorofluoromethane	ND		500	608		ug/L		122	62 - 150	6	20
Vinyl chloride	65		500	654		ug/L		118	65 - 133	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*

Lab Sample ID: MB 480-728964/8
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 728964

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/20/24 01:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/20/24 01:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/20/24 01:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/20/24 01:13	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/20/24 01:13	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-728964/8
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/20/24 01:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/20/24 01:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/20/24 01:13	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/20/24 01:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/20/24 01:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/20/24 01:13	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/20/24 01:13	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/20/24 01:13	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/20/24 01:13	1
2-Hexanone	ND		5.0	1.2	ug/L			10/20/24 01:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/20/24 01:13	1
Acetone	ND		10	3.0	ug/L			10/20/24 01:13	1
Benzene	ND		1.0	0.41	ug/L			10/20/24 01:13	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/20/24 01:13	1
Bromoform	ND		1.0	0.26	ug/L			10/20/24 01:13	1
Bromomethane	ND		1.0	0.69	ug/L			10/20/24 01:13	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/20/24 01:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/20/24 01:13	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/20/24 01:13	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/20/24 01:13	1
Chloroethane	ND		1.0	0.32	ug/L			10/20/24 01:13	1
Chloroform	ND		1.0	0.34	ug/L			10/20/24 01:13	1
Chloromethane	ND		1.0	0.35	ug/L			10/20/24 01:13	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/20/24 01:13	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/20/24 01:13	1
Cyclohexane	ND		1.0	0.18	ug/L			10/20/24 01:13	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/20/24 01:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/20/24 01:13	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/20/24 01:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/20/24 01:13	1
Methyl acetate	ND		2.5	1.3	ug/L			10/20/24 01:13	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/20/24 01:13	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/20/24 01:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/20/24 01:13	1
Styrene	ND		1.0	0.73	ug/L			10/20/24 01:13	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/20/24 01:13	1
Toluene	ND		1.0	0.51	ug/L			10/20/24 01:13	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/20/24 01:13	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/20/24 01:13	1
Trichloroethene	ND		1.0	0.46	ug/L			10/20/24 01:13	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/20/24 01:13	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/20/24 01:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/20/24 01:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/20/24 01:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*10/20/24 01:13*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/20/24 01:13*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-728964/8
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		75 - 123		10/20/24 01:13	1

Lab Sample ID: LCS 480-728964/6
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	24.2		ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		96	76 - 120
1,1,2-Trichloroethane	25.0	23.0		ug/L		92	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.9		ug/L		99	61 - 148
1,1-Dichloroethane	25.0	24.4		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	22.8		ug/L		91	66 - 127
1,2,4-Trichlorobenzene	25.0	23.7		ug/L		95	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	20.9		ug/L		84	56 - 134
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 124
1,2-Dichloroethane	25.0	23.7		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	23.3		ug/L		93	76 - 120
1,3-Dichlorobenzene	25.0	23.1		ug/L		92	77 - 120
1,4-Dichlorobenzene	25.0	22.7		ug/L		91	80 - 120
2-Butanone (MEK)	125	122		ug/L		98	57 - 140
2-Hexanone	125	135		ug/L		108	65 - 127
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	71 - 125
Acetone	125	119		ug/L		95	56 - 142
Benzene	25.0	22.9		ug/L		92	71 - 124
Bromodichloromethane	25.0	23.7		ug/L		95	80 - 122
Bromoform	25.0	22.5		ug/L		90	61 - 132
Bromomethane	25.0	22.3		ug/L		89	55 - 144
Carbon disulfide	25.0	24.5		ug/L		98	59 - 134
Carbon tetrachloride	25.0	24.7		ug/L		99	72 - 134
Chlorobenzene	25.0	23.3		ug/L		93	80 - 120
Dibromochloromethane	25.0	24.7		ug/L		99	75 - 125
Chloroethane	25.0	25.0		ug/L		100	69 - 136
Chloroform	25.0	22.1		ug/L		88	73 - 127
Chloromethane	25.0	29.8		ug/L		119	68 - 124
cis-1,2-Dichloroethene	25.0	23.9		ug/L		95	74 - 124
cis-1,3-Dichloropropene	25.0	23.4		ug/L		93	74 - 124
Cyclohexane	25.0	26.7		ug/L		107	59 - 135
Dichlorodifluoromethane	25.0	29.0		ug/L		116	59 - 135
Ethylbenzene	25.0	23.3		ug/L		93	77 - 123
1,2-Dibromoethane	25.0	22.8		ug/L		91	77 - 120
Isopropylbenzene	25.0	24.4		ug/L		98	77 - 122
Methyl acetate	50.0	48.8		ug/L		98	74 - 133
Methyl tert-butyl ether	25.0	23.1		ug/L		92	77 - 120
Methylcyclohexane	25.0	25.5		ug/L		102	68 - 134
Methylene Chloride	25.0	22.7		ug/L		91	75 - 124
Styrene	25.0	22.0		ug/L		88	80 - 120
Tetrachloroethene	25.0	23.6		ug/L		94	74 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-728964/6
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Toluene			25.0	22.7		ug/L		91	80 - 122		
trans-1,2-Dichloroethene			25.0	22.9		ug/L		92	73 - 127		
trans-1,3-Dichloropropene			25.0	23.9		ug/L		96	80 - 120		
Trichloroethene			25.0	22.7		ug/L		91	74 - 123		
Trichlorofluoromethane			25.0	28.4		ug/L		114	62 - 150		
Vinyl chloride			25.0	26.6		ug/L		106	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*

Lab Sample ID: LCSD 480-728964/46
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			25.0	24.7		ug/L		99	73 - 126	2	15
1,1,2,2-Tetrachloroethane			25.0	24.0		ug/L		96	76 - 120	0	15
1,1,2-Trichloroethane			25.0	22.8		ug/L		91	76 - 122	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	26.7		ug/L		107	61 - 148	7	20
1,1-Dichloroethane			25.0	24.8		ug/L		99	77 - 120	2	20
1,1-Dichloroethene			25.0	25.2		ug/L		101	66 - 127	10	16
1,2,4-Trichlorobenzene			25.0	23.2		ug/L		93	79 - 122	2	20
1,2-Dibromo-3-Chloropropane			25.0	19.4		ug/L		77	56 - 134	8	15
1,2-Dichlorobenzene			25.0	23.6		ug/L		95	80 - 124	2	20
1,2-Dichloroethane			25.0	24.9		ug/L		100	75 - 120	5	20
1,2-Dichloropropane			25.0	24.0		ug/L		96	76 - 120	3	20
1,3-Dichlorobenzene			25.0	23.3		ug/L		93	77 - 120	1	20
1,4-Dichlorobenzene			25.0	22.9		ug/L		92	80 - 120	1	20
2-Butanone (MEK)			125	135		ug/L		108	57 - 140	10	20
2-Hexanone			125	143		ug/L		114	65 - 127	5	15
4-Methyl-2-pentanone (MIBK)			125	139		ug/L		111	71 - 125	2	35
Acetone			125	129		ug/L		103	56 - 142	8	15
Benzene			25.0	23.7		ug/L		95	71 - 124	3	13
Bromodichloromethane			25.0	24.1		ug/L		96	80 - 122	1	15
Bromoform			25.0	18.9	*1	ug/L		75	61 - 132	18	15
Bromomethane			25.0	22.8		ug/L		91	55 - 144	2	15
Carbon disulfide			25.0	24.3		ug/L		97	59 - 134	1	15
Carbon tetrachloride			25.0	24.8		ug/L		99	72 - 134	0	15
Chlorobenzene			25.0	22.8		ug/L		91	80 - 120	2	25
Dibromochloromethane			25.0	22.6		ug/L		90	75 - 125	9	15
Chloroethane			25.0	25.4		ug/L		102	69 - 136	2	15
Chloroform			25.0	22.6		ug/L		90	73 - 127	2	20
Chloromethane			25.0	28.9		ug/L		115	68 - 124	3	15
cis-1,2-Dichloroethene			25.0	24.5		ug/L		98	74 - 124	3	15
cis-1,3-Dichloropropene			25.0	23.2		ug/L		93	74 - 124	1	15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-728964/46
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyclohexane			25.0	27.2		ug/L		109	59 - 135	2	20
Dichlorodifluoromethane			25.0	28.1		ug/L		113	59 - 135	3	20
Ethylbenzene			25.0	23.0		ug/L		92	77 - 123	1	15
1,2-Dibromoethane			25.0	23.3		ug/L		93	77 - 120	2	15
Isopropylbenzene			25.0	24.2		ug/L		97	77 - 122	1	20
Methyl acetate			50.0	50.4		ug/L		101	74 - 133	3	20
Methyl tert-butyl ether			25.0	23.1		ug/L		93	77 - 120	0	37
Methylcyclohexane			25.0	25.1		ug/L		100	68 - 134	2	20
Methylene Chloride			25.0	23.2		ug/L		93	75 - 124	2	15
Styrene			25.0	21.6		ug/L		86	80 - 120	2	20
Tetrachloroethene			25.0	23.1		ug/L		93	74 - 122	2	20
Toluene			25.0	22.3		ug/L		89	80 - 122	2	15
trans-1,2-Dichloroethene			25.0	23.4		ug/L		94	73 - 127	2	20
trans-1,3-Dichloropropene			25.0	21.7		ug/L		87	80 - 120	10	15
Trichloroethene			25.0	23.0		ug/L		92	74 - 123	1	16
Trichlorofluoromethane			25.0	28.3		ug/L		113	62 - 150	1	20
Vinyl chloride			25.0	26.7		ug/L		107	65 - 133	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-728745/1-A
Matrix: Water
Analysis Batch: 729007

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 728745

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		10/18/24 09:09	10/18/24 19:06	1
Iron	ND		0.050	0.026	mg/L		10/18/24 09:09	10/18/24 19:06	1
Zinc	ND		0.010	0.0068	mg/L		10/18/24 09:09	10/18/24 19:06	1

Lab Sample ID: LCS 480-728745/2-A
Matrix: Water
Analysis Batch: 729007

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 728745

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Aluminum			5.10	4.89		mg/L		96	85 - 115		
Iron			5.10	5.43		mg/L		107	85 - 115		
Zinc			0.500	0.560		mg/L		112	85 - 115		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LRC 480-729007/19
Matrix: Water
Analysis Batch: 729007

Client Sample ID: Lab Control Sample

Analyte			Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec Limits		
Aluminum			60.0	613.5		mg/L		1023			
Iron			600	399.4		mg/L		67			
Zinc			20.0	17.55		mg/L		88			

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-728937/1-A
Matrix: Water
Analysis Batch: 728953

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 728937

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		10/19/24 08:24	10/19/24 09:59	1

Lab Sample ID: LCS 480-728937/2-A
Matrix: Water
Analysis Batch: 728953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 728937

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Oil & Grease			40.0	34.80		mg/L		87	78 - 114		

Lab Sample ID: 480-224430-1 MS
Matrix: Water
Analysis Batch: 728953

Client Sample ID: TREATMENT EFFLUENT
Prep Type: Total/NA
Prep Batch: 728937

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Oil & Grease	ND		38.0	34.13		mg/L		90	78 - 114		

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

GC/MS VOA

Analysis Batch: 728892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-2	TREATMENT INFLUENT	Total/NA	Water	8260C	
480-224430-3	TRIP BLANK	Total/NA	Water	8260C	
MB 480-728892/8	Method Blank	Total/NA	Water	8260C	
LCS 480-728892/6	Lab Control Sample	Total/NA	Water	8260C	
480-224430-2 MS	TREATMENT INFLUENT	Total/NA	Water	8260C	
480-224430-2 MSD	TREATMENT INFLUENT	Total/NA	Water	8260C	

Analysis Batch: 728964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-1	TREATMENT EFFLUENT	Total/NA	Water	8260C	
MB 480-728964/8	Method Blank	Total/NA	Water	8260C	
LCS 480-728964/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-728964/46	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 728745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-1	TREATMENT EFFLUENT	Total/NA	Water	200.7	
MB 480-728745/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-728745/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 729007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-1	TREATMENT EFFLUENT	Total/NA	Water	200.7 Rev 4.4	728745
MB 480-728745/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	728745
LCS 480-728745/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	728745
LRC 480-729007/19	Lab Control Sample		Water	200.7 Rev 4.4	

General Chemistry

Prep Batch: 728937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	
MB 480-728937/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-728937/2-A	Lab Control Sample	Total/NA	Water	1664B	
480-224430-1 MS	TREATMENT EFFLUENT	Total/NA	Water	1664B	

Analysis Batch: 728953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	728937
MB 480-728937/1-A	Method Blank	Total/NA	Water	1664B	728937
LCS 480-728937/2-A	Lab Control Sample	Total/NA	Water	1664B	728937
480-224430-1 MS	TREATMENT EFFLUENT	Total/NA	Water	1664B	728937

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-224430-1

Date Collected: 10/15/24 13:00
Matrix: Water
Date Received: 10/16/24 14:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	728964	ZN	EET BUF	10/20/24 01:36
Total/NA	Prep	200.7			728745	EMO	EET BUF	10/18/24 09:09
Total/NA	Analysis	200.7 Rev 4.4		1	729007	BMB	EET BUF	10/18/24 19:55
Total/NA	Prep	1664B			728937	KM	EET BUF	10/19/24 08:24
Total/NA	Analysis	1664B		1	728953	KM	EET BUF	10/19/24 09:59

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-224430-2

Date Collected: 10/15/24 13:10
Matrix: Water
Date Received: 10/16/24 14:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		20	728892	ZN	EET BUF	10/19/24 02:34

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224430-3

Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 14:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	728892	ZN	EET BUF	10/19/24 02:57

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8260 CORP mix_00260	12/09/24	10/09/24	Methanol, Lot 22C2362001	20 mL	2-CEVE_00232	800 uL	2-Chloroethyl vinyl ether	100 ug/mL
					Acrolein Mix_00505	500 uL	Acrolein	500 ug/mL
					Ketones_00226	800 uL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
					MegaMix_00234	800 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2,4-Trimethylbenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dibromoethane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3,5-Trimethylbenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	2000 ug/mL
							2,2-Dichloropropane	100 ug/mL
							2-Chlorotoluene	100 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							3-Chloro-1-propene	100 ug/mL
							4-Chlorotoluene	100 ug/mL
							4-Isopropyltoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromodichloromethane	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chlorobromomethane	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromochloromethane	100 ug/mL
							Dibromomethane	100 ug/mL
							Ethyl ether	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexane	100 ug/mL
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropylbenzene	100 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							n-Butylbenzene	100 ug/mL
							n-Heptane	100 ug/mL
							N-Propylbenzene	100 ug/mL
							Naphthalene	100 ug/mL
							o-Xylene	100 ug/mL
							sec-Butylbenzene	100 ug/mL
							Styrene	100 ug/mL
							tert-Butylbenzene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Tetrahydrofuran	200 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
					Vinyl Acetate_00360	800 uL	Vinyl acetate	200 ug/mL
.2-CEVE_00232	02/28/27		Restek, Lot A0208368		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
.Acrolein Mix_00505	09/30/25		Restek, Lot A0209476		(Purchased Reagent)		Acrolein	20000 ug/mL
.Ketones_00226	04/30/27		Restek, Lot A02010935		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MegaMix_00234	04/30/26		Restek, Lot A0203458		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.Vinyl Acetate_00360	09/30/25		Restek, Lot A0209567		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
BFB_WRK_00166							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					MV_BFB_STK_00095	20 uL	BFB	50 ug/mL
.MV_BFB_STK_00095	02/19/25		Supelco, Lot LRAD6467		(Purchased Reagent)		BFB	25000 ug/mL
GAS CORP mix_00645	10/22/24	10/15/24	Methanol, Lot EA832US	10 mL	8260/624-Gas_00560	400 uL	Bromomethane	100 ug/mL
							Butadiene	100 ug/mL
							Chloroethane	100 ug/mL
							Chloromethane	100 ug/mL
							Dichlorodifluoromethane	100 ug/mL
							Dichlorofluoromethane	100 ug/mL
							Trichlorofluoromethane	100 ug/mL
							Vinyl chloride	100 ug/mL
.8260/624-Gas_00560	12/15/24		Restek, Lot A0211969		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
LRC_00004	11/01/24	09/19/24	1% HNO3, Lot 8053365	50 mL	MEA_Al_STK_00016	0.3 mL	Aluminum	60 ug/mL
					MEA_Fe_STK_00017	3 mL	Iron	600 ug/mL
					MEI_Zn_1,000_00014	1 mL	Zinc	20 ug/mL
.MEA_Al_STK_00016	07/09/26		CPI, Lot 1427322		(Purchased Reagent)		Aluminum	10000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MEA_Fe_STK_00017	03/29/26	CPI International, Lot 1421665			(Purchased Reagent)		Iron	10000 ug/mL
.MEI_Zn_1,000_00014	03/05/26	CPI International, Lot 1390097			(Purchased Reagent)		Zinc	1000 ug/mL
MED_03_Ag_00212	03/08/26	09/13/24	1% HNO3, Lot 1026960-69	200 mL	MEI_Ag_1,000_00015	2 mL	Ag	10 ug/mL
.MEI_Ag_1,000_00015	03/08/26	Agilent Technologies, Lot 1436096			(Purchased Reagent)		Ag	1000 ug/mL
MEI_10_CCVL_00528	11/01/24	10/02/24	1% HNO3, Lot 8053365	2000 mL	MEI_CRI STOCK_00077	20 mL	Aluminum	0.2 mg/L
							Iron	0.05 mg/L
							Zinc	0.01 mg/L
.MEI_CRI STOCK_00077	11/01/24	09/17/24	6%HNO3 5%HCL, Lot 8037073	1000 mL	MEA_Al_STK_00016	2 mL	Aluminum	20 ug/mL
					MEA_Fe_STK_00017	0.5 mL	Iron	5 ug/mL
					MEI_Zn_1,000_00012	1 mL	Zinc	1 ug/mL
..MEA_Al_STK_00016	07/09/26	CPI, Lot 1427322			(Purchased Reagent)		Aluminum	10000 ug/mL
..MEA_Fe_STK_00017	03/29/26	CPI International, Lot 1421665			(Purchased Reagent)		Iron	10000 ug/mL
..MEI_Zn_1,000_00012	01/01/25	CPI International, Lot 1216101-73			(Purchased Reagent)		Zinc	1000 ug/mL
MEI_MSS_ICSA_00068	11/07/24	10/07/24	1% HNO3, Lot 8053365	500 mL	MEI_Adj_A_STK_00012	50 mL	Aluminum	500 ug/mL
							Ba	0.012 ug/mL
							Ca	500 ug/mL
							Iron	200 ug/mL
							Mg	500 ug/mL
.MEI_Adj_A_STK_00012	11/01/24	CPI International, Lot 1437074			(Purchased Reagent)		Aluminum	5000 ug/mL
							Ba	0.12 ug/mL
							Ca	5000 ug/mL
							Iron	2000 ug/mL
							Mg	5000 ug/mL
MEI_MSS_ICSAB_00068	11/01/24	10/07/24	1% HNO3, Lot 8053365	500 mL	MEI_ABpt1_STK_00006	2.5 mL	Mo	0.5 ug/mL
							Sb	0.5 ug/mL
							Sn	0.5 ug/mL
							Ti	0.5 ug/mL
					MEI_ABpt2_STK_00005	2.5 mL	Ag	0.5 ug/mL
							As	0.5 ug/mL
							B	5 ug/mL
							Ba	0.5125 ug/mL
							Be	0.2501 ug/mL
							Cd	0.5 ug/mL
							Co	0.5 ug/mL
							Cr	0.4999 ug/mL
							Cu	0.5 ug/mL
							K	5 ug/mL
							Mn	0.5005 ug/mL
							Na	5 ug/mL
							Ni	0.5005 ug/mL
							Pb	0.5 ug/mL
							Se	0.5 ug/mL
							Sr	0.5 ug/mL
							Tl	0.5 ug/mL
							V	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Zinc	0.5005 ug/mL
					MEI_Adj_A_STK_00012	50 mL	Aluminum	500 ug/mL
							Ba	0.5125 ug/mL
							Ca	500 ug/mL
							Iron	200 ug/mL
							Mg	500 ug/mL
.MEI_ABpt1_STK_00006	09/30/25	CPI International, Lot 1399525			(Purchased Reagent)		Mo	100 ug/mL
							Sb	100 ug/mL
							Sn	100 ug/mL
							Ti	100 ug/mL
.MEI_ABpt2_STK_00005	10/21/25	CPI International, Lot 1333445-1			(Purchased Reagent)		Ag	100 ug/mL
							As	100 ug/mL
							B	1000 ug/mL
							Ba	100.1 ug/mL
							Be	50.02 ug/mL
							Cd	100 ug/mL
							Co	100 ug/mL
							Cr	99.98 ug/mL
							Cu	100 ug/mL
							K	1000 ug/mL
							Mn	100.1 ug/mL
							Na	1000 ug/mL
							Ni	100.1 ug/mL
							Pb	100 ug/mL
							Se	100 ug/mL
							Sr	100 ug/mL
							Tl	100 ug/mL
							V	100 ug/mL
							Zinc	100.1 ug/mL
.MEI_Adj_A_STK_00012	11/01/24	CPI International, Lot 1437074			(Purchased Reagent)		Aluminum	5000 ug/mL
							Ba	0.12 ug/mL
							Ca	5000 ug/mL
							Iron	2000 ug/mL
							Mg	5000 ug/mL
MEI_MSS_ICV_00173	11/01/24	10/02/24	1% HNO3, Lot 8053365	200 mL	ME_TA_ICVss2_00015	3.75 mL	Aluminum	37.5 mg/L
							Iron	37.5 mg/L
					MEI_Zn_1,000S_00003	0.15 mL	Zinc	0.75 mg/L
.ME_TA_ICVss2_00015	05/31/25	CPI, Lot 1374183			(Purchased Reagent)		Aluminum	2000 mg/L
							Iron	2000 mg/L
.MEI_Zn_1,000S_00003	03/05/26	CPI International, Lot 1459124			(Purchased Reagent)		Zinc	1000 ug/mL
MEI_MSS_STD2_00348	11/02/24	10/02/24	1% HNO3, Lot 8053365	1000 mL	ME_TA_CAL2_00006	25 mL	Aluminum	50 ug/mL
							Iron	50 ug/mL
					MEI_Zn_1,000_00013	1 mL	Zinc	1 ug/mL
.ME_TA_CAL2_00006	12/10/25	CPI, Lot 1416581			(Purchased Reagent)		Aluminum	2000 mg/L
							Iron	2000 mg/L
.MEI_Zn_1,000_00013	03/05/26	CPI International, Lot 1398666			(Purchased Reagent)		Zinc	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MEP_Mix4_00011	01/01/25	09/12/24	ELGA Water, Lot none	200 mL	me-sb-stk1000_00007	20 mL	Sb	100 mg/L
					MEA_Al_STK_00015	0.4 mL	Aluminum	20 mg/L
					MEA_Fe_STK_00016	0.4 mL	Iron	20 mg/L
					MEI_B_1,000_00015	20 mL	B	100 mg/L
					MEI_Zn_1,000_00014	20 mL	Zinc	100 mg/L
.me-sb-stk1000_00007	12/26/26	cpi international, Lot 1435489			(Purchased Reagent)		Sb	1000 ug/mL
.MEA_Al_STK_00015	07/09/26	CPI, Lot ALM112021A1			(Purchased Reagent)		Aluminum	10000 ug/mL
.MEA_Fe_STK_00016	03/29/26	CPI International, Lot 1421665			(Purchased Reagent)		Iron	10000 ug/mL
.MEI_B_1,000_00015	01/31/27	CPI International, Lot 1450184			(Purchased Reagent)		B	1000 ug/mL
.MEI_Zn_1,000_00014	03/05/26	CPI International, Lot 1390097			(Purchased Reagent)		Zinc	1000 ug/mL
OG Std EnvExp_00028	02/26/27	Environmental Express, Lot 516866			(Purchased Reagent)		Oil & Grease	8000 ug/mL
							SGT-HEM	4000 ug/mL
restek og lcs_00121	05/31/28	Restek, Lot A0211687			(Purchased Reagent)		Oil & Grease	8000 ug/mL
							SGT-HEM	4000 ug/mL
S_8260_IS_00403	12/09/24	10/09/24	P&T Methanol, Lot 230446	20 mL	IS_STK_01797	1 mL	1,4-Dichlorobenzene-d4	125 ug/mL
							Chlorobenzene-d5	125 ug/mL
							Fluorobenzene (IS)	125 ug/mL
.IS_STK_01797	07/31/29	Restek, Lot A0214530			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
S_8260_Surr_00492	12/04/24	10/04/24	P&T Methanol, Lot 288059	20 mL	SURR_STK_00558	1 mL	1,2-Dichloroethane-d4 (Surr)	125 ug/mL
							4-Bromofluorobenzene (Surr)	125 ug/mL
							Dibromofluoromethane (Surr)	125 ug/mL
							Toluene-d8 (Surr)	125 ug/mL
.SURR_STK_00558	03/23/25	Restek, Lot A0201943			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
Spike Mx 1_00006	12/10/25	CPI International, Lot 1421974			(Purchased Reagent)		As	200 ug/mL
							Ba	200 ug/mL
							Be	100 ug/mL
							Cd	100 ug/mL
							Co	100 ug/mL
							Cr	100 ug/mL
							Cu	100 ug/mL
							Li	100 ug/mL
							Mn	100 ug/mL
							Mo	100 ug/mL
							Ni	100 ug/mL
							Pb	100 ug/mL
							Se	200 ug/mL
							Si	200 ug/mL
							SiO2	427.8 ug/mL
							Sn	200 ug/mL

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sr	100 ug/mL
							Ti	100 ug/mL
							Tl	200 ug/mL
							V	100 ug/mL
Spike Mx 2_00005	11/13/25	CPI International, Lot 1466116			(Purchased Reagent)		Aluminum	1000 ug/mL
							Ca	5000 ug/mL
							Iron	1000 ug/mL
							K	5000 ug/mL
							Mg	5000 ug/mL
							Na	5000 ug/mL
Spike Mx 3_00005	02/28/26	CPI International, Lot 1489780			(Purchased Reagent)		P	2001 ug/mL
							Sulfur	999.9 ug/mL
							U	200.1 ug/mL
							W	99.99 ug/mL
SS 8260 CORP_00117	11/30/24	10/15/24	Methanol, Lot EH471US	20 mL	SS_Ketones_00100	800 uL	2-Butanone (MEK)	500 mg/L
							2-Hexanone	500 mg/L
							4-Methyl-2-pentanone (MIBK)	500 mg/L
							Acetone	500 mg/L
					SS_MegaMix_00133	800 uL	1,1,1-Trichloroethane	100 mg/L
							1,1,2,2-Tetrachloroethane	100 mg/L
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 mg/L
							1,1,2-Trichloroethane	100 mg/L
							1,1-Dichloroethane	100 mg/L
							1,1-Dichloroethene	100 mg/L
							1,2,4-Trichlorobenzene	100 mg/L
							1,2-Dibromo-3-Chloropropane	100 mg/L
							1,2-Dibromoethane	100 mg/L
							1,2-Dichlorobenzene	100 mg/L
							1,2-Dichloroethane	100 mg/L
							1,2-Dichloropropane	100 mg/L
							1,3-Dichlorobenzene	100 mg/L
							1,4-Dichlorobenzene	100 mg/L
							Benzene	100 mg/L
							Bromodichloromethane	100 mg/L
							Bromoform	100 mg/L
							Carbon disulfide	100 mg/L
							Carbon tetrachloride	100 mg/L
							Chlorobenzene	100 mg/L
							Chloroform	100 mg/L
							cis-1,2-Dichloroethene	100 mg/L
							cis-1,3-Dichloropropene	100 mg/L
							Cyclohexane	100 mg/L
							Dibromochloromethane	100 mg/L
							Ethylbenzene	100 mg/L
							Isopropylbenzene	100 mg/L

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acetate	200 mg/L
							Methyl tert-butyl ether	100 mg/L
							Methylcyclohexane	100 mg/L
							Methylene Chloride	100 mg/L
							Styrene	100 mg/L
							Tetrachloroethene	100 mg/L
							Toluene	100 mg/L
							trans-1,2-Dichloroethene	100 mg/L
							trans-1,3-Dichloropropene	100 mg/L
							Trichloroethene	100 mg/L
.SS_Ketones_00100	04/30/25		Restek, Lot A0184721		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.SS_MegaMix_00133	08/31/25		Restek, Lot A0195252		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
SS GAS CORP_00598	10/22/24	10/15/24	Methanol, Lot EA832US	10 mL	SS8260-624gas_00554	400 uL	Bromomethane	100 ug/mL
							Chloroethane	100 ug/mL
							Chloromethane	100 ug/mL
							Dichlorodifluoromethane	100 ug/mL
							Trichlorofluoromethane	100 ug/mL
							Vinyl chloride	100 ug/mL
.SS8260-624gas_00554	12/15/24		Restek, Lot A0210106		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL

Reagent

IS_STK_01797

IS 01797 - 01816

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

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.:** A0214530

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 : July 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	Fluorobenzene	462-06-6	BCBZ5549	99%	2,499.0 µg/mL	+/- 140.3971
2	Chlorobenzene-d5	3114-55-4	PR-31132	99%	2,501.3 µg/mL	+/- 140.5282
3	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	2,498.7 µg/mL	+/- 140.3784

* 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.)

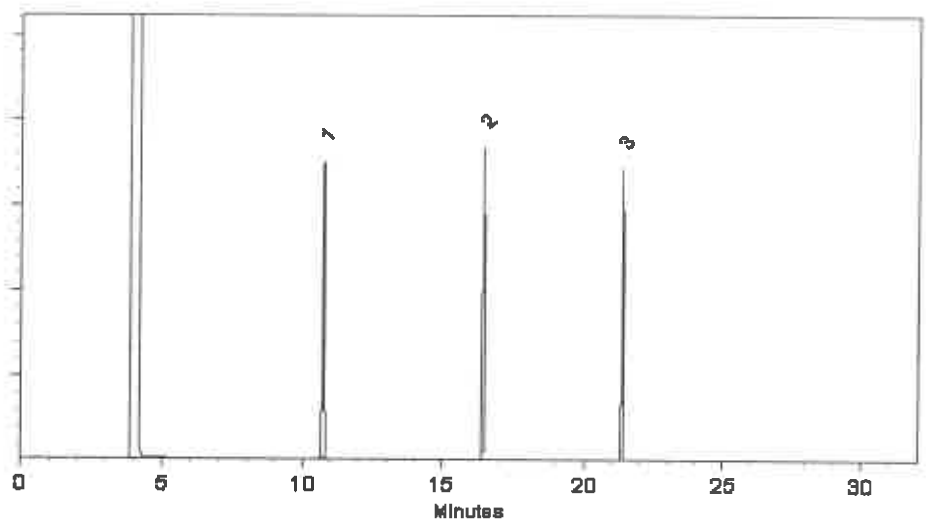
Inj. Temp:
200°C

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.

Parker Owens - Operations Tech I Date Mixed: 29-Jul-2024 Balance Serial # 1127510105

Jennifer Pollino - Operations Tech III - ARM QC Date Passed: 01-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.

Reagent

me-sb-stk1000_00007



CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Antimony (Sb) – 1000 µg/mL

Matrix: 5% HNO_3/tr. HF

Product #: TA-100023

Product Lot #: 1435489

Source Material Lot #: N18I027

*Expiration Date: 24 December 2026

Element	Certified Concentration & Uncertainty
Sb	994.0 ± 6.0 µg/mL (w/v)
	974.0 ± 6.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.999% pure antimony (Sb) dissolved in high purity nitric acid (HNO_3), trace hydrofluoric acid (HF) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3102a, lot #140911**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	MAJOR	Te	2
Al	216	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	1	Hg	<0.5	Mn	<1	Pd	2	Se	4	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	5	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	7	Ni	<2	Rh	<0.5	Ta	1	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	10
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

3 January 2024
Certification Date

Date Opened

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

www.cpiinternational.com

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements
  (Registrar: TUV NORD)

Reagent

ME_TA_CAL2_00006

ICP, ICPMS Cal mix 2

7778776

ID: ME_TA_CAL2_00006

Exp: 12/10/25 Prpd:

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CAL2

ICP ICPMS CAL Mix # 2

Lot #: 1416581

Matrix: 5% HNO_3

*Expiration Date: 10 December 2025

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Al	2000 ± 10 mg/L	Fe	2000 ± 10 mg/L	Mg	2000 ± 10 mg/L
Ca	2000 ± 10 mg/L	K	2000 ± 10 mg/L	Na	2000 ± 10 mg/L

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Al	1369281	Fe	1249266	Mg	1222806
Ca	1344004	K	1367374	Na	1369048

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

21 December 2023
Certification Date

Date Opened

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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The Netherlands

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Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM
Ag	3151	-
Al	3101a	-
As	3103a	3103a
Au	3121	-
B	3107	3107
Ba	3104a	-
Be	3105a	3105a
Bi	3106	3106
Br^-	3184	-
Ca	3109a	3109a
Cd	3108	-
Ce	3110	3110
Cl^-	3182	1818a
Co	3113	3113
Cr	3112a	-
Cs	3111a	-
Cu	3114	-
Dy	3115a	-
Er	3116a	-
Eu	3117a	-
F^-	3183	-
Fe	3126a	-
Ga	3119a	-
Gd	3118a	-
Ge	3120a	-

Analyte	Aq. SRM	MO SRM
Hf	3122	-
Hg	3133	3133
Ho	3123a	-
In	3124a	3124a
K	3141a	3141a
La	3127a	3127a
Li	3129a	3129a
Lu	3130a	-
Mg	3131a	3131a
Mn	3132	3132
Mo	3134	3134
Na	3152a	-
Nb	3137	-
Nd	3135a	-
Ni	3136	-
NO_3^-	3185	-
P	3139a	3139a
Pb	3128	-
Pd	3138	-
PO_4^{-3}	3186	-
Pr	3142a	-
Pt	3140	3140
Rb	3145a	-
Re	3143	-
Rh	3144	3144

Analyte	Aq. SRM	MO SRM
S	3154	2770
Sb	3102a	3102a
Sc	3148a	3148a
Se	3149	3149
Si	3150	-
Sm	3147a	-
Sn	3161a	-
SO_4^{-2}	3181	-
Sr	3153a	3153a
Ta	3155	-
Tb	3157a	-
Te	3156	-
Th	-	-
Ti	3162a	3162a
Tl	3158	3158
Tm	3160a	-
U	3164	-
V	3165	-
W	3163	3163
Y	3167a	3167a
Yb	3166a	-
Zn	3168a	3168a
Zr	3169	3169

Reagent

ME_TA_ICVss2_00015

1778777

7919626
ID: ME_TA_ICVss2_00015
Exp: 05/31/25 Prpd:
ICP, ICPMS cal 2 second s

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CAL2-SS

ICP ICPMS CAL Mix # 2

Lot #: 1374183

Matrix: 5% HNO_3

*Expiration Date: 31 May 2025

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Al	2000 ± 10 mg/L	Fe	2000 ± 10 mg/L	Mg	2000 ± 10 mg/L
Ca	2000 ± 10 mg/L	K	2000 ± 10 mg/L	Na	2000 ± 10 mg/L

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Al	AS19-103ALX	Fe	AS18-178FEX	Mg	AS19-87MGX
Ca	BC19-64CAX	K	BA19-56KX	Na	AV19-43NAX

Intended Use: This solution is intended for use as a second source certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

31 May 2023
Certification Date

Date Opened

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM
Ag	3151	-
Al	3101a	-
As	3103a	3103a
Au	3121	-
B	3107	3107
Ba	3104a	-
Be	3105a	3105a
Bi	3106	3106
Br^-	3184	-
Ca	3109a	3109a
Cd	3108	-
Ce	3110	3110
Cl^-	3182	1818a
Co	3113	3113
Cr	3112a	-
Cs	3111a	-
Cu	3114	-
Dy	3115a	-
Er	3116a	-
Eu	3117a	-
F^-	3183	-
Fe	3126a	-
Ga	3119a	-
Gd	3118a	-
Ge	3120a	-

Analyte	Aq. SRM	MO SRM
Hf	3122	-
Hg	3133	3133
Ho	3123a	-
In	3124a	3124a
K	3141a	3141a
La	3127a	3127a
Li	3129a	3129a
Lu	3130a	-
Mg	3131a	3131a
Mn	3132	3132
Mo	3134	3134
Na	3152a	-
Nb	3137	-
Nd	3135a	-
Ni	3136	-
NO_3^-	3185	-
P	3139a	3139a
Pb	3128	-
Pd	3138	-
PO_4^{-3}	3186	-
Pr	3142a	-
Pt	3140	3140
Rb	3145a	-
Re	3143	-
Rh	3144	3144

Analyte	Aq. SRM	MO SRM
S	3154	2770
Sb	3102a	3102a
Sc	3148a	3148a
Se	3149	3149
Si	3150	-
Sm	3147a	-
Sn	3161a	-
SO_4^{-2}	3181	-
Sr	3153a	3153a
Ta	3155	-
Tb	3157a	-
Te	3156	-
Th	-	-
Ti	3162a	3162a
Tl	3158	3158
Tm	3160a	-
U	3164	-
V	3165	-
W	3163	3163
Y	3167a	3167a
Yb	3166a	-
Zn	3168a	3168a
Zr	3169	3169

Reagent

MEA_Al_STK_00015

7802881
ID: MEA_Al_STK_00015
Exp: 07/09/25 Prpd:
Aluminum stock, 10,000 µg

Rec. 2/7/24

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Aluminum (Al) – 10,000 µg/mL

Matrix: 5% HNO_3

Product #: TA-10M11

Product Lot #: 1427322

Source Material Lot #: ALM112021A1

*Expiration Date: 9 July 2026

Element	Certified Concentration & Uncertainty
Al	10,025 ± 37 µg/mL (w/v)
	9400 ± 34 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 10,000 µg/mL by gravimetric methods using 99.999% pure aluminum nitrate [$Al(NO_3)_3$] dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3101a, lot #140903**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<5	Co	<10	Ge	<5	Lu	<2	P	<1000	Sb	15	Te	<10
Al	MAJOR	Cs	<5	Hf	<2	Mg	<50	Pb	<10	Sc	<50	Ti	<20
As	<20	Cr	28	Hg	<5	Mn	<10	Pd	<5	Se	<20	Tl	<5
Au	<5	Cu	<10	Ho	<2	Mo	<5	Pr	<2	Si	<1000	Tm	<2
B	<50	Dy	<2	In	nd	Na	<250	Pt	<5	Sm	<2	V	12
Ba	11	Er	<2	Ir	<2	Nb	<5	Rb	<5	Sn	<5	W	<5
Bi	<5	Eu	<2	K	<250	Nd	<2	Re	<2	Sr	<10	Y	<5
Ca	<250	Fe	361	La	<5	Ni	<20	Rh	<5	Ta	<5	Yb	<2
Cd	<5	Ga	296	Li	<20	Os	<5	Ru	<5	Tb	<5	Zn	<20
Ce	<2	Gd	<2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

25 July 2023
Certification Date

Date Opened

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

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- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

MEA_Al_STK_00016



CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-10M11

SE Std Aluminum (Al) – 10,000 µg/mL

Product Lot #: 1427322

Matrix: 5% HNO_3

Source Material Lot #: ALM112021A1

*Expiration Date: 9 July 2026

Element	Certified Concentration & Uncertainty
Al	10,025 ± 37 µg/mL (w/v)
	9400 ± 34 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 10,000 µg/mL by gravimetric methods using 99.999% pure aluminum nitrate [$Al(NO_3)_3$] dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3101a, lot #140903**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<5	Co	<10	Ge	<5	Lu	<2	P	<1000	Sb	15	Te	<10
Al	MAJOR	Cs	<5	Hf	<2	Mg	<50	Pb	<10	Sc	<50	Ti	<20
As	<20	Cr	28	Hg	<5	Mn	<10	Pd	<5	Se	<20	Tl	<5
Au	<5	Cu	<10	Ho	<2	Mo	<5	Pr	<2	Si	<1000	Tm	<2
B	<50	Dy	<2	In	nd	Na	<250	Pt	<5	Sm	<2	V	12
Ba	11	Er	<2	Ir	<2	Nb	<5	Rb	<5	Sn	<5	W	<5
Bi	<5	Eu	<2	K	<250	Nd	<2	Re	<2	Sr	<10	Y	<5
Ca	<250	Fe	361	La	<5	Ni	<20	Rh	<5	Ta	<5	Yb	<2
Cd	<5	Ga	296	Li	<20	Os	<5	Ru	<5	Tb	<5	Zn	<20
Ce	<2	Gd	<2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

25 July 2023
Certification Date

Date Opened

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

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- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

MEA_Fe_STK_00016

Rec: 2/7/24

7802882
ID: MEA_Fe_STK_00016
Exp: 03/29/26 Prpd:
Iron stock, 10,000 ug/mL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Iron (Fe) – 10,000 µg/mL

Matrix: 5% HNO_3

Product #: TA-10M261

Product Lot #: 1421665

Source Material Lot #: FED052022A1

*Expiration Date: 29 March 2026

Element	Certified Concentration & Uncertainty
Fe	10,030 ± 39 µg/mL (w/v)
	9631 ± 37 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 10,000 µg/mL by gravimetric methods using 99.999% pure iron nitrate nonahydrate [$Fe(NO_3)_3$] dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3126a, lot #140812**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<5	Co	18	Ge	<5	Lu	<2	P	<1000	Sb	<5	Te	<10
Al	<20	Cs	<5	Hf	<2	Mg	<50	Pb	<10	Sc	<50	Ti	<20
As	<20	Cr	9	Hg	<5	Mn	<10	Pd	<5	Se	<20	Tl	<5
Au	<5	Cu	<10	Ho	<2	Mo	<5	Pr	<2	Si	<1000	Tm	<2
B	<50	Dy	<2	In	nd	Na	<250	Pt	<5	Sm	<2	V	<10
Ba	<10	Er	<2	Ir	<2	Nb	<5	Rb	<5	Sn	<5	W	<5
Bi	<2	Eu	<2	K	<250	Nd	<2	Re	<2	Sr	<10	Y	<5
Ca	<250	Fe	MAJOR	La	<5	Ni	<20	Rh	<5	Ta	<5	Yb	<2
Cd	<5	Ga	11	Li	<20	Os	<5	Ru	<5	Tb	<5	Zn	<20
Ce	<2	Gd	<2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

12 April 2023
Certification Date

Date Opened

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Further Information: Please contact CPI International for further information about this material.

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    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

MEA_Fe_STK_00017



ID: MEA_Fe_STK_00017
Exp: 03/29/26 Prpd:
Iron stock, 10,000 ug/mL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-10M261

SE Std Iron (Fe) – 10,000 µg/mL

Product Lot #: 1421665

Matrix: 5% HNO_3

Source Material Lot #: FED052022A1

*Expiration Date: 29 March 2026

Element	Certified Concentration & Uncertainty
Fe	10,030 ± 39 µg/mL (w/v)
	9631 ± 37 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 10,000 µg/mL by gravimetric methods using 99.999% pure iron nitrate nonahydrate [$Fe(NO_3)_3$] dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3126a, lot #140812**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<5	Co	18	Ge	<5	Lu	<2	P	<1000	Sb	<5	Te	<10
Al	<20	Cs	<5	Hf	<2	Mg	<50	Pb	<10	Sc	<50	Ti	<20
As	<20	Cr	9	Hg	<5	Mn	<10	Pd	<5	Se	<20	Tl	<5
Au	<5	Cu	<10	Ho	<2	Mo	<5	Pr	<2	Si	<1000	Tm	<2
B	<50	Dy	<2	In	nd	Na	<250	Pt	<5	Sm	<2	V	<10
Ba	<10	Er	<2	Ir	<2	Nb	<5	Rb	<5	Sn	<5	W	<5
Bi	<2	Eu	<2	K	<250	Nd	<2	Re	<2	Sr	<10	Y	<5
Ca	<250	Fe	MAJOR	La	<5	Ni	<20	Rh	<5	Ta	<5	Yb	<2
Cd	<5	Ga	11	Li	<20	Os	<5	Ru	<5	Tb	<5	Zn	<20
Ce	<2	Gd	<2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

12 April 2023
Certification Date

Date Opened

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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Reagent

MEI_ABpt1_STK_00006

7791229
ID: MEI_ABpt1_STK_00006
Exp: 09/30/25 Prpd: NZG
CPI ICP ICSAB MIX sol 1 S

8

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-ICP-ICSAB-1

ICP ICSAB Mix Solution 1

Lot #: 1399525

Matrix: 5% HNO_3/0.5% HF

*Expiration Date: 30 June 2025

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Mo	100.1 ± 0.5 mg/L	Si	1000 ± 5 mg/L	Ti	100.1 ± 0.5 mg/L
Sb	100.2 ± 0.5 mg/L	Sn	100.3 ± 0.5 mg/L		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Mo	1240650	Si	1289108	Ti	1091371
Sb	1162568	Sn	1116280		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see final page)**. The solution was diluted with filtered (0.22 µm), 18 M-ohm deionized water and stabilized the appropriate high-purity acid(s) as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see final page)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***18 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

11 September 2023
Certification Date

Date Opened

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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CERTIFICATE OF ANALYSIS

Single-Element Aqueous RM

Thorium (Th) – 1000 µg/mL

Matrix: 2% HNO_3

Product #: S4400-1000591

Lot #: 1446012

*Expiration Date: 23 October 2025

Element	Certified Concentration & Uncertainty
Th	1001 ± 5 µg/mL (w/v)
	982.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a reference material (RM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This RM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to, **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This RM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using pure thorium nitrate [$Th(NO_3)_4$]. The solution was diluted with filtered (0.22um), 18 M-ohm water and stabilized with the appropriate high-purity acid as indicated in the listed matrix. The balances used in the preparation of this RM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable method against an alternate lot as NIST SRM is not available. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	2	Te	<1		
Al	6	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2		
As	<2	Cr	2	Hg	<0.5	Mn	39	Pd	1	Se	<2	Tl	<0.5		
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	0.6	Si	<100	Tm	<0.2		
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1		
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	0.9	Sn	<0.5	W	<0.5		
Bi	<0.2	Eu	<0.2	K	<25	Nd	2	Re	2	Sr	<1	Y	<0.5		
Ca	<25	Fe	<10	La	2	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2		
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	<2		
Ce	5	Gd	<0.2												

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the RM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original RM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

5 May 2022

Certification Date

Date Opened

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Reagent

MEI_ABpt2_STK_00005

7791230
ID: MEI_ABpt2_STK_00005
Exp: 10/21/25 Prpd: NZG
CPI ICP ICSAB MIX sol 2 S

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-ICP-ICSAB-2

ICP ICSAB Mix Solution 2

Lot #: 1333445-1

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	100.0 ± 0.5 mg/L	Cr	100.0 ± 0.5 mg/L	Pb	100.0 ± 0.5 mg/L
As	99.94 ± 0.50 mg/L	Cu	100.0 ± 0.5 mg/L	Se	100.0 ± 0.5 mg/L
B	1000 ± 5 mg/L	K	1000 ± 5 mg/L	Sr	100.0 ± 0.5 mg/L
Ba	99.99 ± 0.50 mg/L	Mn	100.0 ± 0.5 mg/L	Tl	100.0 ± 0.5 mg/L
Be	50.02 ± 0.25 mg/L	Na	1000 ± 5 mg/L	V	100.1 ± 0.5 mg/L
Cd	99.99 ± 0.50 mg/L	Ni	100.0 ± 0.5 mg/L	Zn	99.98 ± 0.50 mg/L
Co	100.0 ± 0.5 mg/L	P	1000 ± 5 mg/L		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Ag	1198373	Cr	1242583	Pb	992969
As	AN18-150ASX	Cu	1207839	Se	1285040
B	1237794	K	1287603	Sr	1244946
Ba	1216157	Mn	1136846	Tl	1059794
Be	1270256	Na	1245609	V	1139942
Cd	1240656	Ni	1084161	Zn	1149838
Co	1237802	P	1035677		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2

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7791231
ID: MEI_ABpt2_STK_00005
Exp: 10/21/25 Prpd: NZG
CPI ICP ICSAB MIX sol 2 S

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-ICP-ICSAB-2

ICP ICSAB Mix Solution 2

Lot #: 1333445-1

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	100.0 ± 0.5 mg/L	Cr	100.0 ± 0.5 mg/L	Pb	100.0 ± 0.5 mg/L
As	99.94 ± 0.50 mg/L	Cu	100.0 ± 0.5 mg/L	Se	100.0 ± 0.5 mg/L
B	1000 ± 5 mg/L	K	1000 ± 5 mg/L	Sr	100.0 ± 0.5 mg/L
Ba	99.99 ± 0.50 mg/L	Mn	100.0 ± 0.5 mg/L	Tl	100.0 ± 0.5 mg/L
Be	50.02 ± 0.25 mg/L	Na	1000 ± 5 mg/L	V	100.1 ± 0.5 mg/L
Cd	99.99 ± 0.50 mg/L	Ni	100.0 ± 0.5 mg/L	Zn	99.98 ± 0.50 mg/L
Co	100.0 ± 0.5 mg/L	P	1000 ± 5 mg/L		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Ag	1198373	Cr	1242583	Pb	992969
As	AN18-150ASX	Cu	1207839	Se	1285040
B	1237794	K	1287603	Sr	1244946
Ba	1216157	Mn	1136846	Tl	1059794
Be	1270256	Na	1245609	V	1139942
Cd	1240656	Ni	1084161	Zn	1149838
Co	1237802	P	1035677		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2

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Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM
Ag	3151	-
Al	3101a	-
As	3103a	3103a
Au	3121	-
B	3107	3107
Ba	3104a	-
Be	3105a	3105a
Bi	3106	3106
Br	3184	-
Ca	3109a	3109a
Cd	3108	-
Ce	3110	3110
Cl	3182	1818a
Co	3113	3113
Cr	3112a	-
Cs	3111a	-
Cu	3114	-
Dy	3115a	-
Er	3116a	-
Eu	3117a	-
F-	3183	-
Fe	3126a	-
Ga	3119a	-
Gd	3118a	-
Ge	3120a	-

Analyte	Aq. SRM	MO SRM
Hf	3122	-
Hg	3133	3133
Ho	3123a	-
In	3124a	3124a
K	3141a	3141a
La	3127a	3127a
Li	3129a	3129a
Lu	3130a	-
Mg	3131a	3131a
Mn	3132	3132
Mo	3134	3134
Na	3152a	-
Nb	3137	-
Nd	3135a	-
Ni	3136	-
NO_3^-	3185	-
P	3139a	3139a
Pb	3128	-
Pd	3138	-
PO_4^{-3}	3186	-
Pr	3142a	-
Pt	3140	3140
Rb	3145a	-
Re	3143	-
Rh	3144	3144

Analyte	Aq. SRM	MO SRM
S	3154	2770
Sb	3102a	3102a
Sc	3148a	3148a
Se	3149	3149
Si	3150	-
Sm	3147a	-
Sn	3161a	-
SO_4^{-2}	3181	-
Sr	3153a	3153a
Ta	3155	-
Tb	3157a	-
Te	3156	-
Th	-	-
Ti	3162a	3162a
Tl	3158	3158
Tm	3160a	-
U	3164	-
V	3165	-
W	3163	3163
Y	3167a	3167a
Yb	3166a	-
Zn	3168a	3168a
Zr	3169	3169

Reagent

MEI_Adj_A_STK_00012

CPI INTERNATIONAL

7534547
ID: MEI_Adj_A_STK_00012
Exp: 11/01/24 Prpd:
CPI ICP ICSA MIX _

7534546
ID: MEI_Adj_A_STK_00012
Exp: 11/01/24 Prpd:
CPI ICP ICSA MIX _

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-ICP-ICSA

ICP ICSA Mix

Lot #: 1336399-1

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Al	5000 ± 25 mg/L	Fe	2000 ± 10 mg/L
Ca	5000 ± 25 mg/L	Mg	5000 ± 25 mg/L

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #
Al	1249289	Fe	1249266
Ca	1232112	Mg	1222806

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to, **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	1	Fe	MAJOR	Sb	10
Al	MAJOR	Hg	<0.5	Se	<2
As	<0.5	K	56	Sn	2
Ba	14	Li	<2	Sr	22
Be	<0.5	Mg	MAJOR	Th	<0.5
Ca	MAJOR	Mn	13	Ti	7
Cd	<0.5	Mo	2	Tl	<0.5
Co	7	Na	786	U	0.8
Cr	21	Ni	4	V	<2
Cu	4	Pb	3	Zn	20

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Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

7534547
ID: MEI_Adj_A_STK_00012
Exp: 11/01/24 Prod: vAK
CPI ICP ICSA MIX

TA-ICP-ICSA

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-ICP-ICSA

ICP ICSA Mix

Lot #: 1437074

Matrix: 5% HNO_3

*Expiration Date: 12 January 2026

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Al	5000 ± 25 mg/L	Fe	2000 ± 10 mg/L
Ca	5000 ± 25 mg/L	Mg	5000 ± 25 mg/L

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #
Al	1369281	Fe	1249266
Ca	1344004	Mg	1222806

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to, **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side).** The solution was stabilized using high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side).** The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Fe	MAJOR	Sb	<0.5
Al	MAJOR	Hg	<0.5	Se	<2
As	<0.5	K	<50	Sn	<0.5
Ba	23	Li	<2	Sr	34
Be	<0.5	Mg	MAJOR	Th	<0.5
Ca	MAJOR	Mn	11	Ti	<2
Cd	<0.5	Mo	<0.5	Tl	<0.5
Co	<0.5	Na	<50	U	<0.5
Cr	<1	Ni	<1	V	<2
Cu	<1	Pb	<0.5	Zn	<2

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The Netherlands

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM
Ag	3151	-
Al	3101a	-
As	3103a	3103a
Au	3121	-
B	3107	3107
Ba	3104a	-
Be	3105a	3105a
Bi	3106	3106
Br^-	3184	-
Ca	3109a	3109a
Cd	3108	-
Ce	3110	3110
Cl^-	3182	1818a
Co	3113	3113
Cr	3112a	-
Cs	3111a	-
Cu	3114	-
Dy	3115a	-
Er	3116a	-
Eu	3117a	-
F^-	3183	-
Fe	3126a	-
Ga	3119a	-
Gd	3118a	-
Ge	3120a	-

Analyte	Aq. SRM	MO SRM
Hf	3122	-
Hg	3133	3133
Ho	3123a	-
In	3124a	3124a
K	3141a	3141a
La	3127a	3127a
Li	3129a	3129a
Lu	3130a	-
Mg	3131a	3131a
Mn	3132	3132
Mo	3134	3134
Na	3152a	-
Nb	3137	-
Nd	3135a	-
Ni	3136	-
NO_3^-	3185	-
P	3139a	3139a
Pb	3128	-
Pd	3138	-
PO_4^{-3}	3186	-
Pr	3142a	-
Pt	3140	3140
Rb	3145a	-
Re	3143	-
Rh	3144	3144

Analyte	Aq. SRM	MO SRM
S	3154	2770
Sb	3102a	3102a
Sc	3148a	3148a
Se	3149	3149
Si	3150	-
Sm	3147a	-
Sn	3161a	-
SO_4^{-2}	3181	-
Sr	3153a	3153a
Ta	3155	-
Tb	3157a	-
Te	3156	-
Th	-	-
Ti	3162a	3162a
Tl	3158	3158
Tm	3160a	-
U	3164	-
V	3165	-
W	3163	3163
Y	3167a	3167a
Yb	3166a	-
Zn	3168a	3168a
Zr	3169	3169

Reagent

MEI_Ag_1,000_00015

Agilent

7918069
ID: MEI_Ag_1,000_00015
Exp: 03/08/2[illegible] Prpd:
CPI Ag 1,000 Std

CERTIFICATE OF ANALYSIS

Agilent Product Name: Silver AA Standard: 1000 µg/mL Ag in 5% HNO_3
Agilent Part No: 5190-8309
Lot No: 1436096

Product Specifications

Analyte	Matrix	Certified Concentration
Ag	5% HNO_3	994.0 ± 3.0 µg/mL (w/v)
		988.0 ± 3.0 µg/g (w/w)

Storage Conditions: Store at Room Temperature (15°C to 30°C)

Intended Use: This solution is intended for use as a certified reference material or calibration standard for atomic absorption spectroscopy (flame AAS or graphite furnace AAS), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured under a quality management system that is accredited to **ISO 17034**, **ISO/IEC 17025**, and registered to **ISO 9001**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using an appropriate concentrate dissolved in high purity nitric acid (HNO_3) and diluted with ASTM Type I Water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST and both the certified concentration and uncertainty values are traceable to NIST SRM 3151, lot #160729. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: Agilent recommends that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy the analyst should: (1) use only pre-cleaned containers and transferware, (2) avoid pipetting directly from the CRM's original container, (3) use a minimum sub-sample size of 500 µL, (4) make dilutions using calibrated balances or certified volumetric class A flasks and pipettes, (5) dilute to volume using the same matrix as the original CRM, and (6) never pour used product back into the original container. The solution should be kept tightly capped. Store at controlled room temperature per USP 35 (10.30.60). Do not freeze, heat, or expose to direct sunlight. Minimize exposure to moisture or high humidity.

Period of Validity: Agilent ensures the accuracy of this solution until the expiration date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Date of Release:
24 March 2023

Date of Expiration:
Earlier of 8 March 2026 or 12 Months from Date opened.

Date Opened: _____

Sample lot approver:
Chuck Goudreau

Chuck Goudreau, Certifying Officer

Hazard Information: Refer to the Safety Data Sheet (SDS), which can be obtained at www.agilent.com/chem/sds.

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 Assessment of Homogeneity and Stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact Agilent for further information about this CRM.

Quality Certifications: This CRM was prepared under a quality management system that is:

- Registered to ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. Reg. No. 44 100 16560231)
- Accredited to ISO 17034– General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35.
- Accredited to ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- LGC Standards, 276 Abby Road, Manchester, NH 03103

Reagent

MEI_B_1,000_00015

8039838
ID: MEI_B_1,000_00015
Exp: 01/31/27 Prpd:
CPI B 1,000 Std

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Boron (B) – 1000 µg/mL

Matrix: H_2O

Product #: TA-100074

Product Lot #: 1450184

Source Material Lot #: R20F050/X19H024

*Expiration Date: 31 January 2027

Element	Certified Concentration & Uncertainty
B	1004 ± 3 µg/mL (w/v)
	1006 ± 3 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9995% pure boric acid (H_3BO_3) dissolved and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3107, lot #190605**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	35	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	MAJOR	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	2	Tb	<0.5	Zn	<2
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

16 February 2024
Certification Date

Date Opened

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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Reagent

MEI_Zn_1,000_00012

1/3/24

7758420

ID: MEI_Zn_1,000_00012

Exp: 01/01/25 Prpd:

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Zinc (Zn) – 1000 µg/mL

Matrix: 2% HNO_3

Product #: TA-1000681-SS

Product Lot #: 711727255-1

Source Material Lot #: 2136117-500

Element	Certified Concentration & Uncertainty
Zn	1000 ± 3 µg/mL (w/v)
	988.1 ± 3.0 µg/g (w/w)

Intended Use: This solution is intended for use as a second source certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using pure zinc (Zn) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3168a**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.02	Co	<0.05	Ge	<0.02	Mg	<0.1	Pd	<0.02	Si	<5	V	<0.05
Al	<0.05	Cr	<0.05	Hf	<0.02	Mn	<0.05	Pr	<0.02	Sm	<0.02	W	<0.02
As	<0.05	Cs	<0.02	Hg	Nd	Mo	<0.02	Pt	<0.02	Sn	<0.5	Y	<0.02
Au	<0.02	Cu	<0.02	Ho	<0.02	Na	<3	Rb	<0.02	Sr	<0.02	Yb	<0.02
B	<1	Dy	<0.02	In	<0.02	Nb	<0.02	Re	<0.02	Ta	<0.02	Zn	Major
Ba	<0.02	Er	<0.02	Ir	<0.02	Nd	<0.02	Rh	<0.02	Tb	<0.02		
Bi	<0.02	Eu	<0.02	K	<1	Ni	<0.2	Ru	<0.3	Te	<0.4		
Ca	<1	Fe	<1	La	<0.02	Os	<0.02	Sb	<0.02	Ti	<0.02		
Cd	<0.4	Ga	<0.02	Li	<0.02	P	Nd	Sc	<0.02	Tl	<0.02		
Ce	<0.02	Gd	<0.02	Lu	<0.02	Pb	3	Se	<0.1	Tm	<0.02		

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

July 20, 2023

Certification Date

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9/13/24

7758420

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Zinc (Zn) – 1000 µg/mL

Matrix: 5% HNO_3

Product #: TA-1000681

Lot #: 1390097

Source Material Lot #: Y28D045

*Expiration Date: 5 March 2026

Element	Certified Concentration & Uncertainty
Zn	998.0 ± 5.0 µg/mL (w/v)
	986.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9999% pure zinc (Zn) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3168a, lot #120629**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	MAJOR
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI international ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

21 March 2023
Certification Date

Date Opened

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CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Zinc (Zn) – 1000 µg/mL

Matrix: 5% HNO_3

Product #: TA-1000681

Lot #: 1216101-73

Source Material Lot #: X17E073/M15F020/Y28D045

Element	Certified Concentration & Uncertainty
Zn	1010 ± 6 µg/mL (w/v)
	1002 ± 6 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9999% pure zinc (Zn) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3168a, lot #120629**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1		
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2		
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5		
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2		
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1		
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5		
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5		
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2		
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	MAJOR		
Ce	<0.2	Gd	<0.2												

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau, Certifying Officer

June 26, 2023
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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The Netherlands

www.cpiinternational.com

Reagent

MEI_Zn_1,000_00013

2/7/24

7802884
ID: MEI_Zn_1,000_00013
Exp: 03/05/26 Prpd:
CPI Zn 1,000 Std

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Zinc (Zn) – 1000 µg/mL

Matrix: 5% HNO_3

Product #: TA-1000681

Lot #: 1398666

Source Material Lot #: Y28D045

*Expiration Date: 5 March 2026

Element	Certified Concentration & Uncertainty
Zn	998.0 ± 5.0 µg/mL (w/v)
	986.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9999% pure zinc (Zn) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3168a, lot #120629.** The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	MAJOR
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

21 March 2023
Certification Date

Date Opened

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The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

MEI_Zn_1,000_00014

Rec 6/18/24

7970935

ID: MEI_Zn_1,000_00014
Exp: 03/05/26 Prpd:
CPI Zn 1,000 Std

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Zinc (Zn) – 1000 µg/mL

Matrix: 5% HNO_3

Product #: TA-1000681

Lot #: 1398666

Source Material Lot #: Y28D045

*Expiration Date: 5 March 2026

Element	Certified Concentration & Uncertainty
Zn	998.0 ± 5.0 µg/mL (w/v)
	986.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9999% pure zinc (Zn) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3168a, lot #120629**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	MAJOR
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

21 March 2023
Certification Date

Date Opened

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Rec 11/8/24

7970936
ID: MEI_Zn_1,000_00014
Exp: 03/05/26 Prpd:
CPI Zn 1,000 Std

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Zinc (Zn) – 1000 µg/mL

Matrix: 5% HNO_3

Product #: TA-1000681

Lot #: 1398666

Source Material Lot #: Y28D045

*Expiration Date: 5 March 2026

Element	Certified Concentration & Uncertainty
Zn	998.0 ± 5.0 µg/mL (w/v)
	986.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9999% pure zinc (Zn) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3168a, lot #120629**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	MAJOR
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

21 March 2023
Certification Date

Date Opened

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The Netherlands

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Rec 6/18/24

7970937
ID: MEI_Zn_1,000_00014
Exp: 03/05/26 Prpd:
CPI Zn 1,000 Std

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Zinc (Zn) – 1000 µg/mL

Matrix: 5% HNO_3

Product #: TA-1000681

Lot #: 1390097

Source Material Lot #: Y28D045

*Expiration Date: 5 March 2026

Element	Certified Concentration & Uncertainty
Zn	998.0 ± 5.0 µg/mL (w/v)
	986.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9999% pure zinc (Zn) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3168a, lot #120629.** The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	MAJOR
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

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Chuck Goudreau

Chuck Goudreau, Certifying Officer

21 March 2023
Certification Date

Date Opened

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The Netherlands

Reagent

MEI_Zn_1,000S_00003

7918252

ID: MEI_Zn_1,000S_00003
Exp: 03/05/26 Prpd:
CPI Zn 1,000 Std SS

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Zinc (Zn) – 1000 µg/mL

Matrix: 5% HNO_3

Product #: TA-1000681

Lot #: 1459124

Source Material Lot #: Y28D045

*Expiration Date: 5 March 2026

Element	Certified Concentration & Uncertainty
Zn	998.0 ± 5.0 µg/mL (w/v)
	986.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9999% pure zinc (Zn) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3168a, lot #120629**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	MAJOR
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

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Chuck Goudreau

Chuck Goudreau, Certifying Officer

21 March 2023
Certification Date

Date Opened

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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F: 707.545.7901

Europe
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1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

MV_BFB_STK_00095

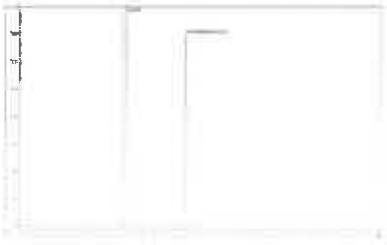
BFB 095-099

Supelco

www.sigmaaldrich.com
Document 20550009 Version 2.0

Certificate of Analysis - Certified Reference Material

4-Bromofluorobenzene solution



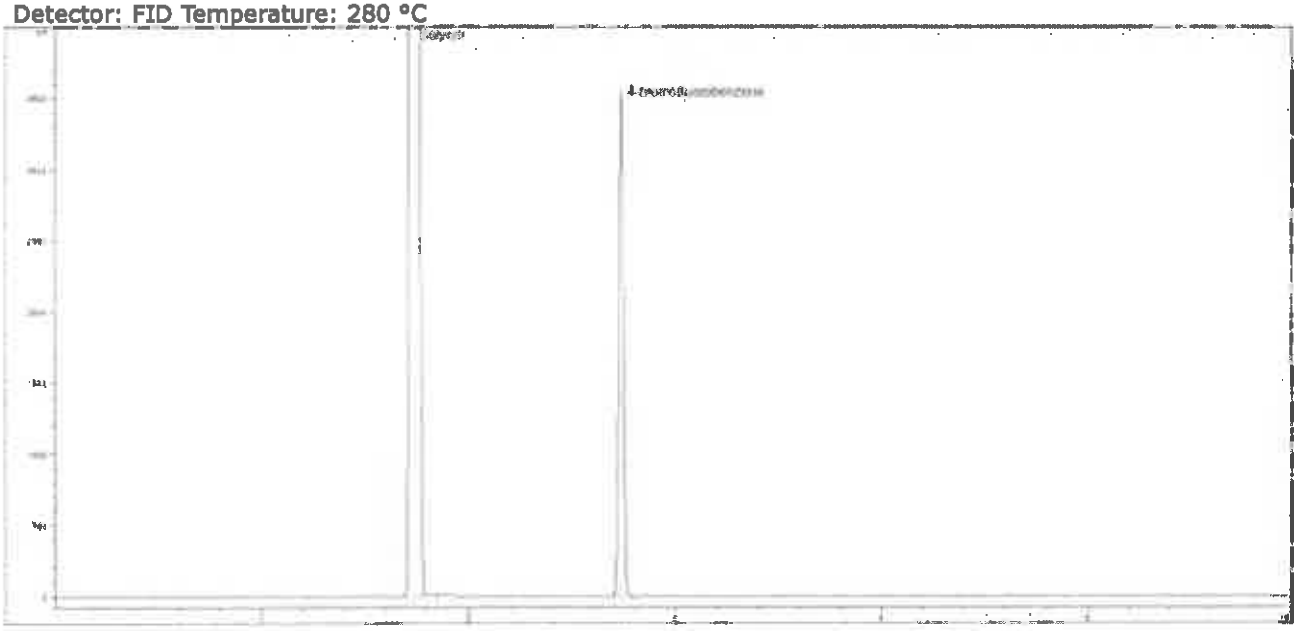
Product no.: 48800
Lot no.: LRAD6467
Expiry Date: November 2026
Manufacturing Date: November 2023
Storage: ROOM TEMPERATURE (2 °C to 30 °C)
Solvent/Matrix: METHANOL
Certificate version: LRAD6467.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
4-BROMOFLUOROBENZENE CAS# 460-00-4	25000 ± 786	µg/mL	99.9	LB48377

ASSAY Method

METHOD: GC (IN-HOUSE)
Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H2 Flow Rate: 4.0 mL/min
Inlet Temperature: 160 °C Injection Volume: 1 µL
Injection Mode: Split Ratio: 35:1
Temperature Program: 120 °C (Hold 0 min) @ 20 °C/min to 180 °C (Hold 3 min)
Detector: FID Temperature: 280 °C



Elution details:

EO	TIME	ANALYTE
1	2.74	4-bromofluorobenzene

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Metrological traceability:	Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
Measurement method:	Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.
Intended use:	Intended for R&D and Analytical Use only. Not for drug, household or other uses.
Minimum sample size:	1 µL
Packaging:	1 mL in amber ampule
Instructions for handling and correct use:	Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.
Health and safety information:	All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.
Accreditation:	Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.
Certificate issue date:	10 NOV 2023

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Details on metrological traceability:	This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.
Associated uncertainty:	Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. If k is not provided, assume a value of 2.0. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows: $U_{crm} = \left(\sqrt{u^2_{characterisation} + u^2_{homogeneity} + u^2_{stability}}\right) \times k$
Homogeneity assessment:	Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial evaluation.

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD6467.01	10 NOV 2023	Original release date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

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The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

Reagent

OG Std EnvExp_00028

Environmental Express

2345A Charleston Regional Pkwy Charleston, SC 29492
(800) 343-5319 www.envexp.com

Certificate of Analysis -Oil and Grease (HEM)

Rev 0

Catalog No: G2018
Lot No: 516866
Expiration Date: 2/26/2027
Storage: Ambient
Solvent: Acetone
Description: 5 mls EPA Method 1664 LCS Sol. in Acetone, 40 mg Total of Stearic Acid and Hexadecane

Compound	CAS No	Purity %	Individual Compound Lot No	Gravimetric Concentration mg/L
stearic acid	57-11-4	100	12555.7.5P	4,000
n-hexadecane (C16)	544-76-3	100	12556.271.2	4,000

This spiking solution (5 mls acetone with 0.4% hexadecane and 0.4% stearic acid) is packaged in a PFA tube. If refrigerated, allow to come to room temperature. Any precipitation will re-dissolve. Simply cut off one end and pour the solution into the acidified sample or blank. It is not necessary to rinse the tube. One hundred percent recovery of each tube is 40 mg. The acceptable range for both the PAR sample and Matrix Spike is 78-114% or 31.2-45.6 mg as stated in the approved EPA Method 1664. **10 mls of this solution is used for QC**.

The standard was prepared using Class A volumetric glassware, analytical balance (0.0001mg) verified against NIST traceable weights prior to use, and high purity Acetone (<1 mg/L residue). Stearic acid and hexadecane purities are stated on the certificate. Each lot of standard is analyzed according to EPA Method 1664 and the results provided above.

EPA Method 1664A: Section 7.10.3 Lot QC Check	Wt./g
Total	1.3679
Tare	1.2866
Difference	0.0813
EPA Acceptance Limit 0.040 ± 0.001 Gravimetric check based on 10 mL of solution	Pass

Certified By: parker fletcher

All weights are traceable to NIST certified weights. Made in USA

Manufacturer is ISO/IEC 17025:2017 Accredited by A2LA - Certificate Number 3031.01 for Chemical Testing

Manufacturer is ISO/IEC 17034:2016 Accredited by A2LA - Certificate Number 3031.02 for Reference Material Manufacturer

Manufacturer's Quality System Audited & Registered by TUV USA to ISO 9001:2015

Reagent

Spike Mx 1_00006

8058436
ID: Spike Mx 1_00006
Exp: 12/10/25 Prod:
Metals spike mix #1

rec 09/03/24

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-SPIKE1+

Spike Mix # 1

Lot #: 1421974

Matrix: 5% HNO_3/tr. HF

*Expiration Date: 10 December 2025

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
As	200.0 ± 1.0 mg/L	Li	100.0 ± 0.5 mg/L	Sn	200.0 ± 1.0 mg/L
Ba	200.0 ± 1.0 mg/L	Mn	100.0 ± 0.5 mg/L	Sr	100.0 ± 0.5 mg/L
Be	100.0 ± 0.5 mg/L	Mo	100.0 ± 0.5 mg/L	Ti	100.0 ± 0.5 mg/L
Cd	100.0 ± 0.5 mg/L	Ni	100.0 ± 0.5 mg/L	Tl	200.0 ± 1.0 mg/L
Co	100.0 ± 0.5 mg/L	Pb	100.0 ± 0.5 mg/L	V	100.0 ± 0.5 mg/L
Cr	100.0 ± 0.5 mg/L	Se	200.0 ± 1.0 mg/L		
Cu	100.0 ± 0.5 mg/L	Si	200.0 ± 1.0 mg/L		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
As	1338706	Li	1316990	Sn	1116280
Ba	1353868	Mn	1294994	Sr	1244946
Be	1165784	Mo	1120495	Ti	1279907
Cd	1378234	Ni	1084161	Tl	1222802
Co	1375613	Pb	1382458	V	1294996
Cr	1361547	Se	1396823		
Cu	1353861	Si	1386111		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to, **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see last page)**. The solution was stabilized using high purity nitric acid (HNO_3), trace hydrofluoric acid (HF) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

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The Netherlands

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Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM
Ag	3151	-
Al	3101a	-
As	3103a	3103a
Au	3121	-
B	3107	3107
Ba	3104a	-
Be	3105a	3105a
Bi	3106	3106
Br^-	3184	-
Ca	3109a	3109a
Cd	3108	-
Ce	3110	3110
Cl^-	3182	1818a
Co	3113	3113
Cr	3112a	-
Cs	3111a	-
Cu	3114	-
Dy	3115a	-
Er	3116a	-
Eu	3117a	-
F^-	3183	-
Fe	3126a	-
Ga	3119a	-
Gd	3118a	-
Ge	3120a	-

Analyte	Aq. SRM	MO SRM
Hf	3122	-
Hg	3133	3133
Ho	3123a	-
In	3124a	3124a
K	3141a	3141a
La	3127a	3127a
Li	3129a	3129a
Lu	3130a	-
Mg	3131a	3131a
Mn	3132	3132
Mo	3134	3134
Na	3152a	-
Nb	3137	-
Nd	3135a	-
Ni	3136	-
NO_3^-	3185	-
P	3139a	3139a
Pb	3128	-
Pd	3138	-
PO_4^{-3}	3186	-
Pr	3142a	-
Pt	3140	3140
Rb	3145a	-
Re	3143	-
Rh	3144	3144

Analyte	Aq. SRM	MO SRM
S	3154	2770
Sb	3102a	3102a
Sc	3148a	3148a
Se	3149	3149
Si	3150	-
Sm	3147a	-
Sn	3161a	-
SO_4^{-2}	3181	-
Sr	3153a	3153a
Ta	3155	-
Tb	3157a	-
Te	3156	-
Th	-	-
Ti	3162a	3162a
Tl	3158	3158
Tm	3160a	-
U	3164	-
V	3165	-
W	3163	3163
Y	3167a	3167a
Yb	3166a	-
Zn	3168a	3168a
Zr	3169	3169

Reagent

Spike Mx 2_00005

8080240
ID: Spike Mx 2_00005
Exp: 11/13/25 Prpd:
Metals spike mix #2

rec 9/23/24

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-SPIKE2

Spike Mix # 2

Lot #: 1466116

Matrix: 5% HNO_3

*Expiration Date: 13 November 2025

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Al	1000 ± 5 mg/L	Fe	1000 ± 5 mg/L	Mg	5000 ± 25 mg/L
Ca	5000 ± 25 mg/L	K	5000 ± 25 mg/L	Na	5000 ± 25 mg/L

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Al	1369281	Fe	1249266	Mg	1222806
Ca	1344004	K	1367374	Na	1344394

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to, **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**.This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

17 May 2024
Certification Date

Date Opened

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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The Netherlands

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Reagent

Spike Mx 3_00005

8080241
ID: Spike Mx 3_00005
Exp: 02/28/26 Prpd:
Metals spike mix #3

CPI INTERNATIONAL

rec 9123124

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-SPIKE3

Spike Mix # 3

Lot #: 1489780

Matrix: 5% HNO_3/tr. HF

*Expiration Date: 28 February 2026

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
P	2001 ± 10 mg/L	U	200.1 ± 1.0 mg/L
S	999.9 ± 5.0 mg/L	W	99.99 ± 0.50 mg/L

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #
P	1385912	U	1218502
S	1385910	W	1371115

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid (HNO_3), trace hydrofluoric acid (HF) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution until the date shown above or ***12 Months** from the date opened, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

8 August 2024
Certification Date

Date Opened

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The Netherlands

Reagent

SS_Ketones_00100

SS.
Ketones 091-100

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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. : 569721.SEC **Lot No.:** A0184721

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 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	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1.SEC (Lot T20G008) **Purity** 99%	12,520.4 µg/mL	+/- 73.3097 µg/mL +/- 755.4610 µg/mL +/- 757.2544 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot HDLUO) **Purity** 99%	12,520.8 µg/mL	+/- 73.3120 µg/mL +/- 755.4852 µg/mL +/- 757.2786 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,514.8 µg/mL	+/- 73.2769 µg/mL +/- 755.1231 µg/mL +/- 756.9157 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot Y3TUO) **Purity** 99%	12,514.0 µg/mL	+/- 73.2722 µg/mL +/- 755.0749 µg/mL +/- 756.8673 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

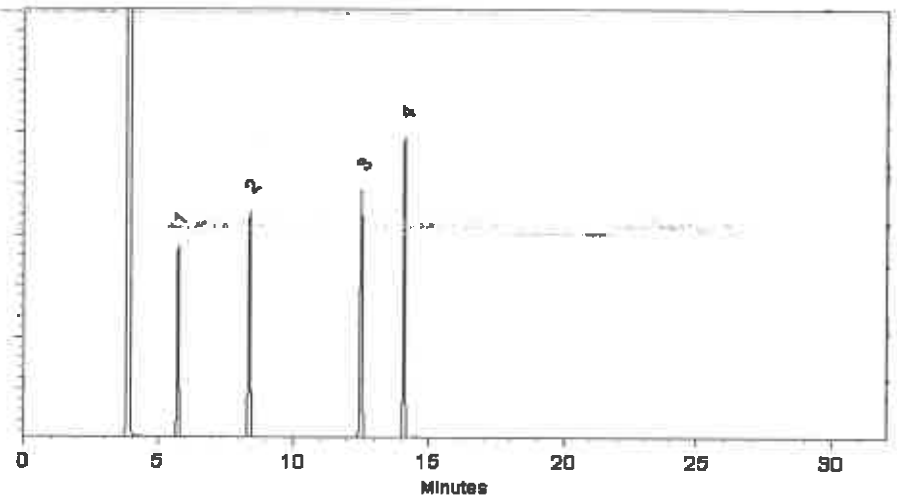
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jess Hoy - Operations Tech I

Date Mixed: 29-Apr-2022 Balance: B345965662

Christie Mills - Operations Technician II

Date Passed: 03-May-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80387

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.

Reagent

SS_MegaMix_00133

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

124 – 133

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. : 571992.SEC **Lot No.:** A0195252

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 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	Diethyl ether (ethyl ether)	60-29-7.SEC	F23X068	99%	2,516.7 µg/mL	+/- 86.9644
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	76-13-1.SEC	18342	99%	2,520.0 µg/mL	+/- 87.0795
3	1,1-Dichloroethene	75-35-4.SEC	13896500	99%	2,525.0 µg/mL	+/- 87.2523
4	tert-Butanol (TBA)	75-65-0.SEC	DI34O	99%	25,129.5 µg/mL	+/- 868.3580
5	Methyl acetate	79-20-9.SEC	UCNEL	99%	5,029.0 µg/mL	+/- 173.7790
6	Iodomethane (methyl iodide)	74-88-4.SEC	Y25A027	99%	2,521.7 µg/mL	+/- 87.1371
7	Allyl chloride (3-chloropropene)	107-05-1.SEC	RD210329	99%	2,518.2 µg/mL	+/- 87.0162
8	Methylene chloride (dichloromethane)	75-09-2.SEC	FGM02	99%	2,516.7 µg/mL	+/- 86.9644
9	Carbon disulfide	75-15-0.SEC	MKBL1376V	99%	2,511.7 µg/mL	+/- 86.7916
10	Acrylonitrile	107-13-1.SEC	V54AD	99%	25,200.3 µg/mL	+/- 870.8057
11	Methyl-tert-butyl ether (MTBE)	1634-04-4.SEC	CDCQG	99%	2,517.3 µg/mL	+/- 86.9874
12	cis-1,2-Dichloroethene	156-59-2.SEC	YZO5O	99%	2,515.3 µg/mL	+/- 86.9183
13	n-Hexane (C6)	110-54-3.SEC	10188491	99%	2,514.7 µg/mL	+/- 86.8953
14	1,1-Dichloroethane	75-34-3.SEC	1026.30-3	98%	2,512.6 µg/mL	+/- 86.8223
15	2,2-Dichloropropane	594-20-7.SEC	GI01	99%	2,521.5 µg/mL	+/- 87.1314
16	trans-1,2-Dichloroethene	156-60-5.SEC	L5QOH	99%	2,525.0 µg/mL	+/- 87.2523

17	Isobutanol (2-Methyl-1-propanol)	78-83-1.SEC PH2XK	99%	62,830.8 µg/mL	+/- 2,171.1398
18	Chloroform	67-66-3.SEC 1297547	99%	2,511.7 µg/mL	+/- 86.7916
19	Bromochloromethane	74-97-5 * 230206JLM	99%	2,515.7 µg/mL	+/- 86.9298
20	Tetrahydrofuran	109-99-9.SEC 3NYHE	99%	5,018.5 µg/mL	+/- 173.4162
21	1,1,1-Trichloroethane	71-55-6.SEC 13891800	99%	2,506.5 µg/mL	+/- 86.6130
22	Cyclohexane	110-82-7.SEC YADRA	99%	2,523.3 µg/mL	+/- 87.1947
23	1,1-Dichloropropene	563-58-6.SEC 556500	99%	2,520.5 µg/mL	+/- 87.0968
24	Carbon tetrachloride	56-23-5.SEC 11466	99%	2,520.5 µg/mL	+/- 87.0968
25	n-Heptane (C7)	142-82-5.SEC TFHUC	99%	2,516.5 µg/mL	+/- 86.9586
26	1,2-Dichloroethane	107-06-2.SEC 00016165	99%	2,519.8 µg/mL	+/- 87.0738
27	Benzene	71-43-2.SEC 101960P29K	99%	2,518.8 µg/mL	+/- 87.0392
28	Trichloroethene	79-01-6.SEC H04X050	99%	2,524.3 µg/mL	+/- 87.2293
29	Methylcyclohexane	108-87-2.SEC Q02QG	99%	2,515.8 µg/mL	+/- 86.9356
30	1,2-Dichloropropane	78-87-5.SEC ERRBI-RH	99%	2,516.8 µg/mL	+/- 86.9701
31	1,4-Dioxane	123-91-1.SEC QHRWO	99%	50,137.2 µg/mL	+/- 1,732.5061
32	Dibromomethane	74-95-3.SEC MOKKJ	99%	2,516.3 µg/mL	+/- 86.9528
33	cis-1,3-Dichloropropene	10061-01-5.SEC ZLXJ-TJ	99%	2,502.8 µg/mL	+/- 86.4863
34	Toluene	108-88-3.SEC YND2B-BD	99%	2,522.2 µg/mL	+/- 87.1544
35	Ethyl methacrylate	97-63-2.SEC AQSPO	99%	2,510.8 µg/mL	+/- 86.7628
36	trans-1,3-Dichloropropene	10061-02-6.SEC DMSL	98%	2,517.1 µg/mL	+/- 86.9804
37	1,1,2-Trichloroethane	79-00-5.SEC 9245400	99%	2,512.2 µg/mL	+/- 86.8089
38	1,3-Dichloropropane	142-28-9.SEC IQCON	99%	2,519.3 µg/mL	+/- 87.0565
39	Tetrachloroethene	127-18-4.SEC F09W014	99%	2,521.3 µg/mL	+/- 87.1256
40	Dibromochloromethane	124-48-1.SEC 10234064	99%	2,517.5 µg/mL	+/- 86.9932
41	1,2-Dibromoethane (EDB)	106-93-4.SEC 050675P15E	99%	2,518.3 µg/mL	+/- 87.0220
42	Chlorobenzene	108-90-7.SEC 1161936	99%	2,515.8 µg/mL	+/- 86.9356
43	m-Xylene	108-38-3.SEC 7ZV6F	99%	1,255.3 µg/mL	+/- 43.3814
44	p-Xylene	106-42-3.SEC D6UOA	99%	1,260.3 µg/mL	+/- 43.5541
45	Ethylbenzene	100-41-4.SEC PI4SE	99%	2,517.7 µg/mL	+/- 86.9989
46	1,1,1,2-Tetrachloroethane	630-20-6.SEC 13789800	99%	2,517.5 µg/mL	+/- 86.9932
47	o-Xylene	95-47-6.SEC UJ6RI	99%	2,515.8 µg/mL	+/- 86.9356
48	Styrene	100-42-5.SEC QGQ7F	99%	2,521.3 µg/mL	+/- 87.1256
49	Isopropylbenzene (cumene)	98-82-8.SEC 7P24L	99%	2,515.0 µg/mL	+/- 86.9068
50	Bromoform	75-25-2.SEC 13723500	99%	2,522.5 µg/mL	+/- 87.1659
51	Bromodichloromethane	75-27-4.SEC 28128	99%	2,524.2 µg/mL	+/- 87.2235
52	1,1,2,2-Tetrachloroethane	79-34-5.SEC BCCD5088	99%	2,523.7 µg/mL	+/- 87.2063

53	1,2,3-Trichloropropane	96-18-4.SEC 6V2ED	99%	2,522.2	µg/mL	+/- 87.1544
54	trans-1,4-Dichloro-2-butene	110-57-6.SEC RD230316RSR	96%	2,517.0	µg/mL	+/- 86.9745
55	n-Propylbenzene	103-65-1.SEC XCGEC	99%	2,518.8	µg/mL	+/- 87.0392
56	Bromobenzene	108-86-1.SEC 2FUHG-EM	99%	2,518.3	µg/mL	+/- 87.0220
57	1,3,5-Trimethylbenzene	108-67-8.SEC GI2SM	99%	2,514.3	µg/mL	+/- 86.8837
58	2-Chlorotoluene	95-49-8.SEC BRHPM	99%	2,515.7	µg/mL	+/- 86.9298
59	4-Chlorotoluene	106-43-4.SEC S5SKD	99%	2,518.8	µg/mL	+/- 87.0392
60	tert-Butylbenzene	98-06-6.SEC D6OHC	99%	2,522.0	µg/mL	+/- 87.1487
61	1,2,4-Trimethylbenzene	95-63-6.SEC JHZDD	99%	2,517.3	µg/mL	+/- 86.9874
62	sec-Butylbenzene	135-98-8.SEC O4HRF	99%	2,522.0	µg/mL	+/- 87.1487
63	4-Isopropyltoluene (p-cymene)	99-87-6.SEC 13889300	98%	2,518.1	µg/mL	+/- 87.0142
64	1,3-Dichlorobenzene	541-73-1.SEC ZA2ZI	99%	2,515.0	µg/mL	+/- 86.9068
65	1,4-Dichlorobenzene	106-46-7.SEC J5GVD	99%	2,522.5	µg/mL	+/- 87.1659
66	n-Butylbenzene	104-51-8.SEC MMPGA	99%	2,523.7	µg/mL	+/- 87.2063
67	1,2-Dichlorobenzene	95-50-1.SEC R6QDM	99%	2,512.0	µg/mL	+/- 86.8031
68	1,2-Dibromo-3-chloropropane	96-12-8.SEC Q135-105	99%	2,517.7	µg/mL	+/- 86.9989
69	1,2,4-Trichlorobenzene	120-82-1.SEC IGLFA	99%	2,515.7	µg/mL	+/- 86.9298
70	Hexachlorobutadiene	87-68-3.SEC 13889400	97%	2,520.4	µg/mL	+/- 87.0928
71	Naphthalene	91-20-3.SEC AM5NG	99%	2,520.0	µg/mL	+/- 87.0795
72	1,2,3-Trichlorobenzene	87-61-6.SEC A0043055	99%	2,517.8	µg/mL	+/- 87.0047

* 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.)

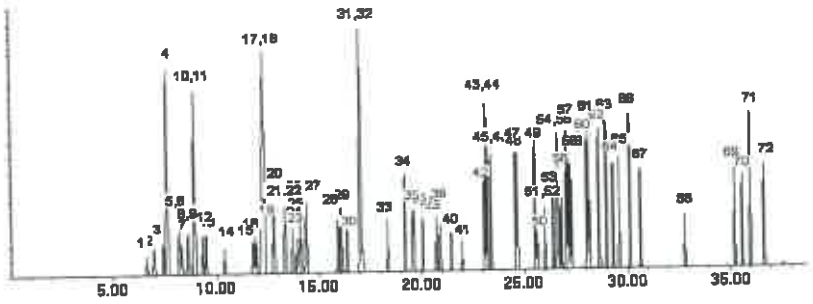
Inj. Temp:
200°C

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.

John Friedline - Operations Technician I

Date Mixed: 28-Feb-2023 Balance Serial # 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 22-Mar-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ZB-624 (20) ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TREATMENT EFFLUENT	480-224430-1	95	103	95	95
TREATMENT INFLUENT	480-224430-2	97	102	97	95
TRIP BLANK	480-224430-3	96	103	97	96
	MB 480-728892/8	105	103	99	92
	MB 480-728964/8	100	105	101	93
	LCS 480-728892/6	99	102	98	94
	LCS 480-728964/6	96	100	100	93
	LCSD 480-728964/46	97	103	96	92
TREATMENT INFLUENT MS	480-224430-2 MS	98	103	99	92
TREATMENT INFLUENT MSD	480-224430-2 MSD	100	104	100	94

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-123
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S3129.d

Lab ID: LCS 480-728892/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	27.2	109	73-126	
1,1,2,2-Tetrachloroethane	25.0	25.7	103	76-120	
1,1,2-Trichloroethane	25.0	24.2	97	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.7	115	61-148	
1,1-Dichloroethane	25.0	26.3	105	77-120	
1,1-Dichloroethene	25.0	27.7	111	66-127	
1,2,4-Trichlorobenzene	25.0	25.7	103	79-122	
1,2-Dibromo-3-Chloropropane	25.0	22.6	90	56-134	
1,2-Dichlorobenzene	25.0	25.5	102	80-124	
1,2-Dichloroethane	25.0	25.6	102	75-120	
1,2-Dichloropropane	25.0	25.2	101	76-120	
1,3-Dichlorobenzene	25.0	25.3	101	77-120	
1,4-Dichlorobenzene	25.0	25.0	100	80-120	
2-Butanone (MEK)	125	132	105	57-140	
2-Hexanone	125	145	116	65-127	
4-Methyl-2-pentanone (MIBK)	125	143	114	71-125	
Acetone	125	125	100	56-142	
Benzene	25.0	25.5	102	71-124	
Bromodichloromethane	25.0	25.3	101	80-122	
Bromoform	25.0	24.5	98	61-132	
Bromomethane	25.0	23.3	93	55-144	
Carbon disulfide	25.0	27.2	109	59-134	
Carbon tetrachloride	25.0	27.6	111	72-134	
Chlorobenzene	25.0	24.6	98	80-120	
Dibromochloromethane	25.0	26.6	107	75-125	
Chloroethane	25.0	26.0	104	69-136	
Chloroform	25.0	23.9	95	73-127	
Chloromethane	25.0	31.6	127	68-124	*+
cis-1,2-Dichloroethene	25.0	26.5	106	74-124	
cis-1,3-Dichloropropene	25.0	26.0	104	74-124	
Cyclohexane	25.0	28.6	115	59-135	
Dichlorodifluoromethane	25.0	30.6	123	59-135	
Ethylbenzene	25.0	25.5	102	77-123	
1,2-Dibromoethane	25.0	24.4	98	77-120	
Isopropylbenzene	25.0	26.8	107	77-122	
Methyl acetate	50.0	51.4	103	74-133	
Methyl tert-butyl ether	25.0	24.4	98	77-120	
Methylcyclohexane	25.0	27.0	108	68-134	
Methylene Chloride	25.0	24.5	98	75-124	
Styrene	25.0	24.1	96	80-120	
Tetrachloroethene	25.0	26.0	104	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S3129.d

Lab ID: LCS 480-728892/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	24.7	99	80-122	
trans-1,2-Dichloroethene	25.0	25.3	101	73-127	
trans-1,3-Dichloropropene	25.0	25.6	102	80-120	
Trichloroethene	25.0	25.3	101	74-123	
Trichlorofluoromethane	25.0	30.6	122	62-150	
Vinyl chloride	25.0	29.3	117	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S3163.d

Lab ID: LCS 480-728964/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	24.2	97	73-126	
1,1,2,2-Tetrachloroethane	25.0	24.1	96	76-120	
1,1,2-Trichloroethane	25.0	23.0	92	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.9	99	61-148	
1,1-Dichloroethane	25.0	24.4	97	77-120	
1,1-Dichloroethene	25.0	22.8	91	66-127	
1,2,4-Trichlorobenzene	25.0	23.7	95	79-122	
1,2-Dibromo-3-Chloropropane	25.0	20.9	84	56-134	
1,2-Dichlorobenzene	25.0	23.2	93	80-124	
1,2-Dichloroethane	25.0	23.7	95	75-120	
1,2-Dichloropropane	25.0	23.3	93	76-120	
1,3-Dichlorobenzene	25.0	23.1	92	77-120	
1,4-Dichlorobenzene	25.0	22.7	91	80-120	
2-Butanone (MEK)	125	122	98	57-140	
2-Hexanone	125	135	108	65-127	
4-Methyl-2-pentanone (MIBK)	125	136	109	71-125	
Acetone	125	119	95	56-142	
Benzene	25.0	22.9	92	71-124	
Bromodichloromethane	25.0	23.7	95	80-122	
Bromoform	25.0	22.5	90	61-132	
Bromomethane	25.0	22.3	89	55-144	
Carbon disulfide	25.0	24.5	98	59-134	
Carbon tetrachloride	25.0	24.7	99	72-134	
Chlorobenzene	25.0	23.3	93	80-120	
Dibromochloromethane	25.0	24.7	99	75-125	
Chloroethane	25.0	25.0	100	69-136	
Chloroform	25.0	22.1	88	73-127	
Chloromethane	25.0	29.8	119	68-124	
cis-1,2-Dichloroethene	25.0	23.9	95	74-124	
cis-1,3-Dichloropropene	25.0	23.4	93	74-124	
Cyclohexane	25.0	26.7	107	59-135	
Dichlorodifluoromethane	25.0	29.0	116	59-135	
Ethylbenzene	25.0	23.3	93	77-123	
1,2-Dibromoethane	25.0	22.8	91	77-120	
Isopropylbenzene	25.0	24.4	98	77-122	
Methyl acetate	50.0	48.8	98	74-133	
Methyl tert-butyl ether	25.0	23.1	92	77-120	
Methylcyclohexane	25.0	25.5	102	68-134	
Methylene Chloride	25.0	22.7	91	75-124	
Styrene	25.0	22.0	88	80-120	
Tetrachloroethene	25.0	23.6	94	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S3163.d

Lab ID: LCS 480-728964/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	22.7	91	80-122	
trans-1,2-Dichloroethene	25.0	22.9	92	73-127	
trans-1,3-Dichloropropene	25.0	23.9	96	80-120	
Trichloroethene	25.0	22.7	91	74-123	
Trichlorofluoromethane	25.0	28.4	114	62-150	
Vinyl chloride	25.0	26.6	106	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S3183.d

Lab ID: LCSD 480-728964/46 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	24.7	99	2	15	73-126	
1,1,2,2-Tetrachloroethane	25.0	24.0	96	0	15	76-120	
1,1,2-Trichloroethane	25.0	22.8	91	1	15	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.7	107	7	20	61-148	
1,1-Dichloroethane	25.0	24.8	99	2	20	77-120	
1,1-Dichloroethene	25.0	25.2	101	10	16	66-127	
1,2,4-Trichlorobenzene	25.0	23.2	93	2	20	79-122	
1,2-Dibromo-3-Chloropropane	25.0	19.4	77	8	15	56-134	
1,2-Dichlorobenzene	25.0	23.6	95	2	20	80-124	
1,2-Dichloroethane	25.0	24.9	100	5	20	75-120	
1,2-Dichloropropane	25.0	24.0	96	3	20	76-120	
1,3-Dichlorobenzene	25.0	23.3	93	1	20	77-120	
1,4-Dichlorobenzene	25.0	22.9	92	1	20	80-120	
2-Butanone (MEK)	125	135	108	10	20	57-140	
2-Hexanone	125	143	114	5	15	65-127	
4-Methyl-2-pentanone (MIBK)	125	139	111	2	35	71-125	
Acetone	125	129	103	8	15	56-142	
Benzene	25.0	23.7	95	3	13	71-124	
Bromodichloromethane	25.0	24.1	96	1	15	80-122	
Bromoform	25.0	18.9	75	18	15	61-132	*1
Bromomethane	25.0	22.8	91	2	15	55-144	
Carbon disulfide	25.0	24.3	97	1	15	59-134	
Carbon tetrachloride	25.0	24.8	99	0	15	72-134	
Chlorobenzene	25.0	22.8	91	2	25	80-120	
Dibromochloromethane	25.0	22.6	90	9	15	75-125	
Chloroethane	25.0	25.4	102	2	15	69-136	
Chloroform	25.0	22.6	90	2	20	73-127	
Chloromethane	25.0	28.9	115	3	15	68-124	
cis-1,2-Dichloroethene	25.0	24.5	98	3	15	74-124	
cis-1,3-Dichloropropene	25.0	23.2	93	1	15	74-124	
Cyclohexane	25.0	27.2	109	2	20	59-135	
Dichlorodifluoromethane	25.0	28.1	113	3	20	59-135	
Ethylbenzene	25.0	23.0	92	1	15	77-123	
1,2-Dibromoethane	25.0	23.3	93	2	15	77-120	
Isopropylbenzene	25.0	24.2	97	1	20	77-122	
Methyl acetate	50.0	50.4	101	3	20	74-133	
Methyl tert-butyl ether	25.0	23.1	93	0	37	77-120	
Methylcyclohexane	25.0	25.1	100	2	20	68-134	
Methylene Chloride	25.0	23.2	93	2	15	75-124	
Styrene	25.0	21.6	86	2	20	80-120	
Tetrachloroethene	25.0	23.1	93	2	20	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S3183.d

Lab ID: LCSD 480-728964/46 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	25.0	22.3	89	2	15	80-122	
trans-1,2-Dichloroethene	25.0	23.4	94	2	20	73-127	
trans-1,3-Dichloropropene	25.0	21.7	87	10	15	80-120	
Trichloroethene	25.0	23.0	92	1	16	74-123	
Trichlorofluoromethane	25.0	28.3	113	1	20	62-150	
Vinyl chloride	25.0	26.7	107	1	15	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S3150.d

Lab ID: 480-224430-2 MS Client ID: TREATMENT INFLUENT MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	500	ND	518	104	73-126	
1,1,2,2-Tetrachloroethane	500	ND	530	106	76-120	
1,1,2-Trichloroethane	500	ND	494	99	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	500	ND	564	113	61-148	
1,1-Dichloroethane	500	ND	510	102	77-120	
1,1-Dichloroethene	500	ND	534	107	66-127	
1,2,4-Trichlorobenzene	500	ND	503	101	79-122	
1,2-Dibromo-3-Chloropropane	500	ND	440	88	56-134	
1,2-Dichlorobenzene	500	ND	499	100	80-124	
1,2-Dichloroethane	500	ND	504	101	75-120	
1,2-Dichloropropane	500	ND	500	100	76-120	
1,3-Dichlorobenzene	500	ND	491	98	77-120	
1,4-Dichlorobenzene	500	ND	486	97	78-124	
2-Butanone (MEK)	2500	ND	2700	108	57-140	
2-Hexanone	2500	ND	2910	116	65-127	
4-Methyl-2-pentanone (MIBK)	2500	ND	2880	115	71-125	
Acetone	2500	ND	2590	104	56-142	
Benzene	500	ND	497	99	71-124	
Bromodichloromethane	500	ND	501	100	80-122	
Bromoform	500	ND	473	95	61-132	
Bromomethane	500	ND	468	94	55-144	
Carbon disulfide	500	ND	524	105	59-134	
Carbon tetrachloride	500	ND	517	103	72-134	
Chlorobenzene	500	ND	486	97	80-120	
Dibromochloromethane	500	ND	496	99	75-125	
Chloroethane	500	ND	532	106	69-136	
Chloroform	500	ND	470	94	73-127	
Chloromethane	500	ND	592	118	68-124	
cis-1,2-Dichloroethene	500	580	974	78	74-124	
cis-1,3-Dichloropropene	500	ND	490	98	74-124	
Cyclohexane	500	ND	578	116	59-135	
Dichlorodifluoromethane	500	ND	599	120	59-135	
Ethylbenzene	500	ND	495	99	77-123	
1,2-Dibromoethane	500	ND	488	98	77-120	
Isopropylbenzene	500	ND	521	104	77-122	
Methyl acetate	1000	ND	1050	105	74-133	
Methyl tert-butyl ether	500	ND	488	98	77-120	
Methylcyclohexane	500	ND	545	109	68-134	
Methylene Chloride	500	ND	477	95	75-124	
Styrene	500	ND	486	97	80-120	
Tetrachloroethene	500	ND	508	102	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S3150.d

Lab ID: 480-224430-2 MS Client ID: TREATMENT INFLUENT MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Toluene	500	ND	477	95	80-122	
trans-1,2-Dichloroethene	500	ND	492	98	73-127	
trans-1,3-Dichloropropene	500	ND	489	98	80-120	
Trichloroethene	500	ND	480	96	74-123	
Trichlorofluoromethane	500	ND	574	115	62-150	
Vinyl chloride	500	65	621	111	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S3151.d

Lab ID: 480-224430-2 MSD Client ID: TREATMENT INFLUENT MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	500	536	107	3	15	73-126	
1,1,2,2-Tetrachloroethane	500	518	104	2	15	76-120	
1,1,2-Trichloroethane	500	492	98	0	15	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	500	549	110	3	20	61-148	
1,1-Dichloroethane	500	536	107	5	20	77-120	
1,1-Dichloroethene	500	526	105	2	16	66-127	
1,2,4-Trichlorobenzene	500	512	102	2	20	79-122	
1,2-Dibromo-3-Chloropropane	500	453	91	3	15	56-134	
1,2-Dichlorobenzene	500	499	100	0	20	80-124	
1,2-Dichloroethane	500	518	104	3	20	75-120	
1,2-Dichloropropane	500	507	101	1	20	76-120	
1,3-Dichlorobenzene	500	491	98	0	20	77-120	
1,4-Dichlorobenzene	500	497	99	2	20	78-124	
2-Butanone (MEK)	2500	2730	109	1	20	57-140	
2-Hexanone	2500	2930	117	1	15	65-127	
4-Methyl-2-pentanone (MIBK)	2500	2900	116	1	35	71-125	
Acetone	2500	2610	104	1	15	56-142	
Benzene	500	514	103	3	13	71-124	
Bromodichloromethane	500	515	103	3	15	80-122	
Bromoform	500	468	94	1	15	61-132	
Bromomethane	500	471	94	1	15	55-144	
Carbon disulfide	500	557	111	6	15	59-134	
Carbon tetrachloride	500	544	109	5	15	72-134	
Chlorobenzene	500	497	99	2	25	80-120	
Dibromochloromethane	500	513	103	3	15	75-125	
Chloroethane	500	534	107	0	15	69-136	
Chloroform	500	488	98	4	20	73-127	
Chloromethane	500	631	126	6	15	68-124	F1
cis-1,2-Dichloroethene	500	1010	85	3	15	74-124	
cis-1,3-Dichloropropene	500	506	101	3	15	74-124	
Cyclohexane	500	596	119	3	20	59-135	
Dichlorodifluoromethane	500	632	126	5	20	59-135	
Ethylbenzene	500	510	102	3	15	77-123	
1,2-Dibromoethane	500	500	100	2	15	77-120	
Isopropylbenzene	500	535	107	3	20	77-122	
Methyl acetate	1000	1060	106	1	20	74-133	
Methyl tert-butyl ether	500	495	99	2	37	77-120	
Methylcyclohexane	500	557	111	2	20	68-134	
Methylene Chloride	500	490	98	3	15	75-124	
Styrene	500	484	97	1	20	80-120	
Tetrachloroethene	500	508	102	0	20	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S3151.d

Lab ID: 480-224430-2 MSD Client ID: TREATMENT INFLUENT MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	500	495	99	4	15	80-122	
trans-1,2-Dichloroethene	500	515	103	5	20	73-127	
trans-1,3-Dichloropropene	500	505	101	3	15	80-120	
Trichloroethene	500	512	102	6	16	74-123	
Trichlorofluoromethane	500	608	122	6	20	62-150	
Vinyl chloride	500	654	118	5	15	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab File ID: S3131.d Lab Sample ID: MB 480-728892/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5973S Date Analyzed: 10/18/2024 22:42

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-728892/6	S3129.d	10/18/2024 21:56
TREATMENT INFLUENT	480-224430-2	S3141.d	10/19/2024 02:34
TRIP BLANK	480-224430-3	S3142.d	10/19/2024 02:57
TREATMENT INFLUENT MS	480-224430-2 MS	S3150.d	10/19/2024 06:04
TREATMENT INFLUENT MSD	480-224430-2 MSD	S3151.d	10/19/2024 06:27

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab File ID: S3165.d Lab Sample ID: MB 480-728964/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5973S Date Analyzed: 10/20/2024 01:13

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-728964/6	S3163.d	10/20/2024 00:27
TREATMENT EFFLUENT	480-224430-1	S3166.d	10/20/2024 01:36
	LCSD 480-728964/46	S3183.d	10/20/2024 08:14

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab File ID: S2973.d BFB Injection Date: 10/15/2024

Instrument ID: HP5973S BFB Injection Time: 14:57

Analysis Batch No.: 728322

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.8	
75	30.0 - 60.0 % of mass 95	55.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.3	(0.3) 1
174	Greater than 50% of mass 95	82.9	
175	5.0 - 9.0 % of mass 174	6.2	(7.4) 1
176	95.0 - 101.0 % of mass 174	80.9	(97.6) 1
177	5.0 - 9.0 % of mass 176	5.4	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-728322/13	S2975.d	10/15/2024	15:49
	IC 480-728322/14	S2976.d	10/15/2024	16:13
	IC 480-728322/15	S2977.d	10/15/2024	16:36
	IC 480-728322/16	S2978.d	10/15/2024	17:00
	IC 480-728322/17	S2979.d	10/15/2024	17:23
	ICIS 480-728322/18	S2980.d	10/15/2024	17:47
	IC 480-728322/19	S2981.d	10/15/2024	18:10
	IC 480-728322/46	S3008.d	10/16/2024	11:36

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab File ID: S3011.d BFB Injection Date: 10/16/2024

Instrument ID: HP5973S BFB Injection Time: 13:05

Analysis Batch No.: 728511

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.9	
75	30.0 - 60.0 % of mass 95	53.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	8.1	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	Greater than 50% of mass 95	81.0	
175	5.0 - 9.0 % of mass 174	5.6	(6.9) 1
176	95.0 - 101.0 % of mass 174	77.6	(95.8) 1
177	5.0 - 9.0 % of mass 176	4.7	(6.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICV 480-728511/10	S3013.d	10/16/2024	14:09
	ICV 480-728511/11	S3014.d	10/16/2024	14:45

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab File ID: S3126.d BFB Injection Date: 10/18/2024

Instrument ID: HP5973S BFB Injection Time: 20:46

Analysis Batch No.: 728892

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.4	
75	30.0 - 60.0 % of mass 95	55.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	83.2	
175	5.0 - 9.0 % of mass 174	6.5	(7.8) 1
176	95.0 - 101.0 % of mass 174	79.3	(95.2) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-728892/4	S3127.d	10/18/2024	21:09
	LCS 480-728892/6	S3129.d	10/18/2024	21:56
	MB 480-728892/8	S3131.d	10/18/2024	22:42
TREATMENT INFLUENT	480-224430-2	S3141.d	10/19/2024	2:34
TRIP BLANK	480-224430-3	S3142.d	10/19/2024	2:57
TREATMENT INFLUENT MS	480-224430-2 MS	S3150.d	10/19/2024	6:04
TREATMENT INFLUENT MSD	480-224430-2 MSD	S3151.d	10/19/2024	6:27

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab File ID: S3160.d BFB Injection Date: 10/19/2024

Instrument ID: HP5973S BFB Injection Time: 23:18

Analysis Batch No.: 728964

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.9	
75	30.0 - 60.0 % of mass 95	55.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	77.5	
175	5.0 - 9.0 % of mass 174	6.1	(7.9) 1
176	95.0 - 101.0 % of mass 174	75.0	(96.8) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-728964/4	S3161.d	10/19/2024	23:41
	LCS 480-728964/6	S3163.d	10/20/2024	0:27
	MB 480-728964/8	S3165.d	10/20/2024	1:13
TREATMENT EFFLUENT	480-224430-1	S3166.d	10/20/2024	1:36
	LCSD 480-728964/46	S3183.d	10/20/2024	8:14

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Sample No.: ICIS 480-728322/18 Date Analyzed: 10/15/2024 17:47

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): S2980.d Heated Purge: (Y/N) N

Calibration ID: 47404

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		166979	4.76	306913	7.70	314686	10.15
UPPER LIMIT		333958	4.93	613826	7.87	629372	10.32
LOWER LIMIT		83490	4.59	153457	7.54	157343	9.99
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-728892/4		146825	4.76	278116	7.70	269898	10.15
CCVIS 480-728964/4		143670	4.76	266960	7.70	262981	10.15

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.167 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Sample No.: CCVIS 480-728892/4 Date Analyzed: 10/18/2024 21:09

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): S3127.d Heated Purge: (Y/N) N

Calibration ID: 47407

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		146825	4.76	278116	7.70	269898	10.15
UPPER LIMIT		293650	4.93	556232	7.87	539796	10.32
LOWER LIMIT		73413	4.59	139058	7.54	134949	9.99
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-728892/6		145313	4.76	272509	7.71	268407	10.15
MB 480-728892/8		125128	4.76	230180	7.70	219434	10.15
480-224430-2	TREATMENT INFLUENT	134126	4.76	254379	7.70	258013	10.15
480-224430-3	TRIP BLANK	132713	4.76	251510	7.70	263613	10.15
480-224430-2 MS	TREATMENT INFLUENT MS	141267	4.76	262394	7.70	259548	10.15
480-224430-2 MSD	TREATMENT INFLUENT MSD	141518	4.76	263205	7.70	261707	10.15

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.167 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Sample No.: CCVIS 480-728964/4 Date Analyzed: 10/19/2024 23:41

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): S3161.d Heated Purge: (Y/N) N

Calibration ID: 47407

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		143670	4.76	266960	7.70	262981	10.15
UPPER LIMIT		287340	4.93	533920	7.87	525962	10.32
LOWER LIMIT		71835	4.59	133480	7.54	131491	9.99
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-728964/6		145248	4.76	263361	7.70	263298	10.15
MB 480-728964/8		129779	4.76	233312	7.71	221293	10.15
480-224430-1	TREATMENT EFFLUENT	134756	4.76	256623	7.70	266159	10.15
LCSD 480-728964/46		135689	4.76	260793	7.70	255333	10.15

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.167 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: TREATMENT EFFLUENT | Lab Sample ID: 480-224430-1

Matrix: Water | Lab File ID: S3166.d

Analysis Method: 8260C | Date Collected: 10/15/2024 13:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2024 01:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728964 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	3.1	J	10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*1	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: TREATMENT EFFLUENT | Lab Sample ID: 480-224430-1

Matrix: Water | Lab File ID: S3166.d

Analysis Method: 8260C | Date Collected: 10/15/2024 13:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2024 01:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728964 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	95		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
1868-53-7	Dibromofluoromethane (Surr)	95		75-123

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3166.d
Lims ID: 480-224430-F-1
Client ID: TREATMENT EFFLUENT
Sample Type: Client
Inject. Date: 20-Oct-2024 01:36:30 ALS Bottle#: 42 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-224430-F-1
Misc. Info.: 480-0120662-029
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Oct-2024 09:45:15 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: QR3Z Date: 20-Oct-2024 09:45:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	134756	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	89	256623	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	96	266159	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	55	157647	23.9	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	99	120505	25.7	
$ 5 Toluene-d8 (Surr)	98	6.248	6.242	0.006	85	638478	23.8	
$ 6 4-Bromofluorobenzene (Surr)	174	8.961	8.956	0.006	89	199369	23.8	
10 Dichlorodifluoromethane	85		1.004				ND	
12 Chloromethane	50		1.132				ND	
13 Vinyl chloride	62		1.217				ND	
14 Bromomethane	94		1.461				ND	
15 Chloroethane	64		1.509				ND	
17 Trichlorofluoromethane	101		1.698				ND	
22 1,1-Dichloroethene	96		2.105				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		2.111				ND	
23 Acetone	43	2.227	2.221	0.006	67	10351	3.05	
26 Carbon disulfide	76		2.288				ND	
27 Methyl acetate	43		2.501				ND	
30 Methylene Chloride	84		2.586				ND	U
32 Methyl tert-butyl ether	73		2.787				ND	
34 trans-1,2-Dichloroethene	96		2.799				ND	
39 1,1-Dichloroethane	63		3.194				ND	
45 cis-1,2-Dichloroethene	96		3.730				ND	
43 2-Butanone (MEK)	43		3.778				ND	
50 Chloroform	83		4.046				ND	
51 1,1,1-Trichloroethane	97		4.137				ND	
52 Cyclohexane	56		4.137				ND	
55 Carbon tetrachloride	117		4.265				ND	
57 Benzene	78		4.484				ND	
58 1,2-Dichloroethane	62		4.563				ND	
62 Trichloroethene	95		5.092				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		5.196				ND	
65 1,2-Dichloropropane	63		5.324				ND	
68 Dichlorobromomethane	83		5.622				ND	
72 cis-1,3-Dichloropropene	75		6.035				ND	
73 4-Methyl-2-pentanone (MIBK)	43		6.187				ND	
74 Toluene	92		6.309				ND	
77 trans-1,3-Dichloropropene	75		6.607				ND	
79 1,1,2-Trichloroethane	83		6.784				ND	
81 Tetrachloroethene	166		6.826				ND	
80 2-Hexanone	43		7.027				ND	
83 Chlorodibromomethane	129		7.167				ND	
84 Ethylene Dibromide	107		7.258				ND	
87 Chlorobenzene	112		7.733				ND	
88 Ethylbenzene	91		7.836				ND	
90 m-Xylene & p-Xylene	106		7.958				ND	
91 o-Xylene	106		8.371				ND	
92 Styrene	104		8.408				ND	
95 Bromoform	173		8.645				ND	
94 Isopropylbenzene	105		8.761				ND	
97 1,1,2,2-Tetrachloroethane	83		9.193				ND	
111 1,3-Dichlorobenzene	146		10.081				ND	
113 1,4-Dichlorobenzene	146		10.178				ND	
116 1,2-Dichlorobenzene	146		10.537				ND	
117 1,2-Dibromo-3-Chloropropane	75		11.292				ND	
119 1,2,4-Trichlorobenzene	180		11.973				ND	
S 124 Xylenes, Total	1		30.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

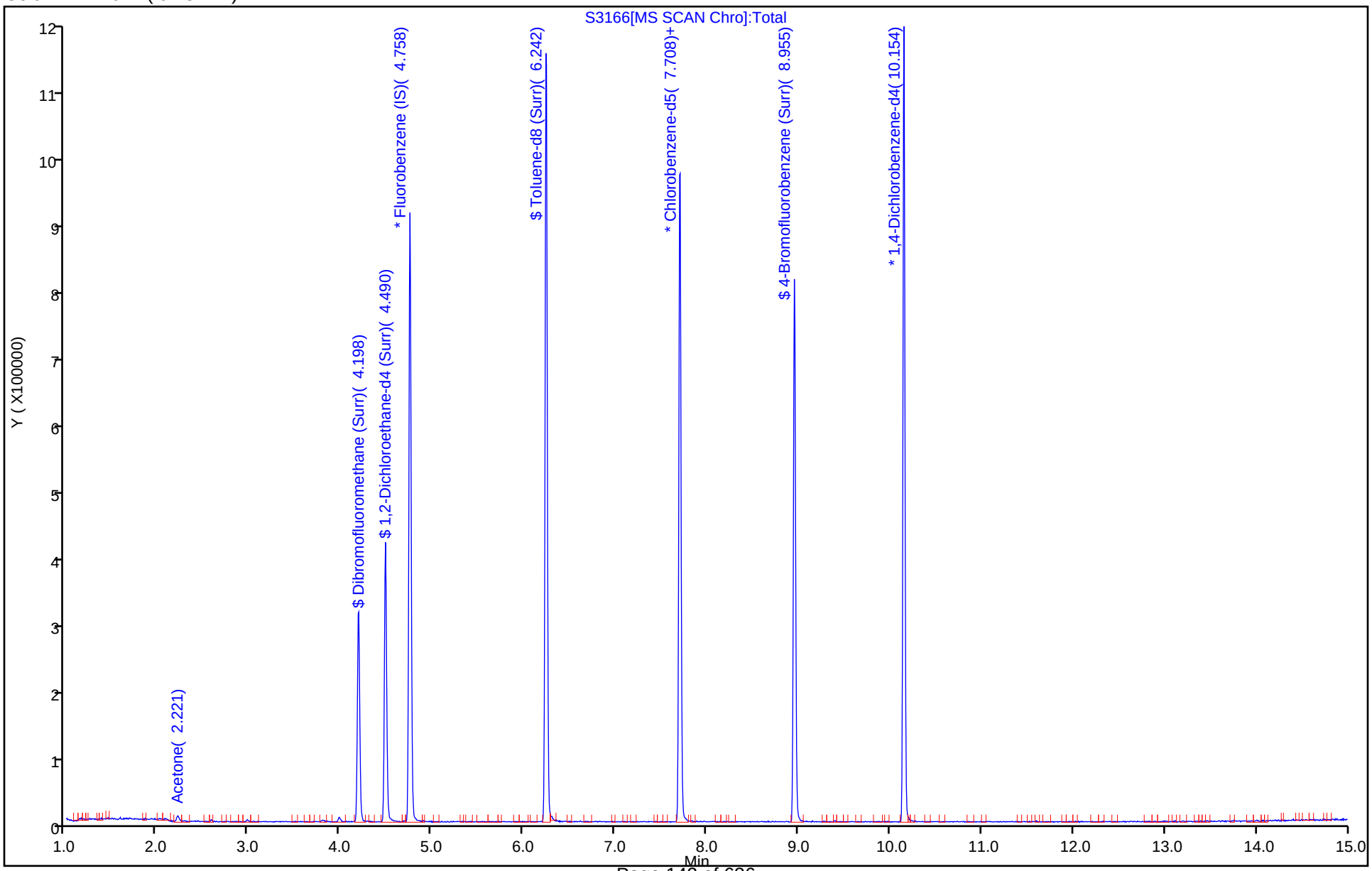
Report Date: 20-Oct-2024 09:45:15 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3166.d

Injection Date:	20-Oct-2024 01:36:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	480-224430-F-1	Lab Sample ID:	480-224430-1	Worklist Smp#:	29
Client ID:	TREATMENT EFFLUENT				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3166.d
Lims ID: 480-224430-F-1
Client ID: TREATMENT EFFLUENT
Sample Type: Client
Inject. Date: 20-Oct-2024 01:36:30 ALS Bottle#: 42 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-224430-F-1
Misc. Info.: 480-0120662-029
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Oct-2024 09:45:15 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: QR3Z Date: 20-Oct-2024 09:45:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 154 Dibromofluoromethane (Surr)	25.0	23.9	95.49
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	25.7	102.65
$ 5 Toluene-d8 (Surr)	25.0	23.8	95.02
$ 6 4-Bromofluorobenzene (Surr)	25.0	23.8	95.37

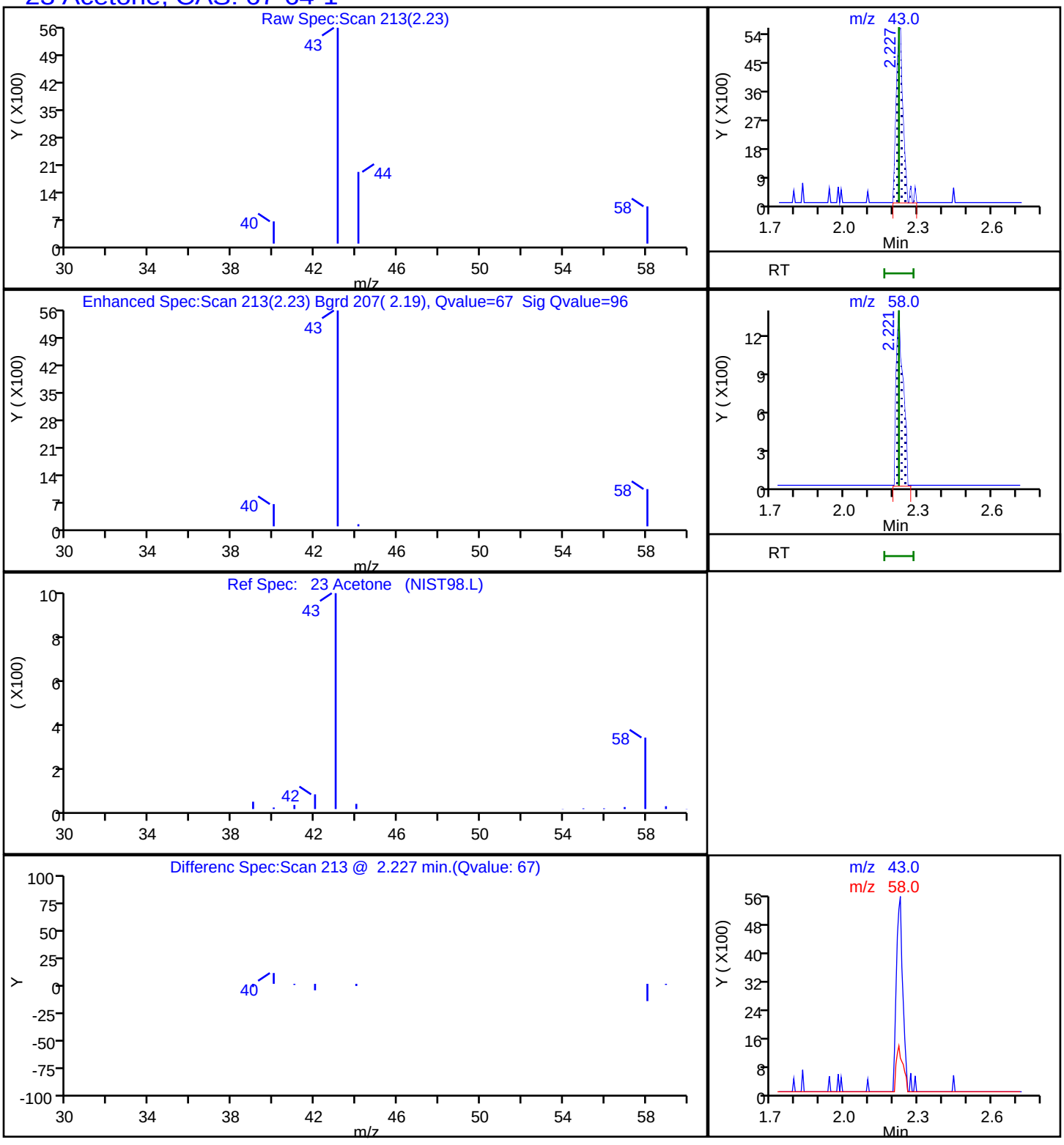
Report Date: 20-Oct-2024 09:45:15 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3166.d

Injection Date:	20-Oct-2024 01:36:30	Instrument ID:	HP5973S		
Lims ID:	480-224430-F-1	Lab Sample ID:	480-224430-1		
Client ID:	TREATMENT EFFLUENT				
Operator ID:	ZN	ALS Bottle#:	42	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

23 Acetone, CAS: 67-64-1



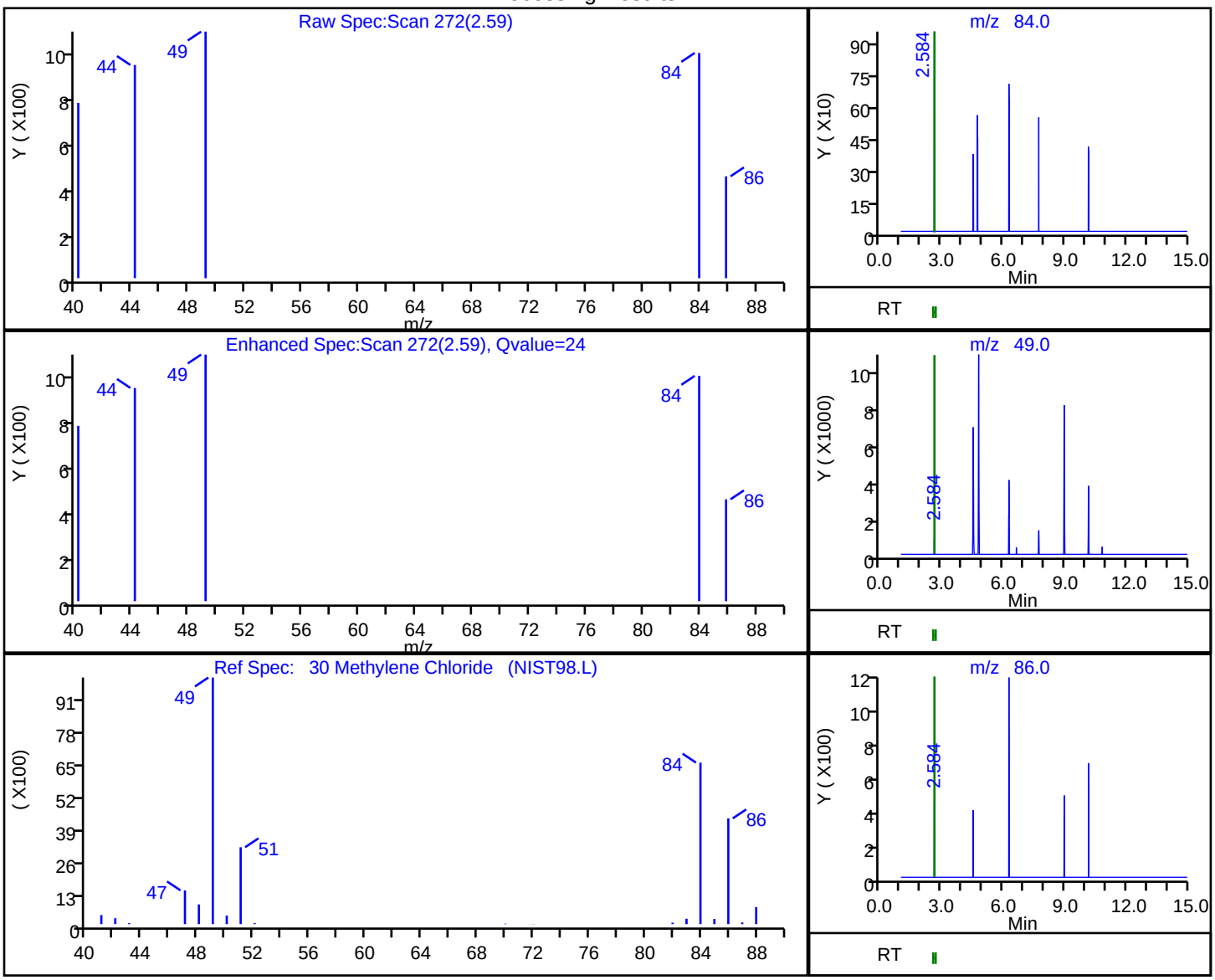
User Disabled Compound Report

Eurofins Buffalo

Data File:	\\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3166.d				
Injection Date:	20-Oct-2024 01:36:30	Instrument ID:	HP5973S		
Lims ID:	480-224430-F-1	Lab Sample ID:	480-224430-1		
Client ID:	TREATMENT EFFLUENT				
Operator ID:	ZN	ALS Bottle#:	42	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
2.58	84.00	0	
2.58	49.00	0	
2.58	86.00	0	

Reviewer: QR3Z, 20-Oct-2024 09:44:58 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: TREATMENT INFLUENT | Lab Sample ID: 480-224430-2

Matrix: Water | Lab File ID: S3141.d

Analysis Method: 8260C | Date Collected: 10/15/2024 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2024 02:34

Soil Aliquot Vol: | Dilution Factor: 20

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		20	16
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	4.2
79-00-5	1,1,2-Trichloroethane	ND		20	4.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2
75-34-3	1,1-Dichloroethane	ND		20	7.6
75-35-4	1,1-Dichloroethene	ND		20	5.8
120-82-1	1,2,4-Trichlorobenzene	ND		20	8.2
96-12-8	1,2-Dibromo-3-Chloropropane	ND		20	7.8
95-50-1	1,2-Dichlorobenzene	ND		20	16
107-06-2	1,2-Dichloroethane	ND		20	4.2
78-87-5	1,2-Dichloropropane	ND		20	14
541-73-1	1,3-Dichlorobenzene	ND		20	16
106-46-7	1,4-Dichlorobenzene	ND		20	17
78-93-3	2-Butanone (MEK)	ND		200	26
591-78-6	2-Hexanone	ND		100	25
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		100	42
67-64-1	Acetone	ND		200	60
71-43-2	Benzene	ND		20	8.2
75-27-4	Bromodichloromethane	ND		20	7.8
75-25-2	Bromoform	ND		20	5.2
74-83-9	Bromomethane	ND		20	14
75-15-0	Carbon disulfide	ND		20	3.8
56-23-5	Carbon tetrachloride	ND		20	5.4
108-90-7	Chlorobenzene	ND		20	15
124-48-1	Dibromochloromethane	ND		20	6.4
75-00-3	Chloroethane	ND		20	6.4
67-66-3	Chloroform	ND		20	6.8
74-87-3	Chloromethane	ND	*+ F1	20	7.0
156-59-2	cis-1,2-Dichloroethene	580		20	16
10061-01-5	cis-1,3-Dichloropropene	ND		20	7.2
110-82-7	Cyclohexane	ND		20	3.6
75-71-8	Dichlorodifluoromethane	ND		20	14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: TREATMENT INFLUENT | Lab Sample ID: 480-224430-2

Matrix: Water | Lab File ID: S3141.d

Analysis Method: 8260C | Date Collected: 10/15/2024 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2024 02:34

Soil Aliquot Vol: | Dilution Factor: 20

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	ND		20	15
106-93-4	1,2-Dibromoethane	ND		20	15
98-82-8	Isopropylbenzene	ND		20	16
79-20-9	Methyl acetate	ND		50	26
1634-04-4	Methyl tert-butyl ether	ND		20	3.2
108-87-2	Methylcyclohexane	ND		20	3.2
75-09-2	Methylene Chloride	ND		20	8.8
100-42-5	Styrene	ND		20	15
127-18-4	Tetrachloroethene	ND		20	7.2
108-88-3	Toluene	ND		20	10
156-60-5	trans-1,2-Dichloroethene	ND		20	18
10061-02-6	trans-1,3-Dichloropropene	ND		20	7.4
79-01-6	Trichloroethene	ND		20	9.2
75-69-4	Trichlorofluoromethane	ND		20	18
75-01-4	Vinyl chloride	65		20	18
1330-20-7	Xylenes, Total	ND		40	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
1868-53-7	Dibromofluoromethane (Surr)	97		75-123

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3141.d
Lims ID: 480-224430-B-2
Client ID: TREATMENT INFLUENT
Sample Type: Client
Inject. Date: 19-Oct-2024 02:34:30 ALS Bottle#: 46 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 10:05:46 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 10:05:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	134126	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.708	-0.006	87	254379	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	96	258013	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	58	159387	24.2	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	93	119677	25.6	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	86	647131	24.3	
$ 6 4-Bromofluorobenzene (Surr)	174	8.962	8.955	0.007	90	196919	23.8	
10 Dichlorodifluoromethane	85		0.998				ND	
12 Chloromethane	50		1.132				ND	
13 Vinyl chloride	62	1.217	1.211	0.012	57	21689	3.27	
14 Bromomethane	94		1.448				ND	
15 Chloroethane	64		1.503				ND	
17 Trichlorofluoromethane	101		1.698				ND	
22 1,1-Dichloroethene	96		2.099				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		2.105				ND	
23 Acetone	43		2.221				ND	
26 Carbon disulfide	76		2.276				ND	
27 Methyl acetate	43		2.495				ND	
30 Methylene Chloride	84	2.586	2.586	0.006	22	1630	0.1298	a
32 Methyl tert-butyl ether	73		2.781				ND	
34 trans-1,2-Dichloroethene	96		2.799				ND	
39 1,1-Dichloroethane	63		3.194				ND	
45 cis-1,2-Dichloroethene	96	3.736	3.730	0.006	86	194312	29.1	
43 2-Butanone (MEK)	43		3.772				ND	
50 Chloroform	83	4.052	4.046	0.012	30	1939	0.1605	
51 1,1,1-Trichloroethane	97		4.137				ND	
52 Cyclohexane	56		4.137				ND	
55 Carbon tetrachloride	117		4.271				ND	
57 Benzene	78		4.484				ND	
58 1,2-Dichloroethane	62		4.563				ND	
62 Trichloroethene	95		5.092				ND	
64 Methylcyclohexane	83		5.196				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63		5.324				ND	
68 Dichlorobromomethane	83		5.622				ND	
72 cis-1,3-Dichloropropene	75		6.035				ND	
73 4-Methyl-2-pentanone (MIBK)	43		6.187				ND	
74 Toluene	92		6.309				ND	
77 trans-1,3-Dichloropropene	75		6.607				ND	
79 1,1,2-Trichloroethane	83		6.790				ND	
81 Tetrachloroethene	166		6.826				ND	
80 2-Hexanone	43		7.021				ND	
83 Chlorodibromomethane	129		7.167				ND	
84 Ethylene Dibromide	107		7.258				ND	
87 Chlorobenzene	112		7.733				ND	
88 Ethylbenzene	91		7.836				ND	
90 m-Xylene & p-Xylene	106		7.958				ND	
91 o-Xylene	106		8.371				ND	
92 Styrene	104		8.408				ND	
95 Bromoform	173		8.645				ND	
94 Isopropylbenzene	105		8.761				ND	
97 1,1,2,2-Tetrachloroethane	83		9.193				ND	
111 1,3-Dichlorobenzene	146		10.081				ND	
113 1,4-Dichlorobenzene	146		10.172				ND	
116 1,2-Dichlorobenzene	146		10.537				ND	
117 1,2-Dibromo-3-Chloropropane	75		11.292				ND	
119 1,2,4-Trichlorobenzene	180		11.973				ND	
S 124 Xylenes, Total	1		30.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

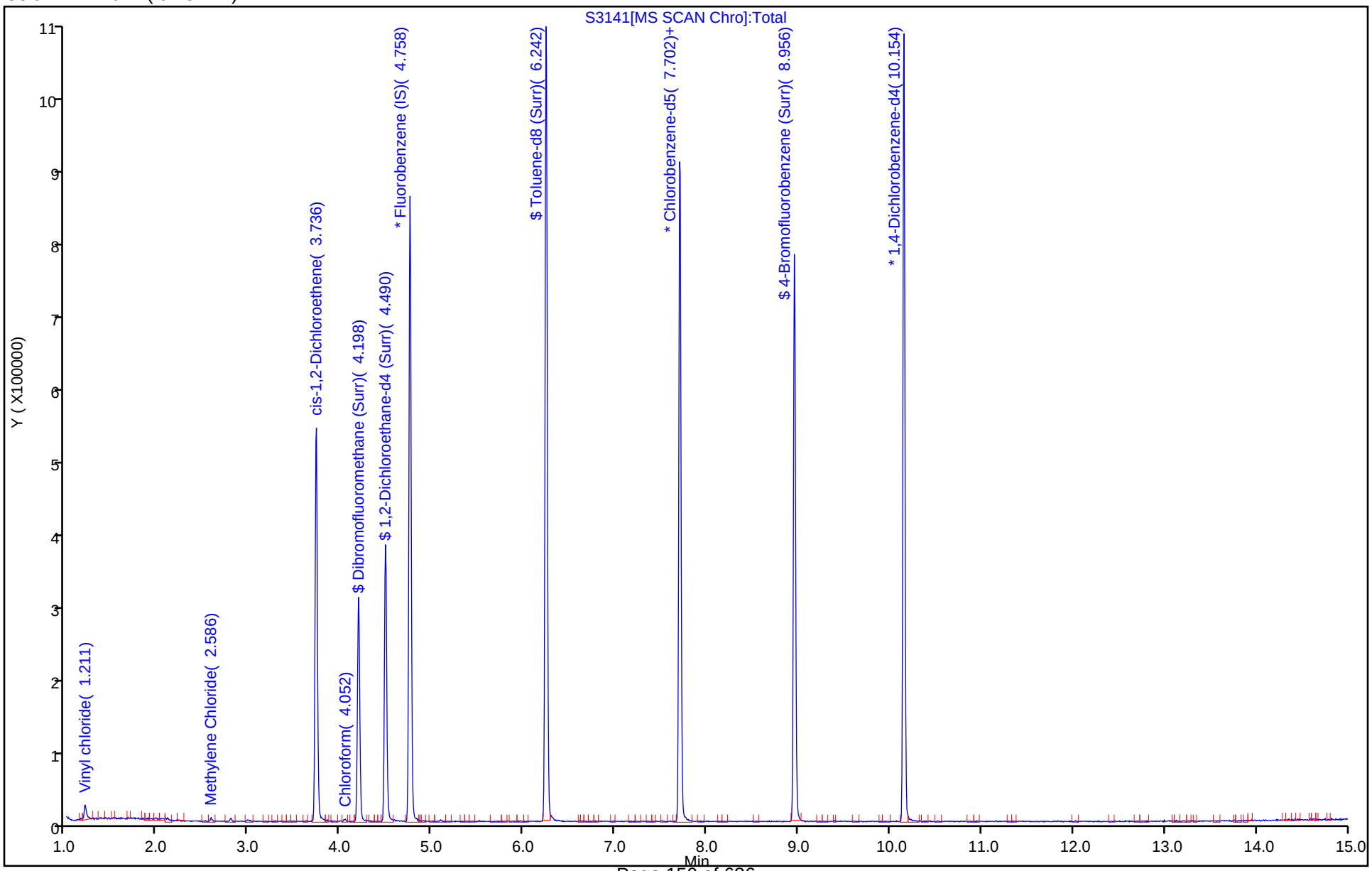
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Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3141.d

Injection Date:	19-Oct-2024 02:34:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	480-224430-B-2	Lab Sample ID:	480-224430-2	Worklist Smp#:	40
Client ID:	TREATMENT INFLUENT				
Purge Vol:	5.000 mL	Dil. Factor:	20.0000	ALS Bottle#:	46
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3141.d
Lims ID: 480-224430-B-2
Client ID: TREATMENT INFLUENT
Sample Type: Client
Inject. Date: 19-Oct-2024 02:34:30 ALS Bottle#: 46 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 10:05:46 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 10:05:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 154 Dibromofluoromethane (Surr)	25.0	24.2	97.00
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	25.6	102.42
$ 5 Toluene-d8 (Surr)	25.0	24.3	97.16
$ 6 4-Bromofluorobenzene (Surr)	25.0	23.8	95.03

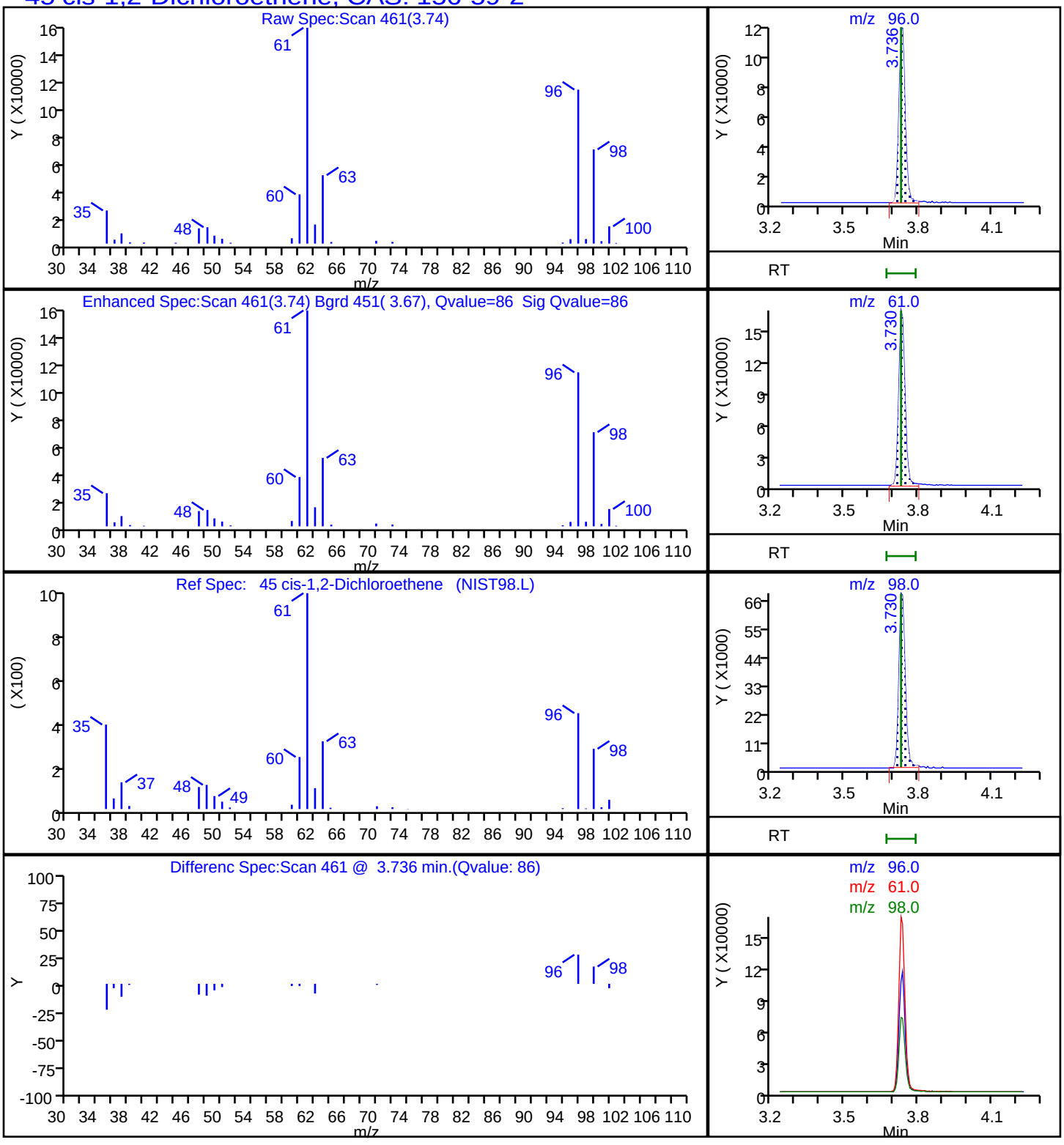
Report Date: 19-Oct-2024 10:05:46 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3141.d

Injection Date:	19-Oct-2024 02:34:30	Instrument ID:	HP5973S		
Lims ID:	480-224430-B-2	Lab Sample ID:	480-224430-2		
Client ID:	TREATMENT INFLUENT				
Operator ID:	ZN	ALS Bottle#:	46	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	20.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

45 cis-1,2-Dichloroethene, CAS: 156-59-2



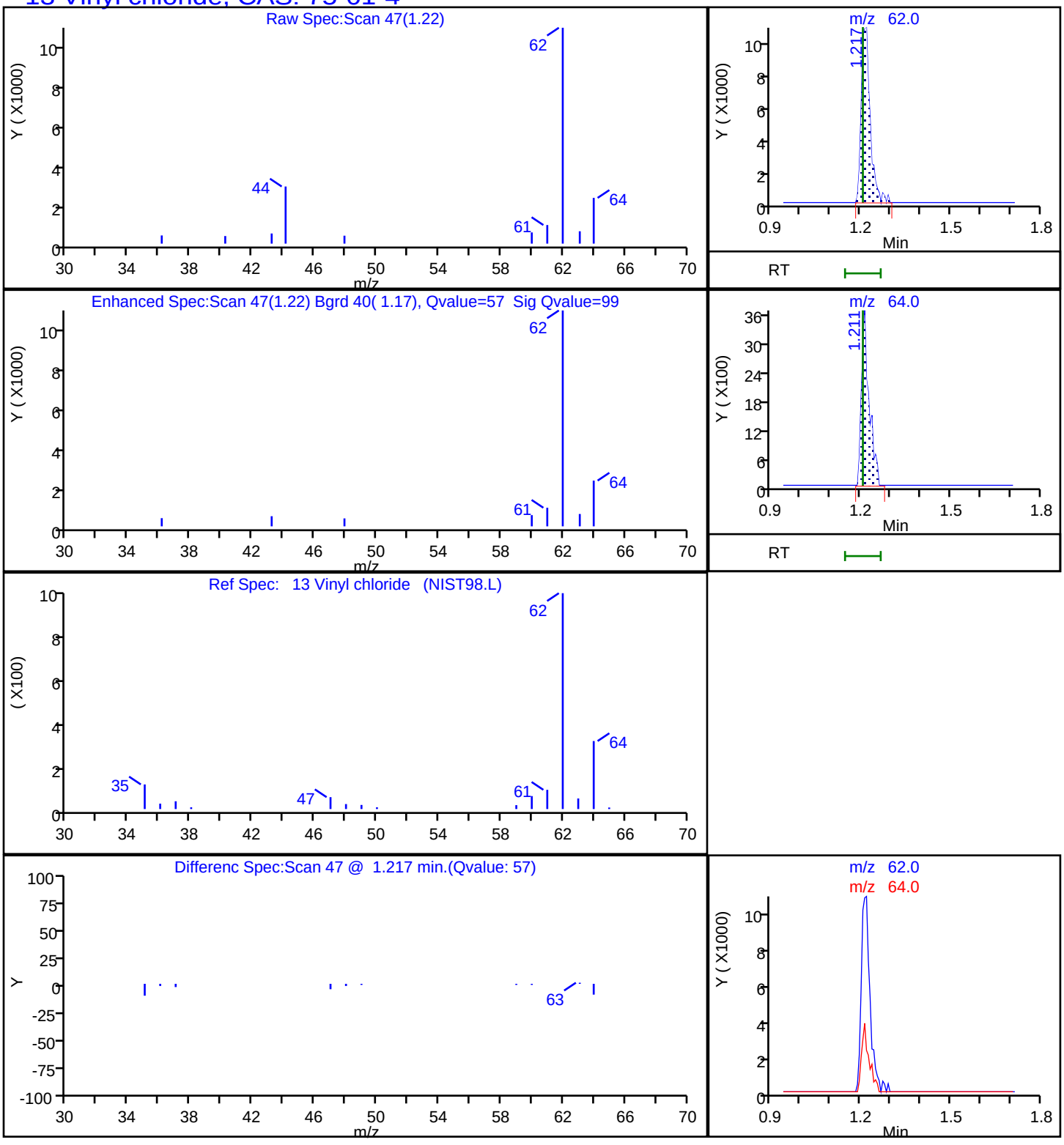
Report Date: 19-Oct-2024 10:05:46 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3141.d

Injection Date:	19-Oct-2024 02:34:30	Instrument ID:	HP5973S		
Lims ID:	480-224430-B-2	Lab Sample ID:	480-224430-2		
Client ID:	TREATMENT INFLUENT				
Operator ID:	ZN	ALS Bottle#:	46	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	20.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

13 Vinyl chloride, CAS: 75-01-4



Manual Integration/User Assign Peak Report

Eurofins Buffalo

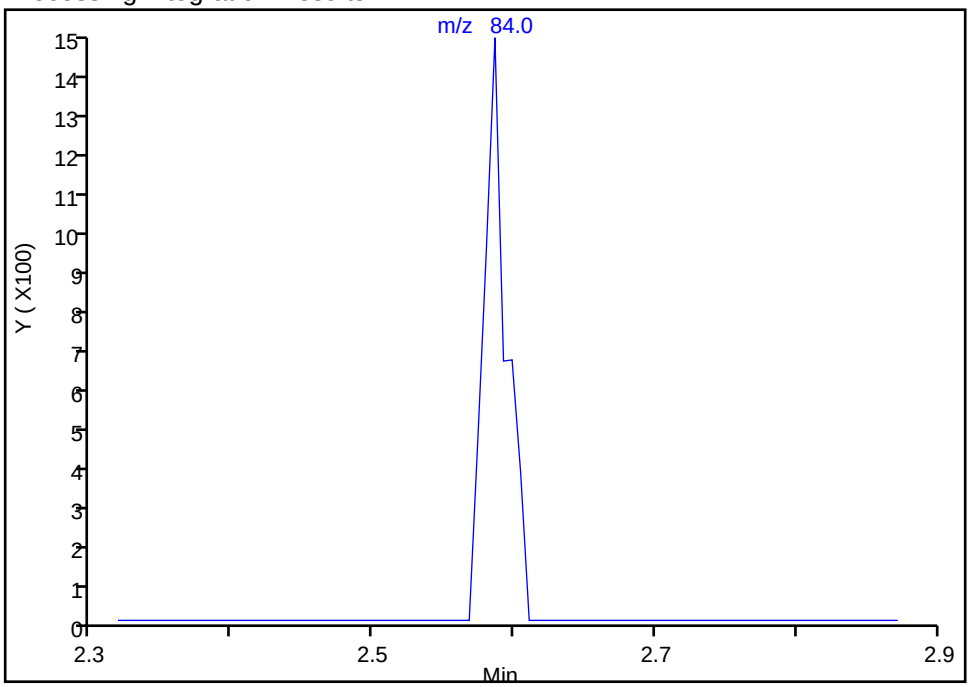
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Injection Date:	19-Oct-2024 02:34:30	Instrument ID:	HP5973S		
Lims ID:	480-224430-B-2	Lab Sample ID:	480-224430-2		
Client ID:	TREATMENT INFLUENT				
Operator ID:	ZN	ALS Bottle#:	46	Worklist Smp#:	40
Purge Vol:	5.000 mL	Dil. Factor:	20.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

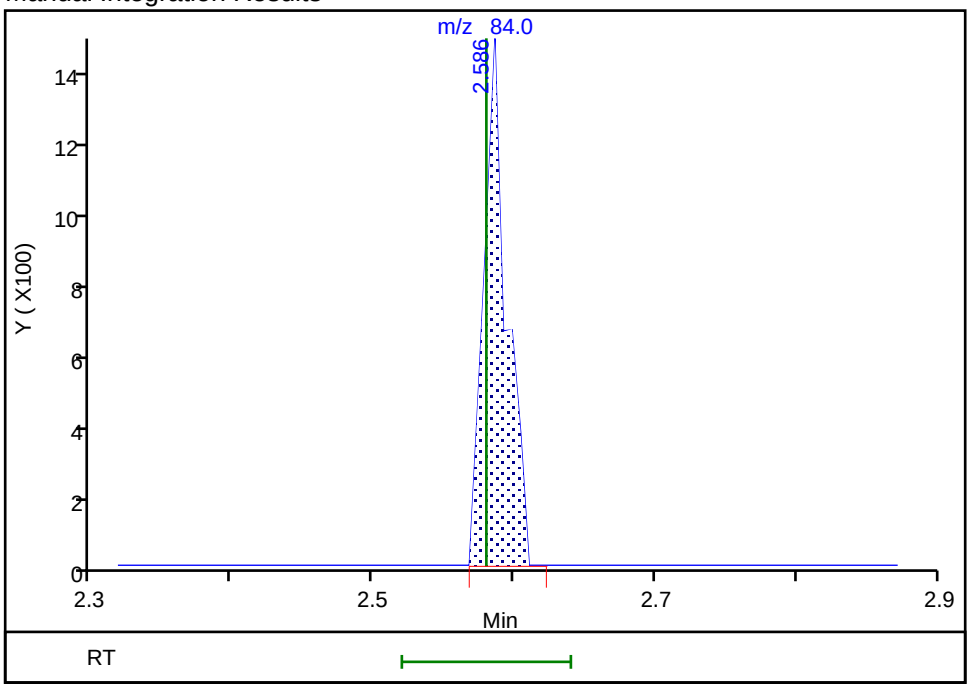
Not Detected
Expected RT: 2.58

Processing Integration Results



Manual Integration Results

RT: 2.59
Area: 1630
Amount: 0.129753
Amount Units: ug/L



Reviewer: QR3Z, 19-Oct-2024 10:05:32 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 480-224430-3

Matrix: Water | Lab File ID: S3142.d

Analysis Method: 8260C | Date Collected: 10/15/2024 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2024 02:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND	*+	1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 480-224430-3

Matrix: Water | Lab File ID: S3142.d

Analysis Method: 8260C | Date Collected: 10/15/2024 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2024 02:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
1868-53-7	Dibromofluoromethane (Surr)	96		75-123

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3142.d
Lims ID: 480-224430-B-3
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 19-Oct-2024 02:57:30 ALS Bottle#: 47 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 10:05:46 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 10:06:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	132713	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.708	-0.006	90	251510	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	95	263613	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	53	156167	24.0	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	99	118934	25.7	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	85	635644	24.1	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	86	196769	24.0	
10 Dichlorodifluoromethane	85		0.998				ND	
12 Chloromethane	50		1.132				ND	
13 Vinyl chloride	62		1.205				ND	
14 Bromomethane	94		1.448				ND	
15 Chloroethane	64		1.503				ND	
17 Trichlorofluoromethane	101		1.698				ND	
22 1,1-Dichloroethene	96		2.099				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		2.105				ND	
23 Acetone	43		2.221				ND	
26 Carbon disulfide	76		2.276				ND	
27 Methyl acetate	43		2.495				ND	
30 Methylene Chloride	84		2.580				ND	
32 Methyl tert-butyl ether	73		2.781				ND	
34 trans-1,2-Dichloroethene	96		2.799				ND	
39 1,1-Dichloroethane	63		3.194				ND	
45 cis-1,2-Dichloroethene	96		3.730				ND	
43 2-Butanone (MEK)	43		3.772				ND	
50 Chloroform	83	4.040	4.046	0.000	40	3469	0.2901	
52 Cyclohexane	56		4.137				ND	
51 1,1,1-Trichloroethane	97		4.137				ND	
55 Carbon tetrachloride	117		4.271				ND	
57 Benzene	78		4.484				ND	
58 1,2-Dichloroethane	62		4.563				ND	
62 Trichloroethene	95		5.092				ND	
64 Methylcyclohexane	83		5.196				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63		5.324				ND	
68 Dichlorobromomethane	83		5.622				ND	
72 cis-1,3-Dichloropropene	75		6.035				ND	
73 4-Methyl-2-pentanone (MIBK)	43		6.187				ND	
74 Toluene	92		6.309				ND	
77 trans-1,3-Dichloropropene	75		6.607				ND	
79 1,1,2-Trichloroethane	83		6.790				ND	
81 Tetrachloroethene	166		6.826				ND	
80 2-Hexanone	43		7.021				ND	
83 Chlorodibromomethane	129		7.167				ND	
84 Ethylene Dibromide	107		7.258				ND	
87 Chlorobenzene	112		7.733				ND	
88 Ethylbenzene	91		7.836				ND	
90 m-Xylene & p-Xylene	106		7.958				ND	
91 o-Xylene	106		8.371				ND	
92 Styrene	104		8.408				ND	
95 Bromoform	173		8.645				ND	
94 Isopropylbenzene	105		8.761				ND	
97 1,1,2,2-Tetrachloroethane	83		9.193				ND	
111 1,3-Dichlorobenzene	146		10.081				ND	
113 1,4-Dichlorobenzene	146		10.172				ND	
116 1,2-Dichlorobenzene	146		10.537				ND	
117 1,2-Dibromo-3-Chloropropane	75		11.292				ND	
119 1,2,4-Trichlorobenzene	180		11.973				ND	
S 124 Xylenes, Total	1		30.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

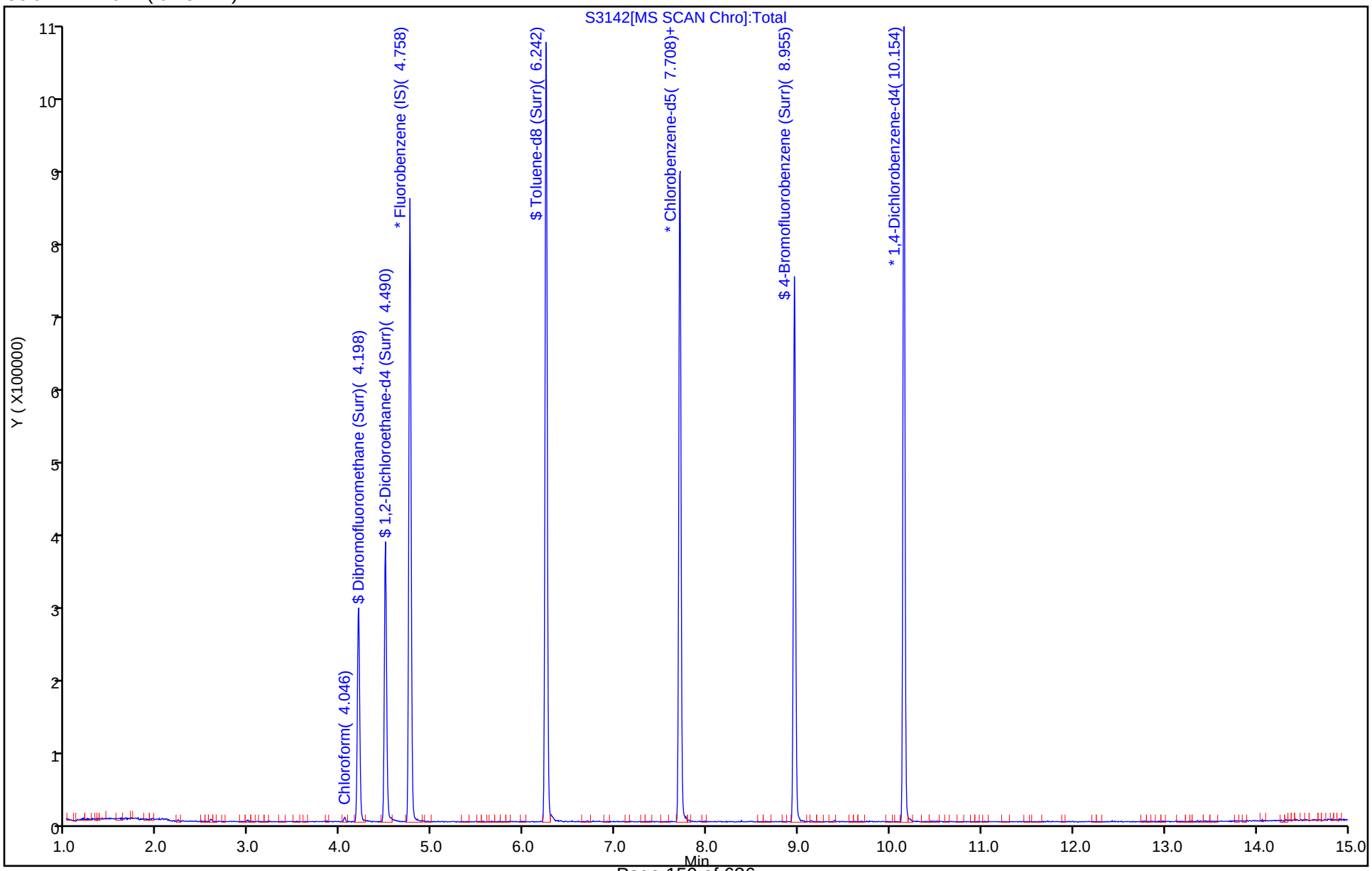
Report Date: 19-Oct-2024 10:06:05 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3142.d

Injection Date:	19-Oct-2024 02:57:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	480-224430-B-3	Lab Sample ID:	480-224430-3	Worklist Smp#:	41
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3142.d
Lims ID: 480-224430-B-3
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 19-Oct-2024 02:57:30 ALS Bottle#: 47 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 10:05:46 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 10:06:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 154 Dibromofluoromethane (Surr)	25.0	24.0	96.05
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	25.7	102.87
$ 5 Toluene-d8 (Surr)	25.0	24.1	96.52
$ 6 4-Bromofluorobenzene (Surr)	25.0	24.0	96.04

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Buffalo Job No.: 480-224430-1 Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 Calibration End Date: 10/16/2024 11:36 Calibration ID: 47404

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-728322/13	S2975.d
Level 2	IC 480-728322/14	S2976.d
Level 3	IC 480-728322/15	S2977.d
Level 4	IC 480-728322/16	S2978.d
Level 5	IC 480-728322/17	S2979.d
Level 6	ICIS 480-728322/18	S2980.d
Level 7	IC 480-728322/19	S2981.d
Level 8	IC 480-728322/46	S3008.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	1.2774 1.4763	0.8890 1.2440	1.4288 1.5631	1.4600	1.4003	Ave		1.3424			0.1000	15.7		20.0			
Chloromethane	1.5841 1.7922	1.5662 1.6433	1.7269 1.7938	1.7841	1.8428	Ave		1.7167			0.1000	6.1		20.0			
Vinyl chloride	1.2385 1.3135	1.0213 1.1224	1.3677 1.3391	1.2399	1.2441	Ave		1.2358			0.1000	9.3		20.0			
Butadiene	1.2992 1.6404	1.0386 1.3649	1.5756 1.7130	1.5254	1.4687	Ave		1.4532				14.9		20.0			
Bromomethane	0.7837 0.7861	0.8579 0.7161	0.8061 0.7886	0.7889	0.7606	Ave		0.7860			0.1000	5.1		20.0			
Chloroethane	0.9644 0.9310	0.9733 0.8521	1.0409 0.9397	1.0073	0.9545	Ave		0.9579			0.1000	5.8		20.0			
Dichlorofluoromethane	1.9984 2.2389	1.9945 2.0133	2.1019 2.2747	2.1334	2.1735	Ave		2.1161				5.2		20.0			
Trichlorofluoromethane	1.1860 1.7788	1.0702 1.5098	1.5497 1.8239	1.6688	1.6404	Ave		1.5285			0.1000	17.7		20.0			
Ethyl ether	1.2236 1.3072	1.3248 1.2827	1.2911 1.2855	1.2950	1.3238	Ave		1.2917				2.5		20.0			
Acrolein	0.1593 0.1565	0.1915 0.1612	0.1704 0.1582	0.1627	0.1658	Ave		0.1657				6.8		20.0			
1,1-Dichloroethene	+++++ 1.0166	0.7467 0.9467	1.0379 1.0041	0.9554	0.9638	Ave		0.9530			0.1000	10.2		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.6877 1.0410	0.6787 0.9889	1.0679 1.0537	1.0415	0.9912	Ave		0.9438			0.1000	17.3		20.0			
Acetone	0.7001 0.5830	0.6758 0.5948	0.6459 0.5913	0.6322	0.6083	Ave		0.6289			0.1000	6.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Buffalo Job No.: 480-224430-1 Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 Calibration End Date: 10/16/2024 11:36 Calibration ID: 47404

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Iodomethane	1.5465 1.8624	1.6594 1.7666	1.9198 1.8181	1.8029	1.8373	Ave		1.7766				6.8		20.0			
Carbon disulfide	2.6613 3.6643	2.7107 3.4484	3.1856 3.8070	3.2233	3.3047	Ave		3.2507			0.1000	12.6		20.0			
Allyl chloride	1.9839 2.3785	2.1673 2.3078	2.1191 2.5480	2.1724	2.2199	Ave		2.2371				7.7		20.0			
Methyl acetate	1.4585 1.4175	1.3862 1.4634	1.5183 1.4646	1.4020	1.4305	Ave		1.4426			0.1000	2.9		20.0			
Methylene Chloride	1.5083 1.2571	1.2887 1.2207	1.4121 1.2368	1.2576	1.2367	Lin1	0.1439	1.2326			0.1000	4.7			1.0000		0.9900
2-Methyl-2-propanol	0.1531 0.1709	0.1484 0.1789	0.1744 0.1737	0.1735	0.1746	Ave		0.1684				6.7		20.0			
Methyl tert-butyl ether	4.0983 4.1810	3.9303 4.2610	4.2312 4.2194	4.0626	4.2574	Ave		4.1552			0.1000	2.8		20.0			
trans-1,2-Dichloroethene	1.1699 1.2523	1.0352 1.2003	1.2461 1.2492	1.1477	1.2033	Ave		1.1880			0.1000	6.1		20.0			
Acrylonitrile	0.6959 0.7200	0.6846 0.7413	0.7226 0.7594	0.7015	0.7274	Ave		0.7191				3.4		20.0			
Hexane	1.6821 2.0190	1.4666 1.9309	1.8669 2.2232	1.8692	1.8818	Ave		1.8675				12.0		20.0			
1,1-Dichloroethane	2.1824 2.3665	2.0740 2.2942	2.4561 2.4618	2.2485	2.3232	Ave		2.3008			0.2000	5.8		20.0			
Vinyl acetate	+++++ 2.5504	1.6932 2.9363	1.8812 +++++	1.9884	2.2342	Lin1	-3.716	2.7899				17.6			0.9910		0.9900
2,2-Dichloropropane	0.9195 1.2968	1.0100 1.1848	1.2243 1.2862	1.1533	1.1846	Ave		1.1574				11.3		20.0			
cis-1,2-Dichloroethene	1.0746 1.3219	1.1402 1.2802	1.2255 1.3437	1.2750	1.2864	Ave		1.2435			0.1000	7.4		20.0			
2-Butanone (MEK)	0.8696 0.8888	0.8621 0.9231	0.9319 0.9566	0.8941	0.9263	Ave		0.9066			0.1000	3.6		20.0			
Chlorobromomethane	0.6300 0.6509	0.6231 0.6622	0.6496 0.6595	0.6576	0.6626	Ave		0.6494				2.3		20.0			
Tetrahydrofuran	0.7734 0.6127	0.6886 0.6265	0.7019 0.6452	0.6684	0.6321	Ave		0.6686				7.8		20.0			
Chloroform	2.7131 2.2093	2.2116 2.1291	2.2034 2.2116	2.1449	2.1960	Ave		2.2524			0.2000	8.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Buffalo Job No.: 480-224430-1 Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 Calibration End Date: 10/16/2024 11:36 Calibration ID: 47404

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Cyclohexane	+++++ 2.5536	1.6472 2.3589	2.2731 2.6447	2.3223	2.2427	Ave		2.2918			0.1000	14.0		20.0			
1,1,1-Trichloroethane	+++++ 1.8514	1.3242 1.7631	1.7053 1.9089	1.6309	1.7386	Ave		1.7032			0.1000	11.2		20.0			
Carbon tetrachloride	+++++ 1.5941	1.0470 1.5223	1.5630 1.7064	1.4101	1.4266	Ave		1.4671			0.1000	14.4		20.0			
1,1-Dichloropropene	1.5234 1.8250	1.4231 1.7031	1.6837 1.8850	1.6611	1.6449	Ave		1.6687				8.9		20.0			
Benzene	4.7029 5.2672	4.6478 5.0553	5.0766 5.4354	4.9341	5.0979	Ave		5.0271			0.5000	5.3		20.0			
Isobutyl alcohol	0.0598 0.0662	0.0529 0.0788	0.0598 0.0822	0.0547	0.0598	Ave		0.0643				16.8		20.0			
1,2-Dichloroethane	1.9723 1.9594	1.9206 1.9344	1.9758 1.9938	1.9286	1.9436	Ave		1.9536			0.1000	1.3		20.0			
n-Heptane	1.6923 1.9369	1.5117 1.9114	1.9493 2.1970	1.9335	1.8802	Ave		1.8765				10.7		20.0			
Trichloroethene	+++++ 1.2907	1.1599 1.2371	1.3186 1.3089	1.1671	1.2672	Ave		1.2499			0.2000	5.2		20.0			
Methylcyclohexane	+++++ 2.2454	1.5156 2.0860	2.0536 2.3071	1.9748	1.9206	Ave		2.0147			0.1000	12.9		20.0			
1,2-Dichloropropane	+++++ 1.3243	1.2254 1.3133	1.3156 1.3475	1.2451	1.3114	Ave		1.2975			0.1000	3.4		20.0			
Dibromomethane	0.7721 0.8057	0.6913 0.8043	0.7102 0.8217	0.7692	0.7874	Ave		0.7702			0.1000	6.0		20.0			
1,4-Dioxane	+++++ 0.0090	0.0075 0.0089	0.0087 0.0083	0.0094	0.0090	Ave		0.0087				7.0		20.0			
Bromodichloromethane	1.1745 1.4495	1.1928 1.4875	1.4098 1.5555	1.3489	1.3827	Ave		1.3751			0.2000	9.8		20.0			
2-Chloroethyl vinyl ether	0.6788 0.8918	0.6349 0.9182	0.8260 0.9663	0.8354	0.8930	Ave		0.8306				14.0		20.0			
cis-1,3-Dichloropropene	1.4558 1.9744	1.4806 2.0442	1.7037 2.1706	1.7467	1.8426	Ave		1.8023			0.2000	14.3		20.0			
4-Methyl-2-pentanone (MIBK)	0.7377 1.0405	0.8291 1.0423	0.9130 1.0814	1.0029	1.0547	Ave		0.9627			0.1000	12.9		20.0			
Toluene	1.7583 1.7305	1.6250 1.6768	1.6439 1.7642	1.6436	1.6238	Ave		1.6833			0.4000	3.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Buffalo Job No.: 480-224430-1 Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 Calibration End Date: 10/16/2024 11:36 Calibration ID: 47404

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
trans-1,3-Dichloropropene	0.7098 0.9437	0.7507 0.9675	0.8168 1.0216	0.8082	0.8687	Ave		0.8609			0.1000	12.7		20.0			
Ethyl methacrylate	+++++ 0.9013	0.6945 0.9326	0.7285 0.9452	0.8528	0.8667	Ave		0.8459				11.6		20.0			
1,1,2-Trichloroethane	+++++ 0.5015	0.4583 0.4975	0.4926 0.4961	0.4875	0.4981	Ave		0.4902			0.1000	3.0		20.0			
Tetrachloroethene	0.5273 0.7314	0.5681 0.6885	0.6713 0.7205	0.6619	0.6582	Ave		0.6534			0.2000	10.9		20.0			
1,3-Dichloropropane	0.9229 1.0728	0.8687 1.0456	1.0160 1.0744	1.0102	1.0222	Ave		1.0041				7.2		20.0			
2-Hexanone	0.5556 0.7175	0.5804 0.7138	0.6811 0.7177	0.6896	0.7164	Ave		0.6715			0.1000	9.8		20.0			
Dibromochloromethane	0.3810 0.5649	0.3576 0.5787	0.4554 0.6169	0.4903	0.5073	Ave		0.4940			0.1000	18.8		20.0			
1,2-Dibromoethane	0.5580 0.6106	0.5314 0.6368	0.5961 0.6203	0.5718	0.5962	Ave		0.5902				5.9		20.0			
Chlorobenzene	1.6092 1.8663	1.6222 1.7943	1.7334 1.8736	1.7553	1.7426	Ave		1.7496			0.5000	5.6		20.0			
Ethylbenzene	+++++ 3.2943	2.6284 3.1987	3.0554 3.4220	3.0451	3.0019	Ave		3.0922			0.1000	8.2		20.0			
1,1,1,2-Tetrachloroethane	+++++ 0.6139	0.4429 0.6309	0.5307 0.6395	0.5505	0.5831	Ave		0.5702				12.1		20.0			
m,p-Xylene	+++++ 1.2475	1.0542 1.2104	1.1997 1.2880	1.1624	1.1812	Ave		1.1919			0.1000	6.2		20.0			
o-Xylene	+++++ 1.2726	1.0421 1.2117	1.0966 1.2595	1.1700	1.1829	Ave		1.1765			0.3000	7.1		20.0			
Styrene	+++++ 2.0011	1.7455 1.9887	2.0354 2.0591	1.9326	1.9674	Ave		1.9614			0.3000	5.3		20.0			
Bromoform	0.3383 0.3442	0.2610 0.3788	0.2534 0.3896	0.2983	0.3115	Ave		0.3219			0.1000	15.6		20.0			
Isopropylbenzene	+++++ 2.9864	2.2991 2.8886	2.6100 3.1608	2.6123	2.6546	Ave		2.7446			0.1000	10.5		20.0			
Bromobenzene	0.6953 0.7860	0.6886 0.7695	0.7071 0.8003	0.7559	0.7584	Ave		0.7451				5.7		20.0			
1,1,2,2-Tetrachloroethane	0.7339 0.8141	0.7387 0.8239	0.7160 0.8405	0.7935	0.7903	Ave		0.7814			0.3000	5.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Buffalo Job No.: 480-224430-1 Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 Calibration End Date: 10/16/2024 11:36 Calibration ID: 47404

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
N-Propylbenzene	+++++ 3.7871	2.8780 3.6310	3.2651 4.0747	3.3895	3.4147	Ave		3.4914				11.0		20.0			
1,2,3-Trichloropropane	0.2370 0.2731	0.2742 0.2751	0.2574 0.2750	0.2878	0.2721	Ave		0.2690				5.7		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.3099	0.2725 0.3100	0.2359 0.3367	0.2979	0.2889	Ave		0.2931				11.0		20.0			
2-Chlorotoluene	0.6332 0.7247	0.5541 0.7013	0.7039 0.7410	0.6760	0.6992	Ave		0.6792				8.8		20.0			
1,3,5-Trimethylbenzene	+++++ 2.7154	2.0765 2.6297	2.4505 2.8682	2.3922	2.4905	Ave		2.5176				10.1		20.0			
4-Chlorotoluene	+++++ 0.7489	0.6478 0.7297	0.6749 0.7744	0.7101	0.7241	Ave		0.7157				6.0		20.0			
tert-Butylbenzene	+++++ 0.6043	0.4563 0.5745	0.5529 0.6180	0.5230	0.5386	Ave		0.5525				9.9		20.0			
1,2,4-Trimethylbenzene	+++++ 2.7692	2.1435 2.7231	2.5446 2.9606	2.5249	2.5397	Ave		2.6008				9.9		20.0			
sec-Butylbenzene	+++++ 3.4001	2.4689 3.2776	2.9333 3.7137	2.9925	3.0266	Ave		3.1161				12.7		20.0			
1,3-Dichlorobenzene	+++++ 1.4854	1.2522 1.4501	1.3783 1.5269	1.4338	1.3970	Ave		1.4177			0.6000	6.3		20.0			
4-Isopropyltoluene	+++++ 3.0055	2.1627 2.9128	2.6212 3.2615	2.6885	2.7922	Ave		2.7778				12.4		20.0			
1,4-Dichlorobenzene	1.3412 1.5001	1.3553 1.4887	1.4697 1.5710	1.4436	1.4742	Ave		1.4555			0.5000	5.2		20.0			
n-Butylbenzene	+++++ 2.6567	1.9359 2.5258	2.1647 2.8423	2.2821	2.4074	Ave		2.4021				12.7		20.0			
1,2-Dichlorobenzene	1.1993 1.4699	1.2138 1.4517	1.4444 1.5008	1.4046	1.4285	Ave		1.3891			0.4000	8.4		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1513	0.0937 0.1658	0.1236 0.1721	0.1291	0.1340	Lin1	-0.109	0.1677			0.0500	12.9			0.9970		0.9900
1,2,4-Trichlorobenzene	+++++ 1.0729	0.8459 1.0545	0.8960 1.0823	0.9326	0.9875	Ave		0.9817			0.2000	9.5		20.0			
Hexachlorobutadiene	+++++ 0.5138	0.3938 0.4868	0.4312 0.4995	0.4794	0.4486	Ave		0.4647				9.1		20.0			
Naphthalene	2.3205 3.2010	2.5082 3.3083	2.5024 3.4197	2.8720	2.9837	Ave		2.8895				14.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Buffalo Job No.: 480-224430-1 Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 Calibration End Date: 10/16/2024 11:36 Calibration ID: 47404

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichlorobenzene	+++++ 1.0628	0.8372 1.0471	0.8910 1.0620	0.9584	0.9926	Ave		0.9787				9.0		20.0			
Dibromofluoromethane (Surr)	1.2706 1.2373	1.1853 1.2402	1.2312 1.2238	1.1761	1.2364	Ave		1.2251				2.5		20.0			
1,2-Dichloroethane-d4 (Surr)	0.9157 0.8666	0.8656 0.8541	0.8837 0.8545	0.8354	0.8940	Ave		0.8712				2.9		20.0			
Toluene-d8 (Surr)	2.5860 2.6366	2.5693 2.6377	2.6586 2.6133	2.6034	2.6423	Ave		2.6184				1.2		20.0			
4-Bromofluorobenzene (Surr)	0.8309 0.8050	0.8098 0.8111	0.8370 0.7981	0.8099	0.8147	Ave		0.8146				1.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1 | Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S | GC Column: ZB-624 (20 | ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 | Calibration End Date: 10/16/2024 11:36 | Calibration ID: 47404

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-728322/13	S2975.d
Level 2	IC 480-728322/14	S2976.d
Level 3	IC 480-728322/15	S2977.d
Level 4	IC 480-728322/16	S2978.d
Level 5	IC 480-728322/17	S2979.d
Level 6	ICIS 480-728322/18	S2980.d
Level 7	IC 480-728322/19	S2981.d
Level 8	IC 480-728322/46	S3008.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	3873 246505	5741 418755	17760 1052806	48116	88708	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	4803 299267	10114 553160	21466 1208213	58798	116740	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	3755 219320	6595 377803	17001 901910	40862	78814	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	3939 273912	6707 459435	19585 1153749	50272	93043	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	2376 131269	5540 241056	10020 531159	26000	48183	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	2924 155456	6285 286820	12939 632924	33197	60468	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorofluoromethane	FB	Ave	6059 373847	12880 677683	26127 1532104	70309	137690	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	3596 297016	6911 508212	19264 1228429	54998	103918	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl ether	FB	Ave	3710 218267	8555 431754	16049 865797	42678	83864	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrolein	FB	Ave	2415 130643	6182 271286	10593 532838	26806	52528	2.50 125	5.00 250	10.0 500	25.0	50.0
1,1-Dichloroethene	FB	Ave	+++++ 169743	4822 318678	12902 676309	31486	61053	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	2085 173833	4383 332879	13274 709723	34324	62791	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	10613 486731	21821 1001144	40143 1991344	104174	192661	2.50 125	5.00 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	4689 310979	10716 594642	23864 1224525	59417	116393	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	8069	17505	39598	106229	209351	0.500	1.00	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1 | Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S | GC Column: ZB-624 (20 ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 | Calibration End Date: 10/16/2024 11:36 | Calibration ID: 47404

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			611869	1160764	2564153			25.0	50.0	100		
Allyl chloride	FB	Ave	6015 397165	13996 776816	26341 1716166	71594	140627	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Methyl acetate	FB	Ave	8844 473388	17903 985171	37747 1972956	92410	181244	1.00 50.0	2.00 100	4.00 200	10.0	20.0
Methylene Chloride	FB	Lin1	4573 209902	8322 410900	17553 833054	41446	78342	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Methyl-2-propanol	FB	Ave	4641 285412	9581 602027	21677 1170253	57193	110611	5.00 250	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	12426 698136	25381 1434288	52595 2841917	133888	269704	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	3547 209109	6685 404017	15490 841378	37824	76230	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrylonitrile	FB	Ave	21100 1202307	44207 2495185	89823 5115147	231172	460824	5.00 250	10.0 500	20.0 1000	50.0	100
Hexane	FB	Ave	5100 337136	9471 649968	23206 1497398	61601	119209	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	6617 395156	13393 772258	30530 1658136	74103	147172	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl acetate	FB	Lin1	+++++ 851726	21869 1976808	46768 +++++	131061	283072	+++++ 50.0	2.00 100	4.00 +++++	10.0	20.0
2,2-Dichloropropane	FB	Ave	2788 216540	6522 398816	15218 866309	38008	75040	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	3258 220737	7363 430940	15234 905060	42020	81492	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	13183 742068	27836 1553649	57918 3221657	147338	293386	2.50 125	5.00 250	10.0 500	25.0	50.0
Chlorobromomethane	FB	Ave	1910 108685	4024 222917	8075 444173	21672	41977	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrahydrofuran	FB	Ave	4690 204627	8894 421763	17449 869124	44059	80087	1.00 50.0	2.00 100	4.00 200	10.0	20.0
Chloroform	FB	Ave	8226 368905	14282 716676	27389 1489616	70689	139115	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Cyclohexane	FB	Ave	+++++ 426404	10637 794016	28255 1781317	76535	142072	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	+++++ 309143	8551 593486	21197 1285722	53747	110141	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	FB	Ave	+++++ 266174	6761 512438	19429 1149303	46471	90372	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	FB	Ave	4619 304745	9190 573284	20929 1269593	54744	104205	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1 | Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S | GC Column: ZB-624 (20 ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 | Calibration End Date: 10/16/2024 11:36 | Calibration ID: 47404

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	14259 879506	30014 1701671	63104 3660953	162608	322943	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Isobutyl alcohol	FB	Ave	4534 276320	8538 663322	18598 1383458	45069	94785	12.5 625	25.0 1250	50.0 2500	125	250
1,2-Dichloroethane	FB	Ave	5980 327181	12403 651132	24560 1342876	63560	123127	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Heptane	FB	Ave	5131 323419	9762 643402	24230 1479774	63720	119109	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	FB	Ave	+++++ 215523	7490 416411	16391 881620	38462	80278	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Methylcyclohexane	FB	Ave	+++++ 374927	9787 702162	25527 1553947	65082	121668	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	FB	Ave	+++++ 221122	7913 442072	16354 907560	41034	83074	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	FB	Ave	2341 134530	4464 270732	8828 553411	25350	49878	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dioxane	CBNZd5	Ave	+++++ 54962	1859 112132	4156 212342	11487	21921	+++++ 500	20.0 1000	40.0 2000	100	200
Bromodichloromethane	FB	Ave	3561 242037	7703 500706	17524 1047667	44456	87590	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	2058 148909	4100 309087	10268 650868	27530	56570	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	4414 329691	9561 688086	21178 1462004	57563	116726	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZd5	Ave	22365 1596688	51279 3271391	108871 6903651	307127	639314	2.50 125	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZd5	Ave	10661 531112	20100 1052562	39207 2252474	100667	196858	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZd5	Ave	4304 289638	9286 607337	19481 1304375	49501	105316	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl methacrylate	CBNZd5	Ave	+++++ 276626	8591 585430	17374 1206753	52232	105068	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZd5	Ave	+++++ 153904	5669 312316	11748 633340	29858	60380	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	CBNZd5	Ave	3197	7027	16010	40539	79793	0.500	1.00	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1 | Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S | GC Column: ZB-624 (20 ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 | Calibration End Date: 10/16/2024 11:36 | Calibration ID: 47404

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			224472	432164	919903			25.0	50.0	100		
1,3-Dichloropropane	CBNZd5	Ave	5596 329265	10745 656309	24231 1371794	61873	123920	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	CBNZd5	Ave	16844 1101005	35897 2240372	81224 4581329	211189	434234	2.50 125	5.00 250	10.0 500	25.0	50.0
Dibromochloromethane	CBNZd5	Ave	2310 173369	4423 363283	10862 787638	30033	61495	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromoethane	CBNZd5	Ave	3383 187399	6573 399756	14217 791993	35024	72282	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Chlorobenzene	CBNZd5	Ave	9757 572782	20066 1126316	41340 2392146	107509	211257	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	CBNZd5	Ave	+++++ 1011058	32512 2007845	72868 4369055	186511	363921	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZd5	Ave	+++++ 188402	5479 396002	12657 816472	33716	70685	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
m,p-Xylene	CBNZd5	Ave	+++++ 382871	13040 759758	28611 1644432	71199	143193	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	CBNZd5	Ave	+++++ 390590	12890 760608	26152 1608041	71663	143401	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	CBNZd5	Ave	+++++ 614149	21591 1248313	48543 2628976	118370	238505	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	CBNZd5	Ave	2051 105628	3228 237797	6044 497419	18271	37767	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd4	Ave	+++++ 939768	29754 1855767	67405 3993575	167685	332401	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd4	Ave	4467 247328	8911 494337	18262 1011172	48521	94958	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd4	Ave	4715 256178	9560 529302	18492 1061893	50937	98961	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd4	Ave	+++++ 1191735	37246 2332723	84323 5148248	217572	427568	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd4	Ave	1523	3548	6647	18473	34069	0.500	1.00	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1 | Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S | GC Column: ZB-624 (20 ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 | Calibration End Date: 10/16/2024 11:36 | Calibration ID: 47404

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			85931	176722	347508			25.0	50.0	100		
trans-1,4-Dichloro-2-butene	DCBd4	Ave	+++++ 97517	3527 199152	6093 425449	19119	36178	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd4	Ave	4068 228049	7171 450514	18179 936185	43394	87546	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd4	Ave	+++++ 854487	26873 1689434	63286 3623926	153556	311845	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd4	Ave	+++++ 235656	8383 468769	17430 978397	45580	90663	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd4	Ave	+++++ 190175	5905 369054	14278 780867	33572	67447	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd4	Ave	+++++ 871416	27740 1749423	65716 3740679	162072	318008	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd4	Ave	+++++ 1069949	31951 2105677	75754 4692187	192090	378982	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd4	Ave	+++++ 467422	16205 931595	35596 1929168	92035	174920	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd4	Ave	+++++ 945799	27988 1871330	67693 4120795	172572	349624	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dichlorobenzene	DCBd4	Ave	8617 472075	17540 956411	37956 1984916	92667	184597	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd4	Ave	+++++ 836027	25053 1622689	55904 3591144	146490	301448	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd4	Ave	7705 462571	15709 932604	37302 1896198	90162	178864	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd4	Lin1	+++++ 47626	1213 106491	3193 217468	8285	16774	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd4	Ave	+++++ 337637	10947 677428	23139 1367508	59865	123650	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd4	Ave	+++++ 161692	5096 312737	11135 631150	30770	56169	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd4	Ave	14909 1007308	32460 2125419	64625 4320743	184356	373603	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd4	Ave	+++++ 334453	10834 672686	23010 1341790	61520	124286	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	192617 206595	191351 208726	191310 206075	193796	195806	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	138811 144702	139744 143751	137311 143876	137655	141590	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZd5	Ave	783987	794540	792585	797283	800811	25.0	25.0	25.0	25.0	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Buffalo Job No.: 480-224430-1 Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 Calibration End Date: 10/16/2024 11:36 Calibration ID: 47404

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
			809212	827857	834122			25.0	25.0	25.0		
4-Bromofluorobenzene (Surr)	CBNZd 5	Ave	251910	250423	249526	248038	246920	25.0	25.0	25.0	25.0	25.0
			247057	254559	254751			25.0	25.0	25.0		

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1 | Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S | GC Column: ZB-624 (20) ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 | Calibration End Date: 10/16/2024 11:36 | Calibration ID: 47404

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-728322/13	S2975.d
Level 2	IC 480-728322/14	S2976.d
Level 3	IC 480-728322/15	S2977.d
Level 4	IC 480-728322/16	S2978.d
Level 5	IC 480-728322/17	S2979.d
Level 6	ICIS 480-728322/18	S2980.d
Level 7	IC 480-728322/19	S2981.d
Level 8	IC 480-728322/46	S3008.d

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	-4.8						30					
Chloromethane	-7.7						30					
Vinyl chloride	0.2						30					
Butadiene	-10.6						30					
Bromomethane	-0.3						30					
Chloroethane	0.7						30					
Dichlorofluoromethane	-5.6						30					
Trichlorofluoromethane	-22.4						30					
Ethyl ether	-5.3						30					
Acrolein	-3.9						30					
1,1-Dichloroethene	+++++	-21.6						30				
1,1,2-Trichloro-1,2,2-trifluoroethane	-27.1						30					
Acetone	11.3						30					
Iodomethane	-13.0						30					
Carbon disulfide	-18.1						30					

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1 | Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S | GC Column: ZB-624 (20) ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 | Calibration End Date: 10/16/2024 11:36 | Calibration ID: 47404

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Allyl chloride	-11.3						30					
Methyl acetate	1.1						30					
Methylene Chloride	-1.0						30					
2-Methyl-2-propanol	-9.1						30					
Methyl tert-butyl ether	-1.4						30					
trans-1,2-Dichloroethene	-1.5						30					
Acrylonitrile	-3.2						30					
Hexane	-9.9						30					
1,1-Dichloroethane	-5.1						30					
Vinyl acetate	+++++	27.3 +++++						30				
2,2-Dichloropropane	-20.6						30					
cis-1,2-Dichloroethene	-13.6						30					
2-Butanone (MEK)	-4.1						30					
Chlorobromomethane	-3.0						30					
Tetrahydrofuran	15.7						30					
Chloroform	20.5						30					
Cyclohexane	+++++	-28.1						30				
1,1,1-Trichloroethane	+++++	-22.3						30				
Carbon tetrachloride	+++++	-28.6						30				
1,1-Dichloropropene	-8.7						30					
Benzene	-6.4						30					

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1 | Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S | GC Column: ZB-624 (20) ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 | Calibration End Date: 10/16/2024 11:36 | Calibration ID: 47404

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Isobutyl alcohol	-7.0						30					
1,2-Dichloroethane	1.0						30					
n-Heptane	-9.8						30					
Trichloroethene	+++++	-7.2						30				
Methylcyclohexane	+++++	-24.8						30				
1,2-Dichloropropane	+++++	-5.6						30				
Dibromomethane	0.2						30					
1,4-Dioxane	+++++	-13.6						30				
Bromodichloromethane	-14.6						30					
2-Chloroethyl vinyl ether	-18.3						30					
cis-1,3-Dichloropropene	-19.2						30					
4-Methyl-2-pentanone (MIBK)	-23.4						30					
Toluene	4.5						30					
trans-1,3-Dichloropropene	-17.5						30					
Ethyl methacrylate	+++++	-17.9						30				
1,1,2-Trichloroethane	+++++	-6.5						30				
Tetrachloroethene	-19.3						30					
1,3-Dichloropropane	-8.1						30					
2-Hexanone	-17.3						30					
Dibromochloromethane	-22.9						30					
1,2-Dibromoethane	-5.5						30					

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1 | Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S | GC Column: ZB-624 (20) ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 | Calibration End Date: 10/16/2024 11:36 | Calibration ID: 47404

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Chlorobenzene	-8.0						30					
Ethylbenzene	+++++	-15.0						30				
1,1,1,2-Tetrachloroethane	+++++	-22.3						30				
m,p-Xylene	+++++	-11.6						30				
o-Xylene	+++++	-11.4						30				
Styrene	+++++	-11.0						30				
Bromoform	5.1						30					
Isopropylbenzene	+++++	-16.2						30				
Bromobenzene	-6.7						30					
1,1,2,2-Tetrachloroethane	-6.1						30					
N-Propylbenzene	+++++	-17.6						30				
1,2,3-Trichloropropane	-11.9						30					
trans-1,4-Dichloro-2-butene	+++++	-7.0						30				
2-Chlorotoluene	-6.8						30					
1,3,5-Trimethylbenzene	+++++	-17.5						30				
4-Chlorotoluene	+++++	-9.5						30				
tert-Butylbenzene	+++++	-17.4						30				
1,2,4-Trimethylbenzene	+++++	-17.6						30				
sec-Butylbenzene	+++++	-20.8						30				
1,3-Dichlorobenzene	+++++	-11.7						30				
4-Isopropyltoluene	+++++	-22.1						30				

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Buffalo Job No.: 480-224430-1 Analy Batch No.: 728322

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2024 15:49 Calibration End Date: 10/16/2024 11:36 Calibration ID: 47404

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
1,4-Dichlorobenzene	-7.9						30					
n-Butylbenzene	+++++	-19.4						30				
1,2-Dichlorobenzene	-13.7						30					
1,2-Dibromo-3-Chloropropane	+++++	21.1						30				
1,2,4-Trichlorobenzene	+++++	-13.8						30				
Hexachlorobutadiene	+++++	-15.3						30				
Naphthalene	-19.7						30					
1,2,3-Trichlorobenzene	+++++	-14.5						30				
Dibromofluoromethane (Surr)	3.7						30					
1,2-Dichloroethane-d4 (Surr)	5.1						30					
Toluene-d8 (Surr)	-1.2						30					
4-Bromofluorobenzene (Surr)	2.0						30					

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2975.d
Lims ID: IC 0.5
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Oct-2024 15:49:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.5
Misc. Info.: 480-0120558-013
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2024 12:19:54 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: QR3Z Date: 16-Oct-2024 08:28:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	151598	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	88	303163	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	95	321241	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	57	192617	25.0	25.9	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	93	138811	25.0	26.3	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	84	783987	25.0	24.7	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	87	251910	25.0	25.5	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	28	3873	0.5000	0.4758	
12 Chloromethane	50	1.132	1.132	0.000	77	4803	0.5000	0.4614	
13 Vinyl chloride	62	1.205	1.211	-0.006	2	3755	0.5000	0.5011	a
151 Butadiene	54	1.217	1.217	0.000	81	3939	0.5000	0.4470	
14 Bromomethane	94	1.454	1.454	0.000	22	2376	0.5000	0.4985	
15 Chloroethane	64	1.509	1.509	0.000	35	2924	0.5000	0.5034	Ma
16 Dichlorofluoromethane	67	1.692	1.686	0.006	39	6059	0.5000	0.4722	
17 Trichlorofluoromethane	101	1.692	1.698	-0.006	3	3596	0.5000	0.3880	
18 Ethyl ether	59	1.917	1.917	0.000	53	3710	0.5000	0.4737	Ma
20 Acrolein	56	2.069	2.081	-0.012	0	2415	2.50	2.40	M
22 1,1-Dichloroethene	96	2.111	2.105	0.006	58	1958	0.5000	0.3388	a
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.105	2.105	0.000	6	2085	0.5000	0.3643	
23 Acetone	43	2.221	2.221	0.000	88	10613	2.50	2.78	
25 Iodomethane	142	2.251	2.251	0.000	47	4689	0.5000	0.4352	
26 Carbon disulfide	76	2.282	2.282	0.000	88	8069	0.5000	0.4093	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	56	6015	0.5000	0.4434	
27 Methyl acetate	43	2.501	2.501	0.000	74	8844	1.00	1.01	a
30 Methylene Chloride	84	2.586	2.586	0.000	65	4573	0.5000	0.4951	
31 2-Methyl-2-propanol	59	2.774	2.762	0.012	44	4641	5.00	4.54	
32 Methyl tert-butyl ether	73	2.787	2.787	0.000	75	12426	0.5000	0.4932	
34 trans-1,2-Dichloroethene	96	2.793	2.799	-0.006	49	3547	0.5000	0.4924	
33 Acrylonitrile	53	2.860	2.860	0.000	89	21100	5.00	4.84	
35 Hexane	57	2.975	2.981	-0.006	63	5100	0.5000	0.4504	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.194	3.194	0.000	1	6617	0.5000	0.4743	
37 Vinyl acetate	43	3.267	3.261	0.006	89	10174	1.00	1.93	
44 2,2-Dichloropropane	77	3.699	3.693	0.006	20	2788	0.5000	0.3972	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	28	3258	0.5000	0.4321	
43 2-Butanone (MEK)	43	3.784	3.778	0.006	94	13183	2.50	2.40	
48 Chlorobromomethane	128	3.961	3.961	0.000	34	1910	0.5000	0.4850	
49 Tetrahydrofuran	42	3.985	3.973	0.012	78	4690	1.00	1.16	
50 Chloroform	83	4.046	4.046	0.000	63	8226	0.5000	0.6023	
52 Cyclohexane	56	4.137	4.137	0.000	57	5294	0.5000	0.3809	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	21	3735	0.5000	0.3616	
55 Carbon tetrachloride	117	4.265	4.271	-0.006	48	3369	0.5000	0.3787	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	39	4619	0.5000	0.4565	a
57 Benzene	78	4.484	4.484	0.000	23	14259	0.5000	0.4678	
53 Isobutyl alcohol	43	4.557	4.551	0.006	42	4534	12.5	11.6	
58 1,2-Dichloroethane	62	4.569	4.563	0.006	8	5980	0.5000	0.5048	
59 n-Heptane	43	4.679	4.679	0.000	77	5131	0.5000	0.4509	
62 Trichloroethene	95	5.092	5.092	0.000	47	3055	0.5000	0.4031	
64 Methylcyclohexane	83	5.196	5.196	0.000	61	4357	0.5000	0.3566	
65 1,2-Dichloropropane	63	5.330	5.324	0.006	36	3086	0.5000	0.3922	
67 Dibromomethane	93	5.463	5.463	0.000	52	2341	0.5000	0.5012	
66 1,4-Dioxane	88	5.488	5.476	0.012	1	702	10.0	6.66	Ma
68 Dichlorobromomethane	83	5.622	5.622	0.000	32	3561	0.5000	0.4270	
69 2-Chloroethyl vinyl ether	63	5.926	5.914	0.012	21	2058	0.5000	0.4086	a
72 cis-1,3-Dichloropropene	75	6.041	6.035	0.006	39	4414	0.5000	0.4039	a
73 4-Methyl-2-pentanone (MIBK)	43	6.193	6.187	0.006	86	22365	2.50	1.92	M
74 Toluene	92	6.309	6.309	0.000	63	10661	0.5000	0.5223	
77 trans-1,3-Dichloropropene	75	6.607	6.601	0.006	30	4304	0.5000	0.4123	a
75 Ethyl methacrylate	69	6.668	6.662	0.006	5	3109	0.5000	0.3031	a
79 1,1,2-Trichloroethane	83	6.783	6.790	-0.007	15	2461	0.5000	0.4140	
81 Tetrachloroethene	166	6.826	6.826	0.000	46	3197	0.5000	0.4035	
82 1,3-Dichloropropane	76	6.948	6.942	0.006	56	5596	0.5000	0.4596	
80 2-Hexanone	43	7.033	7.027	0.006	81	16844	2.50	2.07	
83 Chlorodibromomethane	129	7.167	7.167	0.000	1	2310	0.5000	0.3856	
84 Ethylene Dibromide	107	7.258	7.258	0.000	29	3383	0.5000	0.4727	
87 Chlorobenzene	112	7.733	7.733	-0.001	15	9757	0.5000	0.4599	
88 Ethylbenzene	91	7.836	7.836	0.000	57	14536	0.5000	0.3876	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	14	2530	0.5000	0.3659	
90 m-Xylene & p-Xylene	106	7.964	7.958	0.006	51	5931	0.5000	0.4103	a
91 o-Xylene	106	8.377	8.371	0.006	55	5488	0.5000	0.3847	
92 Styrene	104	8.408	8.408	0.000	25	9755	0.5000	0.4101	
95 Bromoform	173	8.657	8.645	0.012	1	2051	0.5000	0.5254	
94 Isopropylbenzene	105	8.761	8.761	0.000	54	12615	0.5000	0.3577	
101 Bromobenzene	156	9.101	9.101	0.000	68	4467	0.5000	0.4666	
97 1,1,2,2-Tetrachloroethane	83	9.199	9.193	0.006	1	4715	0.5000	0.4696	
99 N-Propylbenzene	91	9.211	9.205	0.006	78	17074	0.5000	0.3806	
100 1,2,3-Trichloropropane	110	9.217	9.217	0.000	14	1523	0.5000	0.4407	
98 trans-1,4-Dichloro-2-butene	53	9.247	9.241	0.006	1	1316	0.5000	0.3494	
103 2-Chlorotoluene	126	9.308	9.302	0.006	62	4068	0.5000	0.4661	
102 1,3,5-Trimethylbenzene	105	9.405	9.400	0.005	60	12358	0.5000	0.3820	
105 4-Chlorotoluene	126	9.424	9.424	0.000	31	3303	0.5000	0.3592	
106 tert-Butylbenzene	134	9.734	9.734	0.000	45	2399	0.5000	0.3379	
107 1,2,4-Trimethylbenzene	105	9.795	9.789	0.006	63	11212	0.5000	0.3355	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.953	9.953	0.000	47	14634	0.5000	0.3655	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	67	7458	0.5000	0.4094	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	48	12651	0.5000	0.3544	
113 1,4-Dichlorobenzene	146	10.178	10.172	0.006	16	8617	0.5000	0.4607	a
115 n-Butylbenzene	91	10.507	10.507	0.000	68	10374	0.5000	0.3361	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	47	7705	0.5000	0.4317	
117 1,2-Dibromo-3-Chloropropane	75	11.297	11.292	0.005	1	479	0.5000	0.8745	Ma
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	29	4385	0.5000	0.3476	
120 Hexachlorobutadiene	225	12.088	12.088	0.000	13	2304	0.5000	0.3858	a
121 Naphthalene	128	12.186	12.180	0.006	59	14909	0.5000	0.4015	a
122 1,2,3-Trichlorobenzene	180	12.386	12.387	-0.001	31	4829	0.5000	0.3840	a
S 125 1,2-Dichloroethene, Total	1				0			0.9245	
S 123 Total BTEX	1				0			2.17	
S 126 1,3-Dichloropropene, Total	1				0			0.8161	
S 124 Xylenes, Total	1				0			0.7950	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00260	Amount Added:	0.50	Units: uL	
GAS CORP mix_00645	Amount Added:	0.50	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

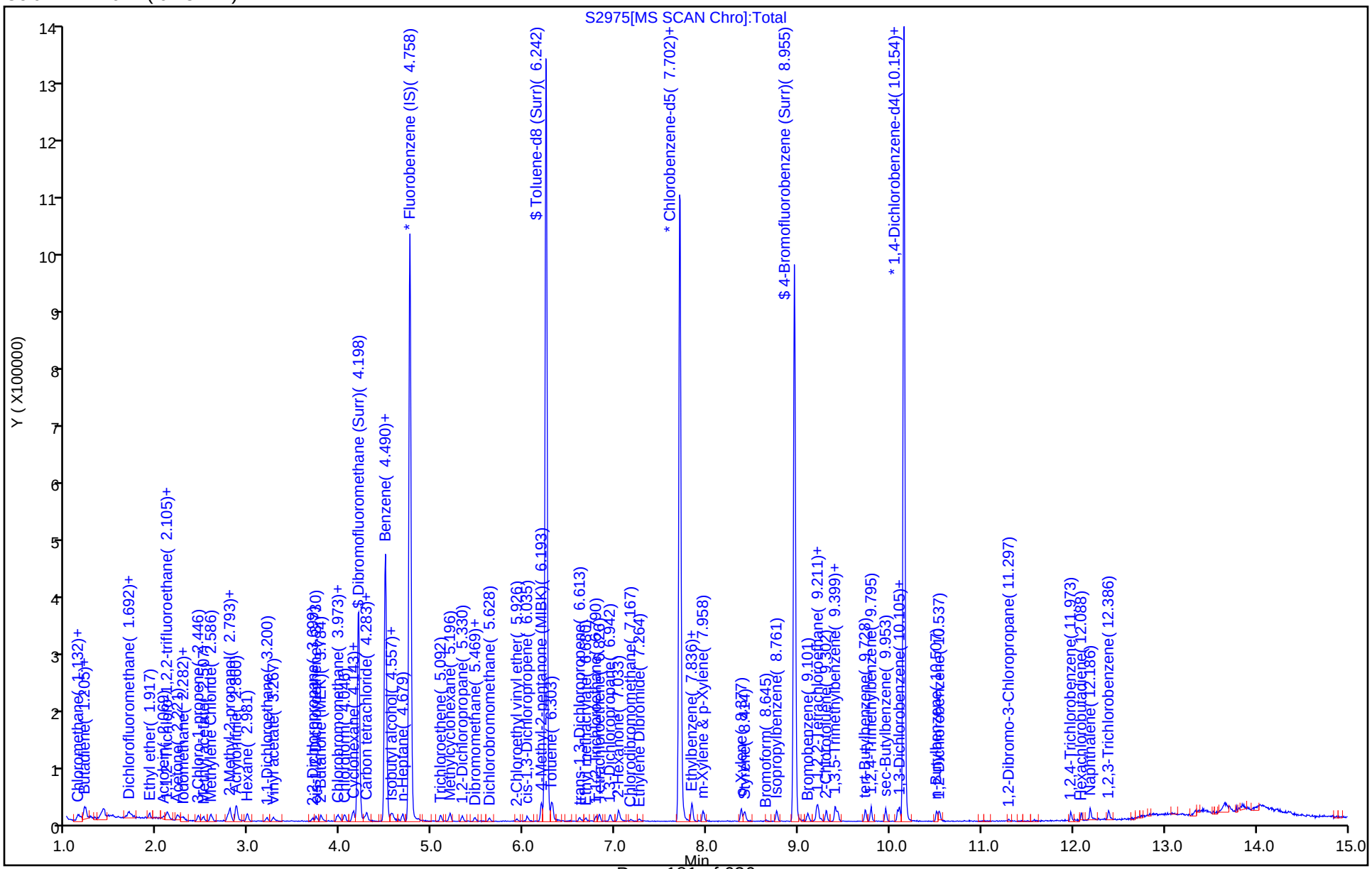
Report Date: 16-Oct-2024 12:19:55 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2975.d

Injection Date:	15-Oct-2024 15:49:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 0.5			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins Buffalo

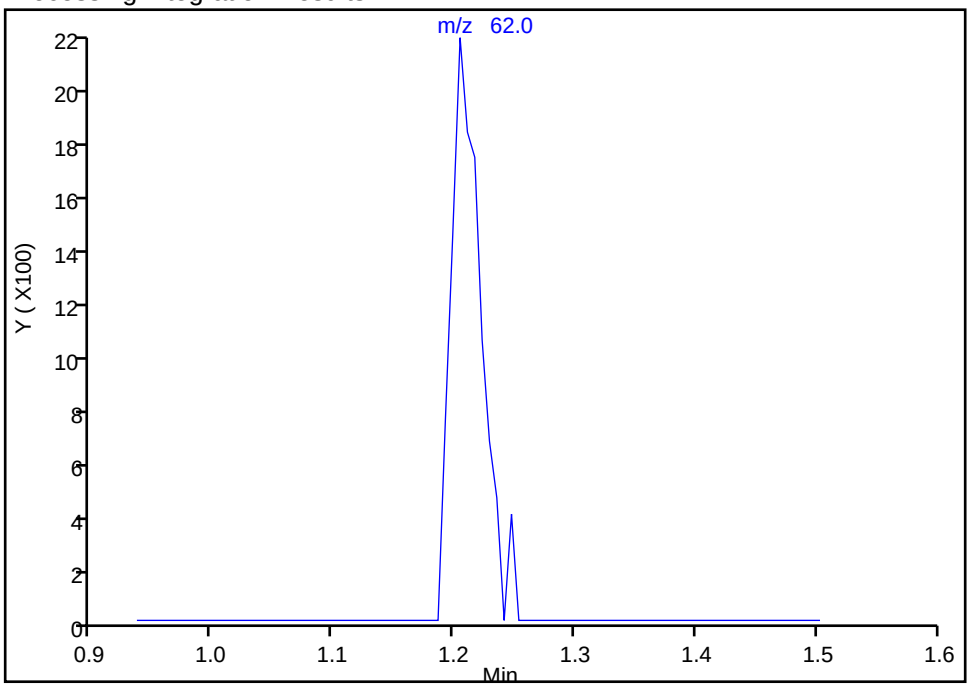
Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2975.d
Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Signal: 1

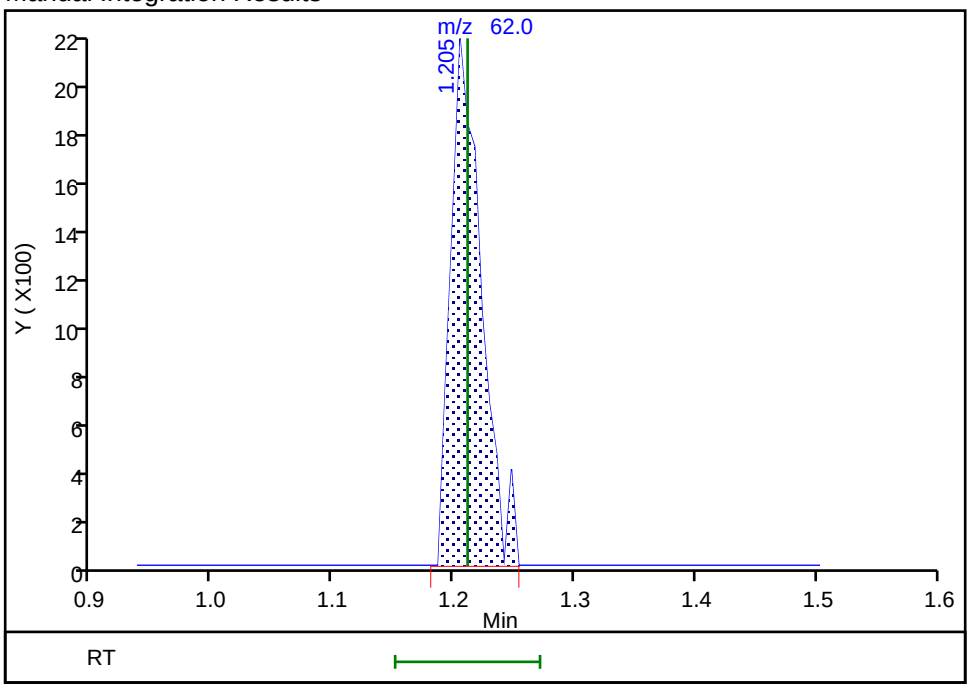
Not Detected
Expected RT: 1.21

Processing Integration Results



Manual Integration Results

RT: 1.20
Area: 3755
Amount: 0.501084
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:26:47 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

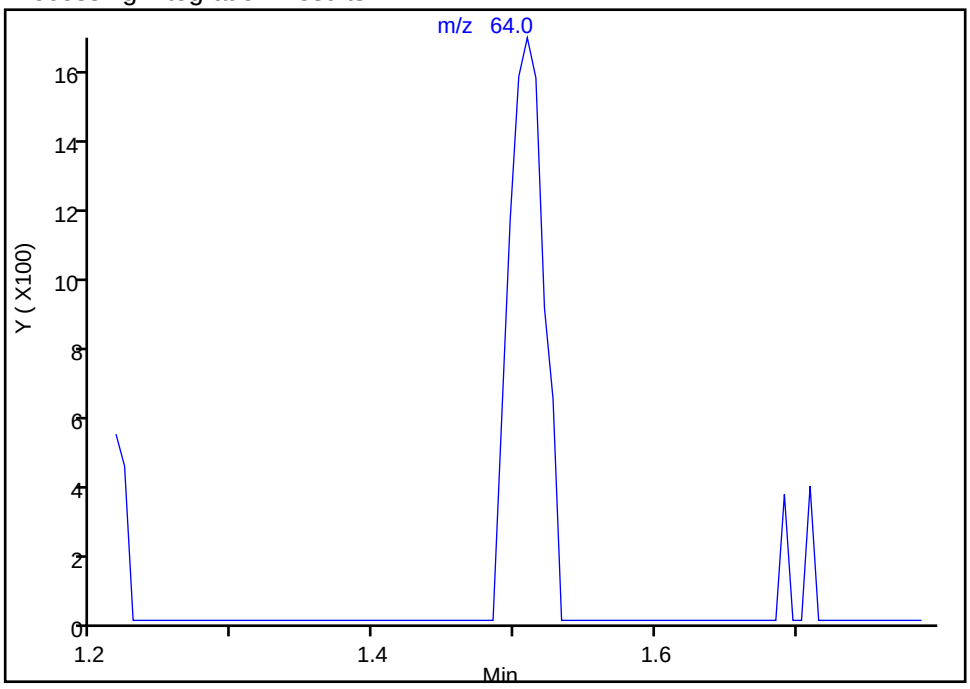
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

15 Chloroethane, CAS: 75-00-3

Signal: 1

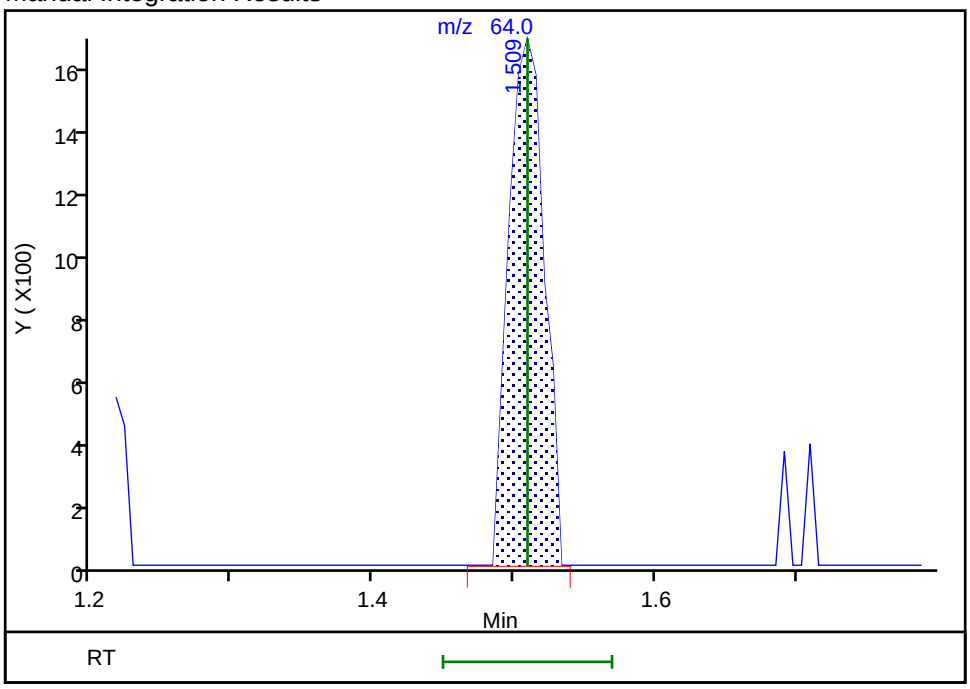
Not Detected
Expected RT: 1.51

Processing Integration Results



Manual Integration Results

RT: 1.51
Area: 2924
Amount: 0.503391
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:26:58 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

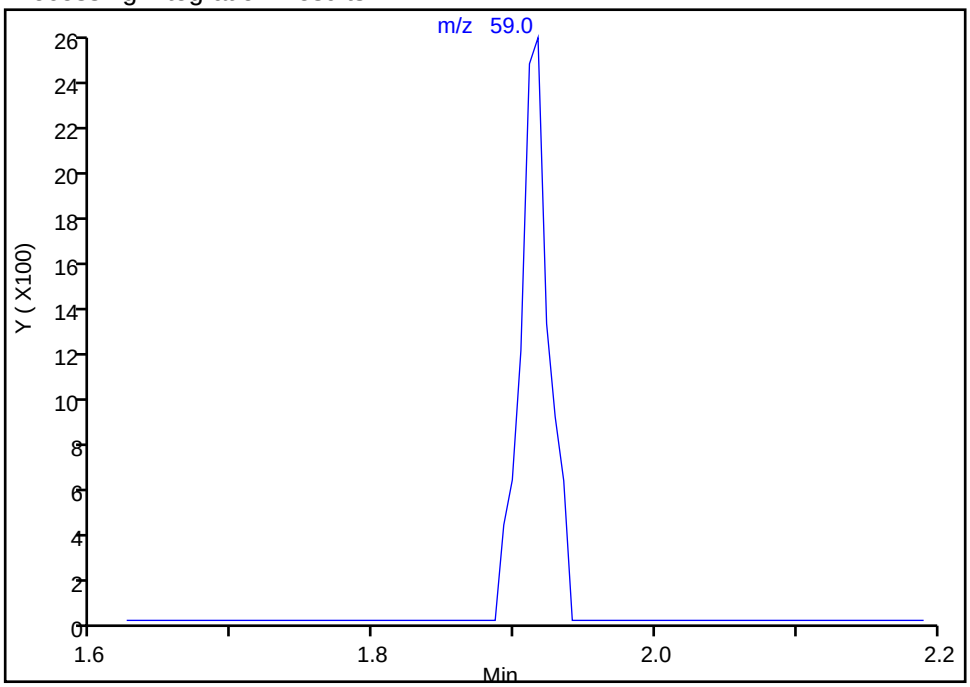
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

18 Ethyl ether, CAS: 60-29-7

Signal: 1

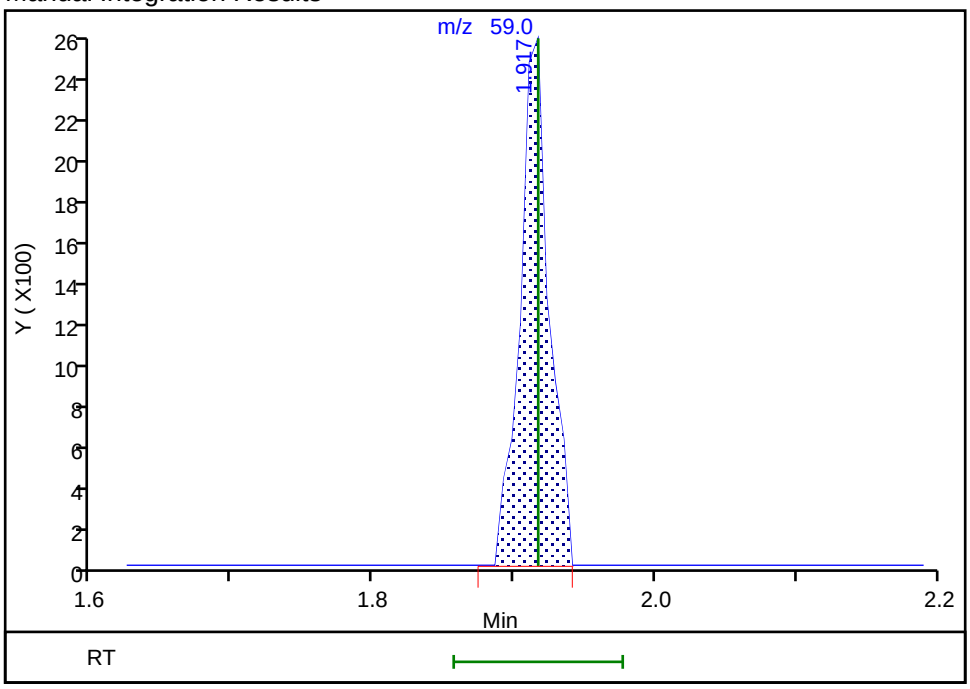
Not Detected
Expected RT: 1.92

Processing Integration Results



Manual Integration Results

RT: 1.92
Area: 3710
Amount: 0.473651
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:27:07 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

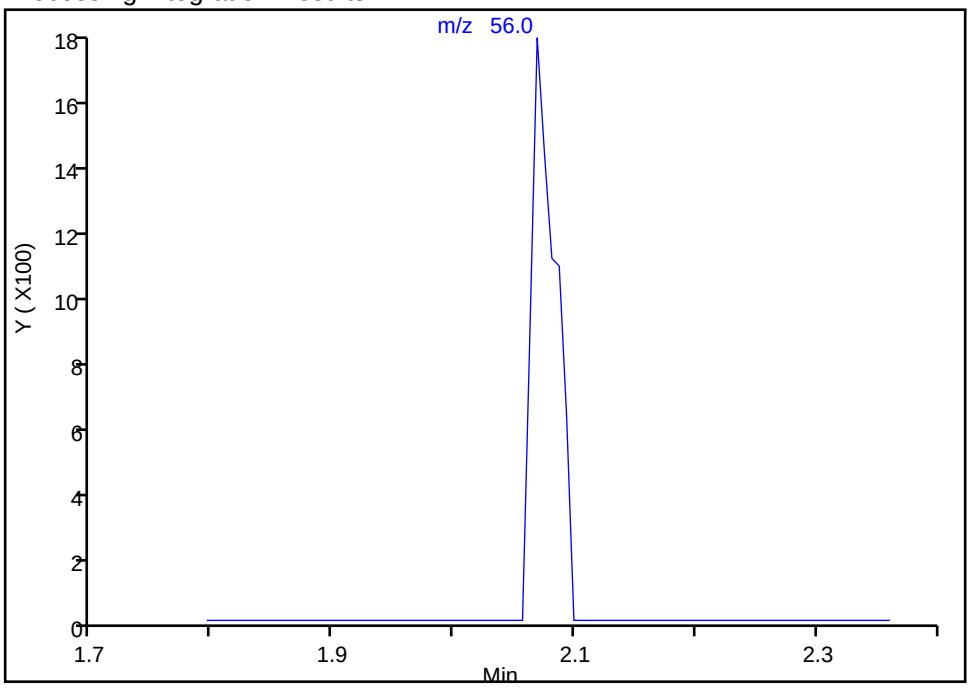
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Signal: 1

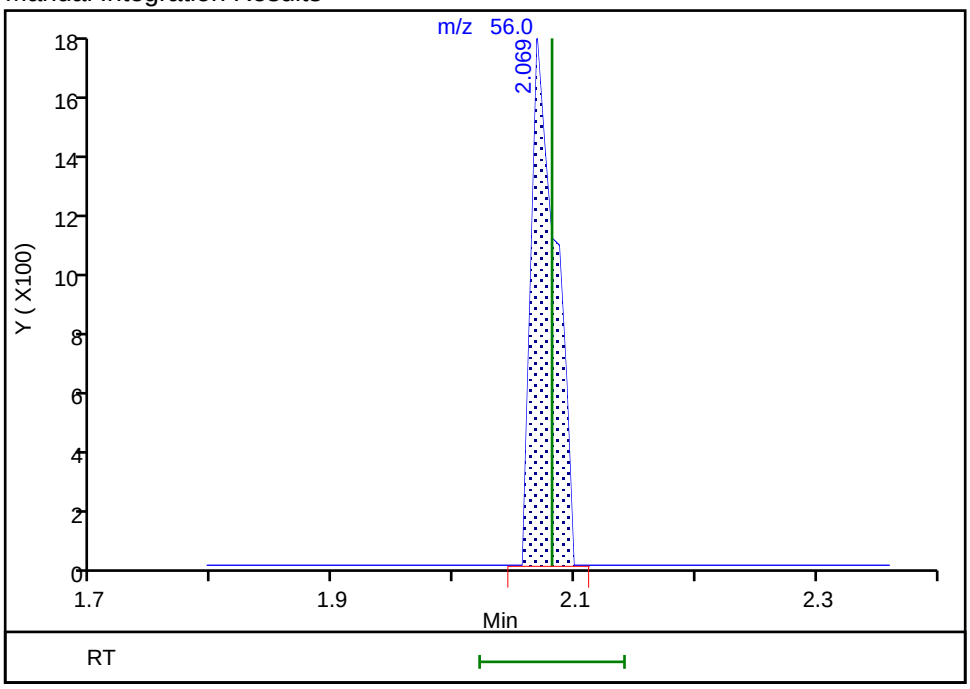
Not Detected
Expected RT: 2.08

Processing Integration Results



Manual Integration Results

RT: 2.07
Area: 2415
Amount: 2.403482
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:27:11 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

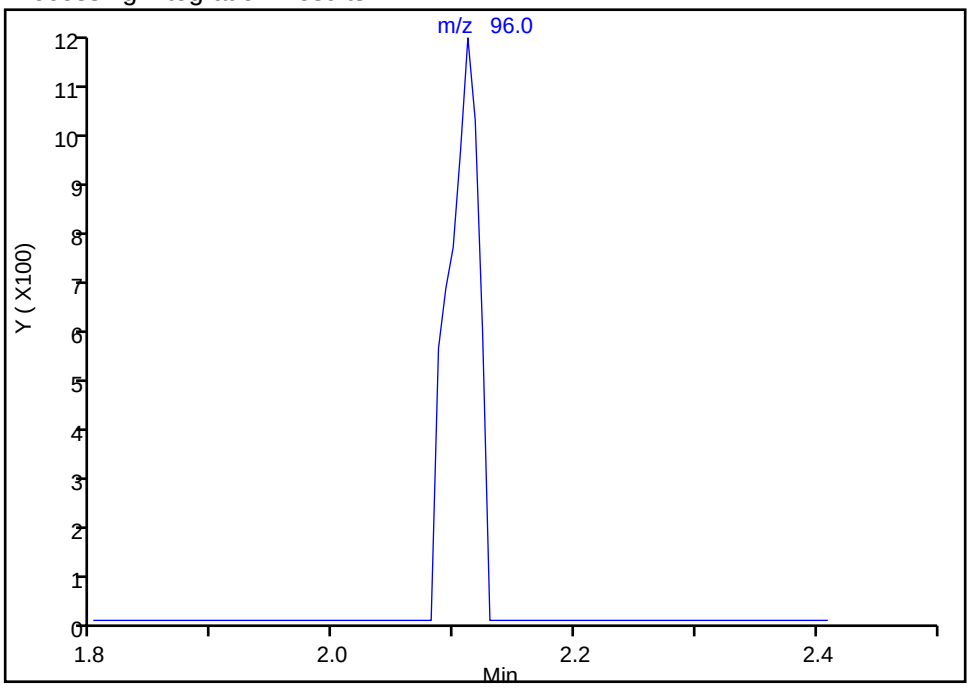
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

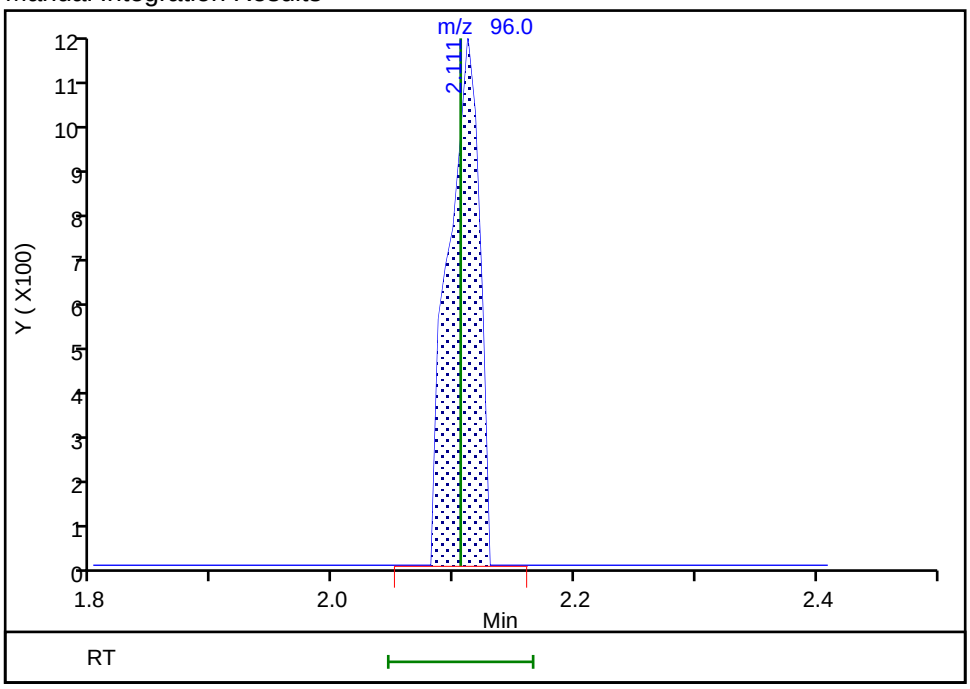
Not Detected
Expected RT: 2.11

Processing Integration Results



Manual Integration Results

RT: 2.11
Area: 1958
Amount: 0.338808
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:27:15 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

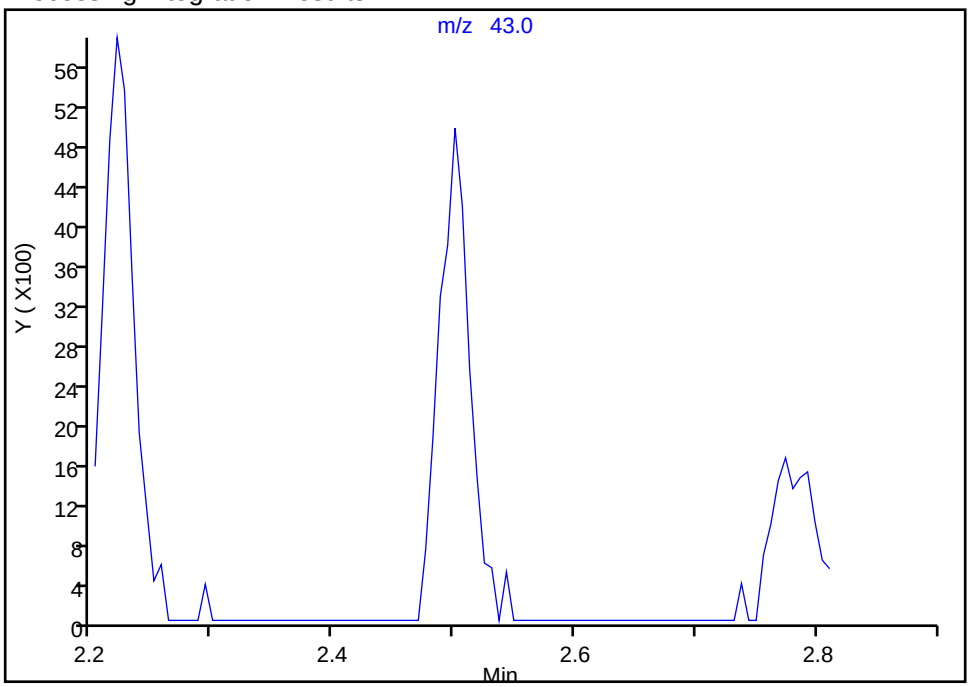
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

27 Methyl acetate, CAS: 79-20-9

Signal: 1

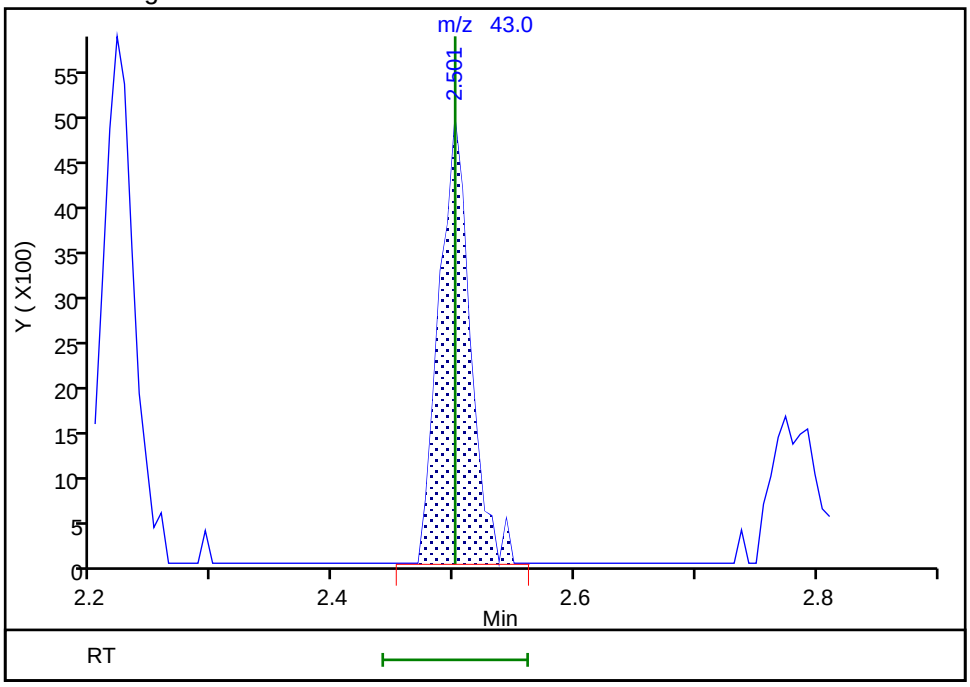
Not Detected
Expected RT: 2.50

Processing Integration Results



Manual Integration Results

RT: 2.50
Area: 8844
Amount: 1.010978
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:27:20 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins Buffalo

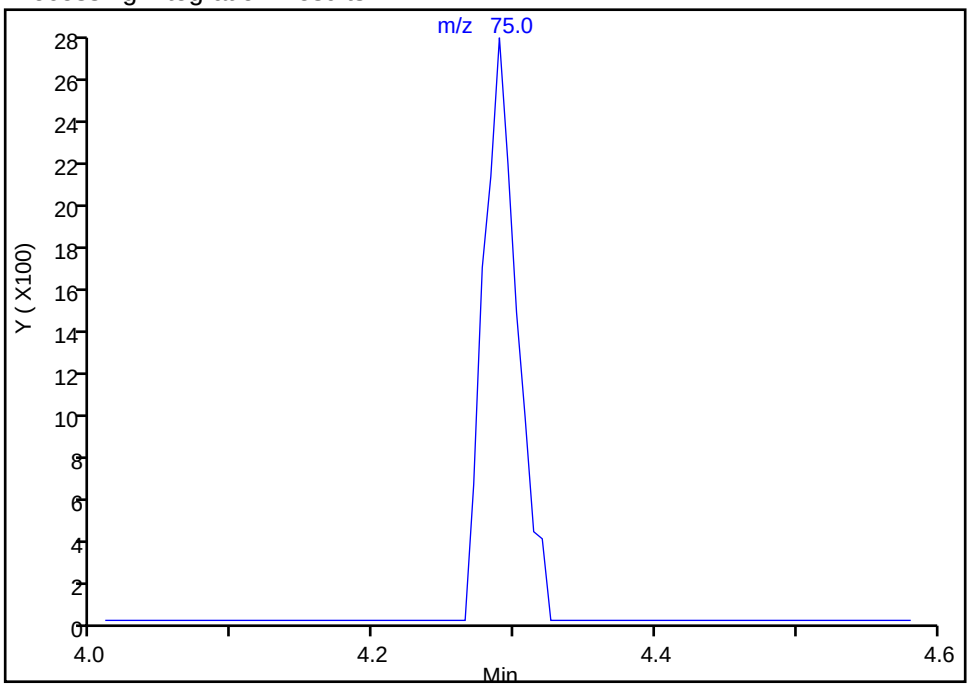
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

54 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

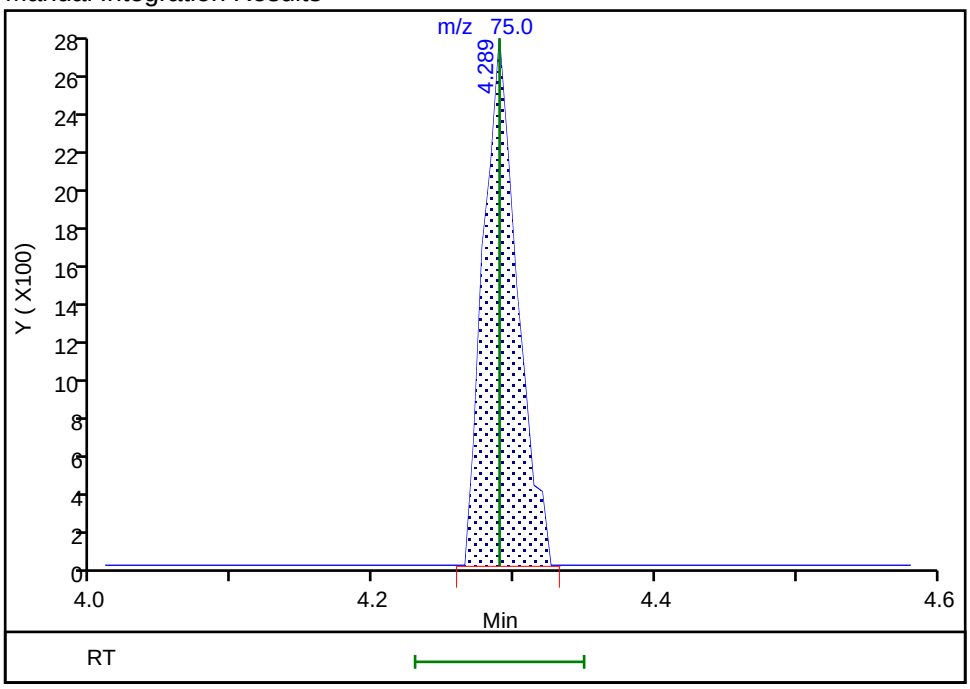
Not Detected
Expected RT: 4.29

Processing Integration Results



Manual Integration Results

RT: 4.29
Area: 4619
Amount: 0.456480
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:27:32 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

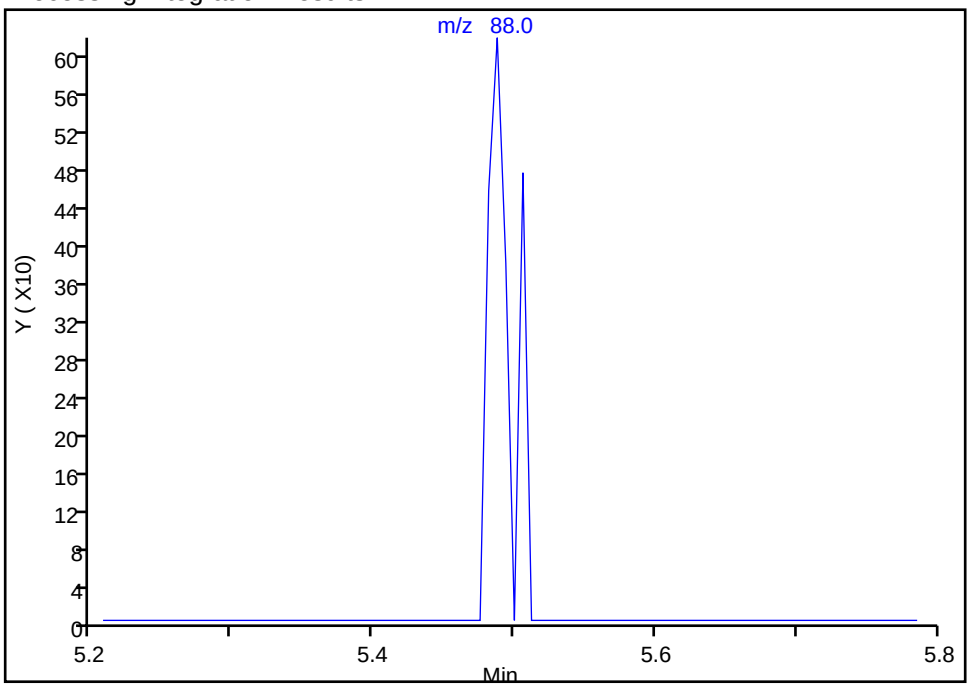
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

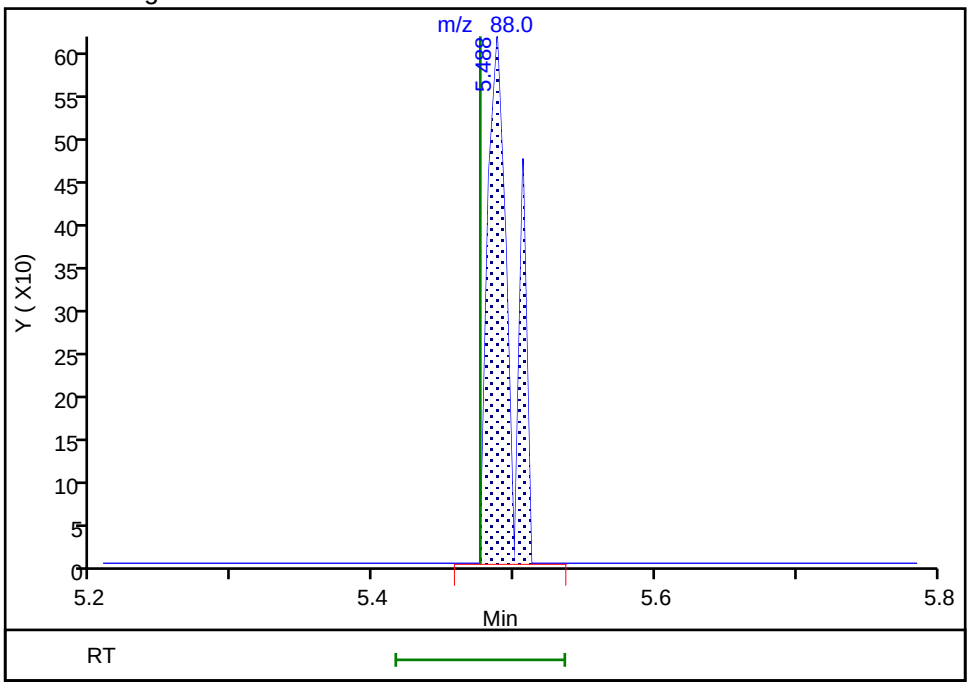
Not Detected
Expected RT: 5.48

Processing Integration Results



Manual Integration Results

RT: 5.49
Area: 702
Amount: 6.659749
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:27:41 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo

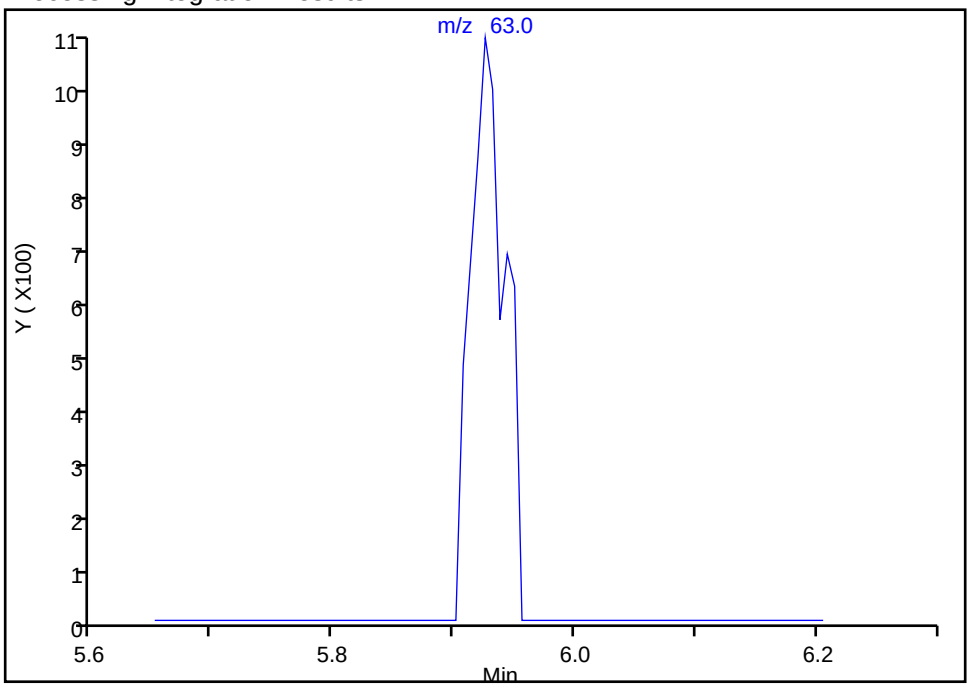
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

69 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

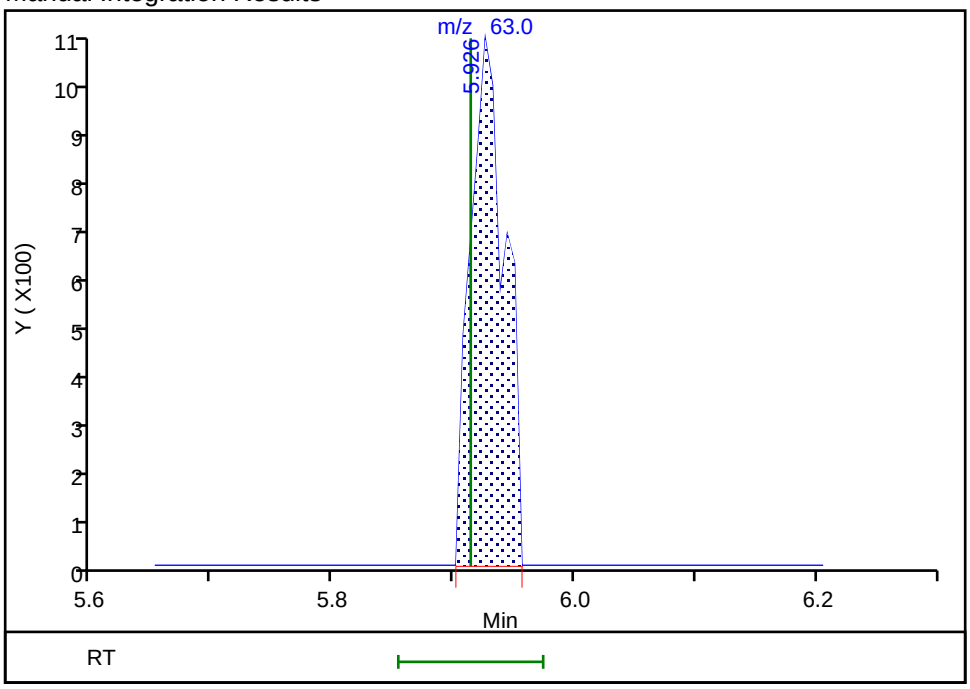
Not Detected
Expected RT: 5.91

Processing Integration Results



Manual Integration Results

RT: 5.93
Area: 2058
Amount: 0.408625
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:27:46 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

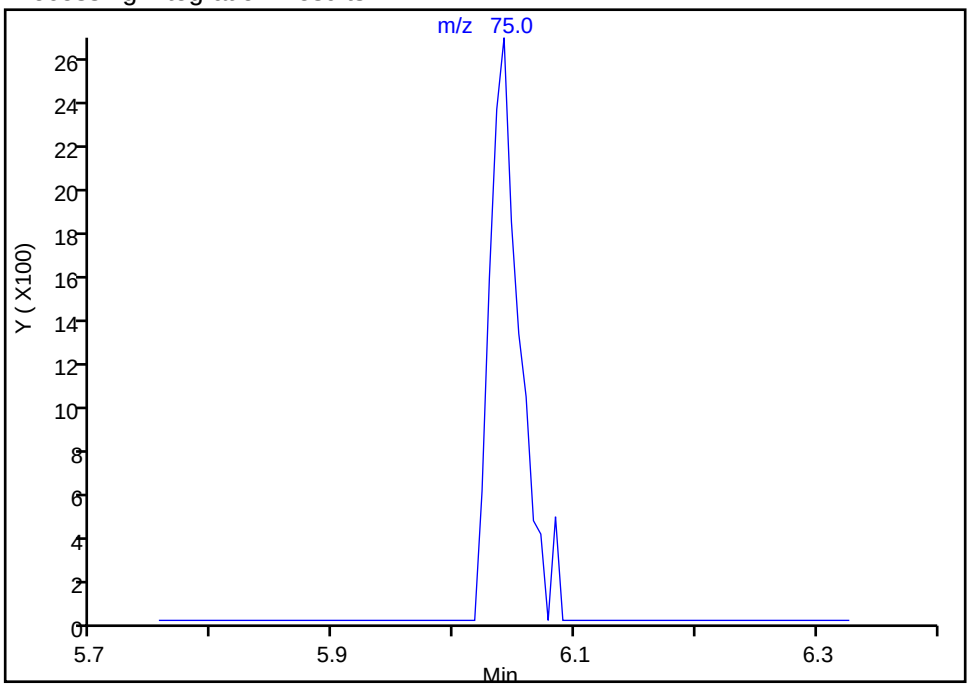
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

72 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

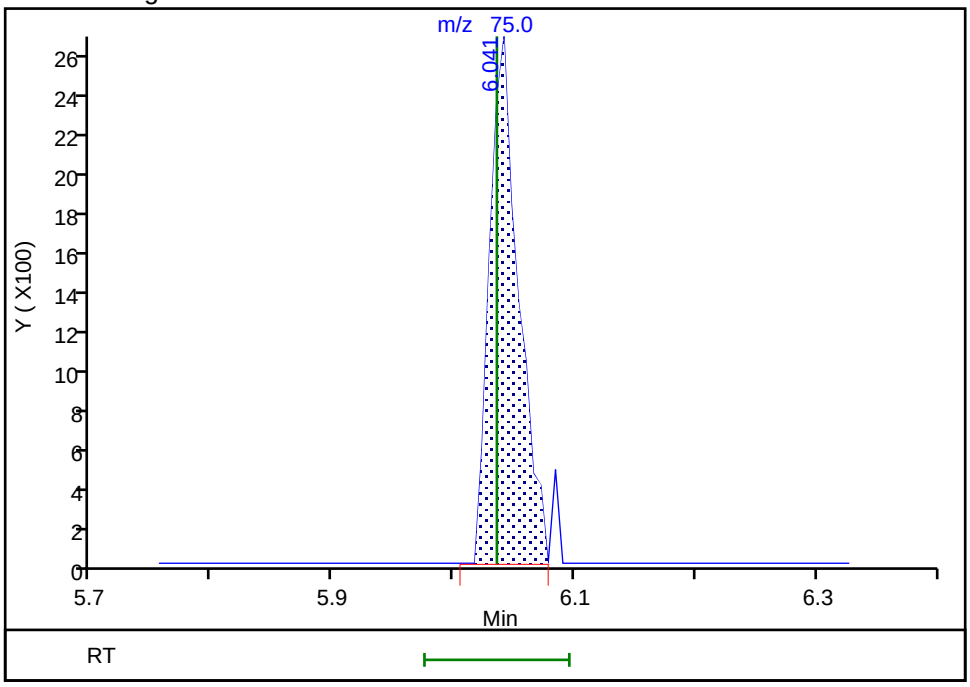
Not Detected
Expected RT: 6.04

Processing Integration Results



Manual Integration Results

RT: 6.04
Area: 4414
Amount: 0.403874
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:27:49 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins Buffalo

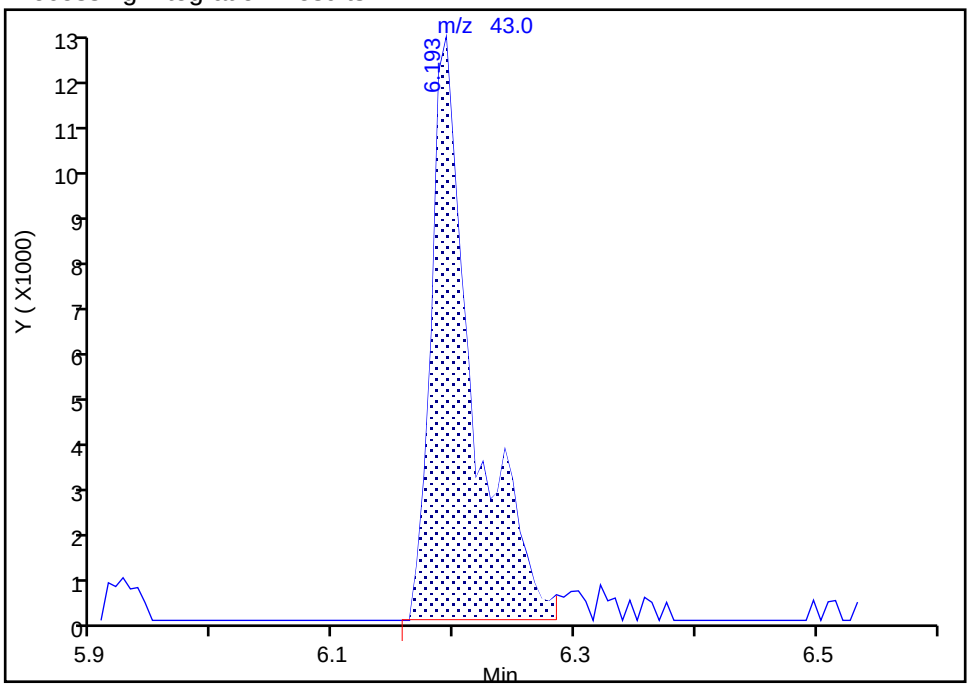
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

73 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

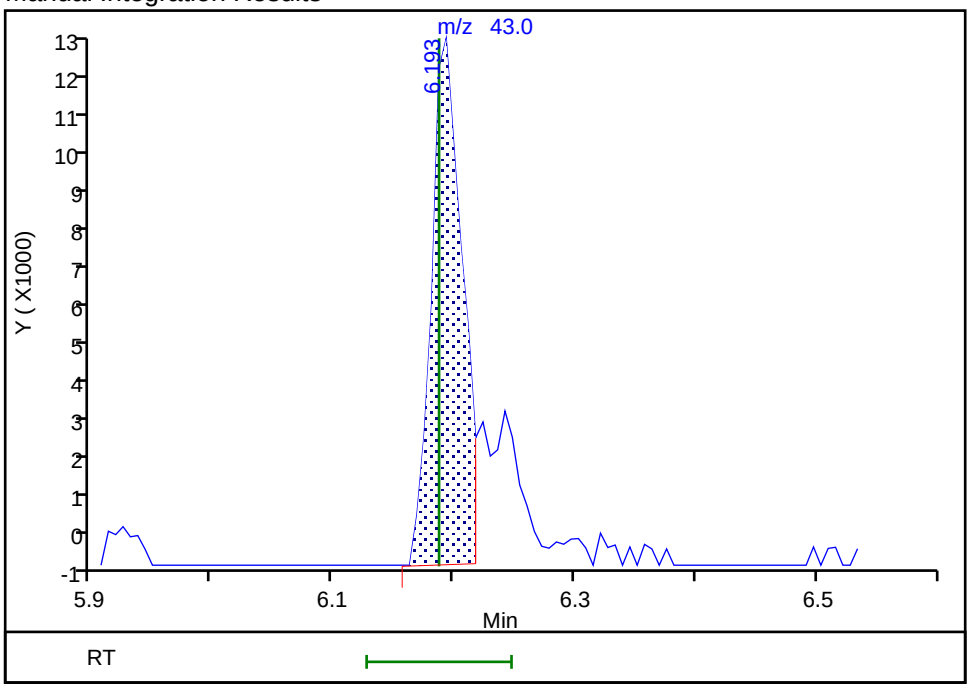
Processing Integration Results

RT: 6.19
Area: 30091
Amount: 2.460725
Amount Units: ug/L



Manual Integration Results

RT: 6.19
Area: 22365
Amount: 1.915749
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:30:33 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo

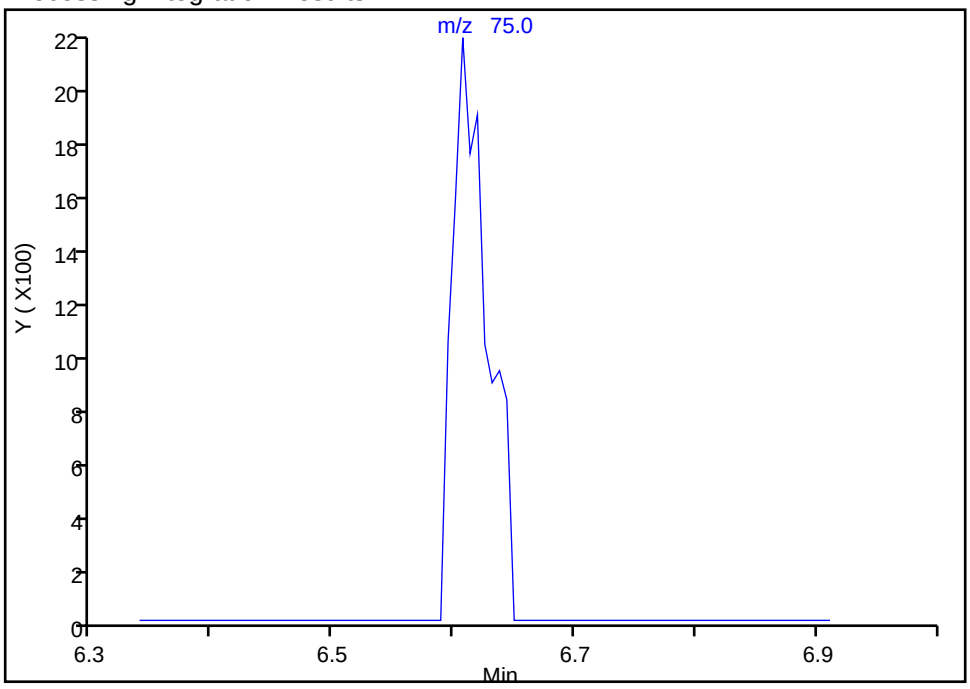
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Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 1

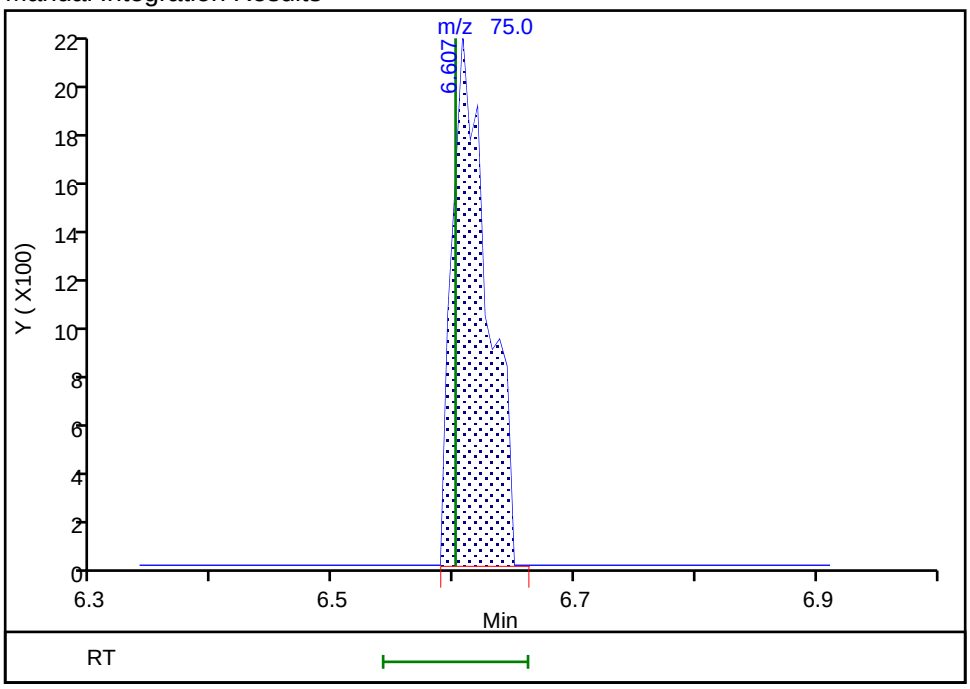
Not Detected
Expected RT: 6.60

Processing Integration Results



Manual Integration Results

RT: 6.61
Area: 4304
Amount: 0.412271
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:27:54 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

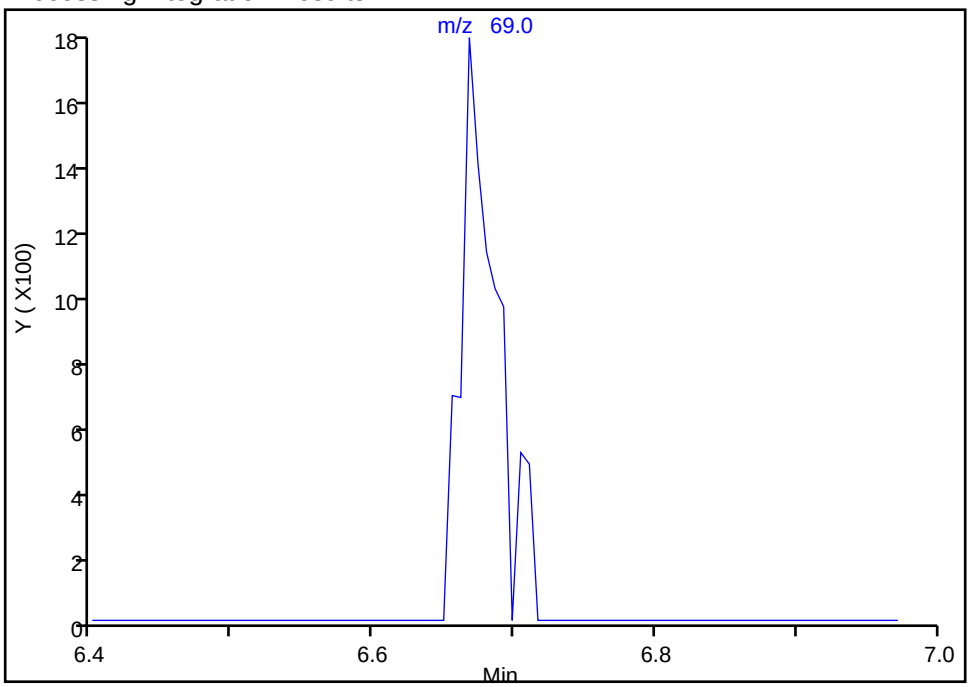
Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2975.d
Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

75 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

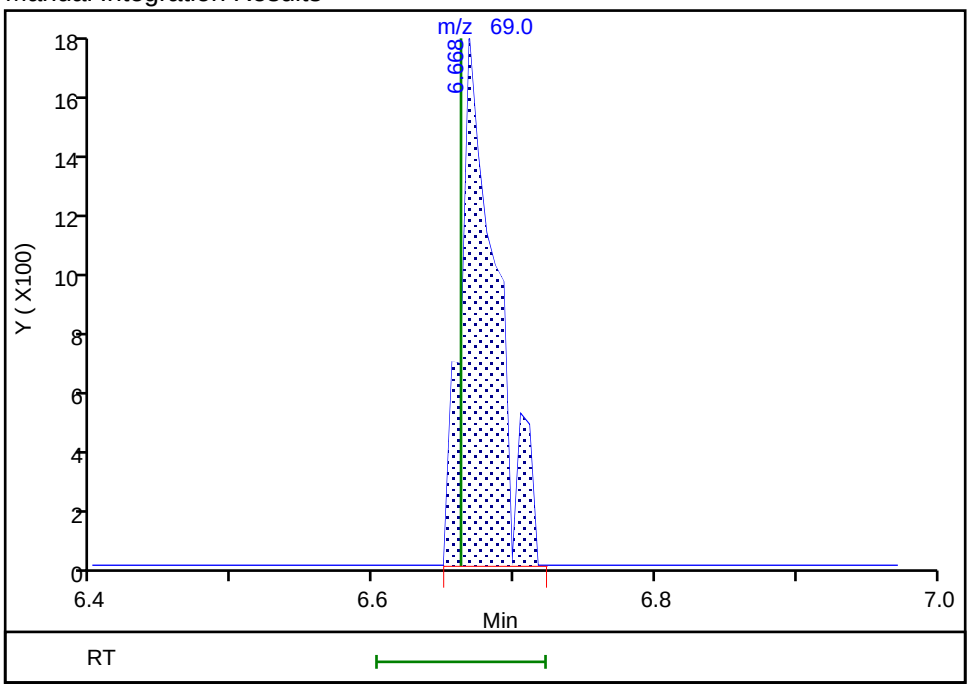
Not Detected
Expected RT: 6.66

Processing Integration Results



Manual Integration Results

RT: 6.67
Area: 3109
Amount: 0.303070
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:27:58 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

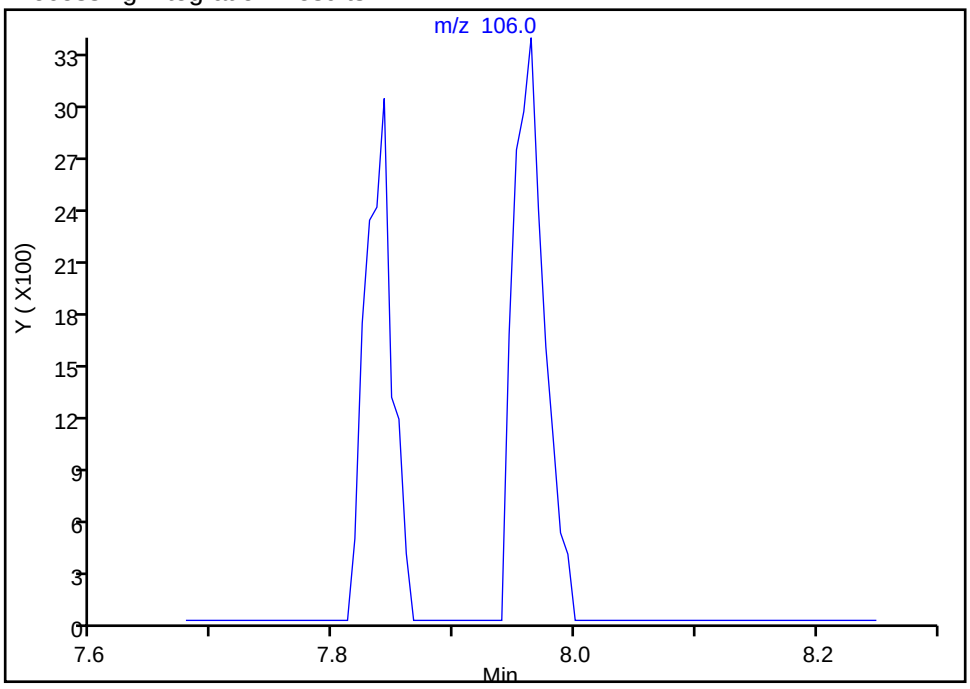
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

90 m-Xylene & p-Xylene, CAS: 179601-23-1

Signal: 1

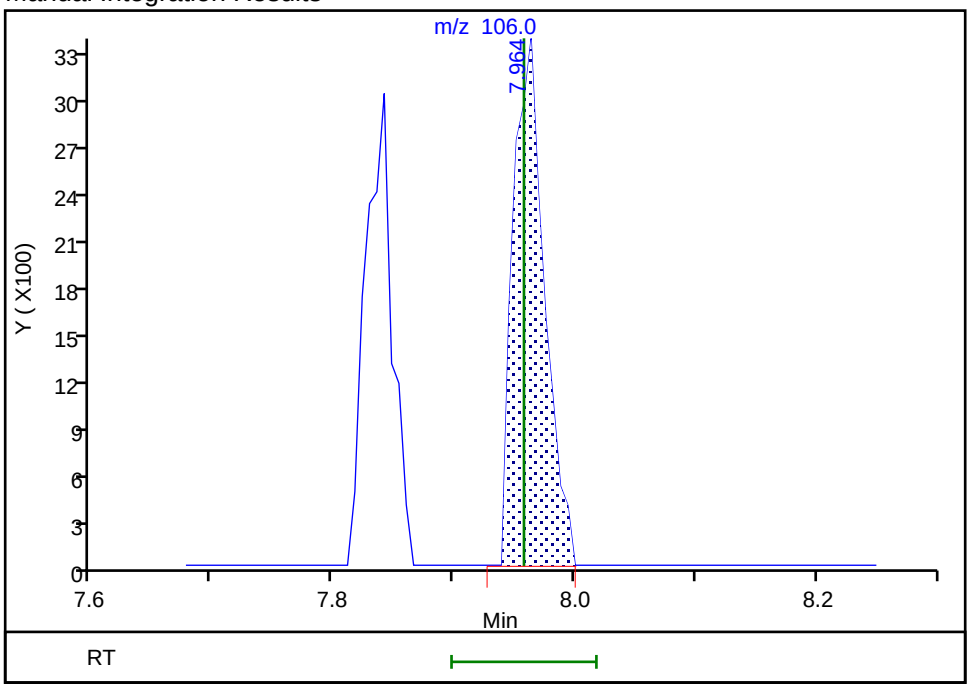
Not Detected
Expected RT: 7.96

Processing Integration Results



Manual Integration Results

RT: 7.96
Area: 5931
Amount: 0.410348
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:28:08 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

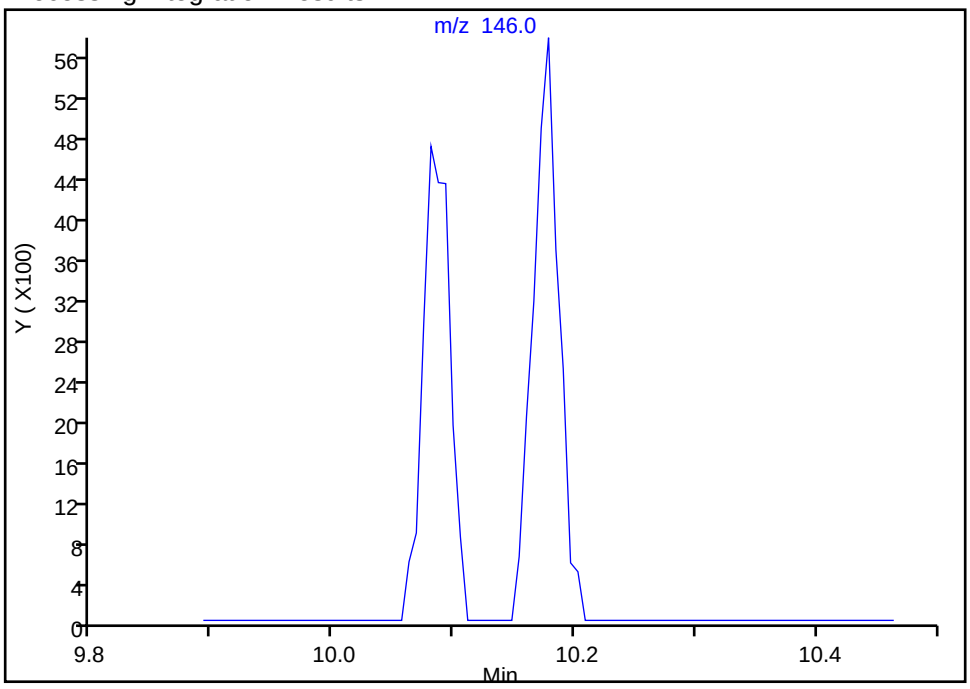
Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2975.d
Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

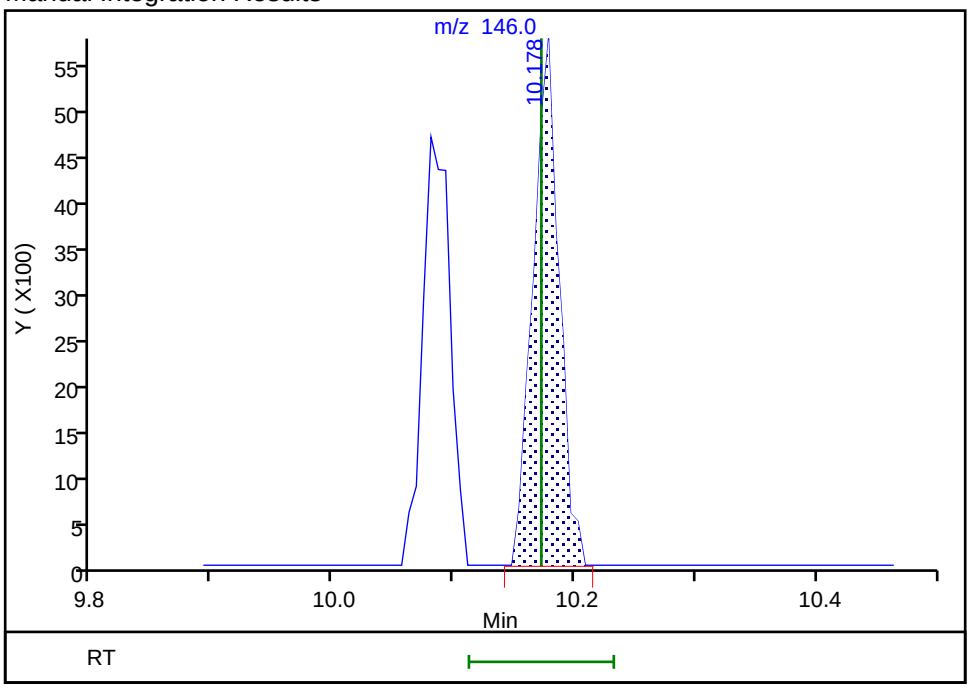
Not Detected
Expected RT: 10.17

Processing Integration Results



Manual Integration Results

RT: 10.18
Area: 8617
Amount: 0.460737
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:28:17 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

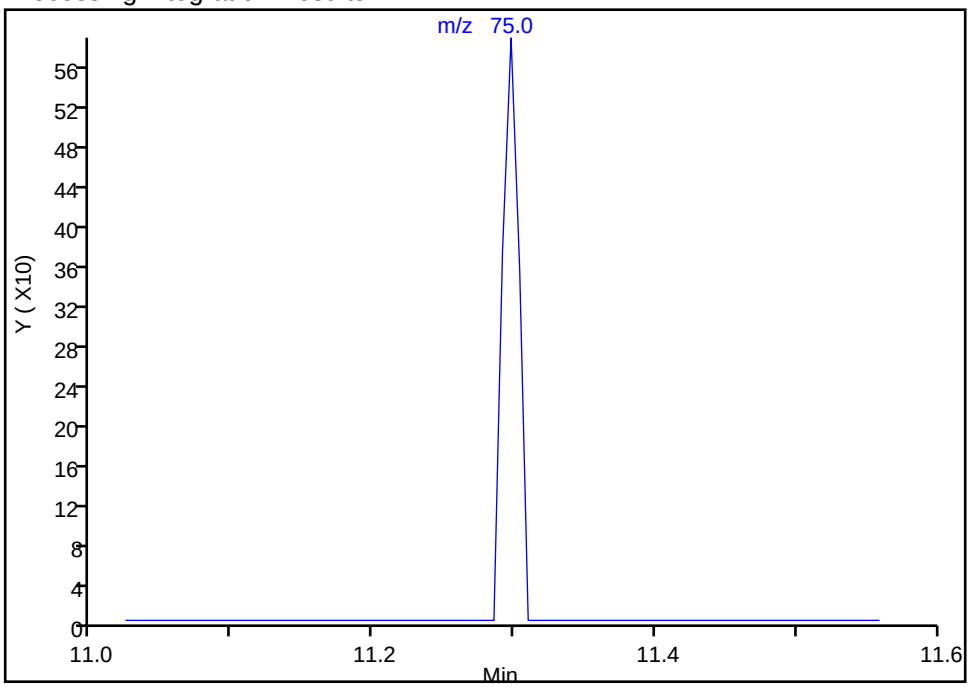
Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2975.d
Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

117 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

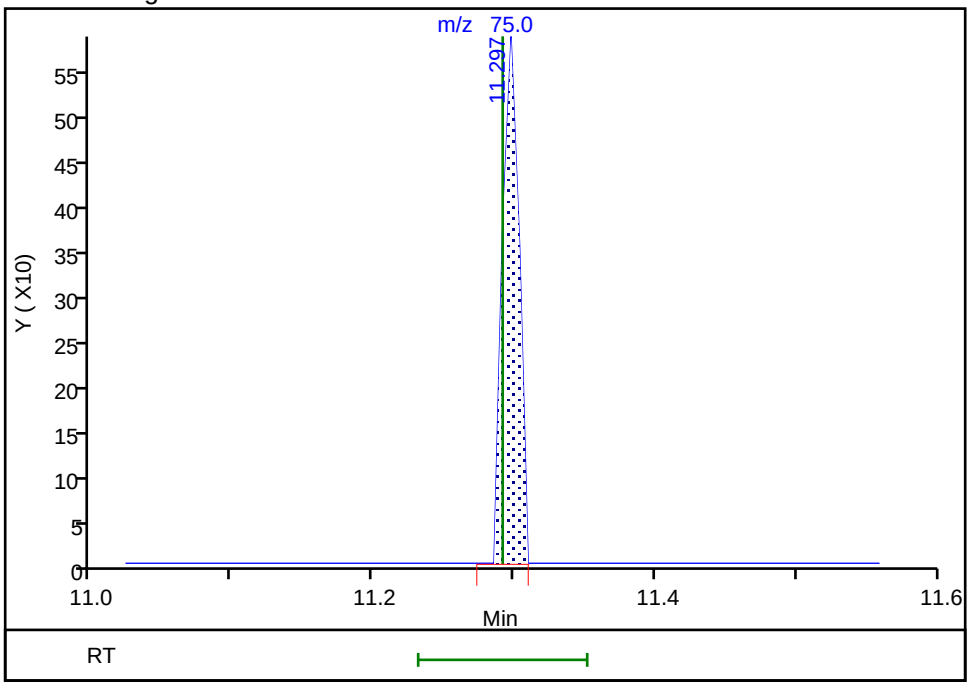
Not Detected
Expected RT: 11.29

Processing Integration Results



Manual Integration Results

RT: 11.30
Area: 479
Amount: 0.874514
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:28:25 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo

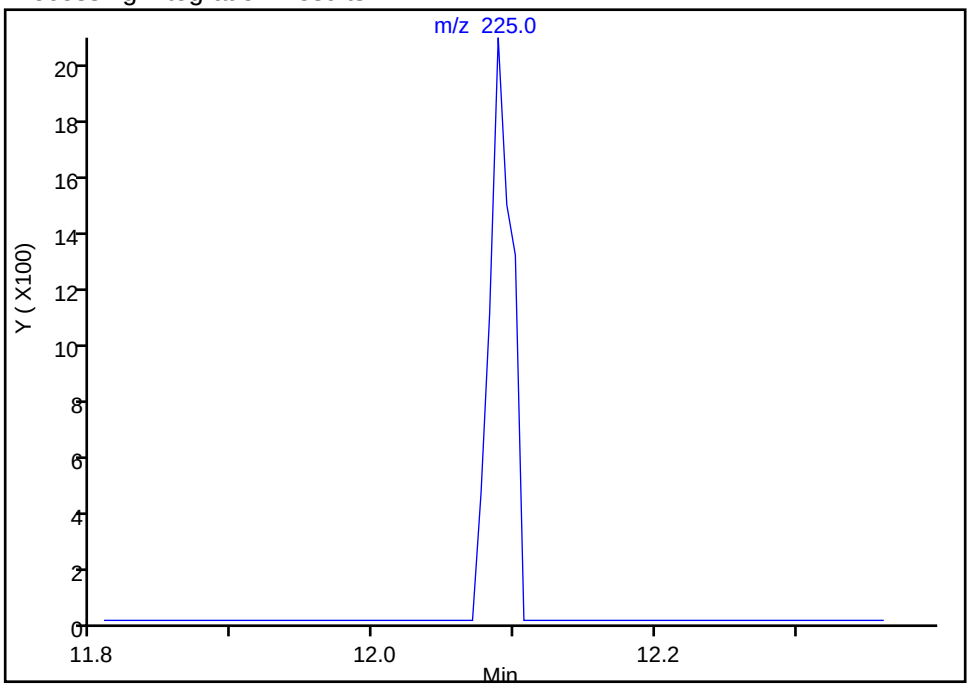
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

120 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

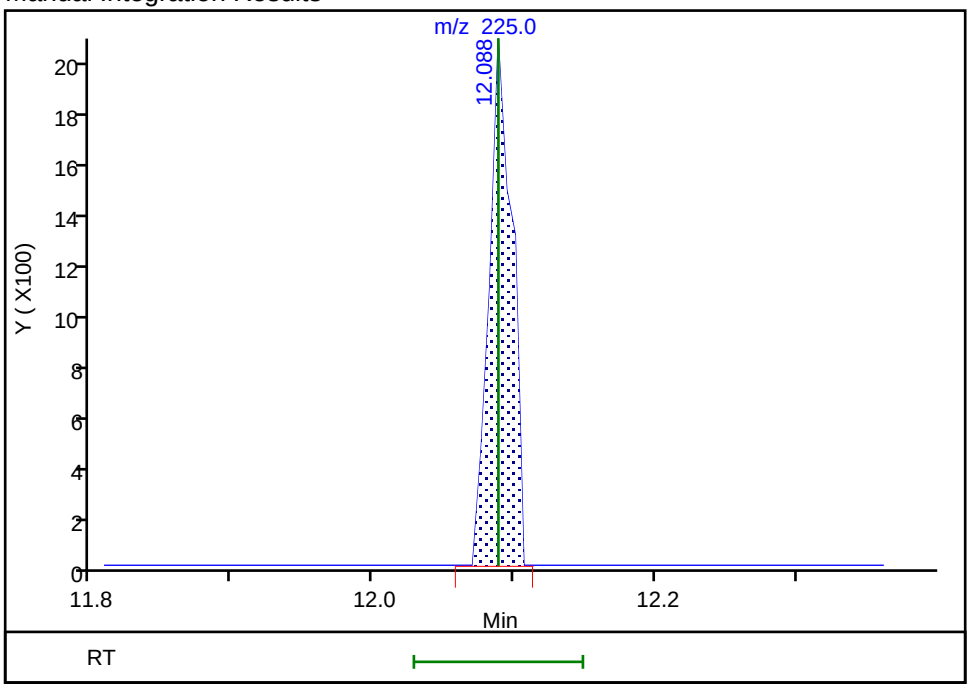
Not Detected
Expected RT: 12.09

Processing Integration Results



Manual Integration Results

RT: 12.09
Area: 2304
Amount: 0.385835
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:28:30 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

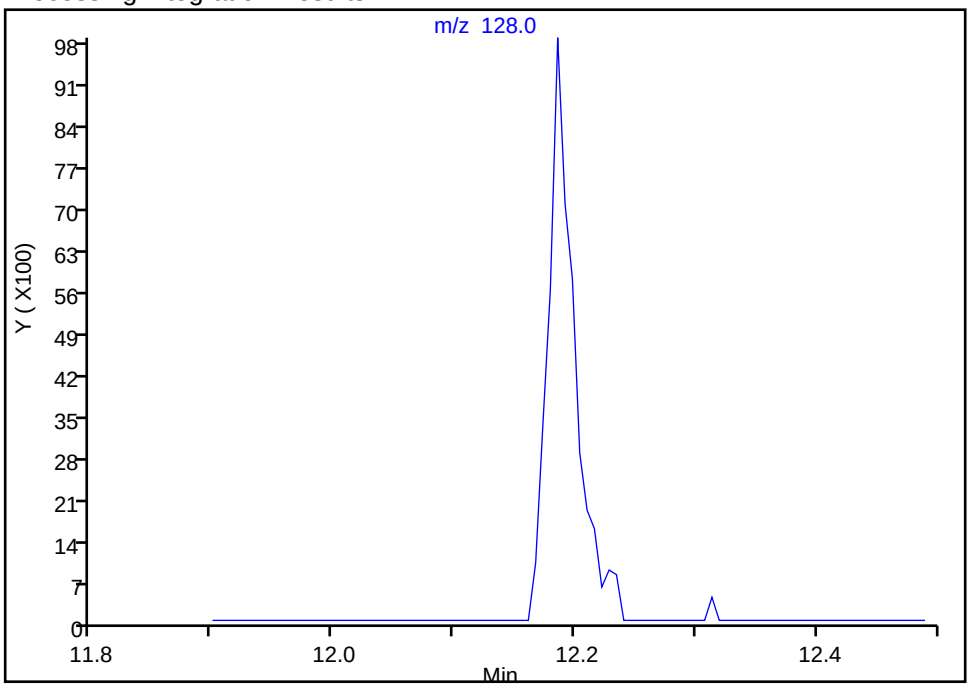
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Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

121 Naphthalene, CAS: 91-20-3

Signal: 1

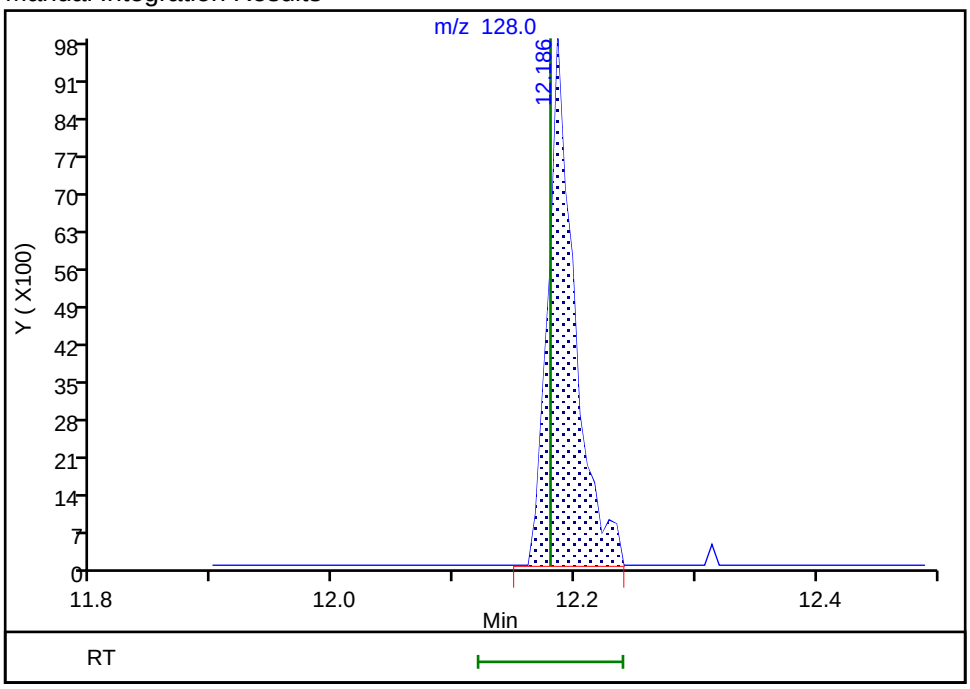
Not Detected
Expected RT: 12.18

Processing Integration Results



Manual Integration Results

RT: 12.19
Area: 14909
Amount: 0.401547
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:28:33 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

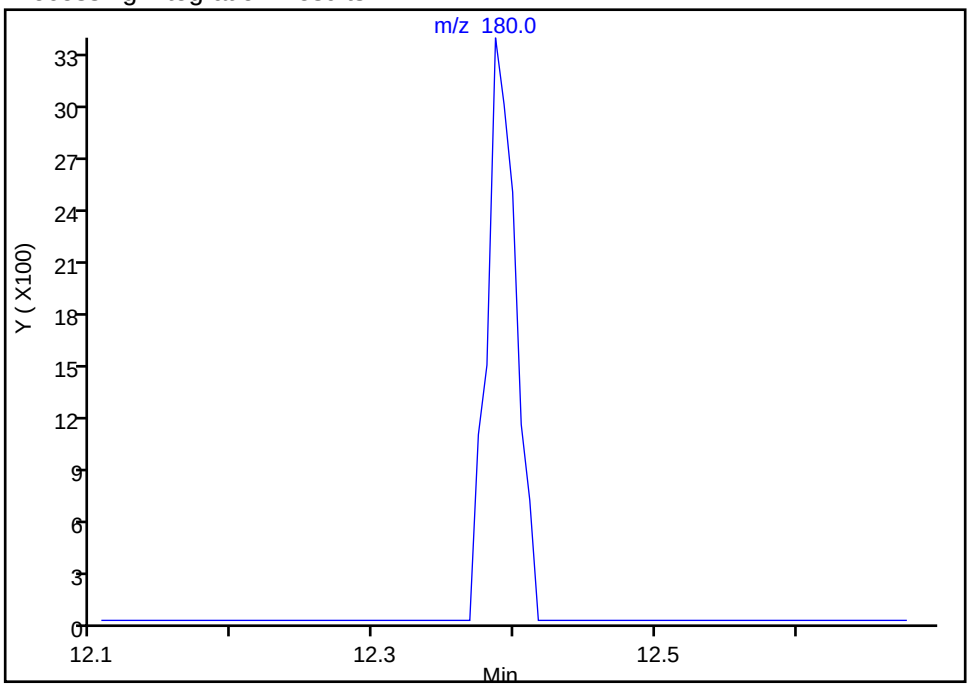
Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2975.d
Injection Date: 15-Oct-2024 15:49:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

122 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

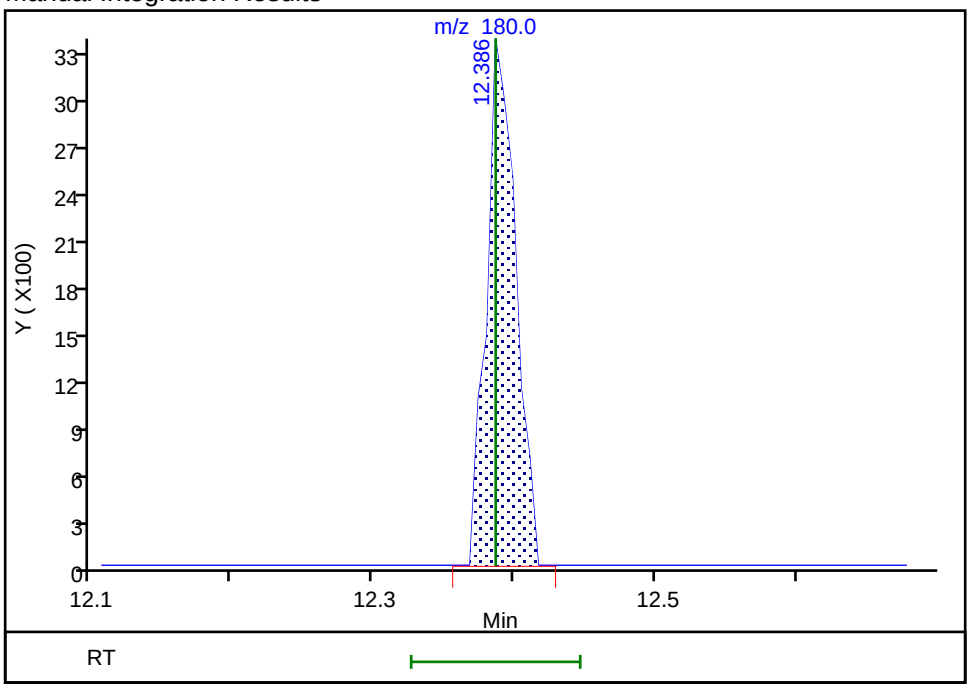
Not Detected
Expected RT: 12.39

Processing Integration Results



Manual Integration Results

RT: 12.39
Area: 4829
Amount: 0.383981
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:28:37 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Report Date: 16-Oct-2024 12:20:16 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2976.d
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Oct-2024 16:13:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 480-0120558-014
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2024 12:20:15 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: QR3Z Date: 16-Oct-2024 08:26:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	161443	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	89	309239	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	94	323538	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	57	191351	25.0	24.2	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	98	139744	25.0	24.8	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	83	794540	25.0	24.5	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	88	250423	25.0	24.9	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	63	5741	1.00	0.6623	
12 Chloromethane	50	1.132	1.132	0.000	68	10114	1.00	0.9123	
13 Vinyl chloride	62	1.205	1.211	-0.006	26	6595	1.00	0.8264	
151 Butadiene	54	1.217	1.217	0.000	89	6707	1.00	0.7147	
14 Bromomethane	94	1.460	1.454	0.006	51	5540	1.00	1.09	
15 Chloroethane	64	1.503	1.509	-0.006	51	6285	1.00	1.02	
16 Dichlorofluoromethane	67	1.685	1.686	-0.001	50	12880	1.00	0.9426	
17 Trichlorofluoromethane	101	1.692	1.698	-0.006	18	6911	1.00	0.7002	
18 Ethyl ether	59	1.911	1.917	-0.006	65	8555	1.00	1.03	Ma
20 Acrolein	56	2.075	2.081	-0.006	78	6182	5.00	5.78	
22 1,1-Dichloroethene	96	2.105	2.105	0.000	62	4822	1.00	0.7835	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.105	2.105	0.000	27	4383	1.00	0.7191	
23 Acetone	43	2.221	2.221	0.000	88	21821	5.00	5.37	
25 Iodomethane	142	2.257	2.251	0.006	75	10716	1.00	0.9340	
26 Carbon disulfide	76	2.276	2.282	-0.006	83	17505	1.00	0.8339	
28 3-Chloro-1-propene	41	2.440	2.446	-0.006	69	13996	1.00	0.9688	
27 Methyl acetate	43	2.495	2.501	-0.006	90	17903	2.00	1.92	a
30 Methylene Chloride	84	2.580	2.586	-0.006	81	8322	1.00	0.9287	
31 2-Methyl-2-propanol	59	2.768	2.762	0.006	62	9581	10.0	8.81	
32 Methyl tert-butyl ether	73	2.781	2.787	-0.006	73	25381	1.00	0.9459	
34 trans-1,2-Dichloroethene	96	2.793	2.799	-0.006	71	6685	1.00	0.8714	
33 Acrylonitrile	53	2.860	2.860	0.000	94	44207	10.0	9.52	
35 Hexane	57	2.981	2.981	0.000	89	9471	1.00	0.7854	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.194	3.194	0.000	53	13393	1.00	0.9014	
37 Vinyl acetate	43	3.261	3.261	0.000	90	21869	2.00	2.55	
44 2,2-Dichloropropane	77	3.693	3.693	0.000	58	6522	1.00	0.8726	
45 cis-1,2-Dichloroethene	96	3.736	3.730	0.006	53	7363	1.00	0.9170	
43 2-Butanone (MEK)	43	3.784	3.778	0.006	94	27836	5.00	4.75	
48 Chlorobromomethane	128	3.967	3.961	0.006	63	4024	1.00	0.9595	
49 Tetrahydrofuran	42	3.979	3.973	0.006	83	8894	2.00	2.06	
50 Chloroform	83	4.046	4.046	0.000	78	14282	1.00	0.9819	
52 Cyclohexane	56	4.137	4.137	0.000	78	10637	1.00	0.7187	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	61	8551	1.00	0.7775	
55 Carbon tetrachloride	117	4.271	4.271	0.000	66	6761	1.00	0.7136	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	61	9190	1.00	0.8528	
57 Benzene	78	4.484	4.484	0.000	45	30014	1.00	0.9245	
53 Isobutyl alcohol	43	4.557	4.551	0.006	42	8538	25.0	20.6	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	43	12403	1.00	0.9831	
59 n-Heptane	43	4.673	4.679	-0.007	85	9762	1.00	0.8056	
62 Trichloroethene	95	5.092	5.092	0.000	64	7490	1.00	0.9279	
64 Methylcyclohexane	83	5.196	5.196	0.000	70	9787	1.00	0.7522	
65 1,2-Dichloropropane	63	5.323	5.324	-0.001	52	7913	1.00	0.9444	
67 Dibromomethane	93	5.469	5.463	0.006	80	4464	1.00	0.8975	
66 1,4-Dioxane	88	5.482	5.476	0.006	57	1859	20.0	17.3	Ma
68 Dichlorobromomethane	83	5.622	5.622	0.000	59	7703	1.00	0.8674	
69 2-Chloroethyl vinyl ether	63	5.920	5.914	0.006	56	4100	1.00	0.7644	
72 cis-1,3-Dichloropropene	75	6.041	6.035	0.006	43	9561	1.00	0.8215	
73 4-Methyl-2-pentanone (MIBK)	43	6.193	6.187	0.006	95	51279	5.00	4.31	M
74 Toluene	92	6.309	6.309	0.000	81	20100	1.00	0.9654	
77 trans-1,3-Dichloropropene	75	6.613	6.601	0.012	67	9286	1.00	0.8720	
75 Ethyl methacrylate	69	6.674	6.662	0.012	38	8591	1.00	0.8210	
79 1,1,2-Trichloroethane	83	6.790	6.790	0.000	46	5669	1.00	0.9349	
81 Tetrachloroethene	166	6.826	6.826	0.000	73	7027	1.00	0.8695	
82 1,3-Dichloropropane	76	6.948	6.942	0.006	72	10745	1.00	0.8651	
80 2-Hexanone	43	7.027	7.027	0.000	94	35897	5.00	4.32	
83 Chlorodibromomethane	129	7.167	7.167	0.000	9	4423	1.00	0.7238	
84 Ethylene Dibromide	107	7.258	7.258	0.000	48	6573	1.00	0.9004	
87 Chlorobenzene	112	7.726	7.733	-0.007	38	20066	1.00	0.9272	
88 Ethylbenzene	91	7.836	7.836	0.000	88	32512	1.00	0.8500	
89 1,1,1,2-Tetrachloroethane	131	7.842	7.836	0.006	19	5479	1.00	0.7768	
90 m-Xylene & p-Xylene	106	7.952	7.958	-0.006	86	13040	1.00	0.8845	
91 o-Xylene	106	8.371	8.371	0.000	84	12890	1.00	0.8858	
92 Styrene	104	8.408	8.408	0.000	49	21591	1.00	0.8899	
95 Bromoform	173	8.651	8.645	0.006	35	3228	1.00	0.8107	
94 Isopropylbenzene	105	8.761	8.761	0.000	76	29754	1.00	0.8377	
101 Bromobenzene	156	9.107	9.101	0.006	71	8911	1.00	0.9241	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	42	9560	1.00	0.9454	
99 N-Propylbenzene	91	9.205	9.205	0.000	92	37246	1.00	0.8243	
100 1,2,3-Trichloropropane	110	9.211	9.217	-0.006	32	3548	1.00	1.02	
98 trans-1,4-Dichloro-2-butene	53	9.241	9.241	0.000	1	3527	1.00	0.9298	
103 2-Chlorotoluene	126	9.308	9.302	0.006	79	7171	1.00	0.8159	
102 1,3,5-Trimethylbenzene	105	9.399	9.400	-0.001	84	26873	1.00	0.8248	
105 4-Chlorotoluene	126	9.430	9.424	0.006	83	8383	1.00	0.9051	
106 tert-Butylbenzene	134	9.728	9.734	-0.006	73	5905	1.00	0.8258	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	76	27740	1.00	0.8242	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.953	9.953	0.000	75	31951	1.00	0.7923	
111 1,3-Dichlorobenzene	146	10.087	10.081	0.006	83	16205	1.00	0.8833	
110 4-Isopropyltoluene	119	10.111	10.105	0.006	83	27988	1.00	0.7786	
113 1,4-Dichlorobenzene	146	10.172	10.172	0.000	41	17540	1.00	0.9312	
115 n-Butylbenzene	91	10.507	10.507	0.000	81	25053	1.00	0.8059	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	81	15709	1.00	0.8738	
117 1,2-Dibromo-3-Chloropropane	75	11.298	11.292	0.006	1	1213	1.00	1.21	
119 1,2,4-Trichlorobenzene	180	11.979	11.973	0.006	50	10947	1.00	0.8617	
120 Hexachlorobutadiene	225	12.088	12.088	0.000	60	5096	1.00	0.8473	
121 Naphthalene	128	12.186	12.180	0.006	85	32460	1.00	0.8680	
122 1,2,3-Trichlorobenzene	180	12.393	12.387	0.006	57	10834	1.00	0.8554	
S 125 1,2-Dichloroethene, Total	1				0			1.79	
S 123 Total BTEX	1				0			4.51	
S 126 1,3-Dichloropropene, Total	1				0			1.69	
S 124 Xylenes, Total	1				0			1.77	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00260	Amount Added:	1.00	Units: uL	
GAS CORP mix_00645	Amount Added:	1.00	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

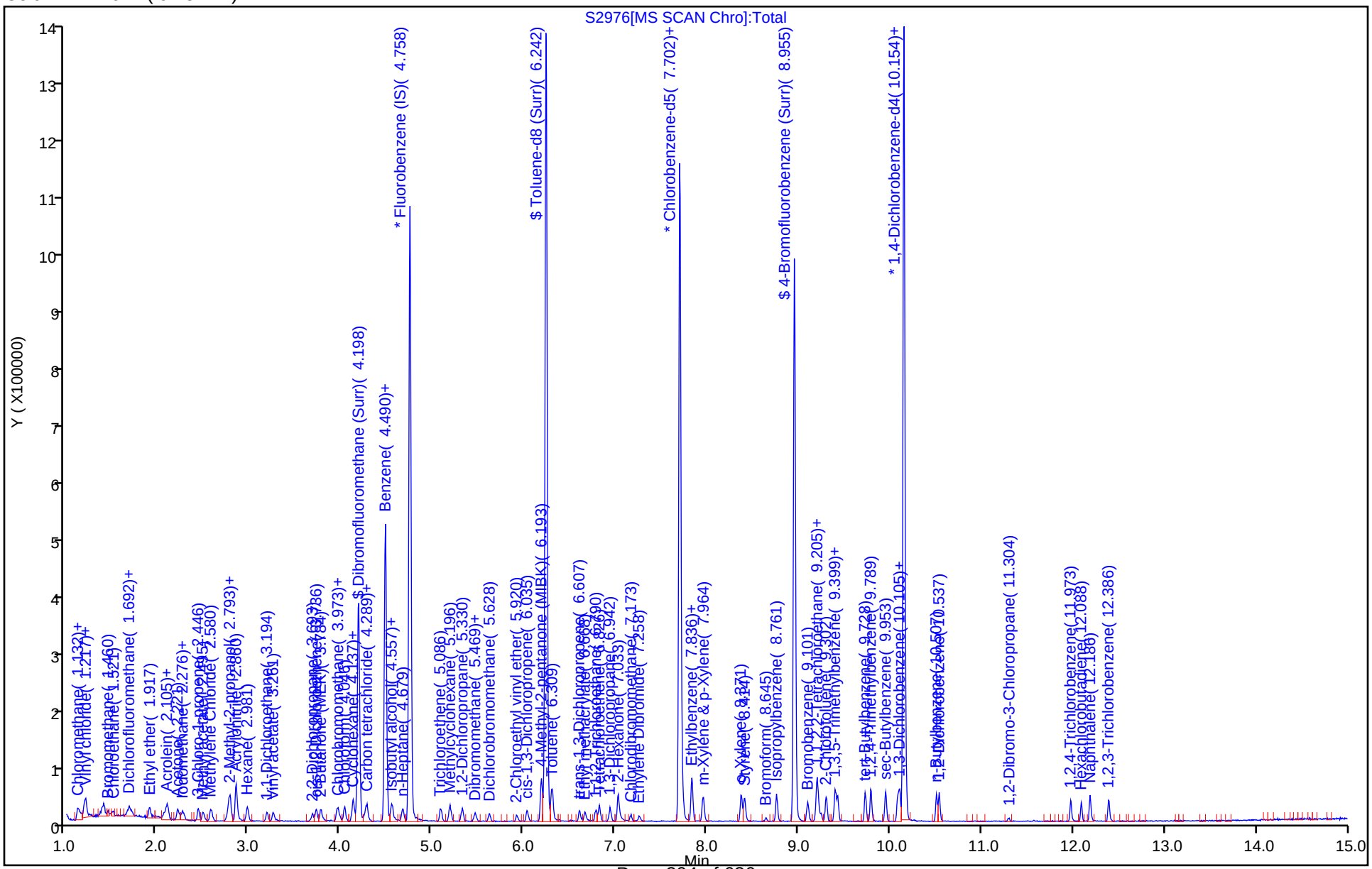
Report Date: 16-Oct-2024 12:20:16 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2976.d

Injection Date:	15-Oct-2024 16:13:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins Buffalo

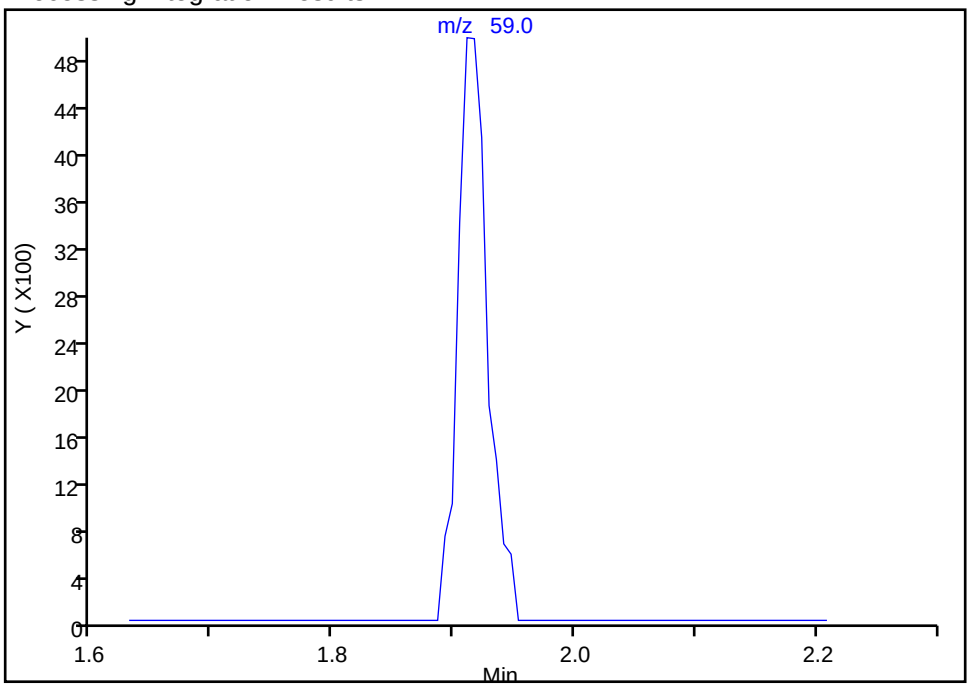
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Injection Date: 15-Oct-2024 16:13:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

18 Ethyl ether, CAS: 60-29-7

Signal: 1

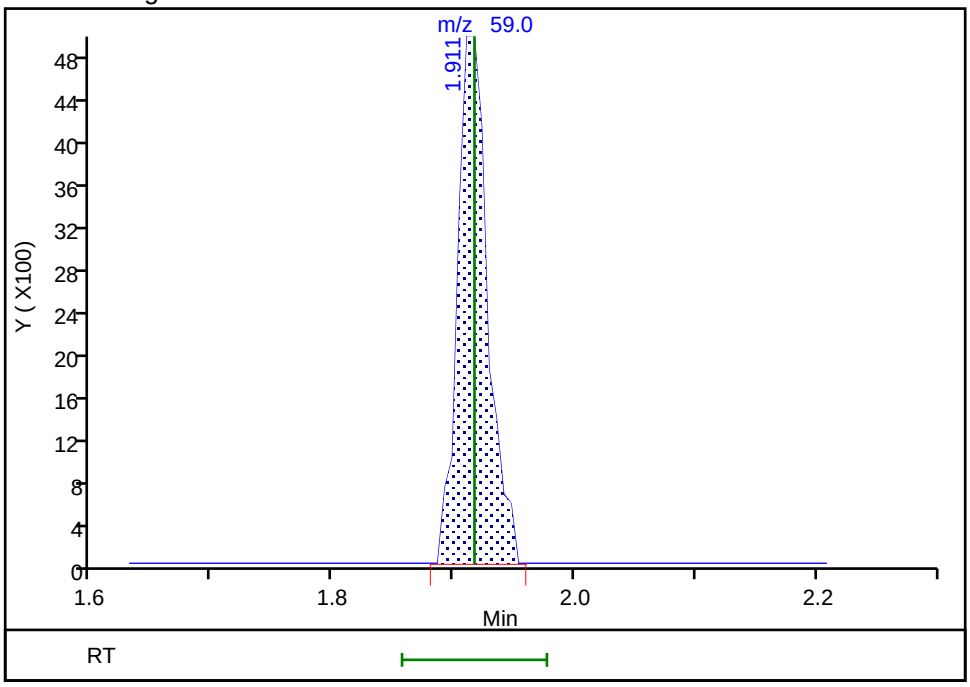
Not Detected
Expected RT: 1.92

Processing Integration Results



Manual Integration Results

RT: 1.91
Area: 8555
Amount: 1.025602
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:25:16 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

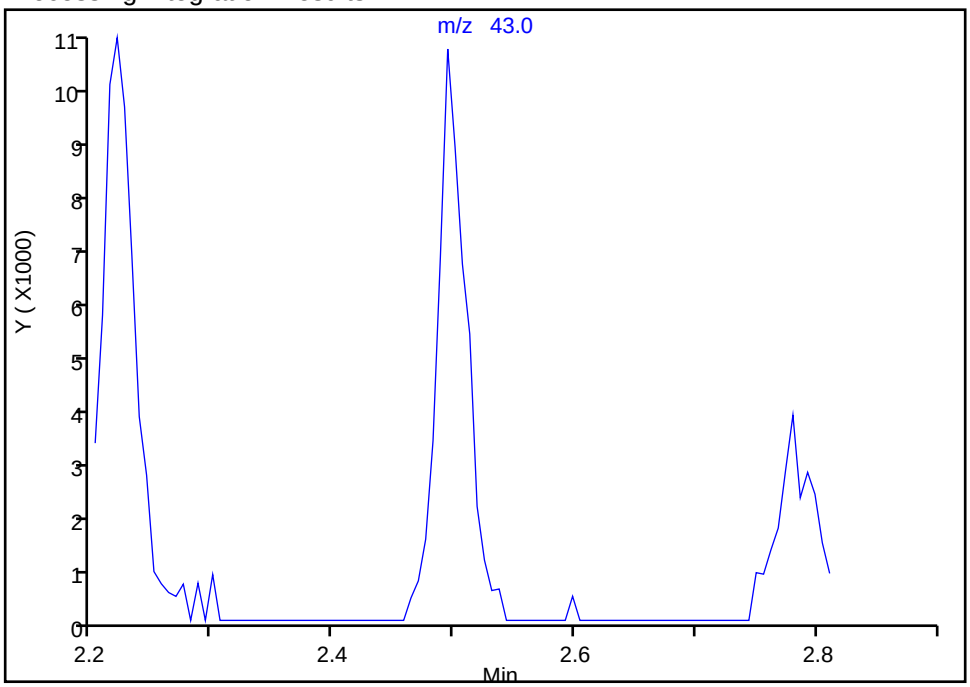
Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2976.d
Injection Date: 15-Oct-2024 16:13:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

27 Methyl acetate, CAS: 79-20-9

Signal: 1

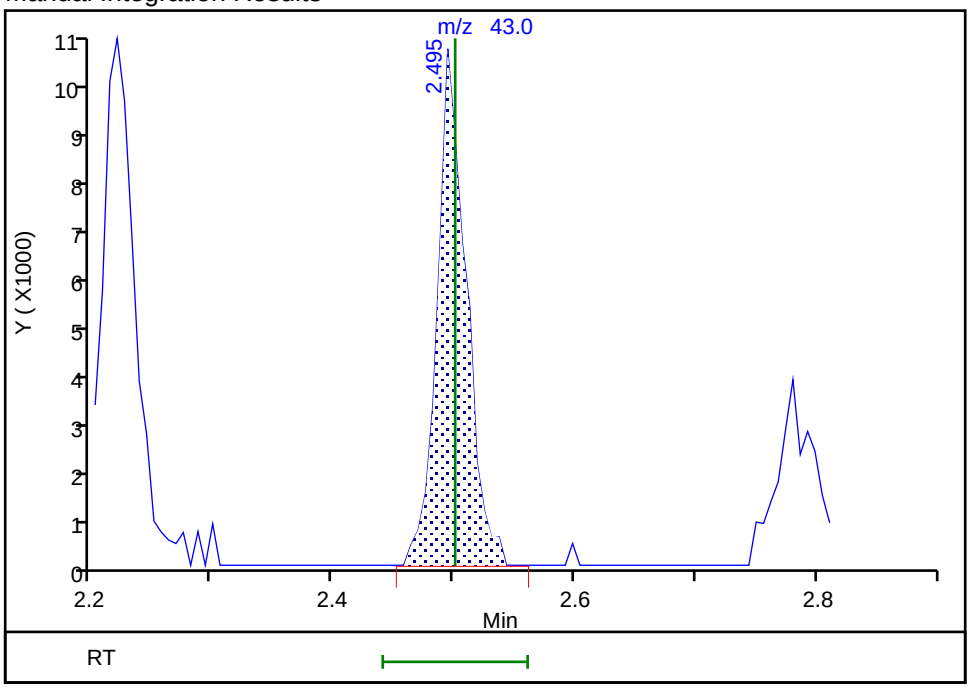
Not Detected
Expected RT: 2.50

Processing Integration Results



Manual Integration Results

RT: 2.49
Area: 17903
Amount: 1.921732
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:25:22 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins Buffalo

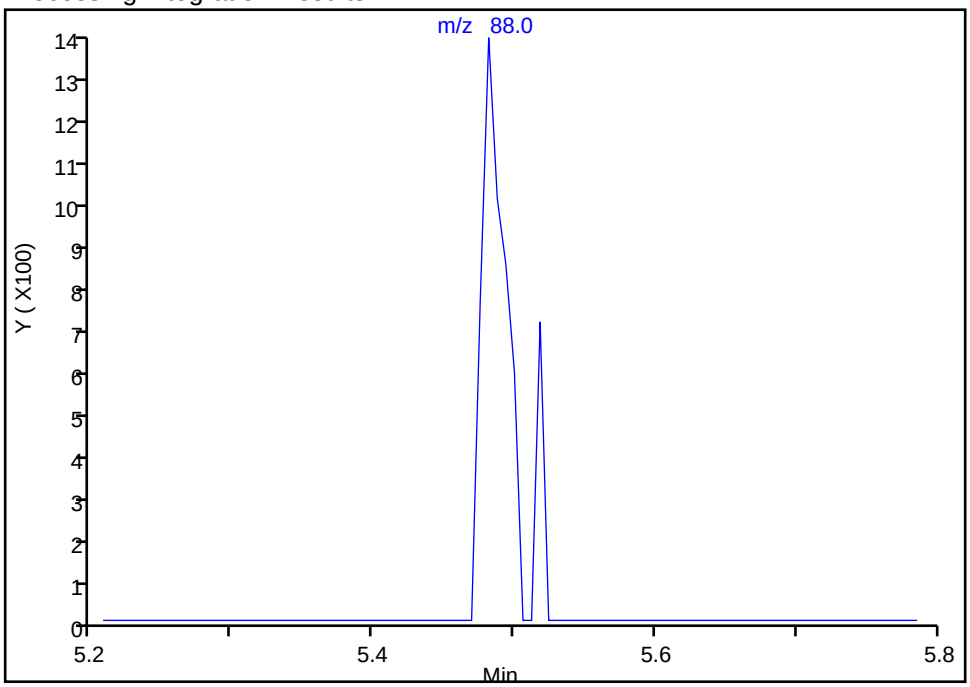
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Injection Date: 15-Oct-2024 16:13:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

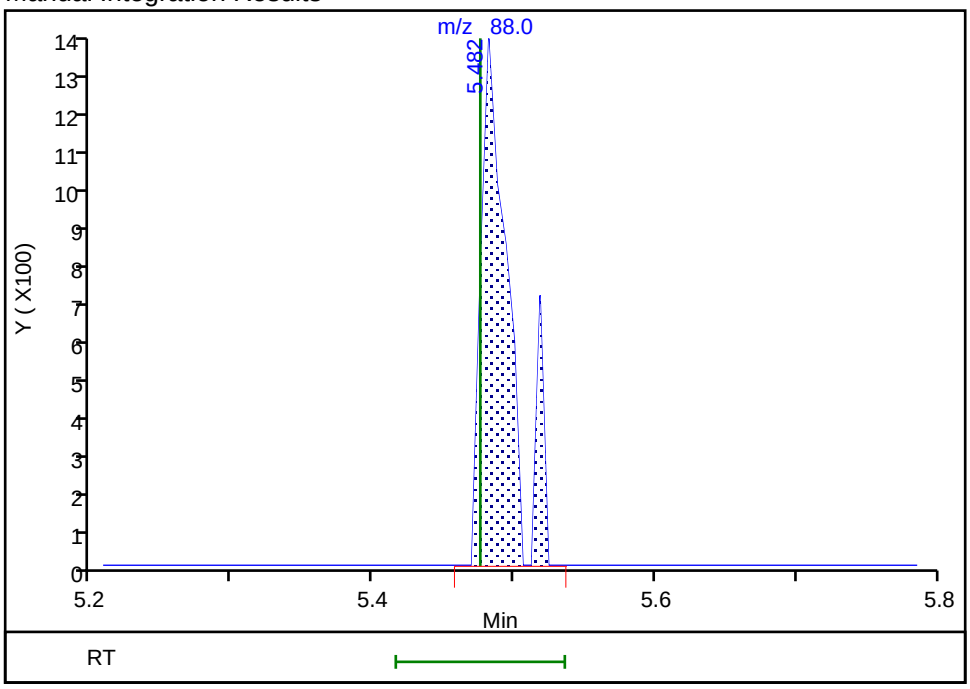
Not Detected
Expected RT: 5.48

Processing Integration Results



Manual Integration Results

RT: 5.48
Area: 1859
Amount: 17.289487
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:25:39 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo

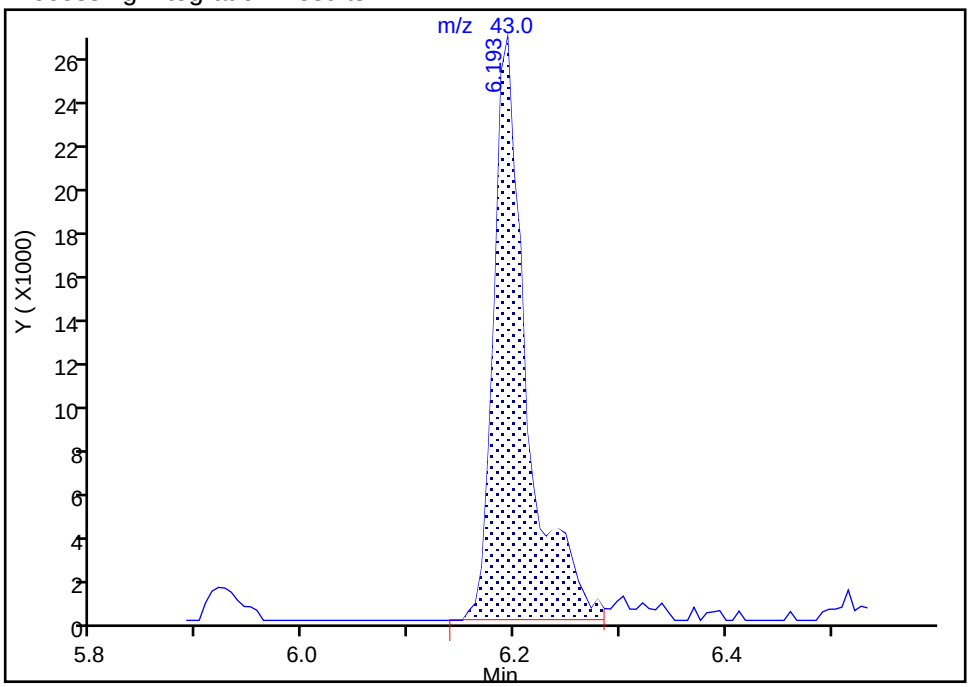
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Injection Date: 15-Oct-2024 16:13:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

73 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

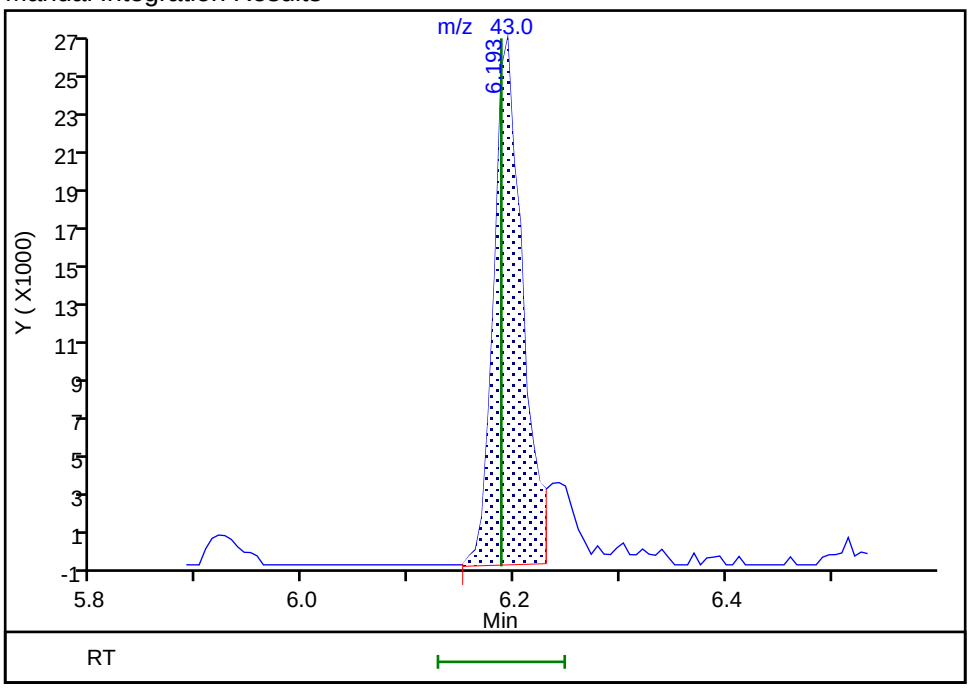
Processing Integration Results

RT: 6.19
Area: 58722
Amount: 4.638510
Amount Units: ug/L



Manual Integration Results

RT: 6.19
Area: 51279
Amount: 4.306170
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:26:13 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2977.d
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Oct-2024 16:36:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 480-0120558-015
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2024 12:20:35 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: QR3Z Date: 16-Oct-2024 08:24:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	155380	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	86	298116	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	94	322816	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	55	191310	25.0	25.1	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	98	137311	25.0	25.4	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	92	792585	25.0	25.4	
$ 6 4-Bromofluorobenzene (Surr)	174	8.961	8.955	0.006	92	249526	25.0	25.7	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	89	17760	2.00	2.13	
12 Chloromethane	50	1.132	1.132	0.000	92	21466	2.00	2.01	
13 Vinyl chloride	62	1.211	1.211	0.000	70	17001	2.00	2.21	
151 Butadiene	54	1.217	1.217	0.000	97	19585	2.00	2.17	
14 Bromomethane	94	1.460	1.454	0.006	75	10020	2.00	2.05	
15 Chloroethane	64	1.503	1.509	-0.006	70	12939	2.00	2.17	
16 Dichlorofluoromethane	67	1.685	1.686	-0.001	87	26127	2.00	1.99	
17 Trichlorofluoromethane	101	1.704	1.698	0.006	54	19264	2.00	2.03	
18 Ethyl ether	59	1.917	1.917	0.000	89	16049	2.00	2.00	Ma
20 Acrolein	56	2.075	2.081	-0.006	85	10593	10.0	10.3	
22 1,1-Dichloroethene	96	2.105	2.105	0.000	81	12902	2.00	2.18	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.105	2.105	0.000	44	13274	2.00	2.26	
23 Acetone	43	2.221	2.221	0.000	95	40143	10.0	10.3	
25 Iodomethane	142	2.257	2.251	0.006	93	23864	2.00	2.16	
26 Carbon disulfide	76	2.288	2.282	0.006	96	39598	2.00	1.96	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	77	26341	2.00	1.89	
27 Methyl acetate	43	2.501	2.501	0.000	96	37747	4.00	4.21	
30 Methylene Chloride	84	2.580	2.586	-0.006	87	17553	2.00	2.17	
31 2-Methyl-2-propanol	59	2.762	2.762	0.000	64	21677	20.0	20.7	
32 Methyl tert-butyl ether	73	2.787	2.787	0.000	91	52595	2.00	2.04	
34 trans-1,2-Dichloroethene	96	2.793	2.799	-0.006	65	15490	2.00	2.10	
33 Acrylonitrile	53	2.860	2.860	0.000	99	89823	20.0	20.1	
35 Hexane	57	2.975	2.981	-0.006	92	23206	2.00	2.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.194	3.194	0.000	71	30530	2.00	2.13	
37 Vinyl acetate	43	3.261	3.261	0.000	95	46768	4.00	4.03	M
44 2,2-Dichloropropane	77	3.687	3.693	-0.006	69	15218	2.00	2.12	
45 cis-1,2-Dichloroethene	96	3.736	3.730	0.006	69	15234	2.00	1.97	
43 2-Butanone (MEK)	43	3.784	3.778	0.006	95	57918	10.0	10.3	
48 Chlorobromomethane	128	3.955	3.961	-0.006	77	8075	2.00	2.00	
49 Tetrahydrofuran	42	3.979	3.973	0.006	79	17449	4.00	4.20	
50 Chloroform	83	4.046	4.046	0.000	90	27389	2.00	1.96	
52 Cyclohexane	56	4.131	4.137	-0.006	87	28255	2.00	1.98	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	70	21197	2.00	2.00	
55 Carbon tetrachloride	117	4.265	4.271	-0.006	64	19429	2.00	2.13	a
54 1,1-Dichloropropene	75	4.289	4.289	0.000	74	20929	2.00	2.02	
57 Benzene	78	4.484	4.484	0.000	52	63104	2.00	2.02	
53 Isobutyl alcohol	43	4.551	4.551	0.000	48	18598	50.0	46.5	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	52	24560	2.00	2.02	
59 n-Heptane	43	4.679	4.679	0.000	84	24230	2.00	2.08	
62 Trichloroethene	95	5.092	5.092	0.000	84	16391	2.00	2.11	
64 Methylcyclohexane	83	5.196	5.196	0.000	83	25527	2.00	2.04	
65 1,2-Dichloropropane	63	5.330	5.324	0.006	82	16354	2.00	2.03	a
67 Dibromomethane	93	5.463	5.463	0.000	80	8828	2.00	1.84	
66 1,4-Dioxane	88	5.476	5.476	0.000	14	4156	40.0	40.1	a
68 Dichlorobromomethane	83	5.622	5.622	0.000	74	17524	2.00	2.05	
69 2-Chloroethyl vinyl ether	63	5.926	5.914	0.012	70	10268	2.00	1.99	
72 cis-1,3-Dichloropropene	75	6.041	6.035	0.006	66	21178	2.00	1.89	
73 4-Methyl-2-pentanone (MIBK)	43	6.193	6.187	0.006	97	108871	10.0	9.48	M
74 Toluene	92	6.309	6.309	0.000	71	39207	2.00	1.95	
77 trans-1,3-Dichloropropene	75	6.607	6.601	0.006	84	19481	2.00	1.90	
75 Ethyl methacrylate	69	6.674	6.662	0.012	78	17374	2.00	1.72	
79 1,1,2-Trichloroethane	83	6.790	6.790	0.000	82	11748	2.00	2.01	
81 Tetrachloroethene	166	6.826	6.826	0.000	68	16010	2.00	2.05	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	88	24231	2.00	2.02	
80 2-Hexanone	43	7.027	7.027	0.000	95	81224	10.0	10.1	
83 Chlorodibromomethane	129	7.173	7.167	0.006	63	10862	2.00	1.84	
84 Ethylene Dibromide	107	7.264	7.258	0.006	63	14217	2.00	2.02	
87 Chlorobenzene	112	7.739	7.733	0.006	88	41340	2.00	1.98	
88 Ethylbenzene	91	7.836	7.836	0.000	94	72868	2.00	1.98	
89 1,1,1,2-Tetrachloroethane	131	7.842	7.836	0.006	34	12657	2.00	1.86	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	96	28611	2.00	2.01	
91 o-Xylene	106	8.371	8.371	0.000	95	26152	2.00	1.86	
92 Styrene	104	8.414	8.408	0.006	89	48543	2.00	2.08	
95 Bromoform	173	8.645	8.645	0.000	74	6044	2.00	1.57	
94 Isopropylbenzene	105	8.761	8.761	0.000	90	67405	2.00	1.90	
101 Bromobenzene	156	9.101	9.101	0.000	86	18262	2.00	1.90	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	56	18492	2.00	1.83	
99 N-Propylbenzene	91	9.205	9.205	0.000	93	84323	2.00	1.87	
100 1,2,3-Trichloropropane	110	9.217	9.217	0.000	45	6647	2.00	1.91	
98 trans-1,4-Dichloro-2-butene	53	9.241	9.241	0.000	1	6093	2.00	1.61	
103 2-Chlorotoluene	126	9.302	9.302	0.000	93	18179	2.00	2.07	
102 1,3,5-Trimethylbenzene	105	9.406	9.400	0.006	89	63286	2.00	1.95	
105 4-Chlorotoluene	126	9.424	9.424	0.000	93	17430	2.00	1.89	
106 tert-Butylbenzene	134	9.734	9.734	0.000	85	14278	2.00	2.00	
107 1,2,4-Trimethylbenzene	105	9.795	9.789	0.006	82	65716	2.00	1.96	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.953	9.953	0.000	80	75754	2.00	1.88	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	92	35596	2.00	1.94	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	89	67693	2.00	1.89	
113 1,4-Dichlorobenzene	146	10.178	10.172	0.006	70	37956	2.00	2.02	
115 n-Butylbenzene	91	10.507	10.507	0.000	88	55904	2.00	1.80	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	85	37302	2.00	2.08	
117 1,2-Dibromo-3-Chloropropane	75	11.298	11.292	0.006	19	3193	2.00	2.13	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	87	23139	2.00	1.83	
120 Hexachlorobutadiene	225	12.088	12.088	0.000	78	11135	2.00	1.86	
121 Naphthalene	128	12.186	12.180	0.006	93	64625	2.00	1.73	
122 1,2,3-Trichlorobenzene	180	12.386	12.387	-0.001	87	23010	2.00	1.82	
S 125 1,2-Dichloroethene, Total	1				0			4.07	
S 123 Total BTEX	1				0			9.83	
S 126 1,3-Dichloropropene, Total	1				0			3.79	
S 124 Xylenes, Total	1				0			3.88	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8260 CORP mix_00260	Amount Added:	2.00	Units: uL	
GAS CORP mix_00645	Amount Added:	2.00	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

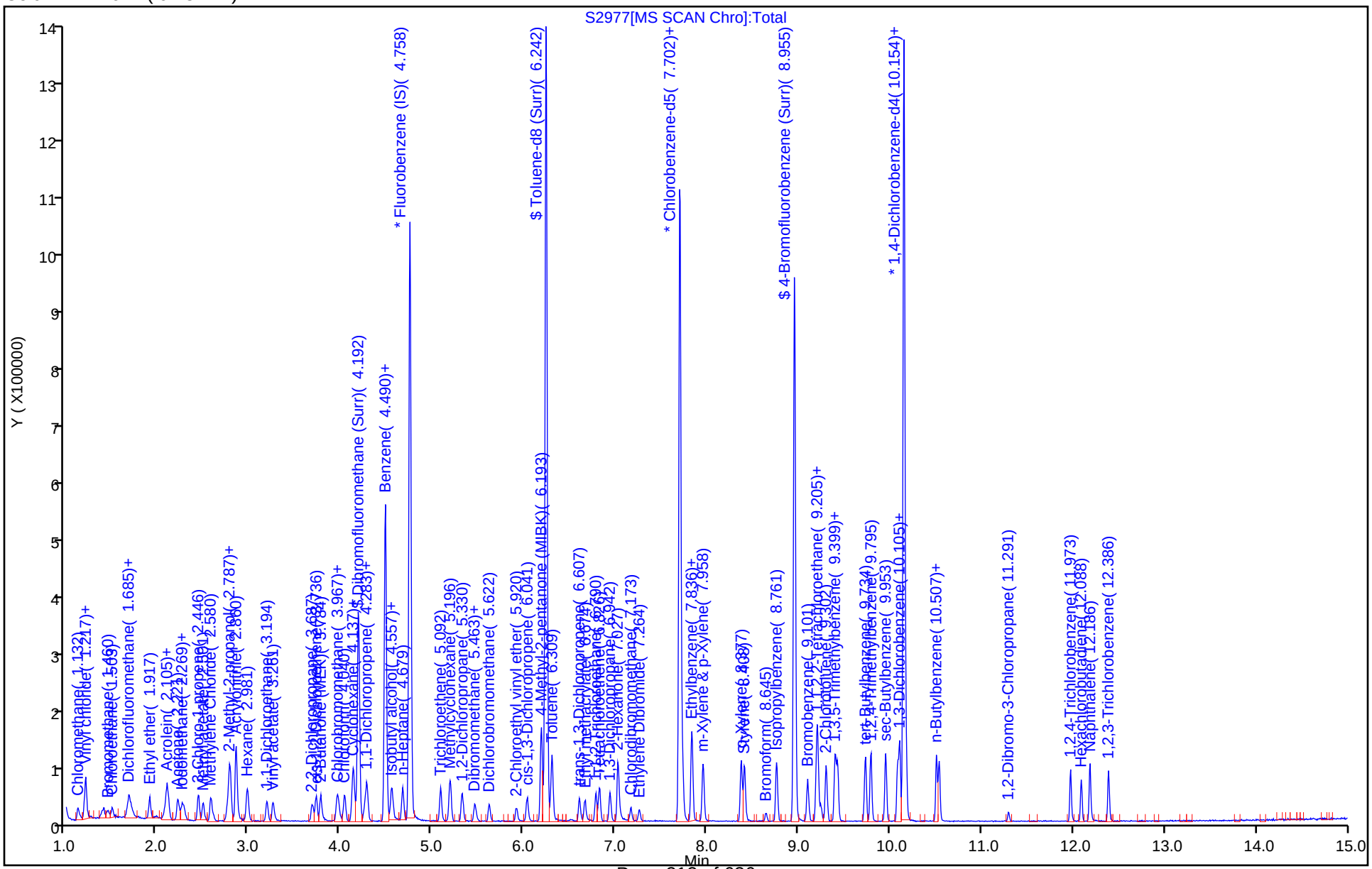
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Eurofins Buffalo

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Injection Date:	15-Oct-2024 16:36:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 2			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins Buffalo

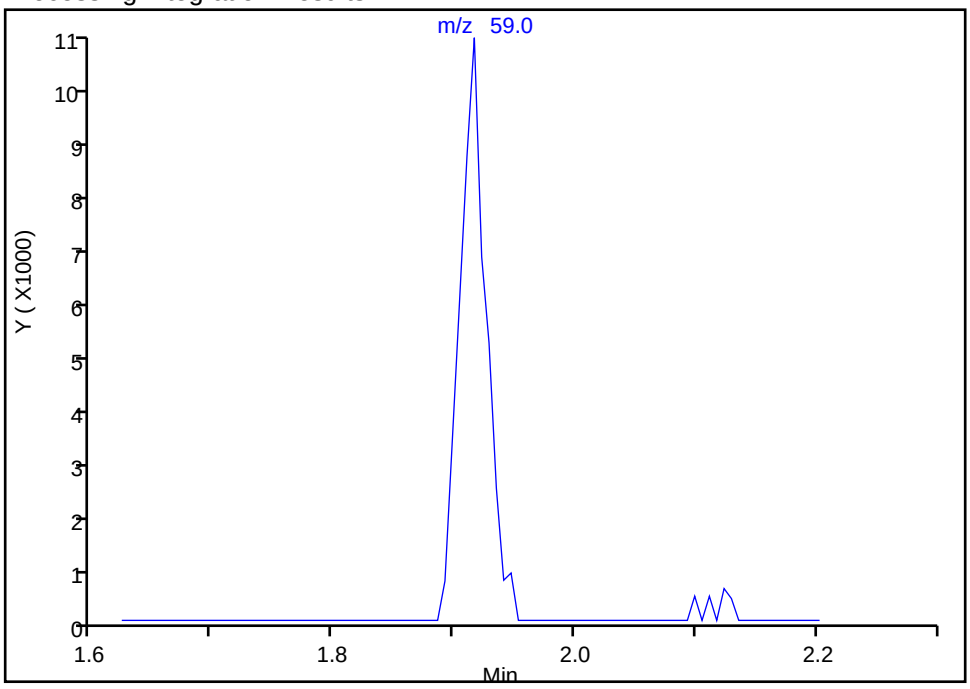
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Injection Date: 15-Oct-2024 16:36:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: LH ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

18 Ethyl ether, CAS: 60-29-7

Signal: 1

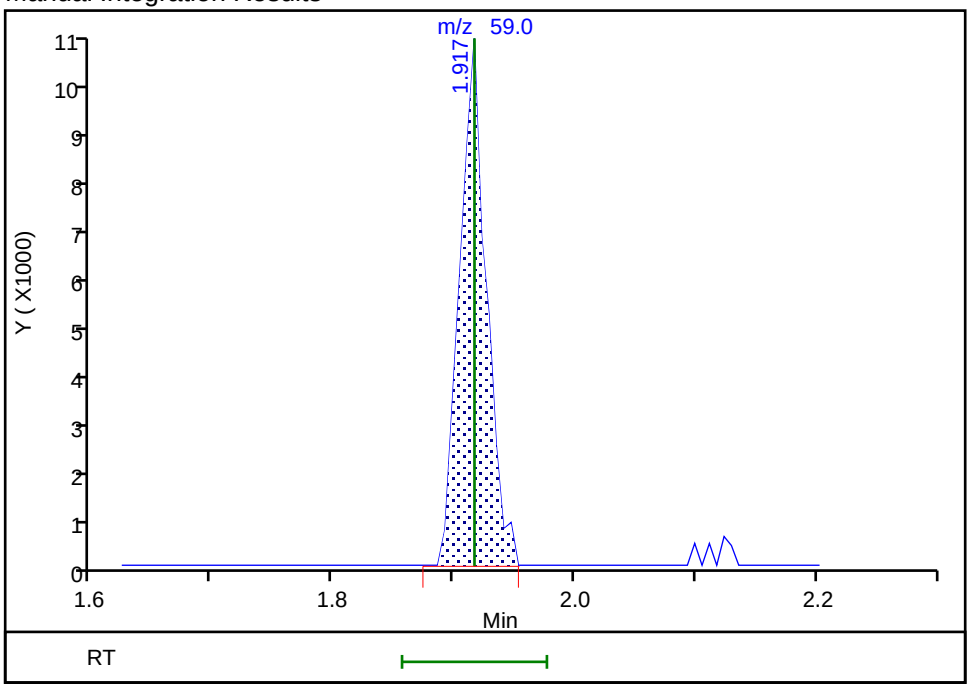
Not Detected
Expected RT: 1.92

Processing Integration Results



Manual Integration Results

RT: 1.92
Area: 16049
Amount: 1.999084
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:24:08 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

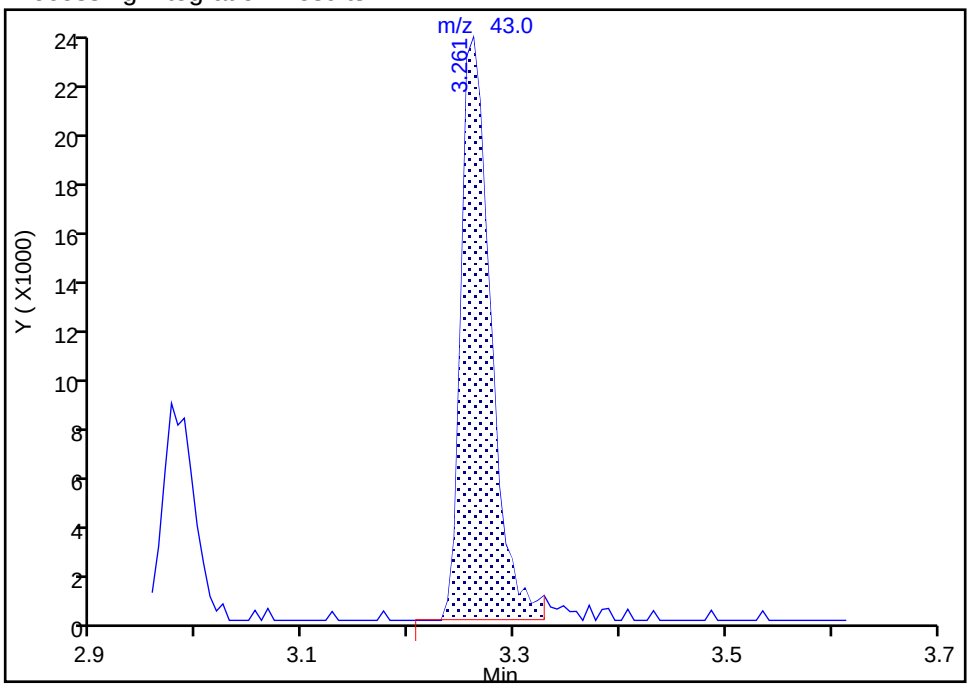
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Injection Date: 15-Oct-2024 16:36:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: LH ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

37 Vinyl acetate, CAS: 108-05-4

Signal: 1

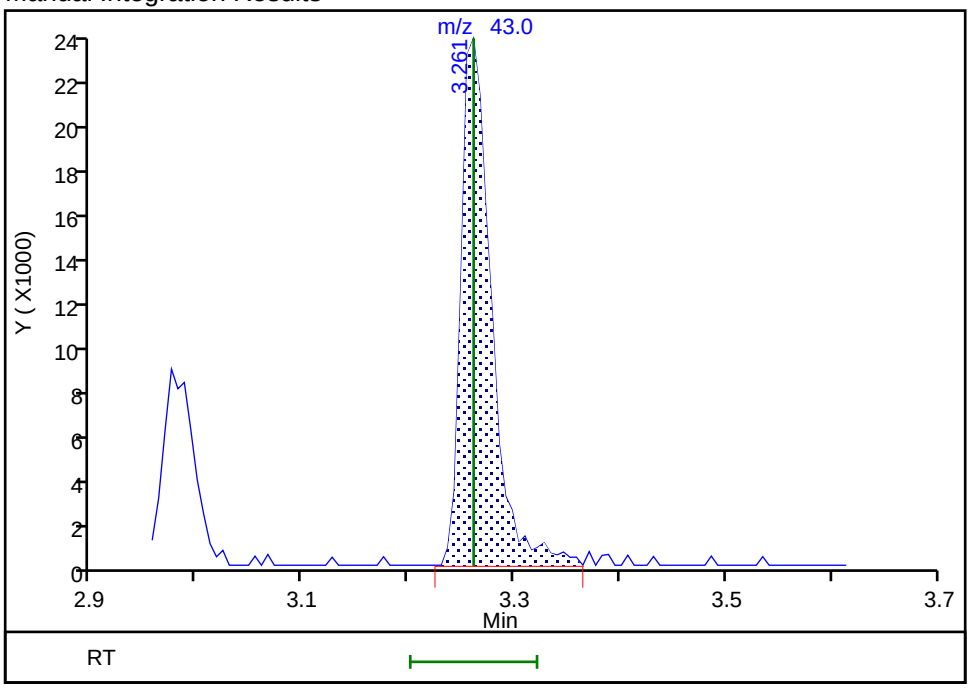
Processing Integration Results

RT: 3.26
Area: 45922
Amount: 3.253571
Amount Units: ug/L



Manual Integration Results

RT: 3.26
Area: 46768
Amount: 4.029021
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 09:10:58 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

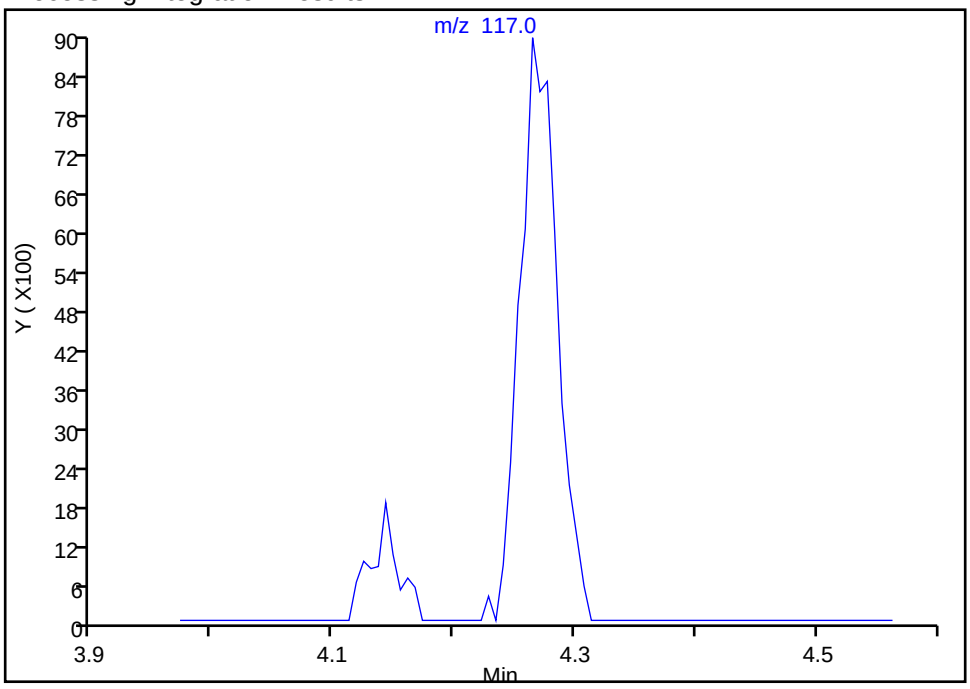
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Injection Date: 15-Oct-2024 16:36:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: LH ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

55 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

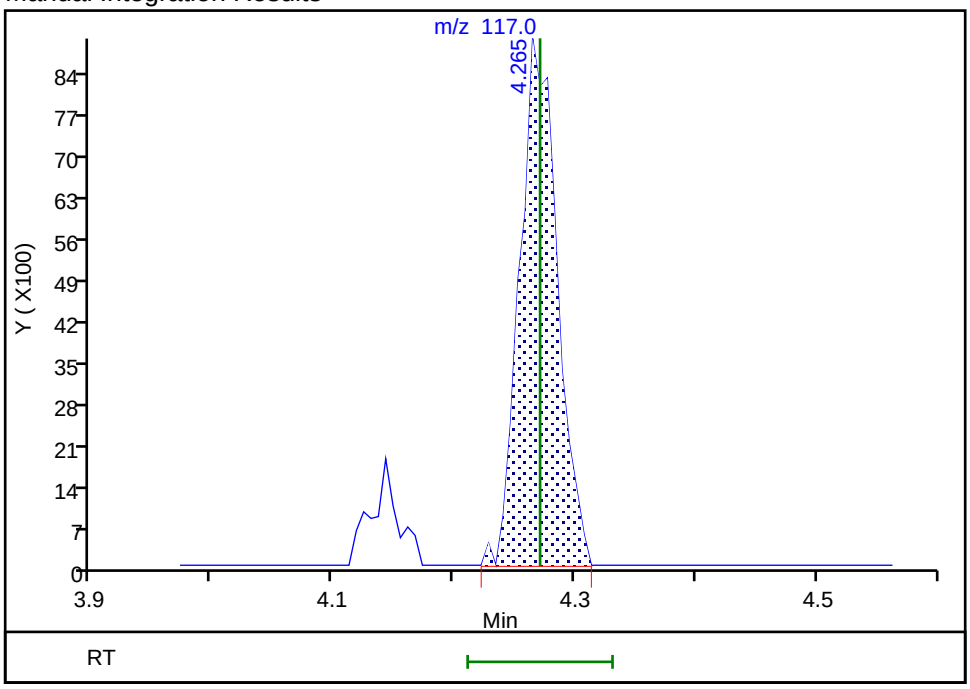
Not Detected
Expected RT: 4.27

Processing Integration Results



Manual Integration Results

RT: 4.26
Area: 19429
Amount: 2.130822
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:24:20 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins Buffalo

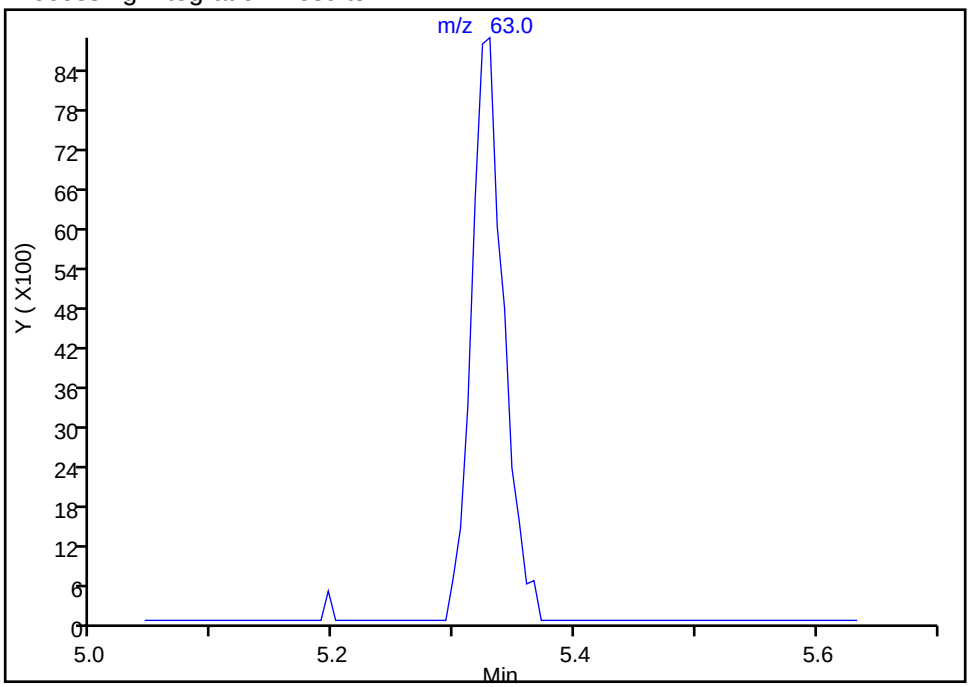
Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2977.d
Injection Date: 15-Oct-2024 16:36:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: LH ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

65 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

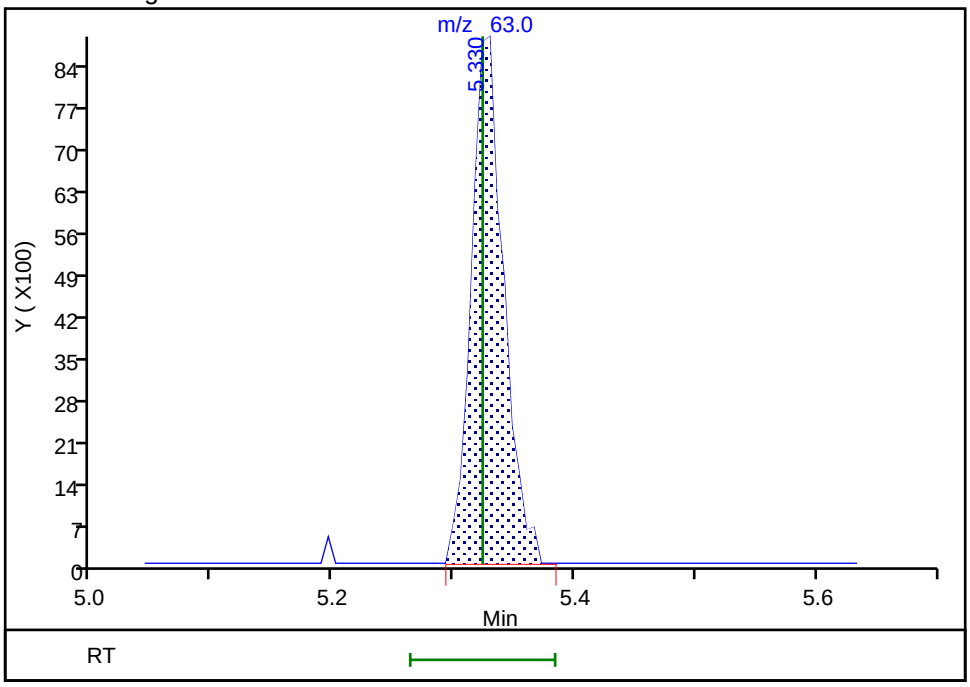
Not Detected
Expected RT: 5.32

Processing Integration Results



Manual Integration Results

RT: 5.33
Area: 16354
Amount: 2.027971
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:24:26 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

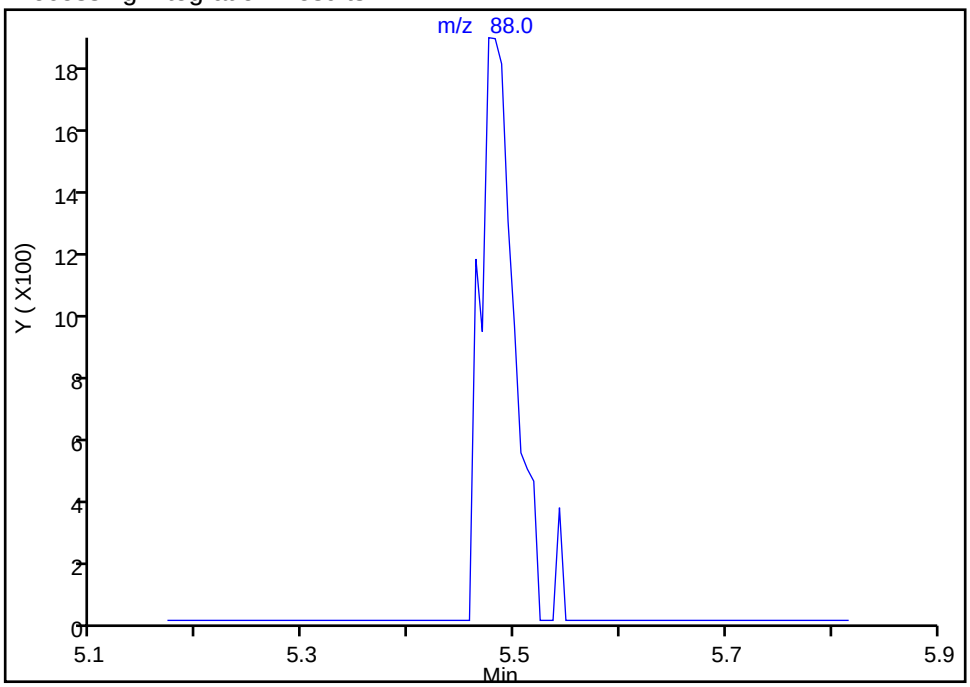
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Injection Date: 15-Oct-2024 16:36:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: LH ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

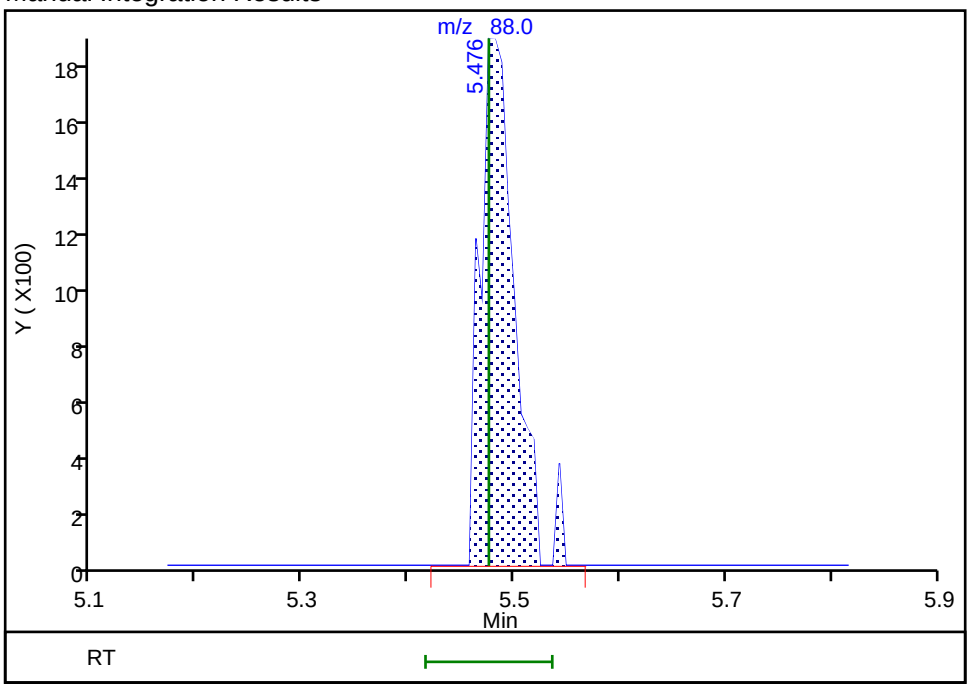
Not Detected
Expected RT: 5.48

Processing Integration Results



Manual Integration Results

RT: 5.48
Area: 4156
Amount: 40.094724
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:24:29 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins Buffalo

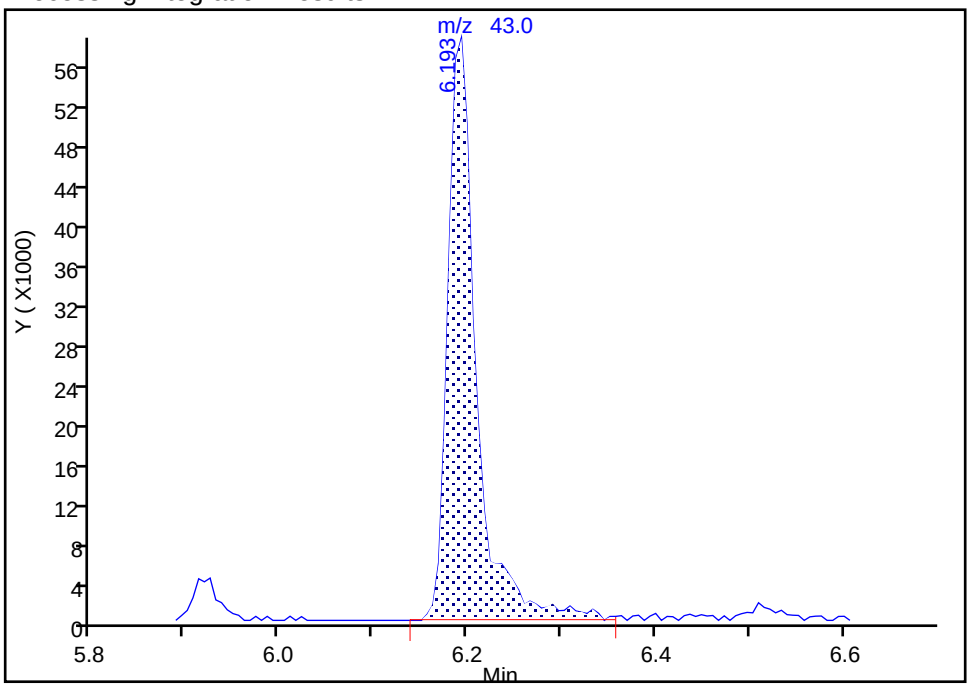
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Injection Date: 15-Oct-2024 16:36:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: LH ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

73 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

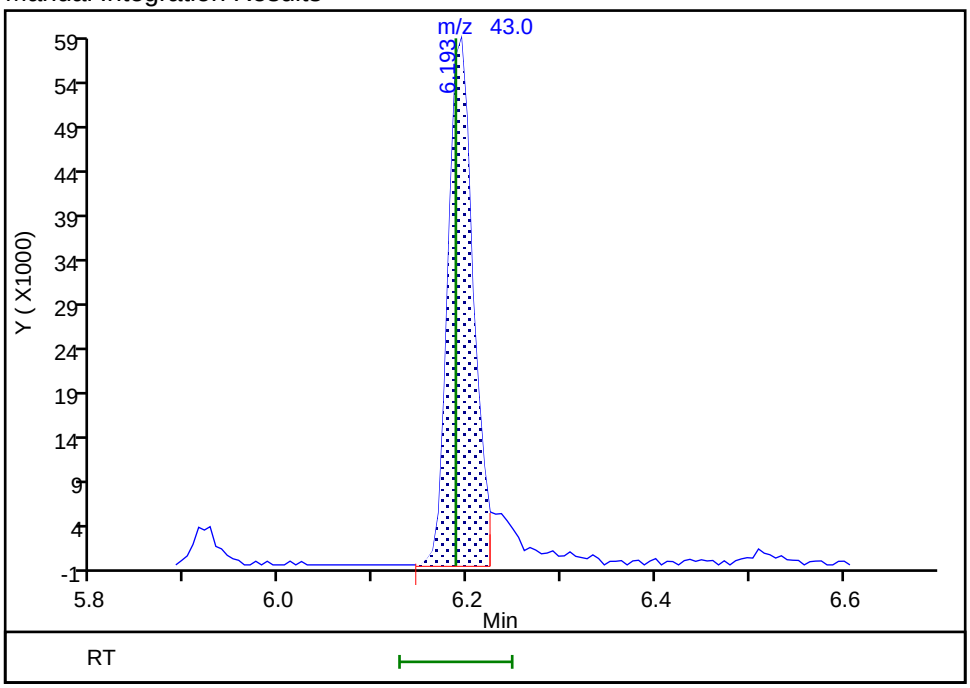
Processing Integration Results

RT: 6.19
Area: 123632
Amount: 10.616688
Amount Units: ug/L



Manual Integration Results

RT: 6.19
Area: 108871
Amount: 9.483590
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:31:11 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2978.d
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 15-Oct-2024 17:00:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 480-0120558-016
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2024 12:20:55 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: QR3Z Date: 16-Oct-2024 08:23:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	164781	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.708	7.702	0.006	87	306246	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	91	320950	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	56	193796	25.0	24.0	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	91	137655	25.0	24.0	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	83	797283	25.0	24.9	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	86	248038	25.0	24.9	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	84	48116	5.00	5.44	
12 Chloromethane	50	1.132	1.132	0.000	99	58798	5.00	5.20	
13 Vinyl chloride	62	1.205	1.211	-0.006	97	40862	5.00	5.02	
151 Butadiene	54	1.217	1.217	0.000	96	50272	5.00	5.25	
14 Bromomethane	94	1.448	1.454	-0.006	76	26000	5.00	5.02	
15 Chloroethane	64	1.509	1.509	0.000	92	33197	5.00	5.26	
16 Dichlorofluoromethane	67	1.686	1.686	0.000	81	70309	5.00	5.04	
17 Trichlorofluoromethane	101	1.692	1.698	-0.006	52	54998	5.00	5.46	
18 Ethyl ether	59	1.917	1.917	0.000	95	42678	5.00	5.01	
20 Acrolein	56	2.075	2.081	-0.006	91	26806	25.0	24.5	
22 1,1-Dichloroethene	96	2.105	2.105	0.000	92	31486	5.00	5.01	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.099	2.105	-0.006	59	34324	5.00	5.52	
23 Acetone	43	2.221	2.221	0.000	95	104174	25.0	25.1	
25 Iodomethane	142	2.257	2.251	0.006	95	59417	5.00	5.07	
26 Carbon disulfide	76	2.276	2.282	-0.006	88	106229	5.00	4.96	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	83	71594	5.00	4.86	
27 Methyl acetate	43	2.495	2.501	-0.006	96	92410	10.0	9.72	
30 Methylene Chloride	84	2.580	2.586	-0.006	89	41446	5.00	4.98	
31 2-Methyl-2-propanol	59	2.762	2.762	0.000	79	57193	50.0	51.5	
32 Methyl tert-butyl ether	73	2.787	2.787	0.000	92	133888	5.00	4.89	
34 trans-1,2-Dichloroethene	96	2.799	2.799	0.000	90	37824	5.00	4.83	
33 Acrylonitrile	53	2.854	2.860	-0.006	98	231172	50.0	48.8	
35 Hexane	57	2.981	2.981	0.000	90	61601	5.00	5.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.194	3.194	0.000	93	74103	5.00	4.89	
37 Vinyl acetate	43	3.261	3.261	0.000	97	131061	10.0	8.46	M
44 2,2-Dichloropropane	77	3.687	3.693	-0.006	81	38008	5.00	4.98	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	68	42020	5.00	5.13	
43 2-Butanone (MEK)	43	3.778	3.778	0.000	100	147338	25.0	24.7	
48 Chlorobromomethane	128	3.961	3.961	0.000	88	21672	5.00	5.06	
49 Tetrahydrofuran	42	3.973	3.973	0.000	93	44059	10.0	10.0	
50 Chloroform	83	4.046	4.046	0.000	81	70689	5.00	4.76	
52 Cyclohexane	56	4.137	4.137	0.000	97	76535	5.00	5.07	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	76	53747	5.00	4.79	
55 Carbon tetrachloride	117	4.265	4.271	-0.006	74	46471	5.00	4.81	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	84	54744	5.00	4.98	
57 Benzene	78	4.484	4.484	0.000	71	162608	5.00	4.91	
53 Isobutyl alcohol	43	4.551	4.551	0.000	51	45069	125.0	106.4	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	74	63560	5.00	4.94	
59 n-Heptane	43	4.679	4.679	0.000	89	63720	5.00	5.15	
62 Trichloroethene	95	5.092	5.092	0.000	89	38462	5.00	4.67	
64 Methylcyclohexane	83	5.196	5.196	0.000	92	65082	5.00	4.90	
65 1,2-Dichloropropane	63	5.330	5.324	0.006	88	41034	5.00	4.80	
67 Dibromomethane	93	5.463	5.463	0.000	89	25350	5.00	4.99	
66 1,4-Dioxane	88	5.482	5.476	0.006	92	11487	100.0	107.9	Ma
68 Dichlorobromomethane	83	5.622	5.622	0.000	91	44456	5.00	4.90	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	87	27530	5.00	5.03	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	80	57563	5.00	4.85	
73 4-Methyl-2-pentanone (MIBK)	43	6.193	6.187	0.006	99	307127	25.0	26.0	M
74 Toluene	92	6.309	6.309	0.000	75	100667	5.00	4.88	
77 trans-1,3-Dichloropropene	75	6.607	6.601	0.006	92	49501	5.00	4.69	
75 Ethyl methacrylate	69	6.668	6.662	0.006	86	52232	5.00	5.04	
79 1,1,2-Trichloroethane	83	6.784	6.790	-0.006	91	29858	5.00	4.97	
81 Tetrachloroethene	166	6.826	6.826	0.000	83	40539	5.00	5.06	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	97	61873	5.00	5.03	
80 2-Hexanone	43	7.027	7.027	0.000	97	211189	25.0	25.7	
83 Chlorodibromomethane	129	7.167	7.167	0.000	78	30033	5.00	4.96	
84 Ethylene Dibromide	107	7.264	7.258	0.006	88	35024	5.00	4.84	
87 Chlorobenzene	112	7.733	7.733	0.000	89	107509	5.00	5.02	
88 Ethylbenzene	91	7.836	7.836	0.000	98	186511	5.00	4.92	
89 1,1,1,2-Tetrachloroethane	131	7.842	7.836	0.006	43	33716	5.00	4.83	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	71199	5.00	4.88	
91 o-Xylene	106	8.377	8.371	0.006	96	71663	5.00	4.97	
92 Styrene	104	8.408	8.408	0.000	88	118370	5.00	4.93	
95 Bromoform	173	8.651	8.645	0.006	85	18271	5.00	4.63	
94 Isopropylbenzene	105	8.761	8.761	0.000	95	167685	5.00	4.76	
101 Bromobenzene	156	9.101	9.101	0.000	91	48521	5.00	5.07	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	67	50937	5.00	5.08	
99 N-Propylbenzene	91	9.205	9.205	0.000	97	217572	5.00	4.85	
100 1,2,3-Trichloropropane	110	9.217	9.217	0.000	59	18473	5.00	5.35	
98 trans-1,4-Dichloro-2-butene	53	9.247	9.241	0.006	40	19119	5.00	5.08	
103 2-Chlorotoluene	126	9.302	9.302	0.000	95	43394	5.00	4.98	
102 1,3,5-Trimethylbenzene	105	9.400	9.400	0.000	95	153556	5.00	4.75	
105 4-Chlorotoluene	126	9.430	9.424	0.006	95	45580	5.00	4.96	
106 tert-Butylbenzene	134	9.734	9.734	0.000	90	33572	5.00	4.73	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	95	162072	5.00	4.85	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.953	9.953	0.000	92	192090	5.00	4.80	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	96	92035	5.00	5.06	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	94	172572	5.00	4.84	
113 1,4-Dichlorobenzene	146	10.172	10.172	0.000	82	92667	5.00	4.96	
115 n-Butylbenzene	91	10.507	10.507	0.000	94	146490	5.00	4.75	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	95	90162	5.00	5.06	
117 1,2-Dibromo-3-Chloropropane	75	11.298	11.292	0.006	46	8285	5.00	4.50	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	92	59865	5.00	4.75	
120 Hexachlorobutadiene	225	12.088	12.088	0.000	89	30770	5.00	5.16	
121 Naphthalene	128	12.186	12.180	0.006	97	184356	5.00	4.97	
122 1,2,3-Trichlorobenzene	180	12.387	12.387	0.000	94	61520	5.00	4.90	
S 125 1,2-Dichloroethene, Total	1				0			9.96	
S 123 Total BTEX	1				0			24.6	
S 126 1,3-Dichloropropene, Total	1				0			9.54	
S 124 Xylenes, Total	1				0			9.85	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8260 CORP mix_00260	Amount Added:	5.00	Units: uL	
GAS CORP mix_00645	Amount Added:	5.00	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

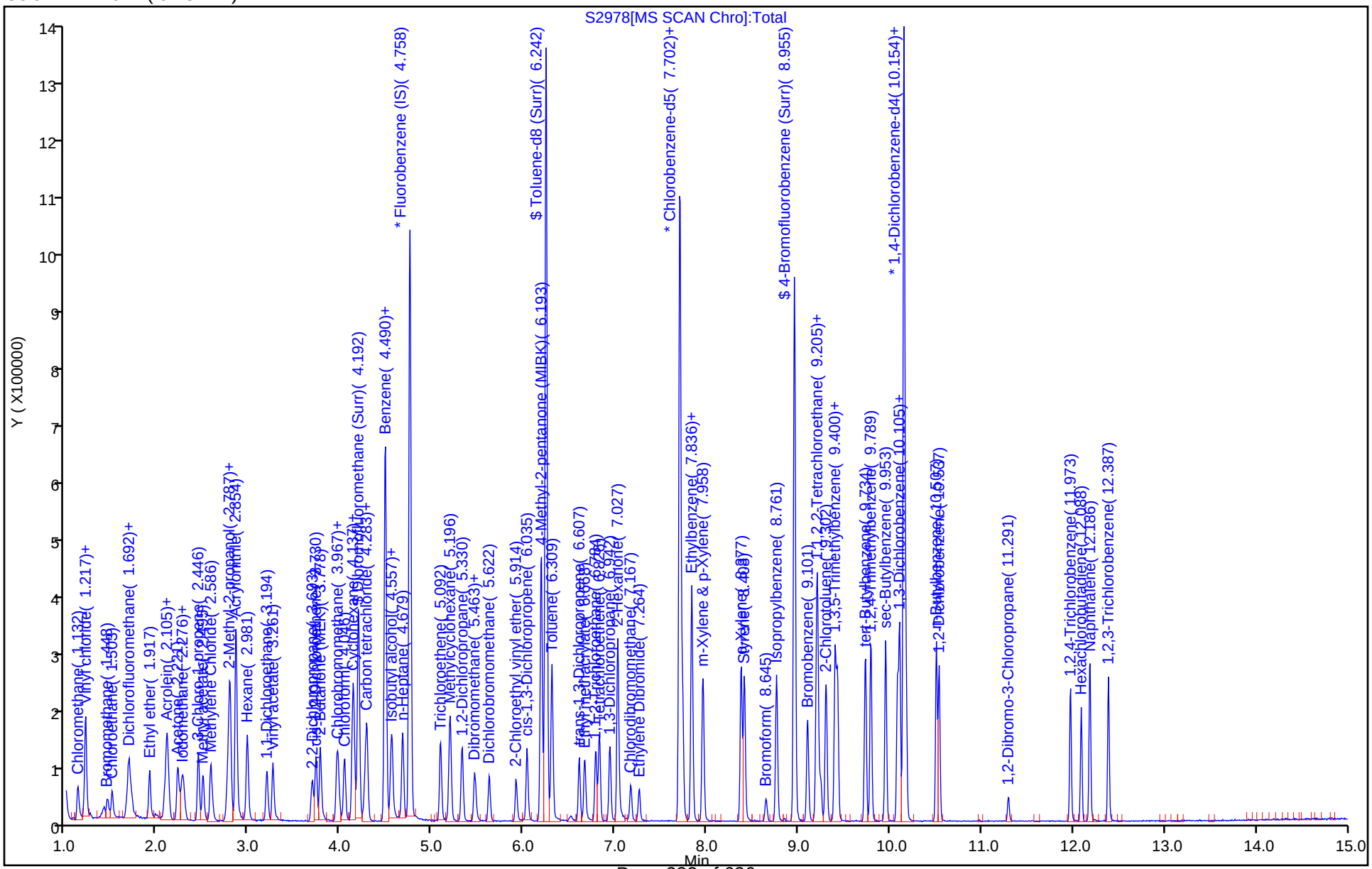
Report Date: 16-Oct-2024 12:20:56 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2978.d

Injection Date:	15-Oct-2024 17:00:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 3			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo

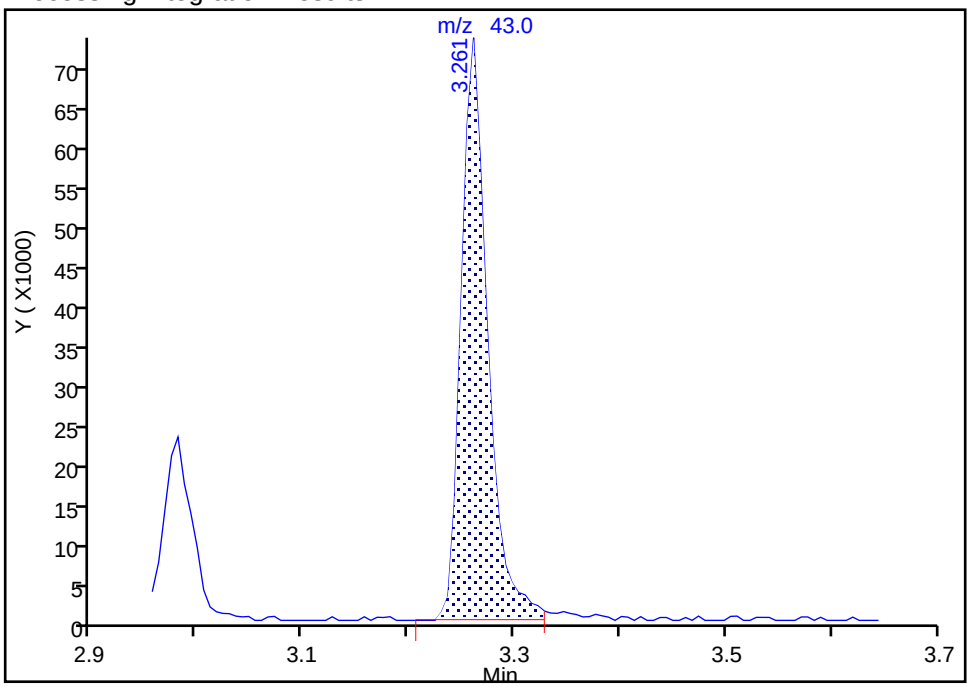
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Injection Date: 15-Oct-2024 17:00:30 Instrument ID: HP5973S
Lims ID: IC 3
Client ID:
Operator ID: LH ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

37 Vinyl acetate, CAS: 108-05-4

Signal: 1

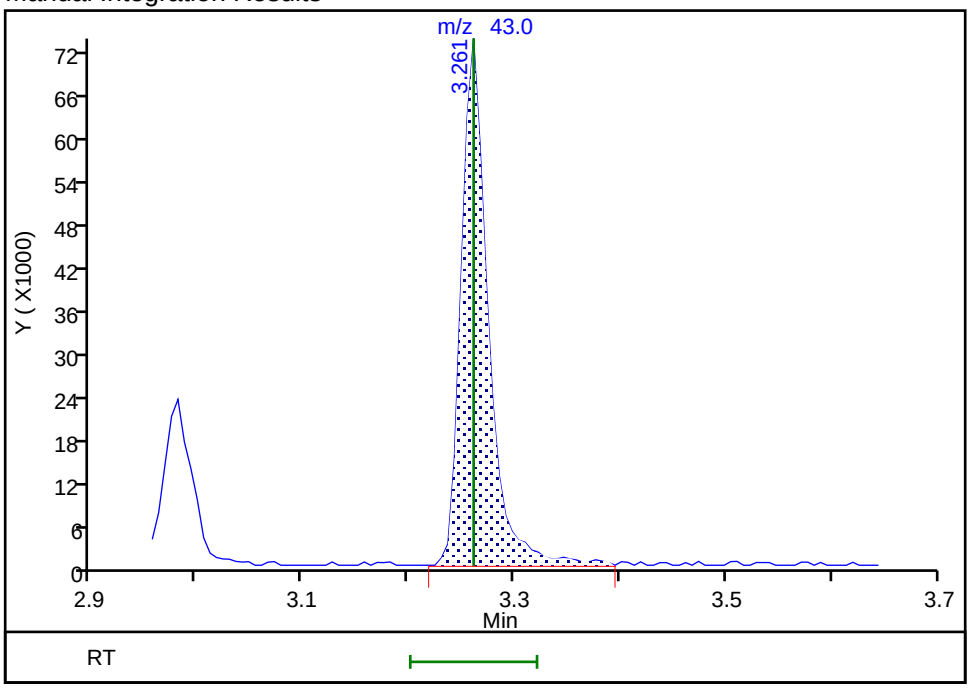
Processing Integration Results

RT: 3.26
Area: 128431
Amount: 8.599084
Amount Units: ug/L



Manual Integration Results

RT: 3.26
Area: 131061
Amount: 8.458972
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 09:10:44 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo

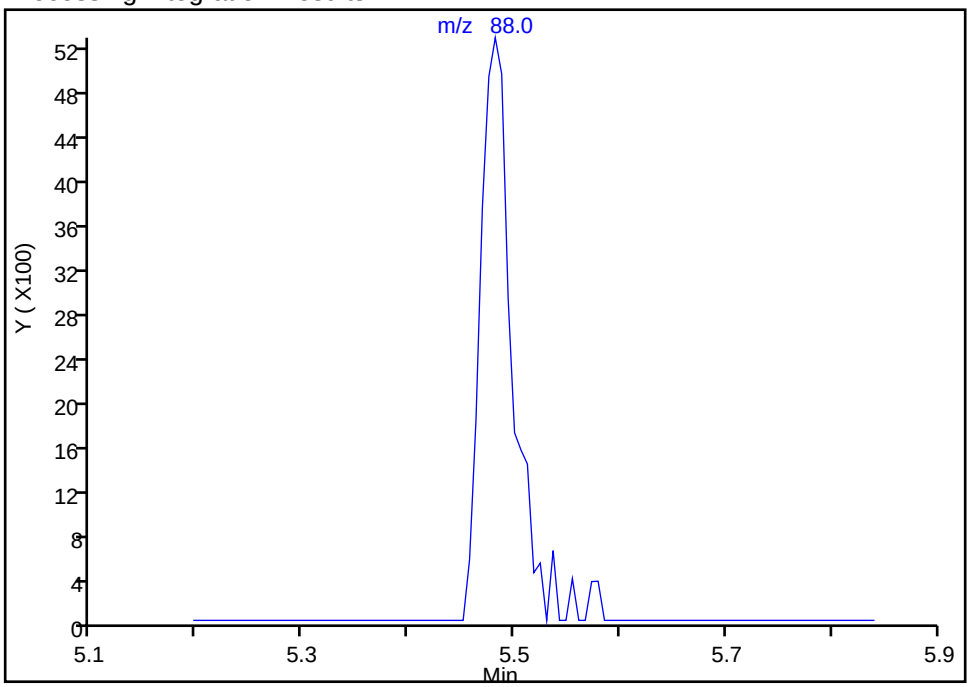
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Injection Date: 15-Oct-2024 17:00:30 Instrument ID: HP5973S
Lims ID: IC 3
Client ID:
Operator ID: LH ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

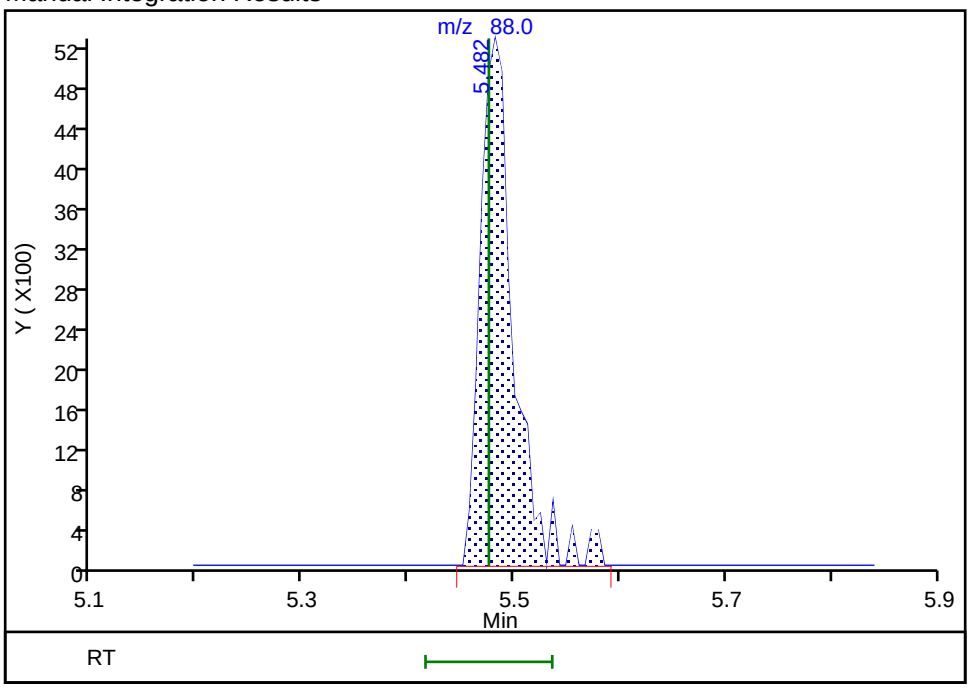
Not Detected
Expected RT: 5.48

Processing Integration Results



Manual Integration Results

RT: 5.48
Area: 11487
Amount: 107.8781
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:23:32 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo

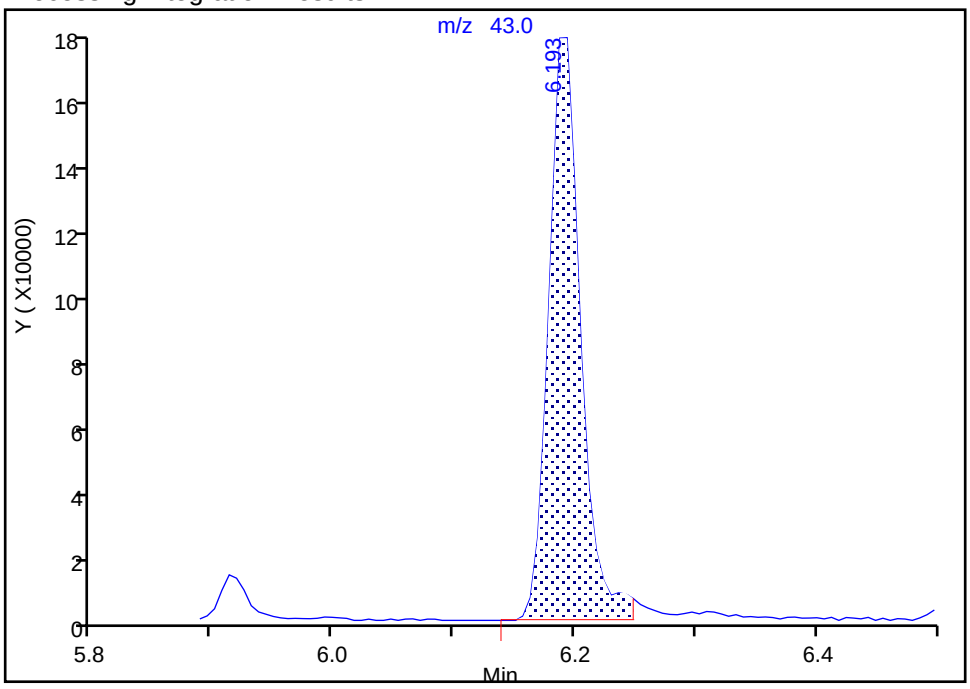
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Injection Date: 15-Oct-2024 17:00:30 Instrument ID: HP5973S
Lims ID: IC 3
Client ID:
Operator ID: LH ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

73 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

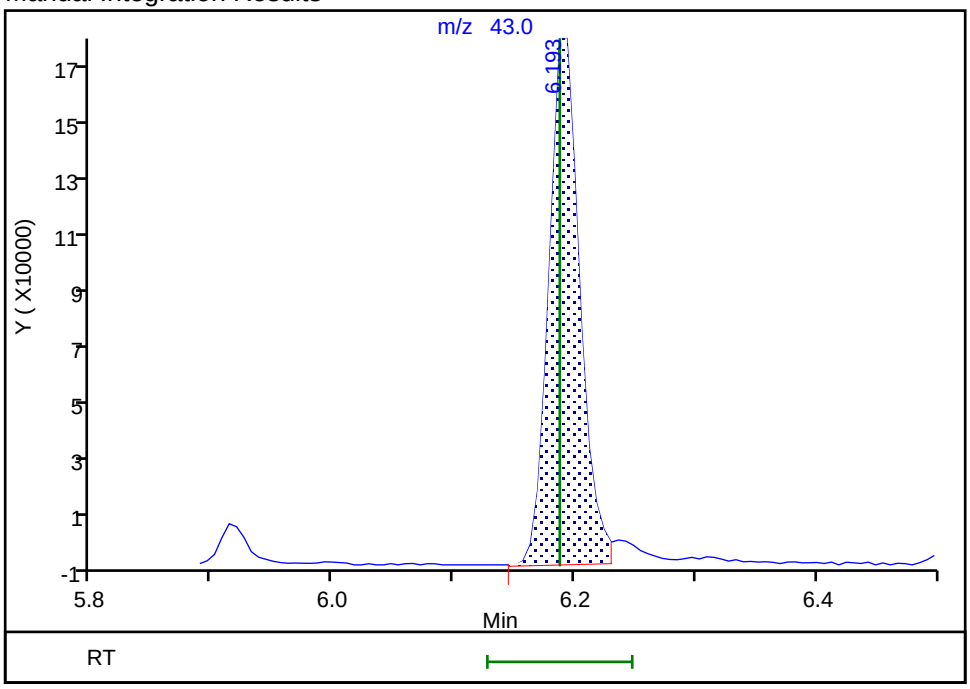
Processing Integration Results

RT: 6.19
Area: 315180
Amount: 26.771212
Amount Units: ug/L



Manual Integration Results

RT: 6.19
Area: 307127
Amount: 26.043144
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:31:38 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2979.d
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 15-Oct-2024 17:23:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Misc. Info.: 480-0120558-017
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2024 12:21:18 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: QR3Z Date: 16-Oct-2024 08:22:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	97	158372	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	87	303077	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	86	313038	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	55	195806	25.0	25.2	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	86	141590	25.0	25.7	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	81	800811	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	88	246920	25.0	25.0	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	84	88708	10.0	10.4	
12 Chloromethane	50	1.138	1.132	0.006	99	116740	10.0	10.7	
13 Vinyl chloride	62	1.211	1.211	0.000	63	78814	10.0	10.1	
151 Butadiene	54	1.217	1.217	0.000	95	93043	10.0	10.1	
14 Bromomethane	94	1.460	1.454	0.006	88	48183	10.0	9.68	
15 Chloroethane	64	1.509	1.509	0.000	93	60468	10.0	9.96	
16 Dichlorofluoromethane	67	1.692	1.686	0.006	97	137690	10.0	10.3	
17 Trichlorofluoromethane	101	1.692	1.698	-0.006	52	103918	10.0	10.7	
18 Ethyl ether	59	1.917	1.917	0.000	94	83864	10.0	10.2	
20 Acrolein	56	2.075	2.081	-0.006	89	52528	50.0	50.0	
22 1,1-Dichloroethene	96	2.105	2.105	0.000	84	61053	10.0	10.1	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.111	2.105	0.006	73	62791	10.0	10.5	
23 Acetone	43	2.221	2.221	0.000	98	192661	50.0	48.4	
25 Iodomethane	142	2.257	2.251	0.006	99	116393	10.0	10.3	
26 Carbon disulfide	76	2.282	2.282	0.000	99	209351	10.0	10.2	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	86	140627	10.0	9.92	
27 Methyl acetate	43	2.501	2.501	0.000	96	181244	20.0	19.8	
30 Methylene Chloride	84	2.586	2.586	0.000	91	78342	10.0	9.92	
31 2-Methyl-2-propanol	59	2.762	2.762	0.000	83	110611	100.0	103.7	
32 Methyl tert-butyl ether	73	2.787	2.787	0.000	93	269704	10.0	10.2	
34 trans-1,2-Dichloroethene	96	2.799	2.799	0.000	82	76230	10.0	10.1	
33 Acrylonitrile	53	2.860	2.860	0.000	99	460824	100.0	101.2	
35 Hexane	57	2.981	2.981	0.000	94	119209	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.194	3.194	0.000	98	147172	10.0	10.1	
37 Vinyl acetate	43	3.261	3.261	0.000	97	283072	20.0	17.3	M
44 2,2-Dichloropropane	77	3.687	3.693	-0.006	86	75040	10.0	10.2	
45 cis-1,2-Dichloroethene	96	3.736	3.730	0.006	67	81492	10.0	10.3	
43 2-Butanone (MEK)	43	3.778	3.778	0.000	99	293386	50.0	51.1	
48 Chlorobromomethane	128	3.961	3.961	0.000	91	41977	10.0	10.2	
49 Tetrahydrofuran	42	3.979	3.973	0.006	90	80087	20.0	18.9	
50 Chloroform	83	4.046	4.046	0.000	96	139115	10.0	9.75	
52 Cyclohexane	56	4.137	4.137	0.000	94	142072	10.0	9.79	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	83	110141	10.0	10.2	
55 Carbon tetrachloride	117	4.271	4.271	0.000	79	90372	10.0	9.72	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	87	104205	10.0	9.86	
57 Benzene	78	4.484	4.484	0.000	92	322943	10.0	10.1	
53 Isobutyl alcohol	43	4.551	4.551	0.000	60	94785	250.0	232.8	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	72	123127	10.0	9.95	
59 n-Heptane	43	4.679	4.679	0.000	96	119109	10.0	10.0	
62 Trichloroethene	95	5.092	5.092	0.000	91	80278	10.0	10.1	
64 Methylcyclohexane	83	5.196	5.196	0.000	95	121668	10.0	9.53	
65 1,2-Dichloropropane	63	5.323	5.324	-0.001	89	83074	10.0	10.1	
67 Dibromomethane	93	5.463	5.463	0.000	83	49878	10.0	10.2	
66 1,4-Dioxane	88	5.482	5.476	0.006	93	21921	200.0	208.0	
68 Dichlorobromomethane	83	5.622	5.622	0.000	96	87590	10.0	10.1	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	93	56570	10.0	10.8	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	79	116726	10.0	10.2	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.187	0.000	99	639314	50.0	54.8	
74 Toluene	92	6.309	6.309	0.000	89	196858	10.0	9.65	
77 trans-1,3-Dichloropropene	75	6.601	6.601	0.000	94	105316	10.0	10.1	
75 Ethyl methacrylate	69	6.668	6.662	0.006	71	105068	10.0	10.2	
79 1,1,2-Trichloroethane	83	6.784	6.790	-0.006	94	60380	10.0	10.2	
81 Tetrachloroethene	166	6.826	6.826	0.000	89	79793	10.0	10.1	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	95	123920	10.0	10.2	
80 2-Hexanone	43	7.027	7.027	0.000	98	434234	50.0	53.3	
83 Chlorodibromomethane	129	7.167	7.167	0.000	84	61495	10.0	10.3	
84 Ethylene Dibromide	107	7.258	7.258	0.000	97	72282	10.0	10.1	
87 Chlorobenzene	112	7.733	7.733	0.000	91	211257	10.0	9.96	
88 Ethylbenzene	91	7.836	7.836	0.000	98	363921	10.0	9.71	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	44	70685	10.0	10.2	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	143193	10.0	9.91	
91 o-Xylene	106	8.371	8.371	0.000	98	143401	10.0	10.1	
92 Styrene	104	8.408	8.408	0.000	93	238505	10.0	10.0	
95 Bromoform	173	8.645	8.645	0.000	92	37767	10.0	9.68	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	332401	10.0	9.67	
101 Bromobenzene	156	9.101	9.101	0.000	95	94958	10.0	10.2	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	67	98961	10.0	10.1	
99 N-Propylbenzene	91	9.205	9.205	0.000	98	427568	10.0	9.78	
100 1,2,3-Trichloropropane	110	9.211	9.217	-0.006	54	34069	10.0	10.1	
98 trans-1,4-Dichloro-2-butene	53	9.247	9.241	0.006	78	36178	10.0	9.86	
103 2-Chlorotoluene	126	9.302	9.302	0.000	95	87546	10.0	10.3	
102 1,3,5-Trimethylbenzene	105	9.399	9.400	-0.001	93	311845	10.0	9.89	
105 4-Chlorotoluene	126	9.424	9.424	0.000	96	90663	10.0	10.1	
106 tert-Butylbenzene	134	9.728	9.734	-0.006	91	67447	10.0	9.75	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	55	318008	10.0	9.77	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.953	9.953	0.000	94	378982	10.0	9.71	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	97	174920	10.0	9.85	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	94	349624	10.0	10.1	
113 1,4-Dichlorobenzene	146	10.178	10.172	0.006	92	184597	10.0	10.1	
115 n-Butylbenzene	91	10.507	10.507	0.000	94	301448	10.0	10.0	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	95	178864	10.0	10.3	
117 1,2-Dibromo-3-Chloropropane	75	11.291	11.292	-0.001	56	16774	10.0	8.64	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	93	123650	10.0	10.1	
120 Hexachlorobutadiene	225	12.088	12.088	0.000	94	56169	10.0	9.65	
121 Naphthalene	128	12.180	12.180	0.000	98	373603	10.0	10.3	
122 1,2,3-Trichlorobenzene	180	12.387	12.387	0.000	94	124286	10.0	10.1	
S 125 1,2-Dichloroethene, Total	1				0			20.5	
S 123 Total BTEX	1				0			49.5	
S 126 1,3-Dichloropropene, Total	1				0			20.3	
S 124 Xylenes, Total	1				0			20.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00260	Amount Added:	5.00	Units: uL	
GAS CORP mix_00645	Amount Added:	5.00	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

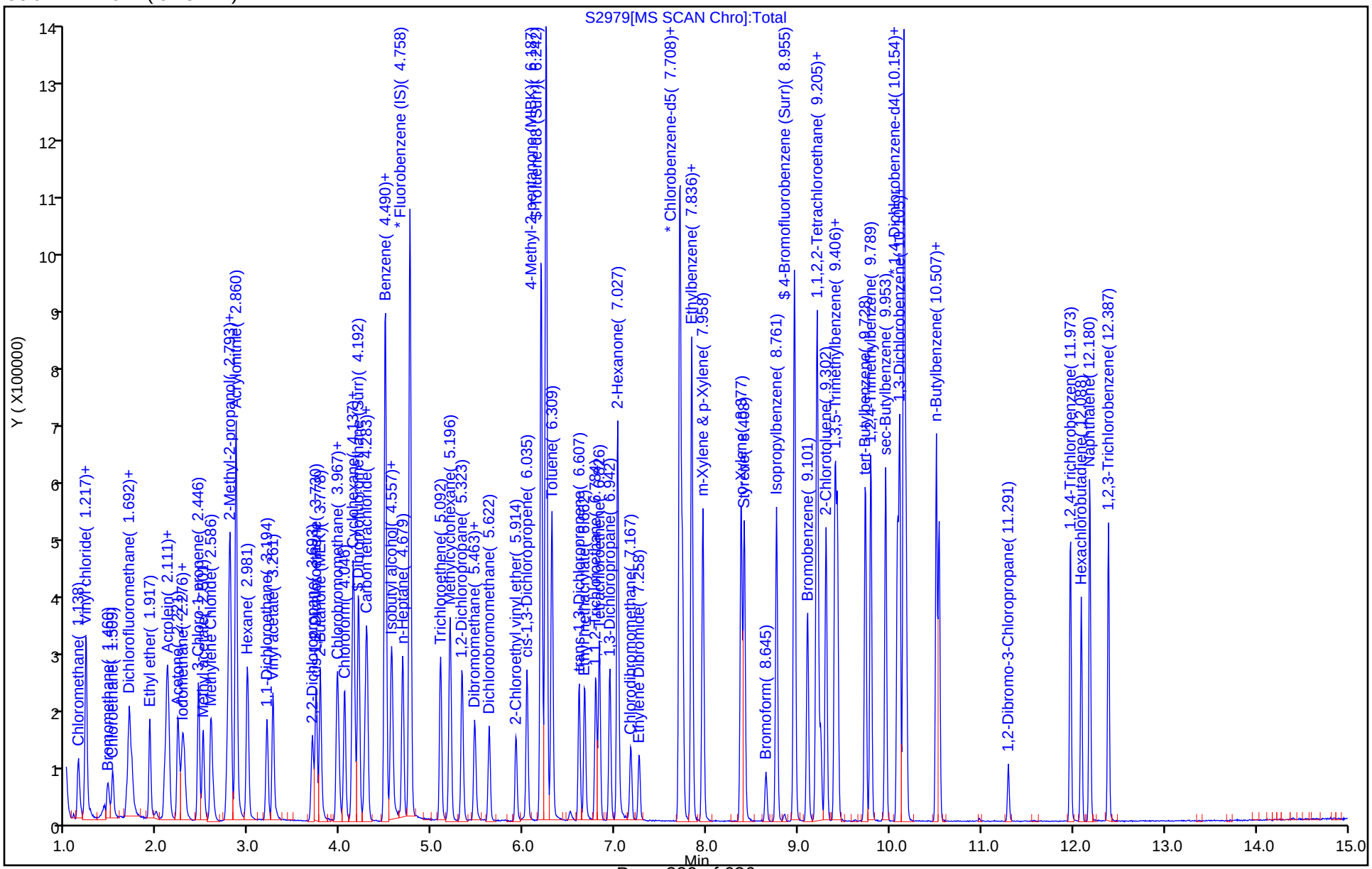
Report Date: 16-Oct-2024 12:21:19 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2979.d

Injection Date:	15-Oct-2024 17:23:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 4			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins Buffalo

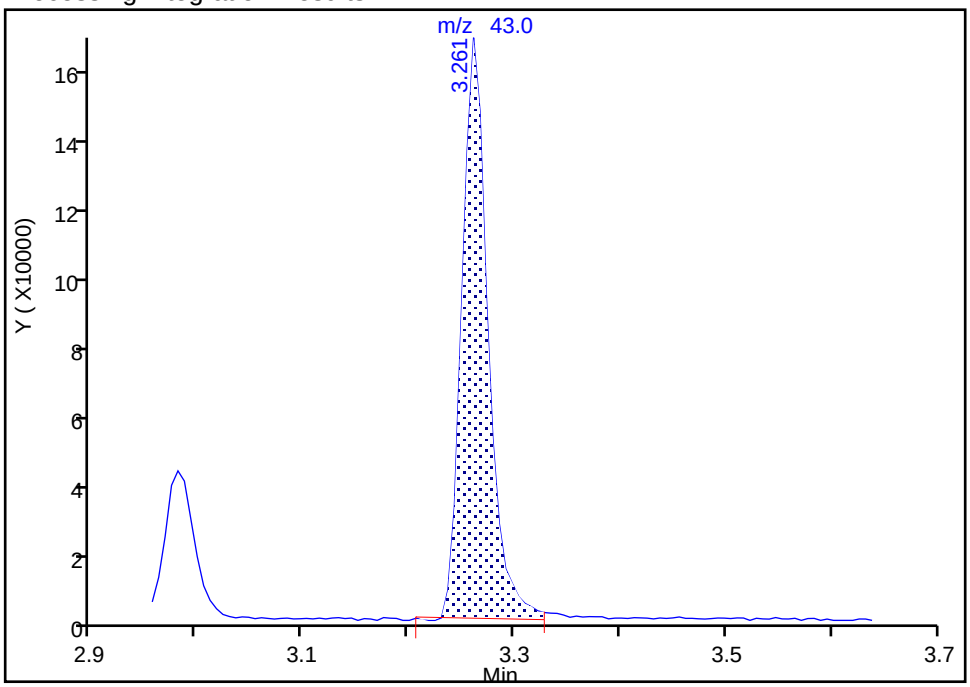
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Injection Date: 15-Oct-2024 17:23:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: LH ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

37 Vinyl acetate, CAS: 108-05-4

Signal: 1

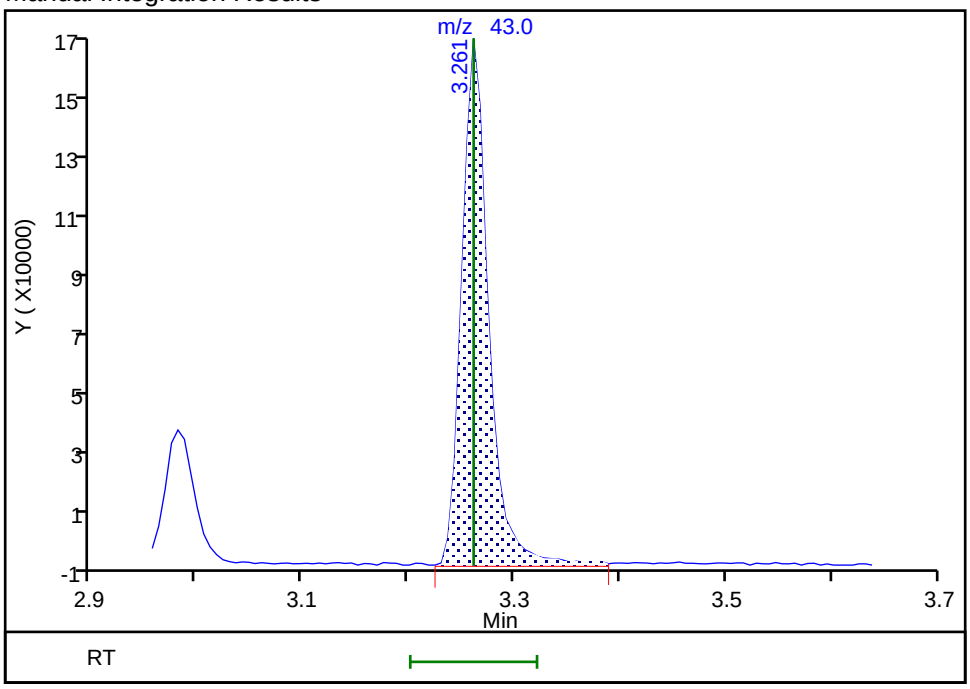
Processing Integration Results

RT: 3.26
Area: 274638
Amount: 19.054787
Amount Units: ug/L



Manual Integration Results

RT: 3.26
Area: 283072
Amount: 17.348216
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 09:11:31 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2980.d
Lims ID: ICIS 5
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 15-Oct-2024 17:47:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS 5
Misc. Info.: 480-0120558-018
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2024 12:21:42 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: QR3Z Date: 16-Oct-2024 08:22:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	166979	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	86	306913	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	67	314686	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	55	206595	25.0	25.2	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	60	144702	25.0	24.9	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	57	809212	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	87	247057	25.0	24.7	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	85	246505	25.0	27.5	
12 Chloromethane	50	1.132	1.132	0.000	89	299267	25.0	26.1	
13 Vinyl chloride	62	1.211	1.211	0.000	54	219320	25.0	26.6	
151 Butadiene	54	1.217	1.217	0.000	95	273912	25.0	28.2	
14 Bromomethane	94	1.454	1.454	0.000	93	131269	25.0	25.0	
15 Chloroethane	64	1.509	1.509	0.000	98	155456	25.0	24.3	
16 Dichlorofluoromethane	67	1.686	1.686	0.000	82	373847	25.0	26.5	
17 Trichlorofluoromethane	101	1.698	1.698	0.000	50	297016	25.0	29.1	
18 Ethyl ether	59	1.917	1.917	0.000	96	218267	25.0	25.3	
20 Acrolein	56	2.081	2.081	0.000	95	130643	125.0	118.0	
22 1,1-Dichloroethene	96	2.105	2.105	0.000	85	169743	25.0	26.7	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.105	2.105	0.000	59	173833	25.0	27.6	
23 Acetone	43	2.221	2.221	0.000	97	486731	125.0	115.9	
25 Iodomethane	142	2.251	2.251	0.000	99	310979	25.0	26.2	
26 Carbon disulfide	76	2.282	2.282	0.000	99	611869	25.0	28.2	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	85	397165	25.0	26.6	
27 Methyl acetate	43	2.501	2.501	0.000	96	473388	50.0	49.1	
30 Methylene Chloride	84	2.586	2.586	0.000	93	209902	25.0	25.4	
31 2-Methyl-2-propanol	59	2.762	2.762	0.000	82	285412	250.0	253.7	M
32 Methyl tert-butyl ether	73	2.787	2.787	0.000	93	698136	25.0	25.2	
34 trans-1,2-Dichloroethene	96	2.799	2.799	0.000	88	209109	25.0	26.4	
33 Acrylonitrile	53	2.860	2.860	0.000	99	1202307	250.0	250.3	
35 Hexane	57	2.981	2.981	0.000	96	337136	25.0	27.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.194	3.194	0.000	98	395156	25.0	25.7	
37 Vinyl acetate	43	3.261	3.261	0.000	97	851726	50.0	47.0	
44 2,2-Dichloropropane	77	3.693	3.693	0.000	91	216540	25.0	28.0	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	69	220737	25.0	26.6	
43 2-Butanone (MEK)	43	3.778	3.778	0.000	99	742068	125.0	122.6	
48 Chlorobromomethane	128	3.961	3.961	0.000	91	108685	25.0	25.1	
49 Tetrahydrofuran	42	3.973	3.973	0.000	90	204627	50.0	45.8	
50 Chloroform	83	4.046	4.046	0.000	82	368905	25.0	24.5	
52 Cyclohexane	56	4.137	4.137	0.000	95	426404	25.0	27.9	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	76	309143	25.0	27.2	
55 Carbon tetrachloride	117	4.271	4.271	0.000	87	266174	25.0	27.2	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	89	304745	25.0	27.3	
57 Benzene	78	4.484	4.484	0.000	97	879506	25.0	26.2	
53 Isobutyl alcohol	43	4.551	4.551	0.000	92	276320	625.0	643.6	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	76	327181	25.0	25.1	
59 n-Heptane	43	4.679	4.679	0.000	96	323419	25.0	25.8	
62 Trichloroethene	95	5.092	5.092	0.000	95	215523	25.0	25.8	
64 Methylcyclohexane	83	5.196	5.196	0.000	94	374927	25.0	27.9	
65 1,2-Dichloropropane	63	5.324	5.324	0.000	89	221122	25.0	25.5	
67 Dibromomethane	93	5.463	5.463	0.000	88	134530	25.0	26.2	
66 1,4-Dioxane	88	5.476	5.476	0.000	66	54962	500.0	515.0	M
68 Dichlorobromomethane	83	5.622	5.622	0.000	96	242037	25.0	26.4	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	90	148909	25.0	26.8	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	85	329691	25.0	27.4	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.187	0.000	99	1596688	125.0	135.1	
74 Toluene	92	6.309	6.309	0.000	88	531112	25.0	25.7	
77 trans-1,3-Dichloropropene	75	6.601	6.601	0.000	99	289638	25.0	27.4	
75 Ethyl methacrylate	69	6.662	6.662	0.000	75	276626	25.0	26.6	
79 1,1,2-Trichloroethane	83	6.790	6.790	0.000	95	153904	25.0	25.6	
81 Tetrachloroethene	166	6.826	6.826	0.000	85	224472	25.0	28.0	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	95	329265	25.0	26.7	
80 2-Hexanone	43	7.027	7.027	0.000	98	1101005	125.0	133.6	
83 Chlorodibromomethane	129	7.167	7.167	0.000	87	173369	25.0	28.6	
84 Ethylene Dibromide	107	7.258	7.258	0.000	98	187399	25.0	25.9	
87 Chlorobenzene	112	7.733	7.733	0.000	92	572782	25.0	26.7	
88 Ethylbenzene	91	7.836	7.836	0.000	99	1011058	25.0	26.6	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	44	188402	25.0	26.9	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	382871	25.0	26.2	
91 o-Xylene	106	8.371	8.371	0.000	98	390590	25.0	27.0	
92 Styrene	104	8.408	8.408	0.000	93	614149	25.0	25.5	
95 Bromoform	173	8.645	8.645	0.000	94	105628	25.0	26.7	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	939768	25.0	27.2	
101 Bromobenzene	156	9.101	9.101	0.000	94	247328	25.0	26.4	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	66	256178	25.0	26.0	
99 N-Propylbenzene	91	9.205	9.205	0.000	97	1191735	25.0	27.1	
100 1,2,3-Trichloropropane	110	9.217	9.217	0.000	61	85931	25.0	25.4	
98 trans-1,4-Dichloro-2-butene	53	9.241	9.241	0.000	83	97517	25.0	26.4	
103 2-Chlorotoluene	126	9.302	9.302	0.000	95	228049	25.0	26.7	
102 1,3,5-Trimethylbenzene	105	9.400	9.400	0.000	90	854487	25.0	27.0	
105 4-Chlorotoluene	126	9.424	9.424	0.000	99	235656	25.0	26.2	
106 tert-Butylbenzene	134	9.734	9.734	0.000	90	190175	25.0	27.3	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	35	871416	25.0	26.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.953	9.953	0.000	95	1069949	25.0	27.3	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	97	467422	25.0	26.2	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	95	945799	25.0	27.0	
113 1,4-Dichlorobenzene	146	10.172	10.172	0.000	90	472075	25.0	25.8	
115 n-Butylbenzene	91	10.507	10.507	0.000	95	836027	25.0	27.6	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	96	462571	25.0	26.5	
117 1,2-Dibromo-3-Chloropropane	75	11.292	11.292	0.000	71	47626	25.0	23.2	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	92	337637	25.0	27.3	
120 Hexachlorobutadiene	225	12.088	12.088	0.000	95	161692	25.0	27.6	
121 Naphthalene	128	12.180	12.180	0.000	97	1007308	25.0	27.7	
122 1,2,3-Trichlorobenzene	180	12.387	12.387	0.000	96	334453	25.0	27.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00260	Amount Added:	12.50	Units: uL	
GAS CORP mix_00645	Amount Added:	12.50	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

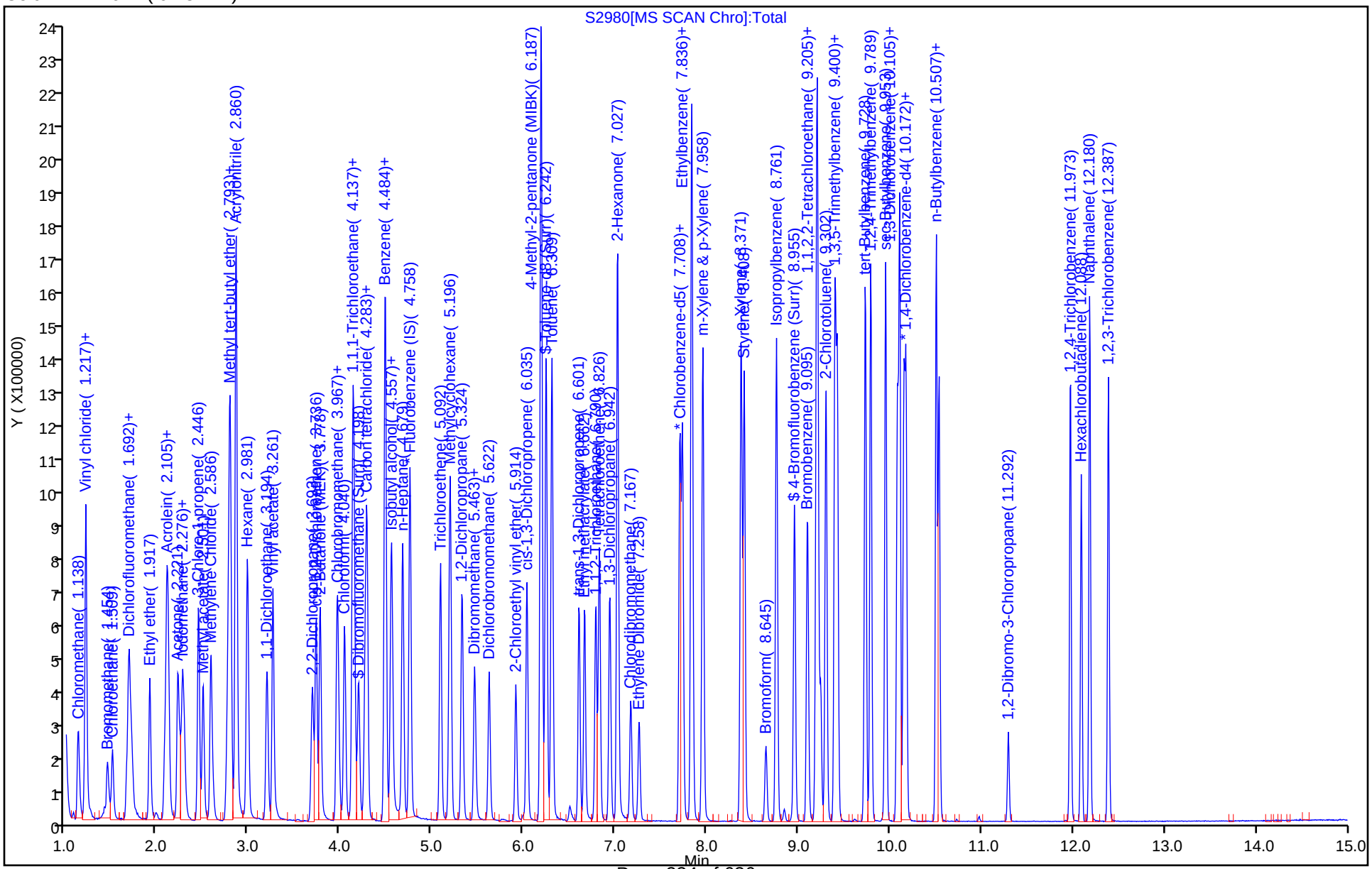
Report Date: 16-Oct-2024 12:21:44 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2980.d

Injection Date:	15-Oct-2024 17:47:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	ICIS 5			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo

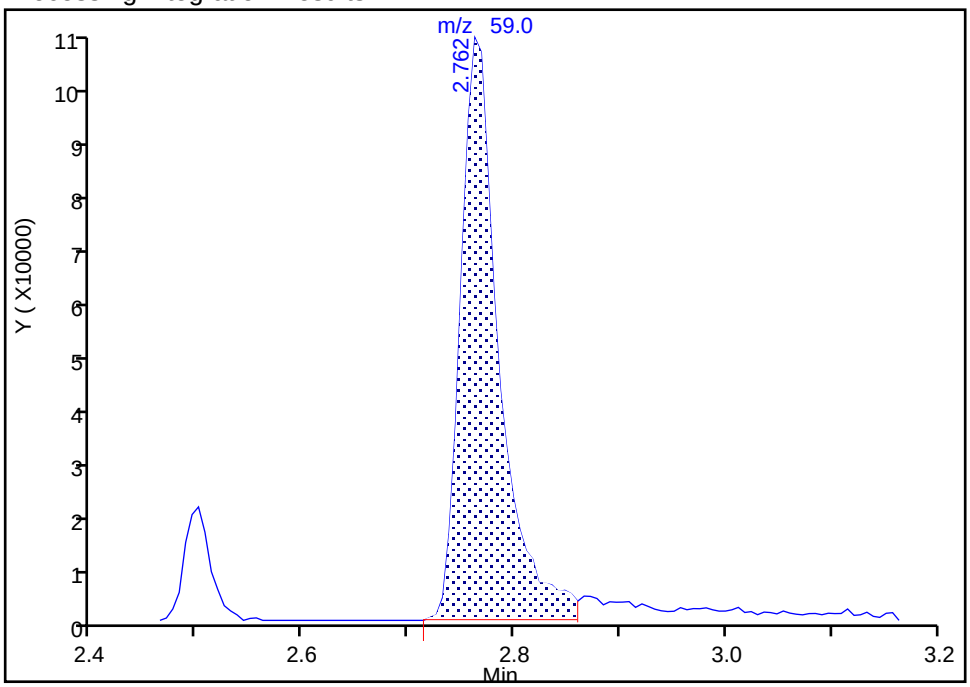
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Injection Date: 15-Oct-2024 17:47:30 Instrument ID: HP5973S
Lims ID: ICIS 5
Client ID:
Operator ID: LH ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

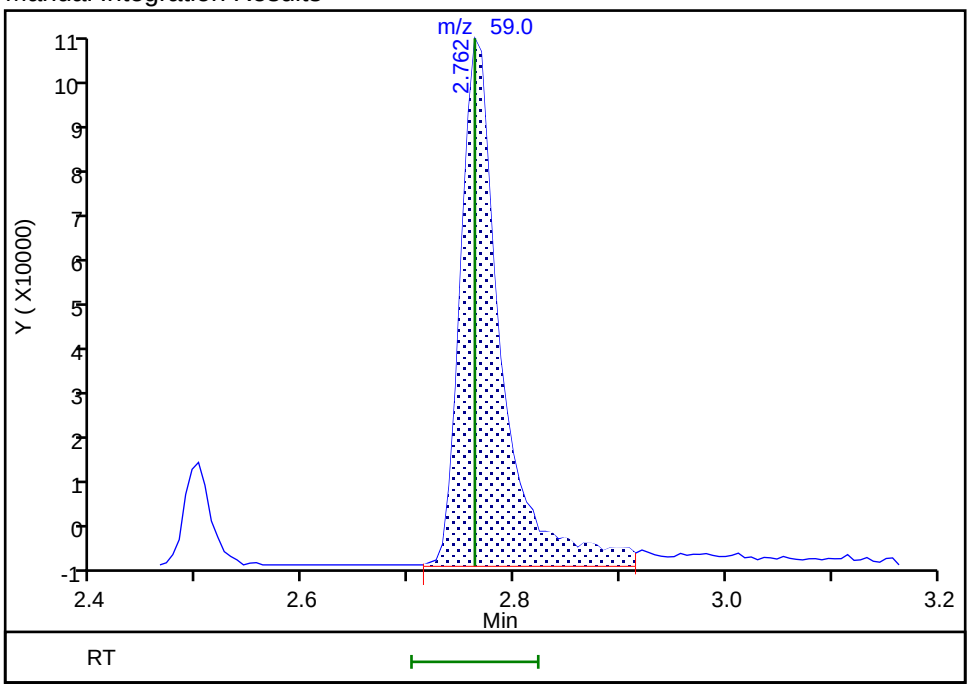
Processing Integration Results

RT: 2.76
Area: 272959
Amount: 241.4399
Amount Units: ug/L



Manual Integration Results

RT: 2.76
Area: 285412
Amount: 253.6958
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:33:31 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Buffalo

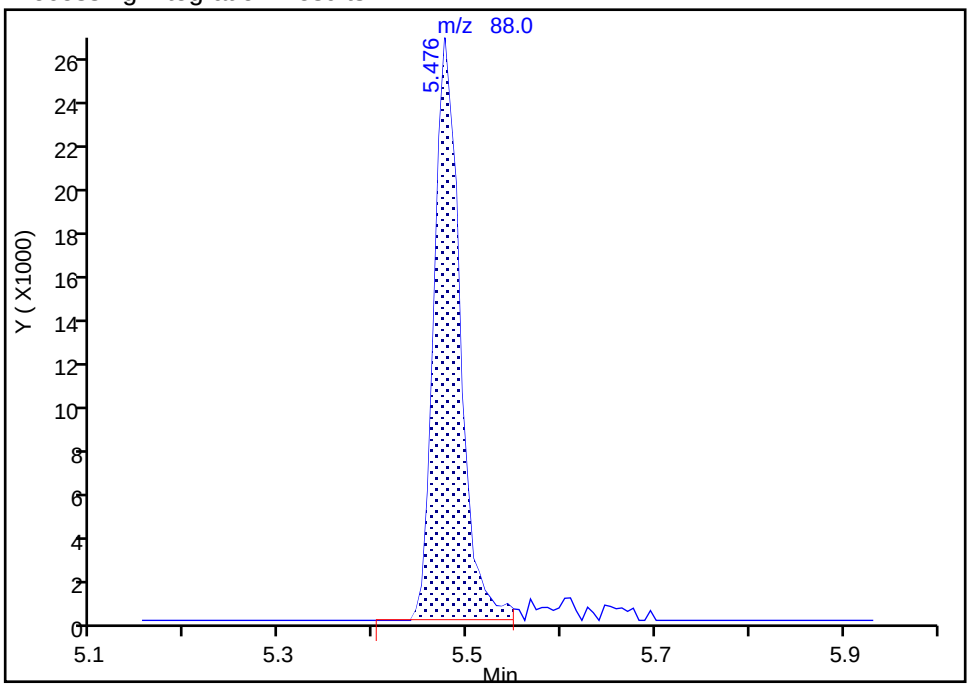
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Injection Date: 15-Oct-2024 17:47:30 Instrument ID: HP5973S
Lims ID: ICIS 5
Client ID:
Operator ID: LH ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

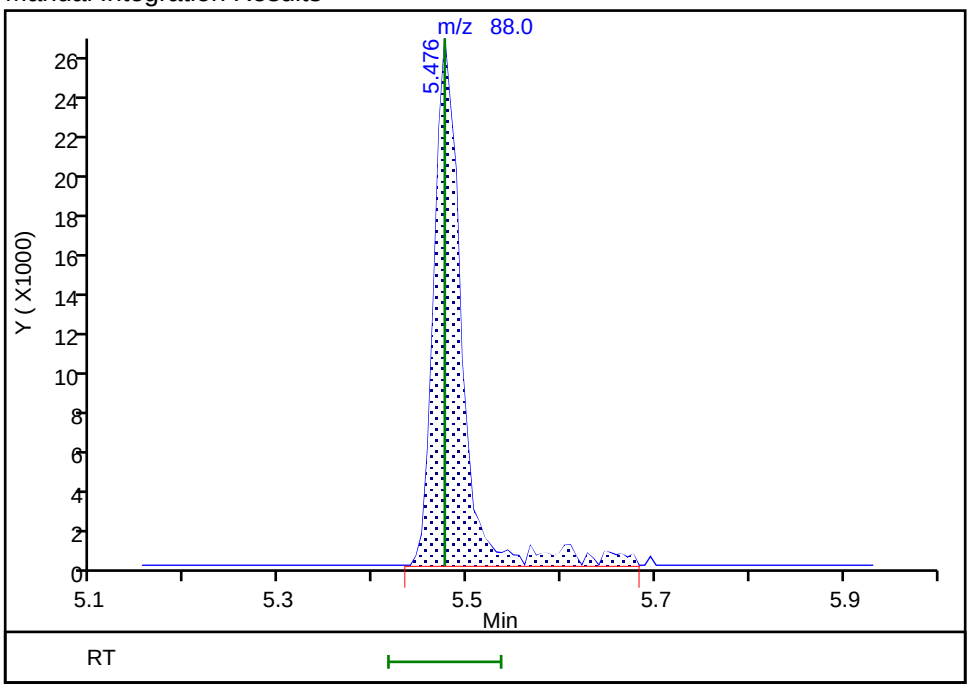
Processing Integration Results

RT: 5.48
Area: 50957
Amount: 473.3144
Amount Units: ug/L



Manual Integration Results

RT: 5.48
Area: 54962
Amount: 515.0439
Amount Units: ug/L



Reviewer: QR3Z, 16-Oct-2024 08:19:08 -04:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2981.d
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 15-Oct-2024 18:10:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 480-0120558-019
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2024 12:22:03 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: QR3Z Date: 16-Oct-2024 08:29:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	168305	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.708	7.702	0.006	86	313856	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	56	321221	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	54	208726	25.0	25.3	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	43	143751	25.0	24.5	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	38	827857	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr)	174	8.961	8.955	0.006	91	254559	25.0	24.9	
10 Dichlorodifluoromethane	85	1.004	0.998	0.006	87	418755	50.0	46.3	
12 Chloromethane	50	1.138	1.132	0.006	100	553160	50.0	47.9	
13 Vinyl chloride	62	1.211	1.211	0.000	68	377803	50.0	45.4	
151 Butadiene	54	1.223	1.217	0.006	93	459435	50.0	47.0	
14 Bromomethane	94	1.454	1.454	0.000	93	241056	50.0	45.6	
15 Chloroethane	64	1.509	1.509	0.000	94	286820	50.0	44.5	
16 Dichlorofluoromethane	67	1.692	1.686	0.006	83	677683	50.0	47.6	
17 Trichlorofluoromethane	101	1.704	1.698	0.006	52	508212	50.0	49.4	
18 Ethyl ether	59	1.917	1.917	0.000	96	431754	50.0	49.6	
20 Acrolein	56	2.081	2.081	0.000	95	271286	250.0	243.2	
22 1,1-Dichloroethene	96	2.105	2.105	0.000	93	318678	50.0	49.7	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.111	2.105	0.006	64	332879	50.0	52.4	
23 Acetone	43	2.221	2.221	0.000	98	1001144	250.0	236.5	
25 Iodomethane	142	2.269	2.251	0.018	77	594642	50.0	49.7	
26 Carbon disulfide	76	2.288	2.282	0.006	99	1160764	50.0	53.0	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	85	776816	50.0	51.6	
27 Methyl acetate	43	2.501	2.501	0.000	99	985171	100.0	101.4	
30 Methylene Chloride	84	2.586	2.586	0.000	93	410900	50.0	49.4	
31 2-Methyl-2-propanol	59	2.762	2.762	0.000	83	602027	500.0	530.9	
32 Methyl tert-butyl ether	73	2.787	2.787	0.000	99	1434288	50.0	51.3	
34 trans-1,2-Dichloroethene	96	2.799	2.799	0.000	85	404017	50.0	50.5	
33 Acrylonitrile	53	2.860	2.860	0.000	99	2495185	500.0	515.4	
35 Hexane	57	2.981	2.981	0.000	95	649968	50.0	51.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.194	3.194	0.000	86	772258	50.0	49.9	
37 Vinyl acetate	43	3.261	3.261	0.000	98	1976808	100.0	106.6	
44 2,2-Dichloropropane	77	3.693	3.693	0.000	90	398816	50.0	51.2	
45 cis-1,2-Dichloroethene	96	3.736	3.730	0.006	82	430940	50.0	51.5	
43 2-Butanone (MEK)	43	3.778	3.778	0.000	99	1553649	250.0	254.6	
48 Chlorobromomethane	128	3.961	3.961	0.000	95	222917	50.0	51.0	
49 Tetrahydrofuran	42	3.973	3.973	0.000	89	421763	100.0	93.7	
50 Chloroform	83	4.046	4.046	0.000	95	716676	50.0	47.3	
52 Cyclohexane	56	4.137	4.137	0.000	95	794016	50.0	51.5	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	76	593486	50.0	51.8	
55 Carbon tetrachloride	117	4.271	4.271	0.000	87	512438	50.0	51.9	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	89	573284	50.0	51.0	
57 Benzene	78	4.484	4.484	0.000	98	1701671	50.0	50.3	
53 Isobutyl alcohol	43	4.551	4.551	0.000	94	663322	1250.0	1532.7	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	76	651132	50.0	49.5	
59 n-Heptane	43	4.679	4.679	0.000	96	643402	50.0	50.9	
62 Trichloroethene	95	5.092	5.092	0.000	92	416411	50.0	49.5	
64 Methylcyclohexane	83	5.196	5.196	0.000	95	702162	50.0	51.8	
65 1,2-Dichloropropane	63	5.323	5.324	-0.001	89	442072	50.0	50.6	
67 Dibromomethane	93	5.457	5.463	-0.006	90	270732	50.0	52.2	
66 1,4-Dioxane	88	5.476	5.476	0.000	71	112132	1000.0	1027.5	
68 Dichlorobromomethane	83	5.622	5.622	0.000	97	500706	50.0	54.1	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	94	309087	50.0	55.3	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	86	688086	50.0	56.7	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.187	0.000	99	3271391	250.0	270.7	
74 Toluene	92	6.309	6.309	0.000	88	1052562	50.0	49.8	
77 trans-1,3-Dichloropropene	75	6.601	6.601	0.000	95	607337	50.0	56.2	
75 Ethyl methacrylate	69	6.662	6.662	0.000	76	585430	50.0	55.1	
79 1,1,2-Trichloroethane	83	6.783	6.790	-0.007	89	312316	50.0	50.7	
81 Tetrachloroethene	166	6.826	6.826	0.000	83	432164	50.0	52.7	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	97	656309	50.0	52.1	
80 2-Hexanone	43	7.027	7.027	0.000	99	2240372	250.0	265.8	
83 Chlorodibromomethane	129	7.173	7.167	0.006	88	363283	50.0	58.6	
84 Ethylene Dibromide	107	7.258	7.258	0.000	97	399756	50.0	54.0	
87 Chlorobenzene	112	7.733	7.733	0.000	91	1126316	50.0	51.3	
88 Ethylbenzene	91	7.836	7.836	0.000	99	2007845	50.0	51.7	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	44	396002	50.0	55.3	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	759758	50.0	50.8	
91 o-Xylene	106	8.377	8.371	0.006	98	760608	50.0	51.5	
92 Styrene	104	8.408	8.408	0.000	85	1248313	50.0	50.7	
95 Bromoform	173	8.645	8.645	0.000	95	237797	50.0	58.8	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	1855767	50.0	52.6	
101 Bromobenzene	156	9.101	9.101	0.000	95	494337	50.0	51.6	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	61	529302	50.0	52.7	
99 N-Propylbenzene	91	9.205	9.205	0.000	98	2332723	50.0	52.0	
100 1,2,3-Trichloropropane	110	9.217	9.217	0.000	64	176722	50.0	51.1	
98 trans-1,4-Dichloro-2-butene	53	9.241	9.241	0.000	90	199152	50.0	52.9	
103 2-Chlorotoluene	126	9.302	9.302	0.000	95	450514	50.0	51.6	
102 1,3,5-Trimethylbenzene	105	9.399	9.400	-0.001	95	1689434	50.0	52.2	
105 4-Chlorotoluene	126	9.424	9.424	0.000	99	468769	50.0	51.0	
106 tert-Butylbenzene	134	9.734	9.734	0.000	90	369054	50.0	52.0	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	48	1749423	50.0	52.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.953	9.953	0.000	94	2105677	50.0	52.6	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	97	931595	50.0	51.1	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	94	1871330	50.0	52.4	
113 1,4-Dichlorobenzene	146	10.178	10.172	0.006	94	956411	50.0	51.1	
115 n-Butylbenzene	91	10.507	10.507	0.000	95	1622689	50.0	52.6	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	96	932604	50.0	52.3	
117 1,2-Dibromo-3-Chloropropane	75	11.291	11.292	-0.001	75	106491	50.0	50.1	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	93	677428	50.0	53.7	
120 Hexachlorobutadiene	225	12.088	12.088	0.000	93	312737	50.0	52.4	
121 Naphthalene	128	12.180	12.180	0.000	97	2125419	50.0	57.2	
122 1,2,3-Trichlorobenzene	180	12.386	12.387	-0.001	93	672686	50.0	53.5	
S 125 1,2-Dichloroethene, Total	1				0			102.0	
S 123 Total BTEX	1				0			254.1	
S 126 1,3-Dichloropropene, Total	1				0			112.9	
S 124 Xylenes, Total	1				0			102.3	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00260	Amount Added:	25.00	Units: uL	
GAS CORP mix_00645	Amount Added:	25.00	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

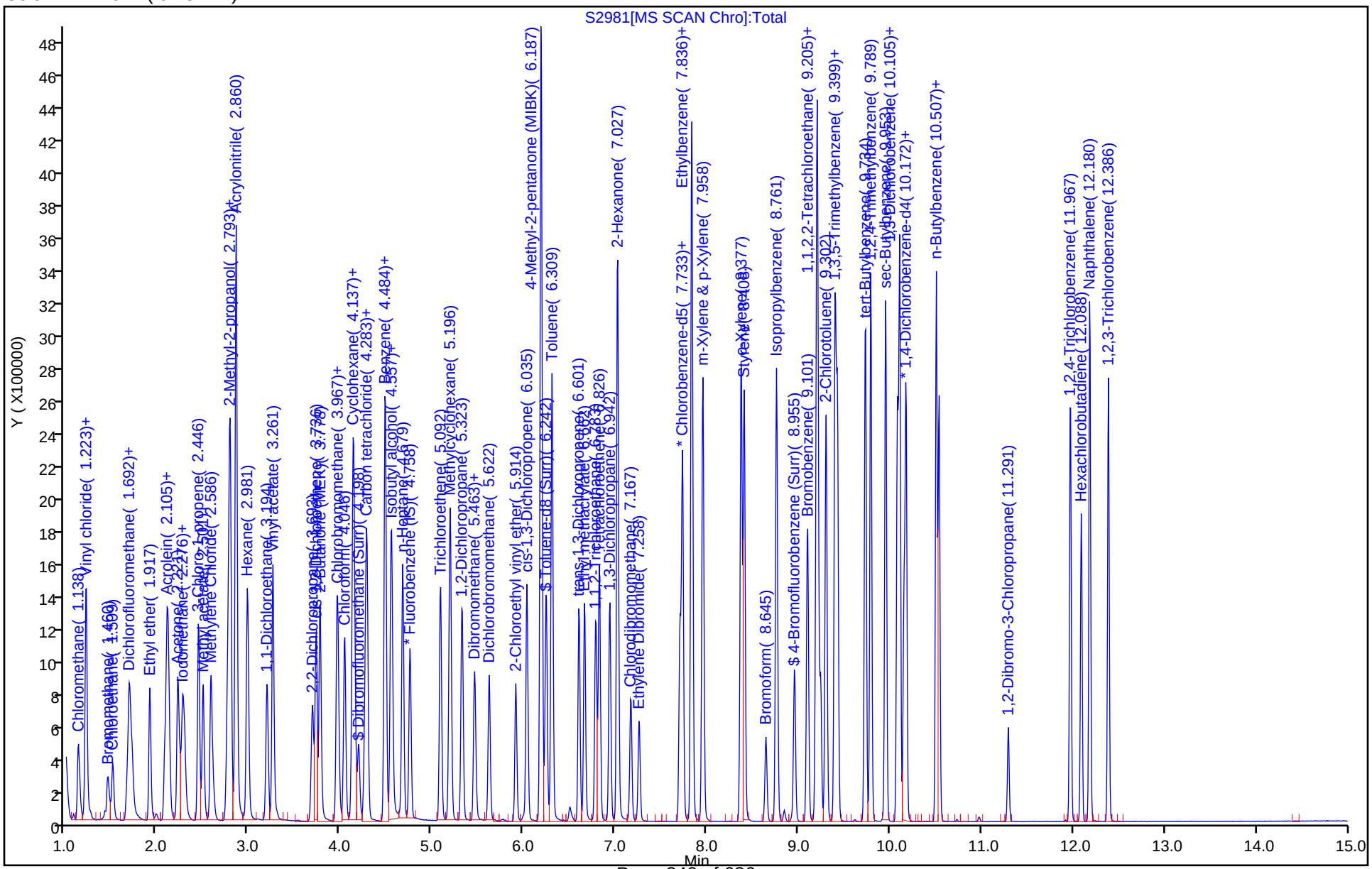
Report Date: 16-Oct-2024 12:22:05 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2981.d

Injection Date:	15-Oct-2024 18:10:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 6			Worklist Smp#:	19
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 16-Oct-2024 11:36:30 ALS Bottle#: 46 Worklist Smp#: 46
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 480-0120558-046
Operator ID: ZN Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2024 12:23:17 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1611

First Level Reviewer: QR3Z Date: 16-Oct-2024 11:57:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	168384	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	87	319188	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	32	315867	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	56	206075	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	42	143876	25.0	24.5	
$ 5 Toluene-d8 (Surr)	98	6.248	6.242	0.006	16	834122	25.0	25.0	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	87	254751	25.0	24.5	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	98	1052806	100.0	116.4	
12 Chloromethane	50	1.132	1.132	0.000	82	1208213	100.0	104.5	
13 Vinyl chloride	62	1.205	1.211	-0.006	74	901910	100.0	108.4	
151 Butadiene	54	1.217	1.217	0.000	97	1153749	100.0	117.9	
14 Bromomethane	94	1.454	1.454	0.000	92	531159	100.0	100.3	
15 Chloroethane	64	1.503	1.509	-0.006	94	632924	100.0	98.1	
16 Dichlorofluoromethane	67	1.686	1.686	0.000	82	1532104	100.0	107.5	
17 Trichlorofluoromethane	101	1.698	1.698	0.000	52	1228429	100.0	119.3	
18 Ethyl ether	59	1.917	1.917	0.000	96	865797	100.0	99.5	
20 Acrolein	56	2.075	2.081	-0.006	94	532838	500.0	477.4	
22 1,1-Dichloroethene	96	2.105	2.105	0.000	85	676309	100.0	105.4	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.105	2.105	0.000	60	709723	100.0	111.6	
23 Acetone	43	2.221	2.221	0.000	98	1991344	500.0	470.1	
25 Iodomethane	142	2.251	2.251	0.000	99	1224525	100.0	102.3	
26 Carbon disulfide	76	2.282	2.282	0.000	99	2564153	100.0	117.1	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	86	1716166	100.0	113.9	
27 Methyl acetate	43	2.495	2.501	-0.006	99	1972956	200.0	203.0	
30 Methylene Chloride	84	2.580	2.586	-0.006	97	833054	100.0	100.2	
31 2-Methyl-2-propanol	59	2.762	2.762	0.000	80	1170253	1000.0	1031.5	
32 Methyl tert-butyl ether	73	2.781	2.787	-0.006	99	2841917	100.0	101.5	
34 trans-1,2-Dichloroethene	96	2.793	2.799	-0.006	79	841378	100.0	105.2	
33 Acrylonitrile	53	2.860	2.860	0.000	99	5115147	1000.0	1056.1	
35 Hexane	57	2.981	2.981	0.000	95	1497398	100.0	119.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.194	3.194	0.000	98	1658136	100.0	107.0	
37 Vinyl acetate	43	3.255	3.261	-0.006	97	4476874	200.0	239.6	
44 2,2-Dichloropropane	77	3.693	3.693	0.000	91	866309	100.0	111.1	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	69	905060	100.0	108.1	
43 2-Butanone (MEK)	43	3.772	3.778	-0.006	98	3221657	500.0	527.6	
48 Chlorobromomethane	128	3.961	3.961	0.000	94	444173	100.0	101.5	
49 Tetrahydrofuran	42	3.967	3.973	-0.006	90	869124	200.0	193.0	
50 Chloroform	83	4.040	4.046	-0.006	82	1489616	100.0	98.2	
52 Cyclohexane	56	4.137	4.137	0.000	90	1781317	100.0	115.4	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	78	1285722	100.0	112.1	
55 Carbon tetrachloride	117	4.271	4.271	0.000	77	1149303	100.0	116.3	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	91	1269593	100.0	113.0	
57 Benzene	78	4.484	4.484	0.000	98	3660953	100.0	108.1	
53 Isobutyl alcohol	43	4.551	4.551	0.000	73	1383458	2500.0	3195.2	
58 1,2-Dichloroethane	62	4.557	4.563	-0.006	84	1342876	100.0	102.1	
59 n-Heptane	43	4.679	4.679	0.000	96	1479774	100.0	117.1	
62 Trichloroethene	95	5.092	5.092	0.000	90	881620	100.0	104.7	
64 Methylcyclohexane	83	5.196	5.196	0.000	96	1553947	100.0	114.5	
65 1,2-Dichloropropane	63	5.323	5.324	-0.001	88	907560	100.0	103.9	
67 Dibromomethane	93	5.457	5.463	-0.006	89	553411	100.0	106.7	
66 1,4-Dioxane	88	5.476	5.476	0.000	73	212342	2000.0	1913.3	
68 Dichlorobromomethane	83	5.622	5.622	0.000	92	1047667	100.0	113.1	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	92	650868	100.0	116.3	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	85	1462004	100.0	120.4	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.187	0.000	99	6903651	500.0	561.7	
74 Toluene	92	6.309	6.309	0.000	91	2252474	100.0	104.8	
77 trans-1,3-Dichloropropene	75	6.601	6.601	0.000	99	1304375	100.0	118.7	
75 Ethyl methacrylate	69	6.662	6.662	0.000	76	1206753	100.0	111.7	
79 1,1,2-Trichloroethane	83	6.784	6.790	-0.006	95	633340	100.0	101.2	
81 Tetrachloroethene	166	6.826	6.826	0.000	89	919903	100.0	110.3	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	96	1371794	100.0	107.0	
80 2-Hexanone	43	7.021	7.027	-0.006	99	4581329	500.0	534.4	
83 Chlorodibromomethane	129	7.167	7.167	0.000	88	787638	100.0	124.9	
84 Ethylene Dibromide	107	7.258	7.258	0.000	98	791993	100.0	105.1	
87 Chlorobenzene	112	7.733	7.733	0.000	92	2392146	100.0	107.1	
88 Ethylbenzene	91	7.836	7.836	0.000	99	4369055	100.0	110.7	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	38	816472	100.0	112.2	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	1644432	100.0	108.1	
91 o-Xylene	106	8.377	8.371	0.006	98	1608041	100.0	107.1	
92 Styrene	104	8.408	8.408	0.000	94	2628976	100.0	105.0	
95 Bromoform	173	8.645	8.645	0.000	95	497419	100.0	121.0	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	3993575	100.0	115.2	
101 Bromobenzene	156	9.101	9.101	0.000	95	1011172	100.0	107.4	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	67	1061893	100.0	107.6	
99 N-Propylbenzene	91	9.205	9.205	0.000	98	5148248	100.0	116.7	
100 1,2,3-Trichloropropane	110	9.217	9.217	0.000	61	347508	100.0	102.3	
98 trans-1,4-Dichloro-2-butene	53	9.241	9.241	0.000	91	425449	100.0	114.9	
103 2-Chlorotoluene	126	9.302	9.302	0.000	95	936185	100.0	109.1	
102 1,3,5-Trimethylbenzene	105	9.399	9.400	-0.001	93	3623926	100.0	113.9	
105 4-Chlorotoluene	126	9.424	9.424	0.000	99	978397	100.0	108.2	
106 tert-Butylbenzene	134	9.734	9.734	0.000	87	780867	100.0	111.9	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	41	3740679	100.0	113.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.953	9.953	0.000	94	4692187	100.0	119.2	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	97	1929168	100.0	107.7	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	95	4120795	100.0	117.4	
113 1,4-Dichlorobenzene	146	10.178	10.172	0.006	94	1984916	100.0	107.9	
115 n-Butylbenzene	91	10.507	10.507	0.000	95	3591144	100.0	118.3	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	96	1896198	100.0	108.0	
117 1,2-Dibromo-3-Chloropropane	75	11.291	11.292	-0.001	75	217468	100.0	103.3	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	93	1367508	100.0	110.3	
120 Hexachlorobutadiene	225	12.088	12.088	0.000	95	631150	100.0	107.5	
121 Naphthalene	128	12.180	12.180	0.000	97	4320743	100.0	118.4	
122 1,2,3-Trichlorobenzene	180	12.387	12.387	0.000	93	1341790	100.0	108.5	
S 125 1,2-Dichloroethene, Total	1				0			213.2	
S 123 Total BTEX	1				0			538.7	
S 126 1,3-Dichloropropene, Total	1				0			239.1	
S 124 Xylenes, Total	1				0			215.1	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00260	Amount Added:	50.00	Units: uL	
GAS CORP mix_00645	Amount Added:	50.00	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

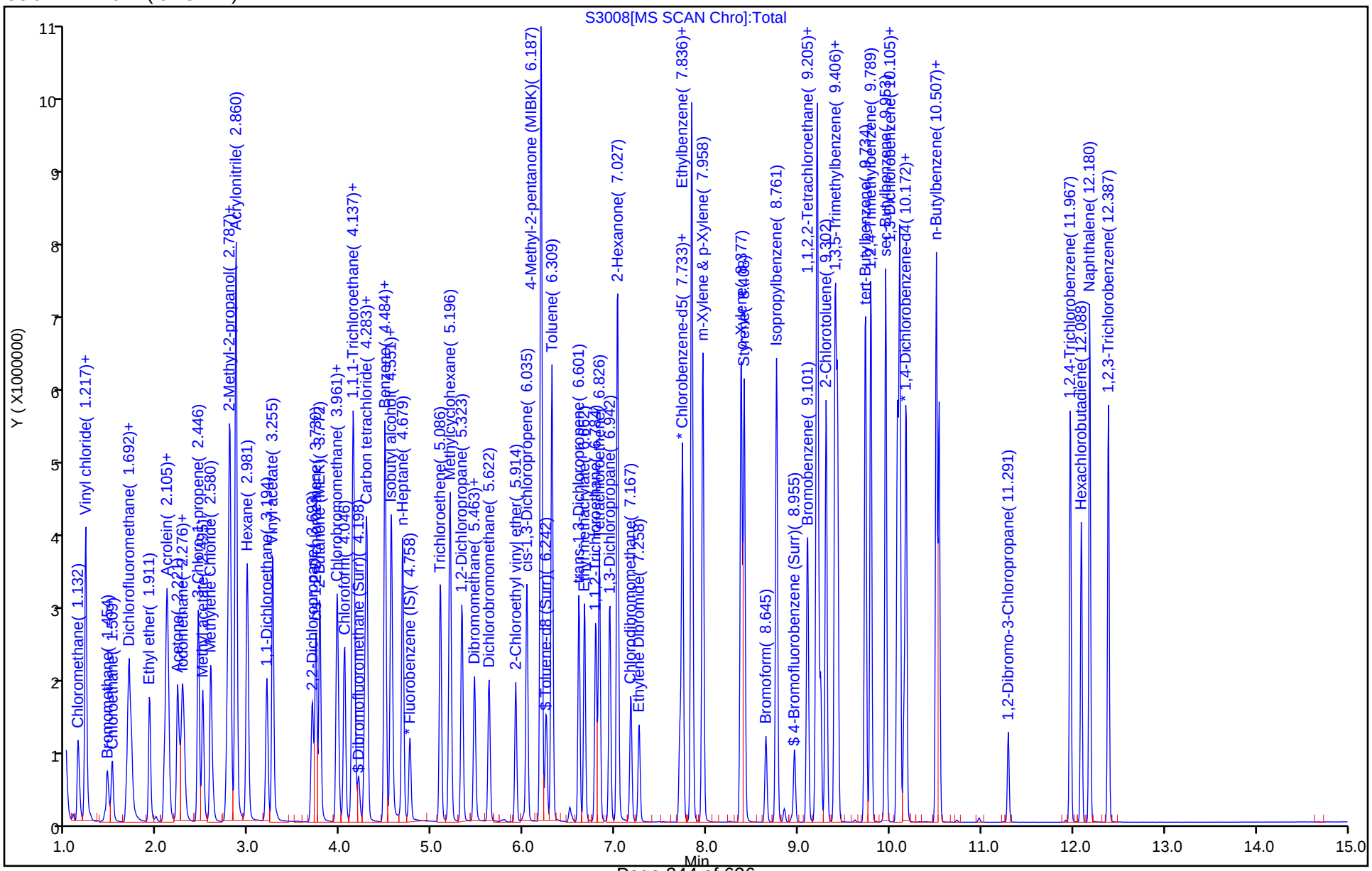
Report Date: 16-Oct-2024 12:23:19 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Injection Date:	16-Oct-2024 11:36:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	IC 7			Worklist Smp#:	46
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	46
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

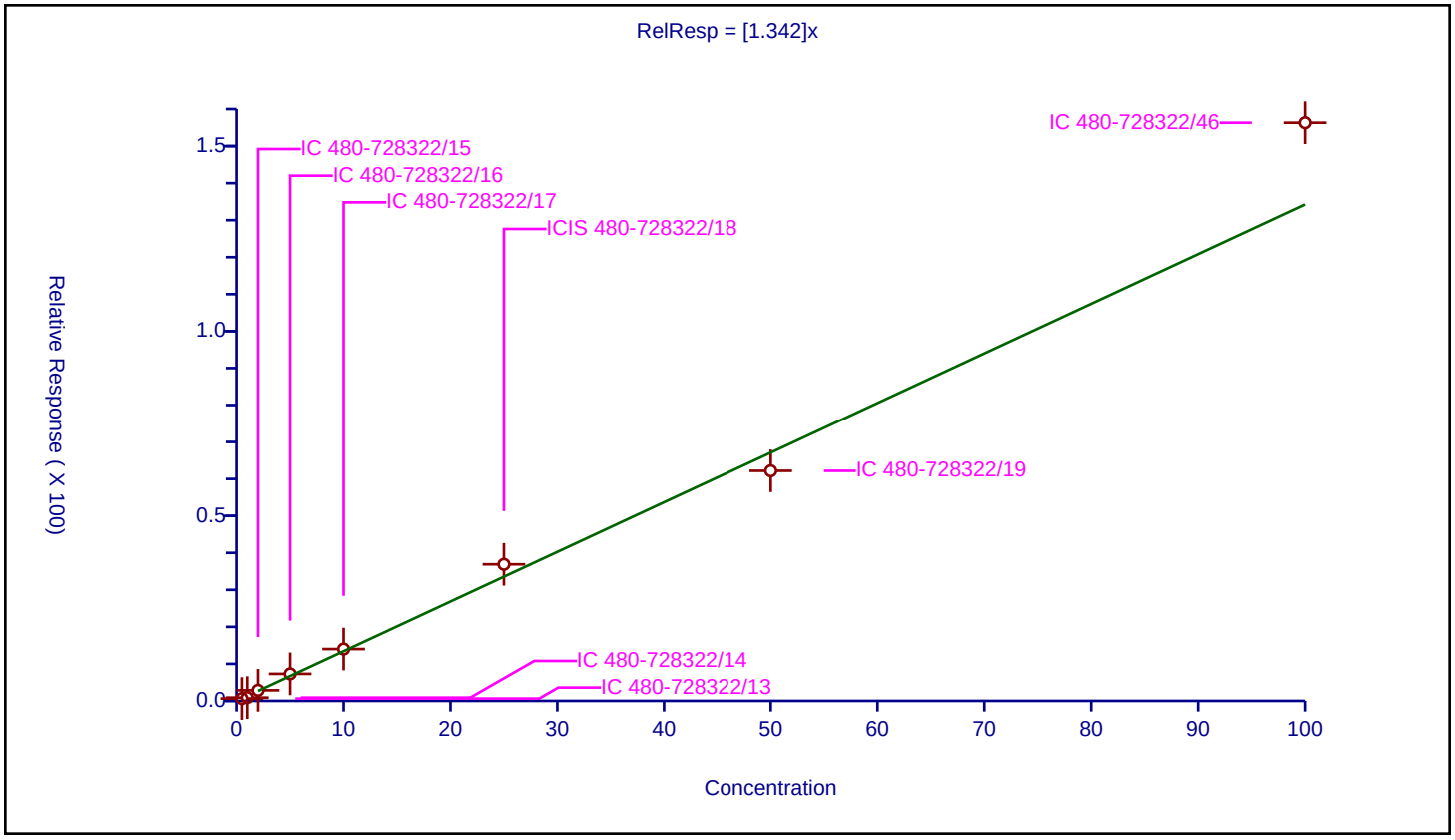
Curve Coefficients

Intercept:	0
Slope:	1.342

Error Coefficients

Relative Standard Deviation:	15.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.638696	25.0	151598.0	1.277392	Y
2	IC 480-728322/14	1.0	0.889013	25.0	161443.0	0.889013	Y
3	IC 480-728322/15	2.0	2.857511	25.0	155380.0	1.428755	Y
4	IC 480-728322/16	5.0	7.299992	25.0	164781.0	1.459998	Y
5	IC 480-728322/17	10.0	14.003107	25.0	158372.0	1.400311	Y
6	ICIS 480-728322/18	25.0	36.906587	25.0	166979.0	1.476263	Y
7	IC 480-728322/19	50.0	62.201806	25.0	168305.0	1.244036	Y
8	IC 480-728322/46	100.0	156.310279	25.0	168384.0	1.563103	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

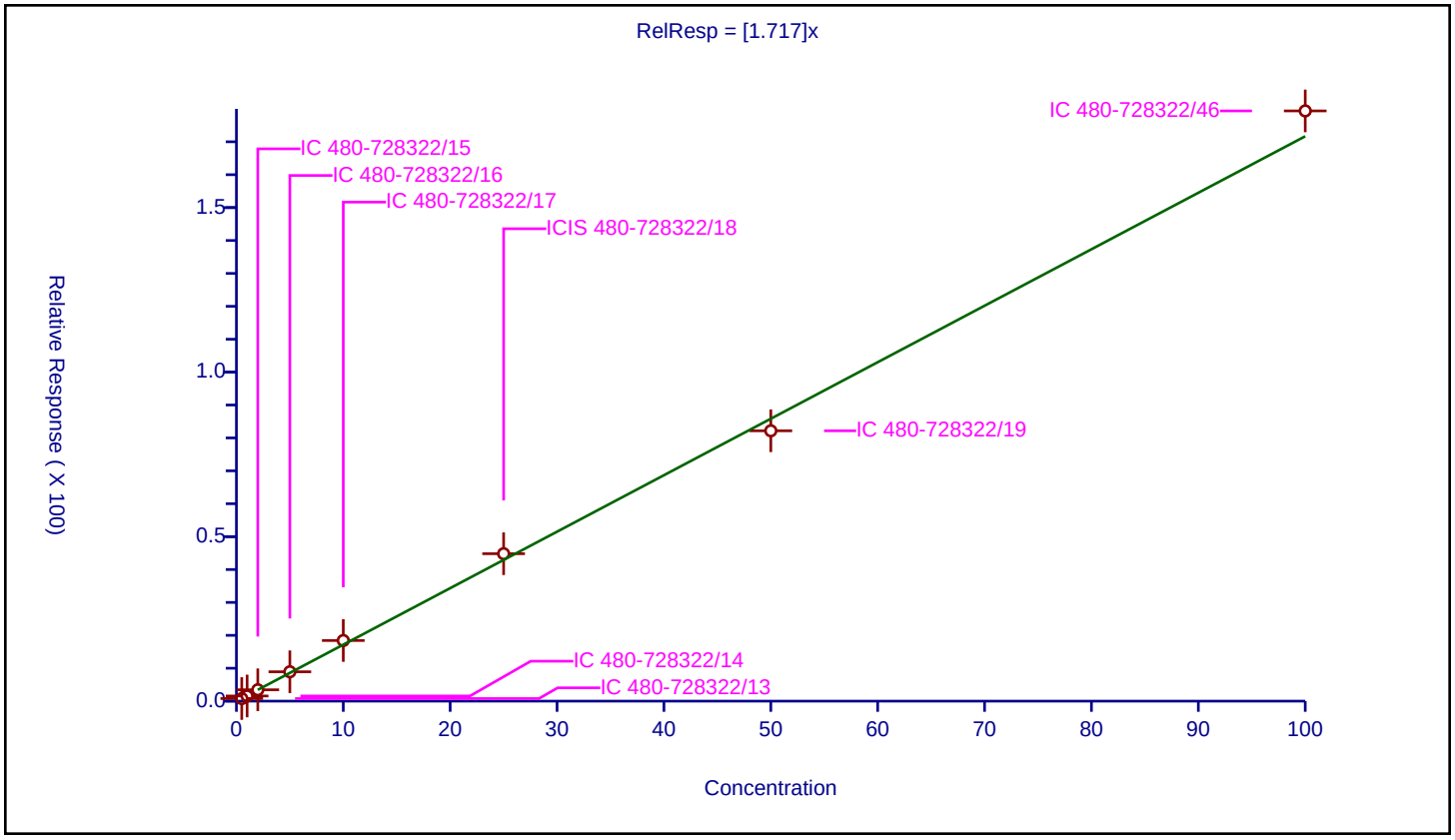
Curve Coefficients

Intercept:	0
Slope:	1.717

Error Coefficients

Relative Standard Deviation:	6.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.792062	25.0	151598.0	1.584124	Y
2	IC 480-728322/14	1.0	1.566187	25.0	161443.0	1.566187	Y
3	IC 480-728322/15	2.0	3.453791	25.0	155380.0	1.726895	Y
4	IC 480-728322/16	5.0	8.920628	25.0	164781.0	1.784126	Y
5	IC 480-728322/17	10.0	18.428131	25.0	158372.0	1.842813	Y
6	ICIS 480-728322/18	25.0	44.806083	25.0	166979.0	1.792243	Y
7	IC 480-728322/19	50.0	82.166305	25.0	168305.0	1.643326	Y
8	IC 480-728322/46	100.0	179.383582	25.0	168384.0	1.793836	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

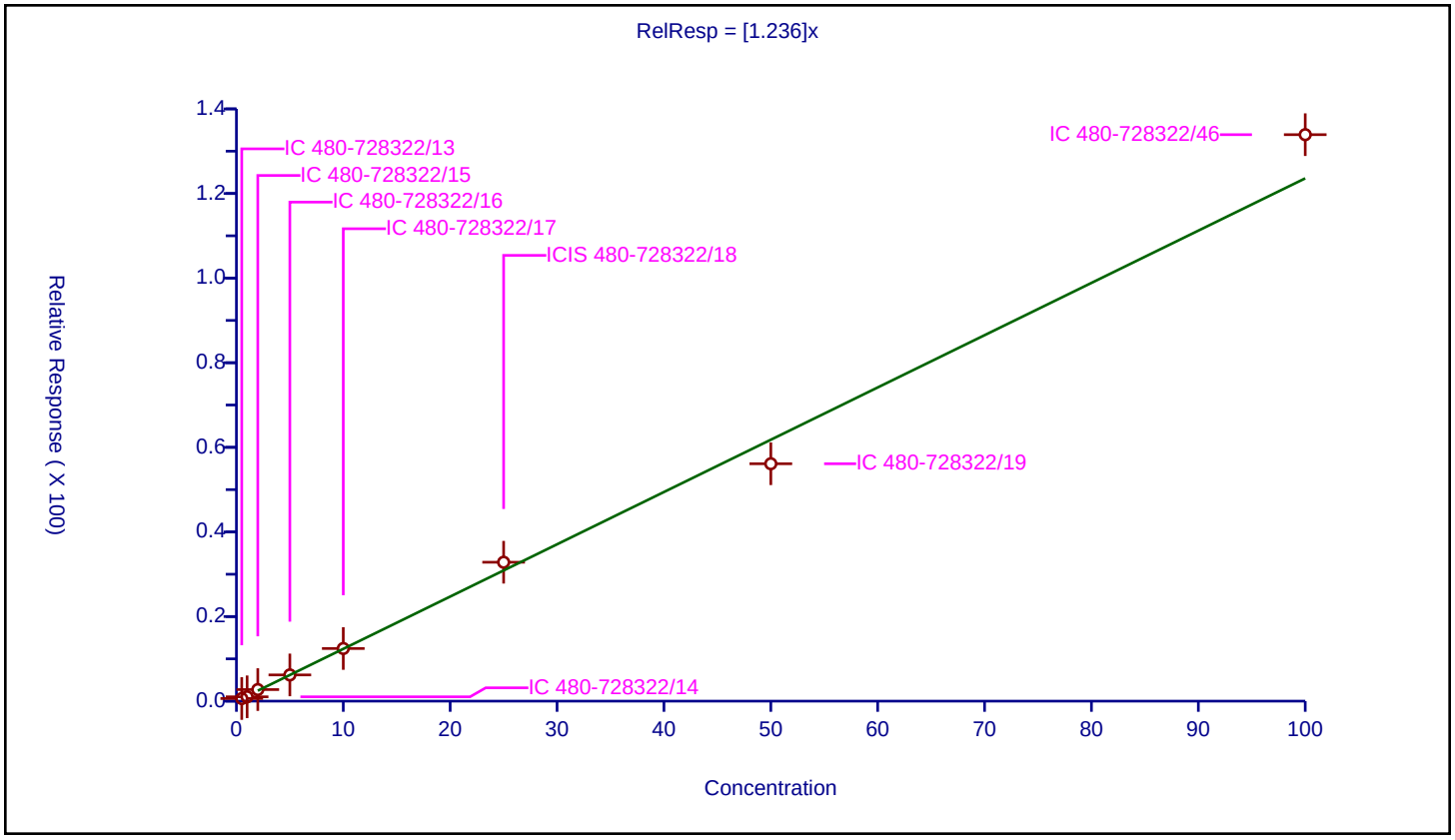
Curve Coefficients

Intercept:	0
Slope:	1.236

Error Coefficients

Relative Standard Deviation:	9.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.619236	25.0	151598.0	1.238473	Y
2	IC 480-728322/14	1.0	1.021258	25.0	161443.0	1.021258	Y
3	IC 480-728322/15	2.0	2.735391	25.0	155380.0	1.367695	Y
4	IC 480-728322/16	5.0	6.19944	25.0	164781.0	1.239888	Y
5	IC 480-728322/17	10.0	12.441277	25.0	158372.0	1.244128	Y
6	ICIS 480-728322/18	25.0	32.836464	25.0	166979.0	1.313459	Y
7	IC 480-728322/19	50.0	56.118802	25.0	168305.0	1.122376	Y
8	IC 480-728322/46	100.0	133.906725	25.0	168384.0	1.339067	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

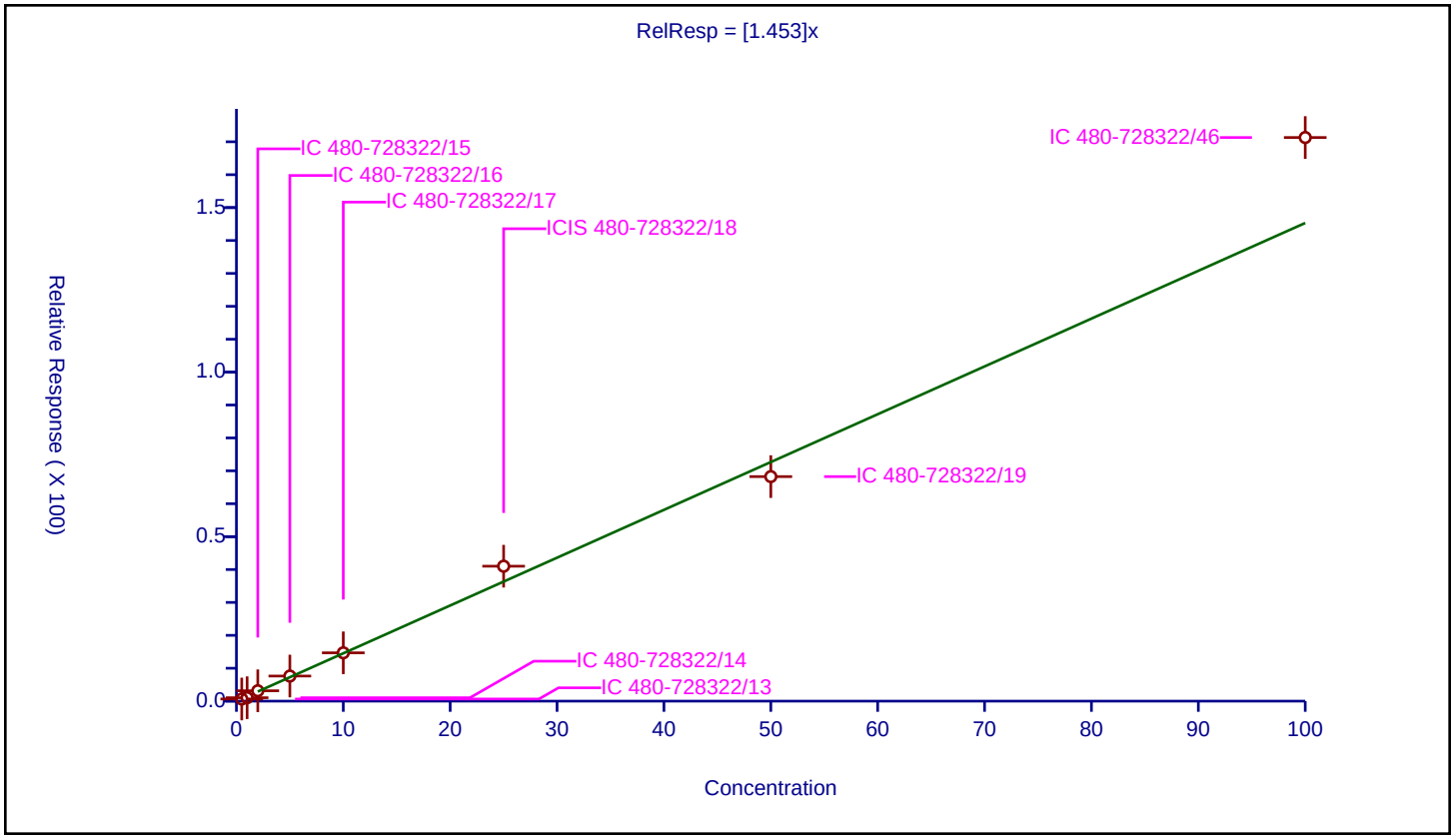
Curve Coefficients

Intercept:	0
Slope:	1.453

Error Coefficients

Relative Standard Deviation:	14.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.64958	25.0	151598.0	1.29916	Y
2	IC 480-728322/14	1.0	1.038602	25.0	161443.0	1.038602	Y
3	IC 480-728322/15	2.0	3.151146	25.0	155380.0	1.575573	Y
4	IC 480-728322/16	5.0	7.627093	25.0	164781.0	1.525419	Y
5	IC 480-728322/17	10.0	14.687413	25.0	158372.0	1.468741	Y
6	ICIS 480-728322/18	25.0	41.009947	25.0	166979.0	1.640398	Y
7	IC 480-728322/19	50.0	68.244407	25.0	168305.0	1.364888	Y
8	IC 480-728322/46	100.0	171.297303	25.0	168384.0	1.712973	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

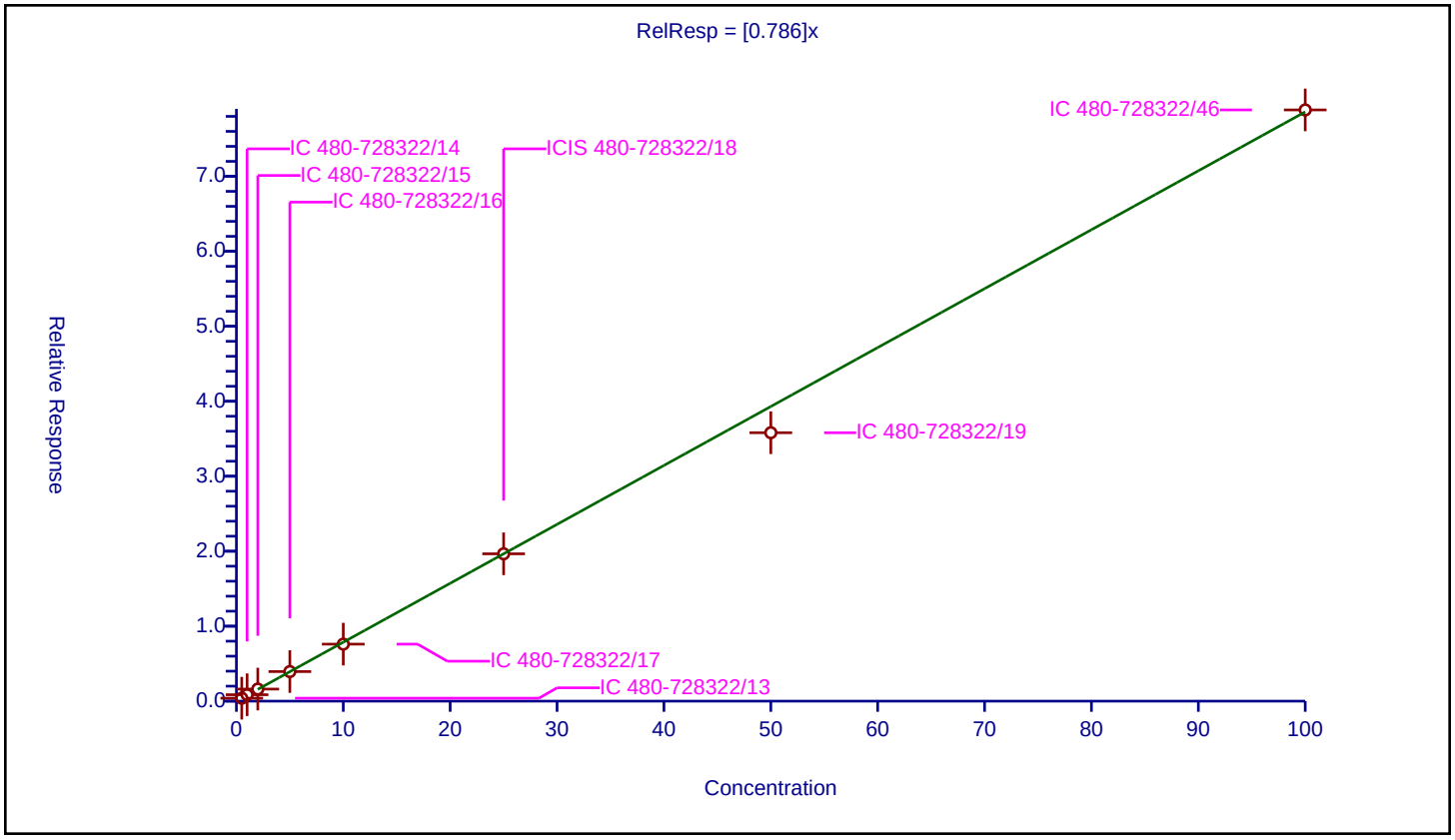
Curve Coefficients

Intercept:	0
Slope:	0.786

Error Coefficients

Relative Standard Deviation:	5.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.391826	25.0	151598.0	0.783651	Y
2	IC 480-728322/14	1.0	0.857888	25.0	161443.0	0.857888	Y
3	IC 480-728322/15	2.0	1.612177	25.0	155380.0	0.806088	Y
4	IC 480-728322/16	5.0	3.94463	25.0	164781.0	0.788926	Y
5	IC 480-728322/17	10.0	7.605985	25.0	158372.0	0.760598	Y
6	ICIS 480-728322/18	25.0	19.653519	25.0	166979.0	0.786141	Y
7	IC 480-728322/19	50.0	35.806423	25.0	168305.0	0.716128	Y
8	IC 480-728322/46	100.0	78.861264	25.0	168384.0	0.788613	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

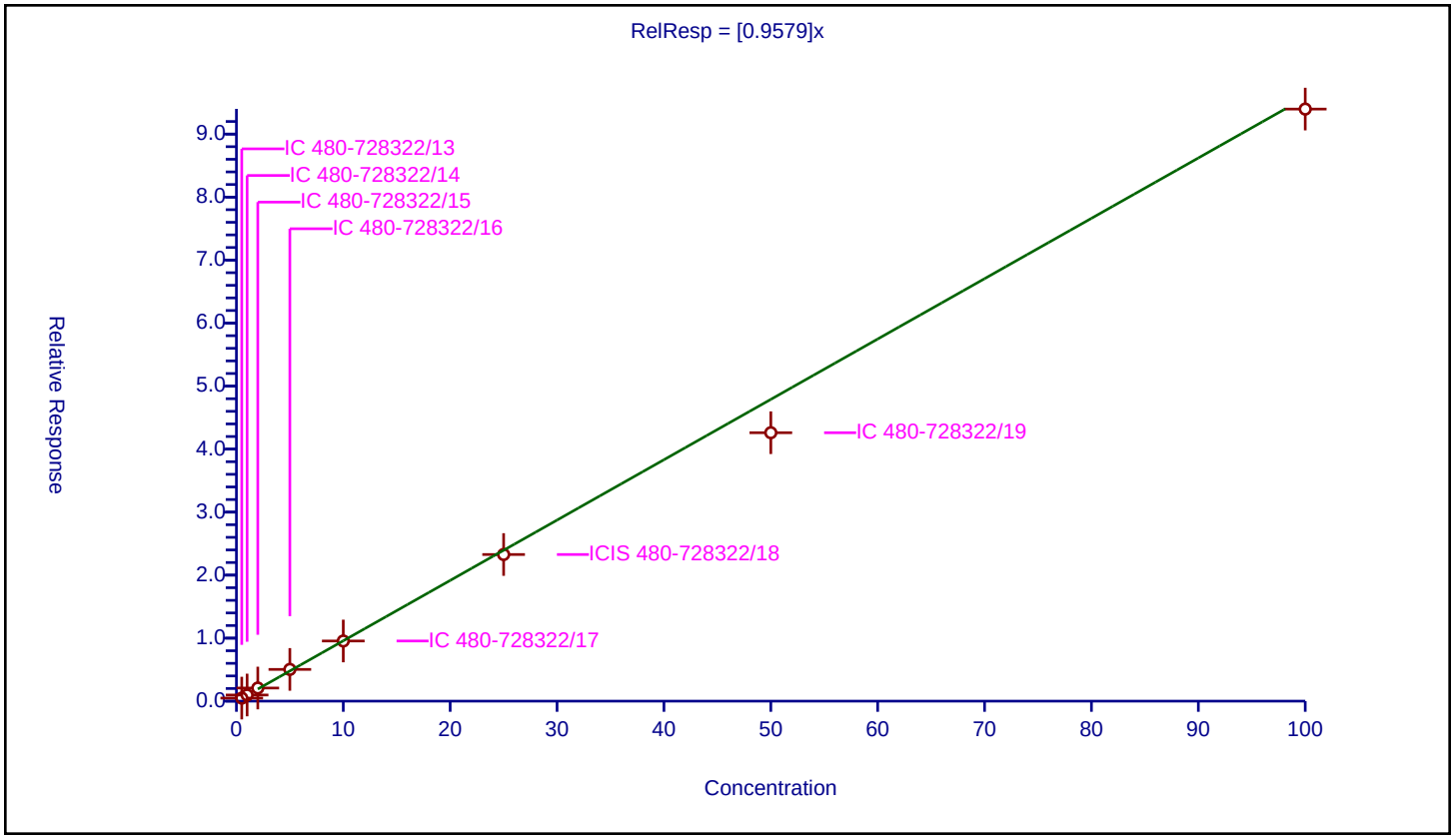
Curve Coefficients

Intercept:	0
Slope:	0.9579

Error Coefficients

Relative Standard Deviation:	5.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.482196	25.0	151598.0	0.964393	Y
2	IC 480-728322/14	1.0	0.973254	25.0	161443.0	0.973254	Y
3	IC 480-728322/15	2.0	2.081832	25.0	155380.0	1.040916	Y
4	IC 480-728322/16	5.0	5.036533	25.0	164781.0	1.007307	Y
5	IC 480-728322/17	10.0	9.545248	25.0	158372.0	0.954525	Y
6	ICIS 480-728322/18	25.0	23.274783	25.0	166979.0	0.930991	Y
7	IC 480-728322/19	50.0	42.604201	25.0	168305.0	0.852084	Y
8	IC 480-728322/46	100.0	93.97033	25.0	168384.0	0.939703	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

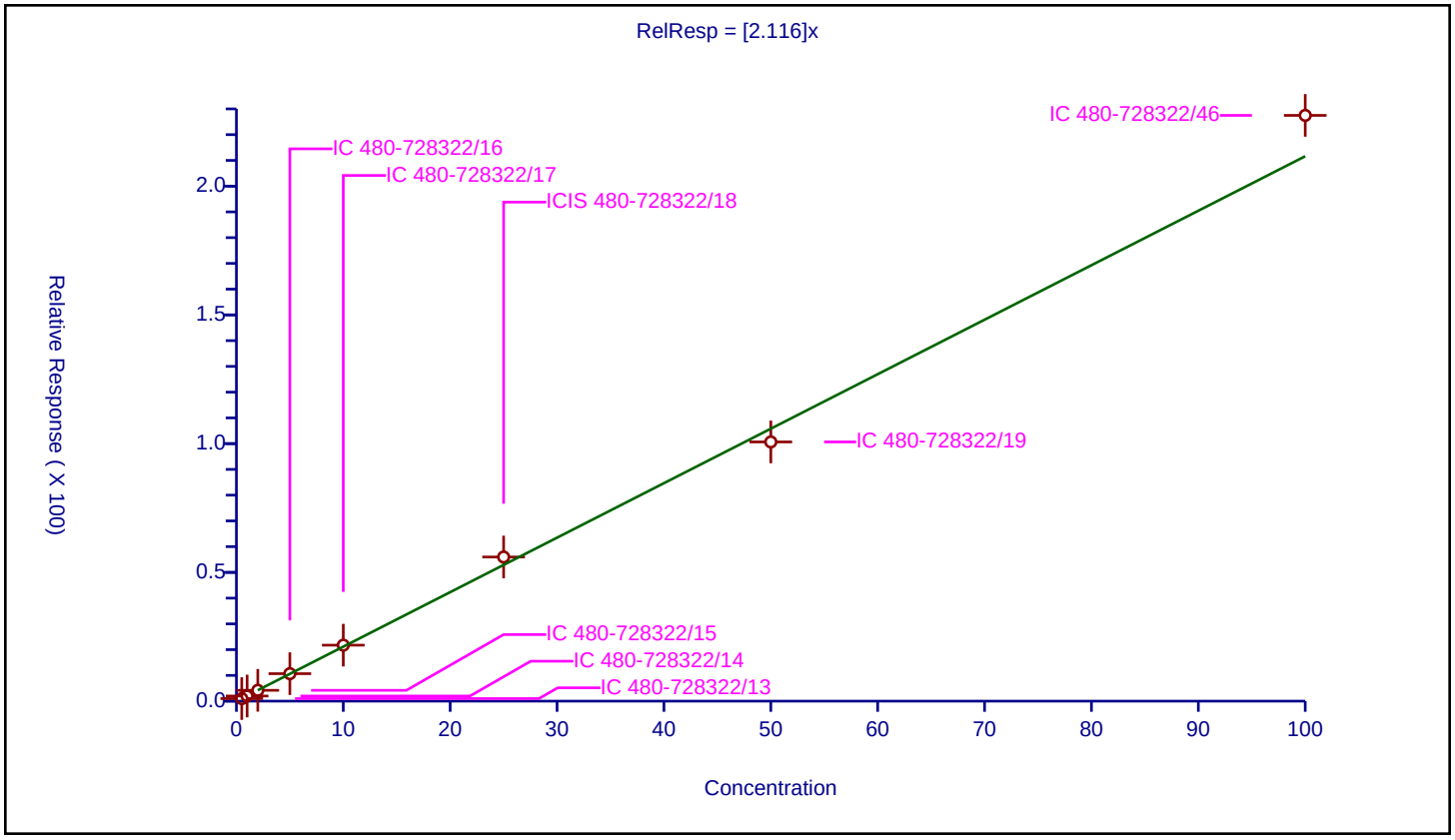
Curve Coefficients

Intercept:	0
Slope:	2.116

Error Coefficients

Relative Standard Deviation:	5.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.999189	25.0	151598.0	1.998377	Y
2	IC 480-728322/14	1.0	1.994512	25.0	161443.0	1.994512	Y
3	IC 480-728322/15	2.0	4.203726	25.0	155380.0	2.101863	Y
4	IC 480-728322/16	5.0	10.667037	25.0	164781.0	2.133407	Y
5	IC 480-728322/17	10.0	21.735218	25.0	158372.0	2.173522	Y
6	ICIS 480-728322/18	25.0	55.972158	25.0	166979.0	2.238886	Y
7	IC 480-728322/19	50.0	100.662933	25.0	168305.0	2.013259	Y
8	IC 480-728322/46	100.0	227.471731	25.0	168384.0	2.274717	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

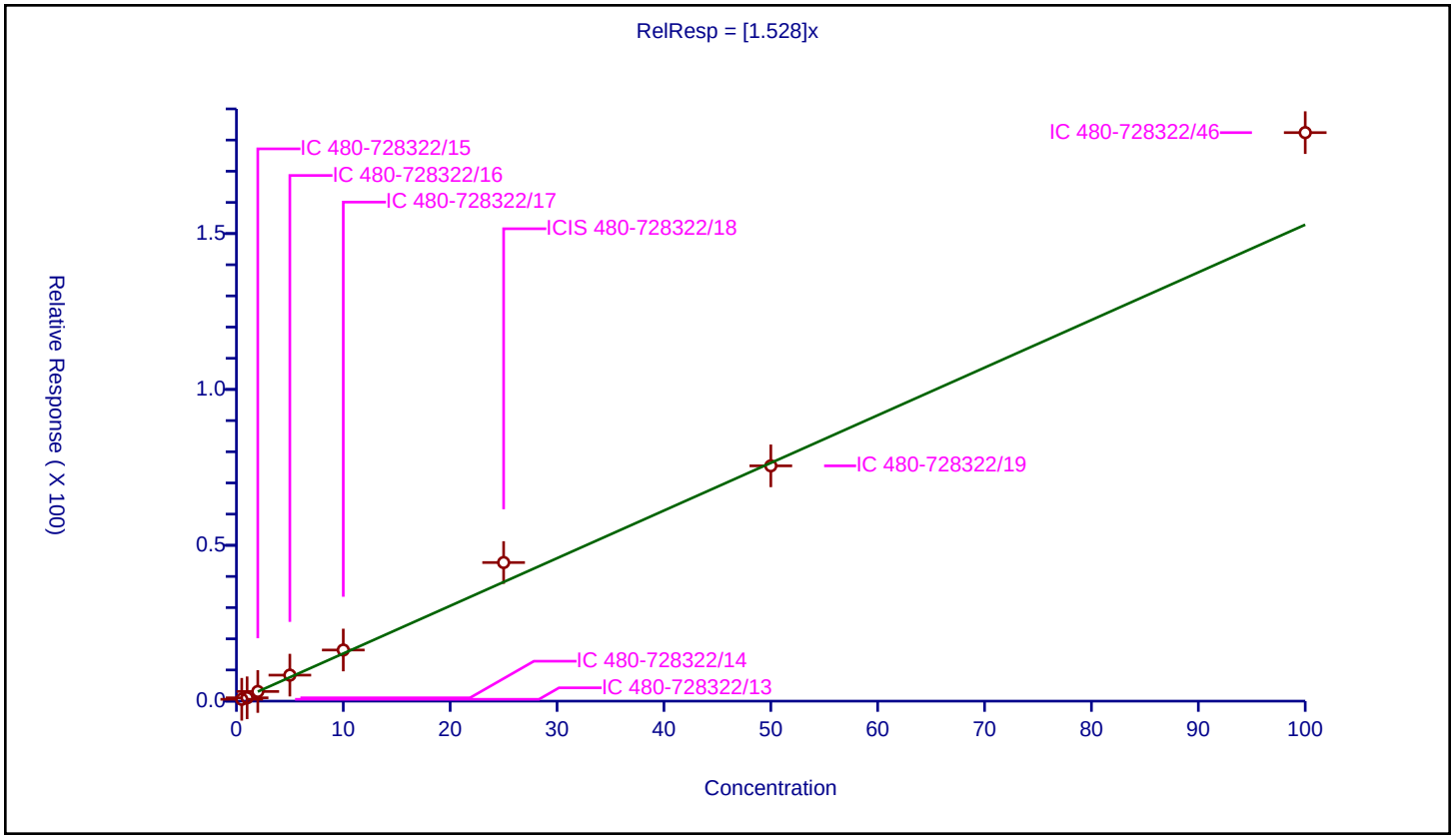
Curve Coefficients

Intercept:	0
Slope:	1.528

Error Coefficients

Relative Standard Deviation:	17.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.593016	25.0	151598.0	1.186031	Y
2	IC 480-728322/14	1.0	1.070192	25.0	161443.0	1.070192	Y
3	IC 480-728322/15	2.0	3.099498	25.0	155380.0	1.549749	Y
4	IC 480-728322/16	5.0	8.344105	25.0	164781.0	1.668821	Y
5	IC 480-728322/17	10.0	16.404099	25.0	158372.0	1.64041	Y
6	ICIS 480-728322/18	25.0	44.469065	25.0	166979.0	1.778763	Y
7	IC 480-728322/19	50.0	75.489736	25.0	168305.0	1.509795	Y
8	IC 480-728322/46	100.0	182.385054	25.0	168384.0	1.823851	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

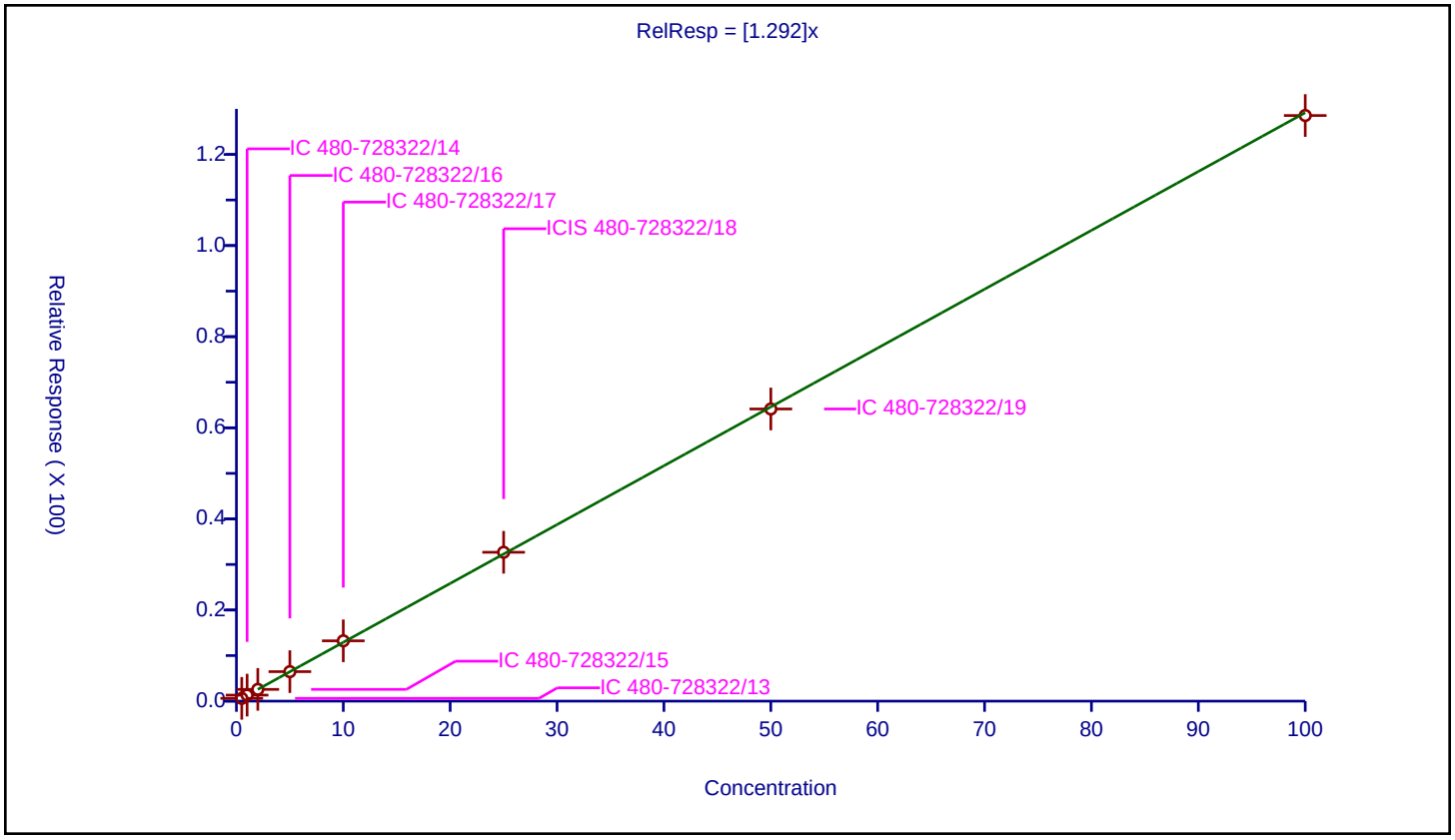
Curve Coefficients

Intercept:	0
Slope:	1.292

Error Coefficients

Relative Standard Deviation:	2.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.611815	25.0	151598.0	1.223631	Y
2	IC 480-728322/14	1.0	1.324771	25.0	161443.0	1.324771	Y
3	IC 480-728322/15	2.0	2.582218	25.0	155380.0	1.291109	Y
4	IC 480-728322/16	5.0	6.474958	25.0	164781.0	1.294992	Y
5	IC 480-728322/17	10.0	13.238451	25.0	158372.0	1.323845	Y
6	ICIS 480-728322/18	25.0	32.67881	25.0	166979.0	1.307152	Y
7	IC 480-728322/19	50.0	64.132676	25.0	168305.0	1.282654	Y
8	IC 480-728322/46	100.0	128.545022	25.0	168384.0	1.28545	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

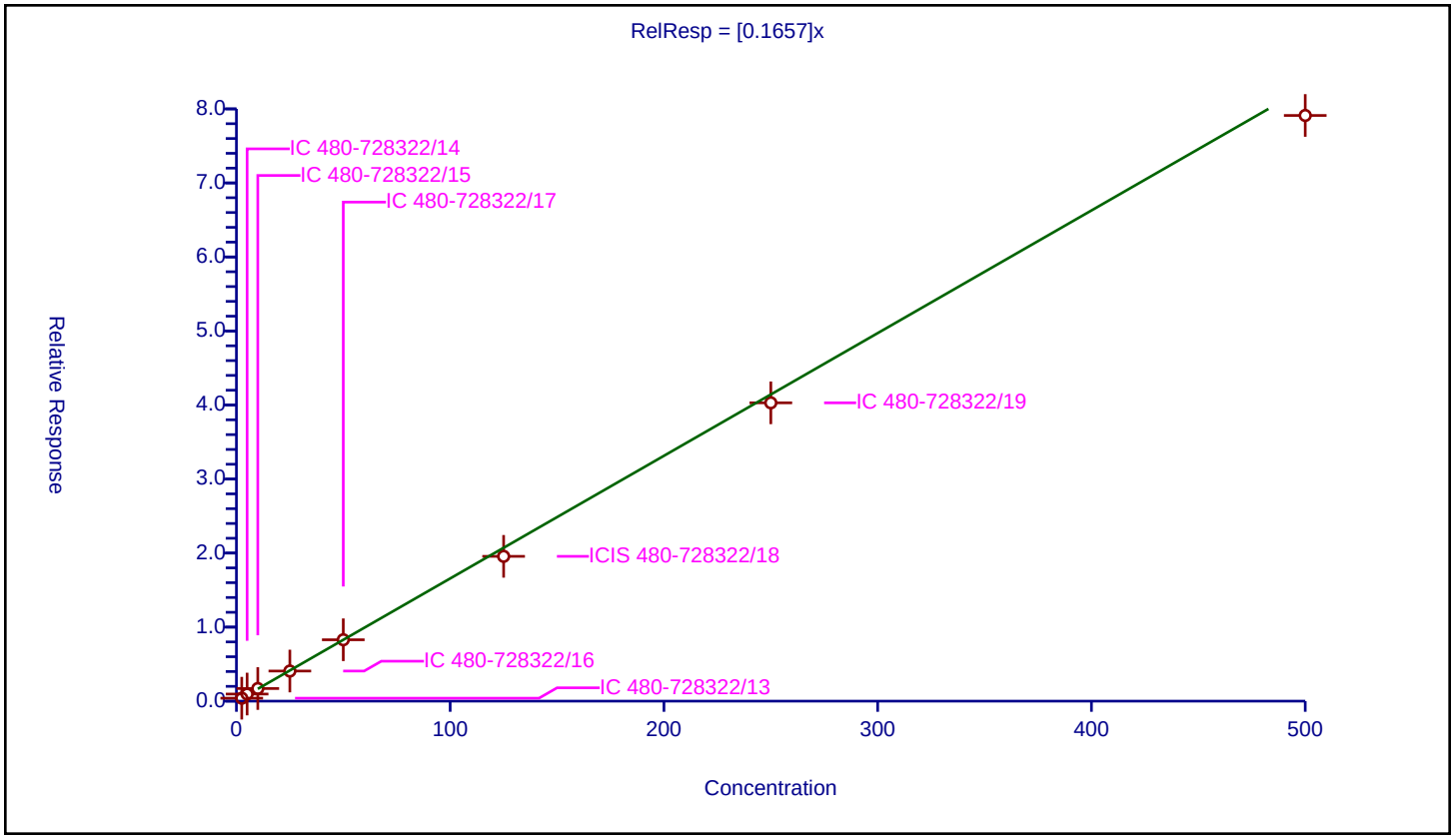
Curve Coefficients

Intercept:	0
Slope:	0.1657

Error Coefficients

Relative Standard Deviation:	6.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	2.5	0.398257	25.0	151598.0	0.159303	Y
2	IC 480-728322/14	5.0	0.957304	25.0	161443.0	0.191461	Y
3	IC 480-728322/15	10.0	1.70437	25.0	155380.0	0.170437	Y
4	IC 480-728322/16	25.0	4.066913	25.0	164781.0	0.162677	Y
5	IC 480-728322/17	50.0	8.29187	25.0	158372.0	0.165837	Y
6	ICIS 480-728322/18	125.0	19.559795	25.0	166979.0	0.156478	Y
7	IC 480-728322/19	250.0	40.296783	25.0	168305.0	0.161187	Y
8	IC 480-728322/46	500.0	79.110545	25.0	168384.0	0.158221	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

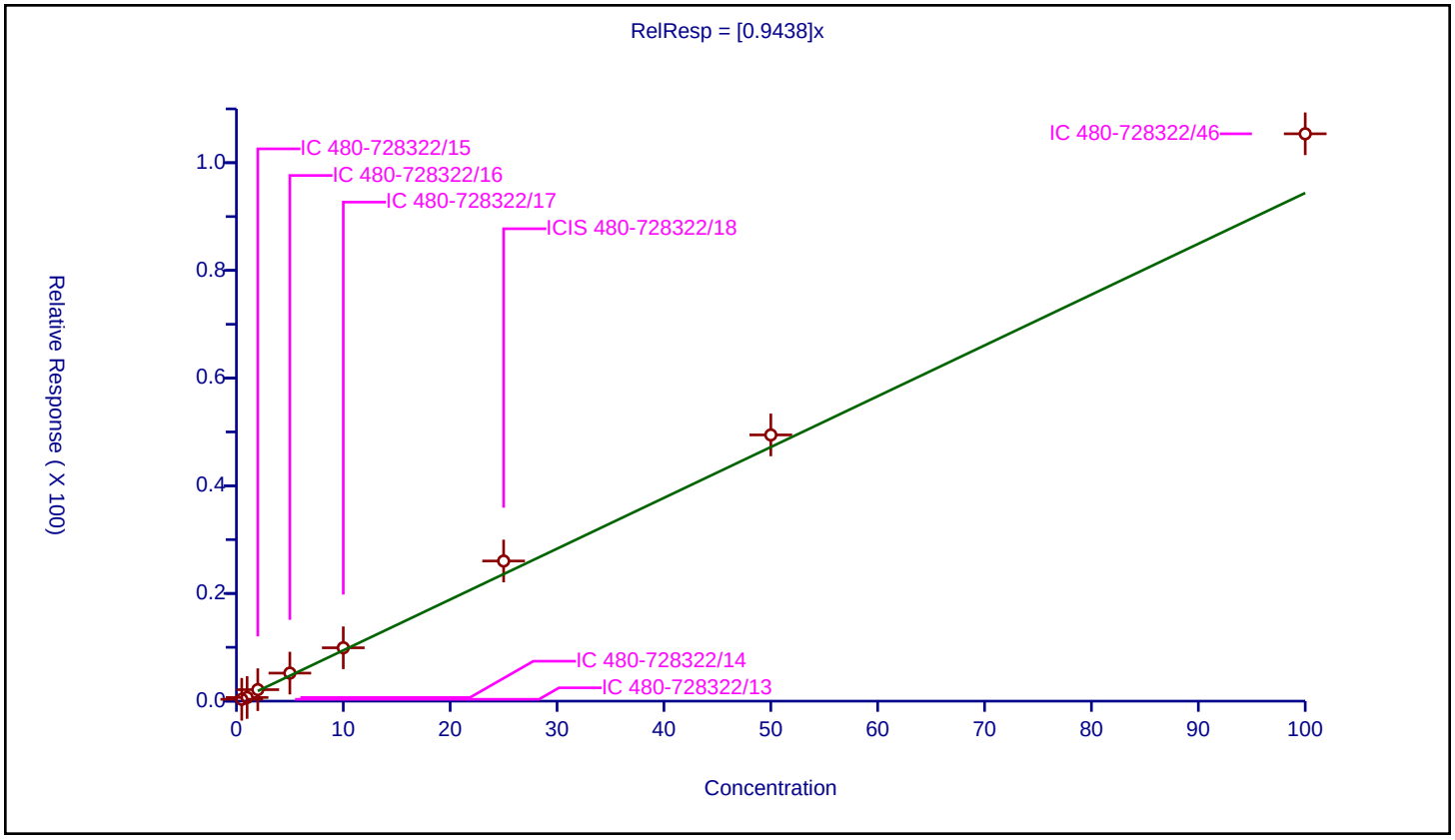
Curve Coefficients

Intercept:	0
Slope:	0.9438

Error Coefficients

Relative Standard Deviation:	17.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.343837	25.0	151598.0	0.687674	Y
2	IC 480-728322/14	1.0	0.678723	25.0	161443.0	0.678723	Y
3	IC 480-728322/15	2.0	2.135732	25.0	155380.0	1.067866	Y
4	IC 480-728322/16	5.0	5.207518	25.0	164781.0	1.041504	Y
5	IC 480-728322/17	10.0	9.911948	25.0	158372.0	0.991195	Y
6	ICIS 480-728322/18	25.0	26.026177	25.0	166979.0	1.041047	Y
7	IC 480-728322/19	50.0	49.445798	25.0	168305.0	0.988916	Y
8	IC 480-728322/46	100.0	105.37269	25.0	168384.0	1.053727	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

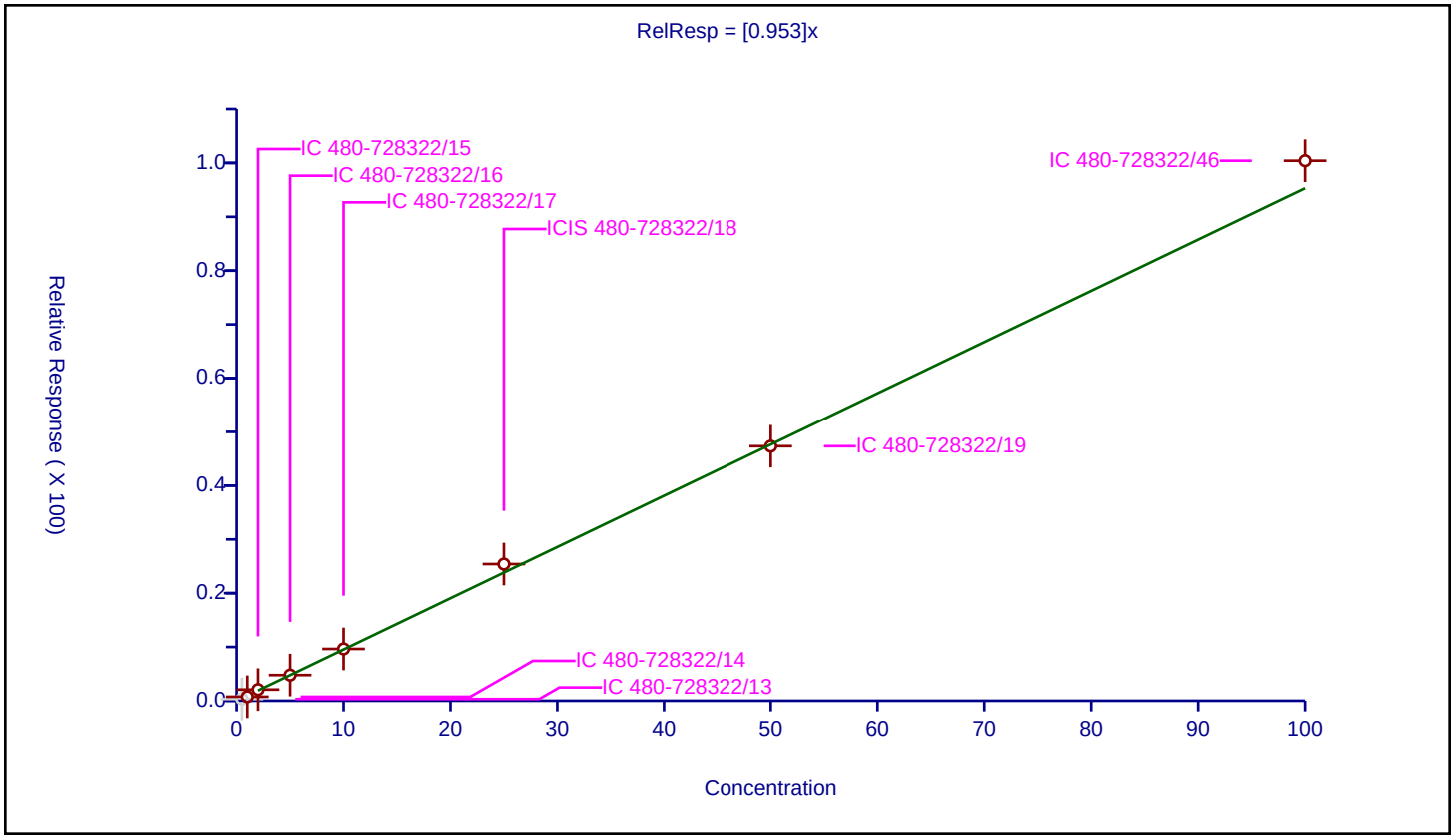
Curve Coefficients

Intercept:	0
Slope:	0.953

Error Coefficients

Relative Standard Deviation:	10.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.322893	25.0	151598.0	0.645787	N
2	IC 480-728322/14	1.0	0.746703	25.0	161443.0	0.746703	Y
3	IC 480-728322/15	2.0	2.075878	25.0	155380.0	1.037939	Y
4	IC 480-728322/16	5.0	4.776946	25.0	164781.0	0.955389	Y
5	IC 480-728322/17	10.0	9.637594	25.0	158372.0	0.963759	Y
6	ICIS 480-728322/18	25.0	25.413824	25.0	166979.0	1.016553	Y
7	IC 480-728322/19	50.0	47.336383	25.0	168305.0	0.946728	Y
8	IC 480-728322/46	100.0	100.411708	25.0	168384.0	1.004117	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

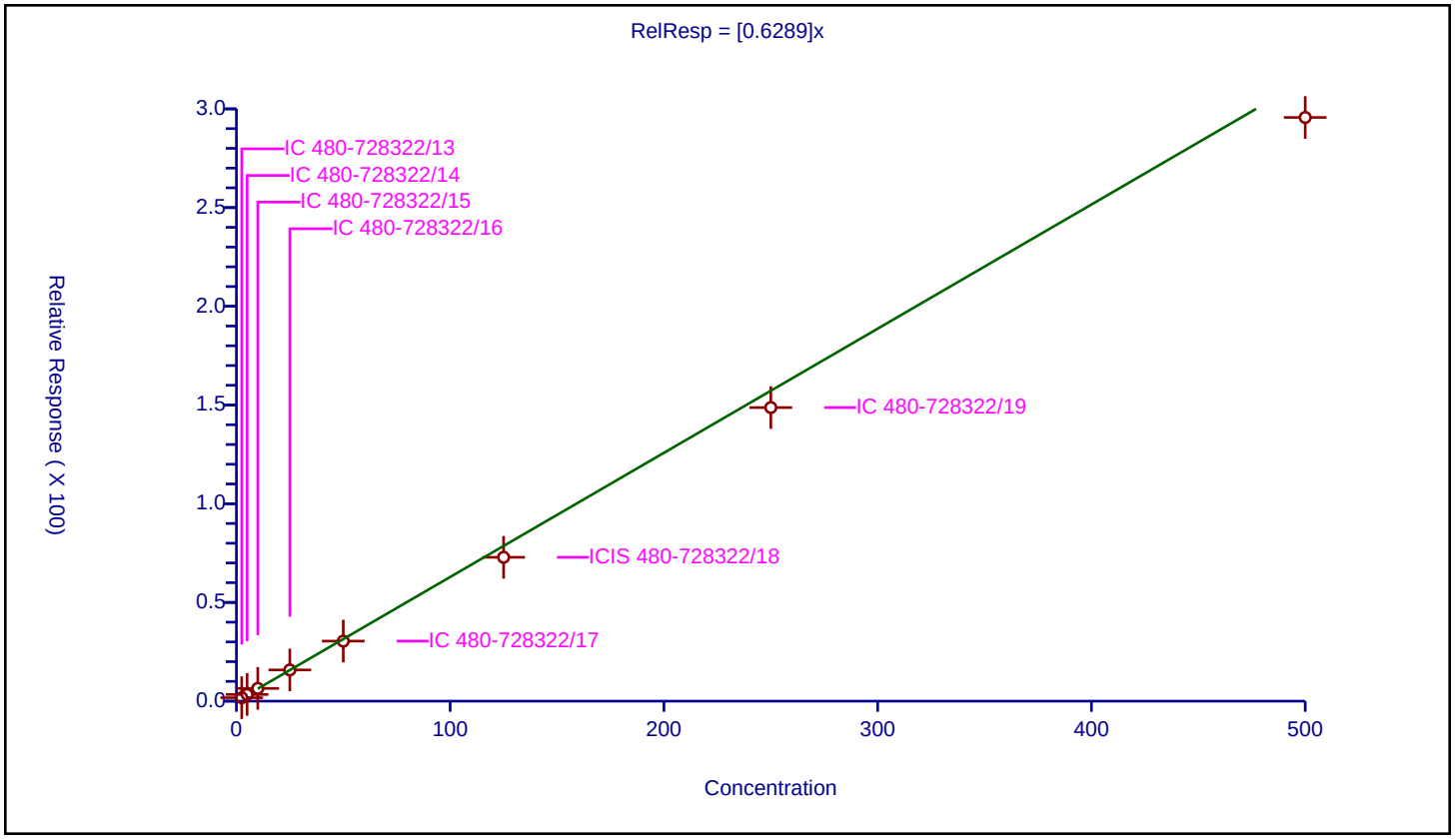
Curve Coefficients

Intercept:	0
Slope:	0.6289

Error Coefficients

Relative Standard Deviation:	6.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	2.5	1.750188	25.0	151598.0	0.700075	Y
2	IC 480-728322/14	5.0	3.379056	25.0	161443.0	0.675811	Y
3	IC 480-728322/15	10.0	6.458843	25.0	155380.0	0.645884	Y
4	IC 480-728322/16	25.0	15.804917	25.0	164781.0	0.632197	Y
5	IC 480-728322/17	50.0	30.412731	25.0	158372.0	0.608255	Y
6	ICIS 480-728322/18	125.0	72.873086	25.0	166979.0	0.582985	Y
7	IC 480-728322/19	250.0	148.709783	25.0	168305.0	0.594839	Y
8	IC 480-728322/46	500.0	295.655169	25.0	168384.0	0.59131	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

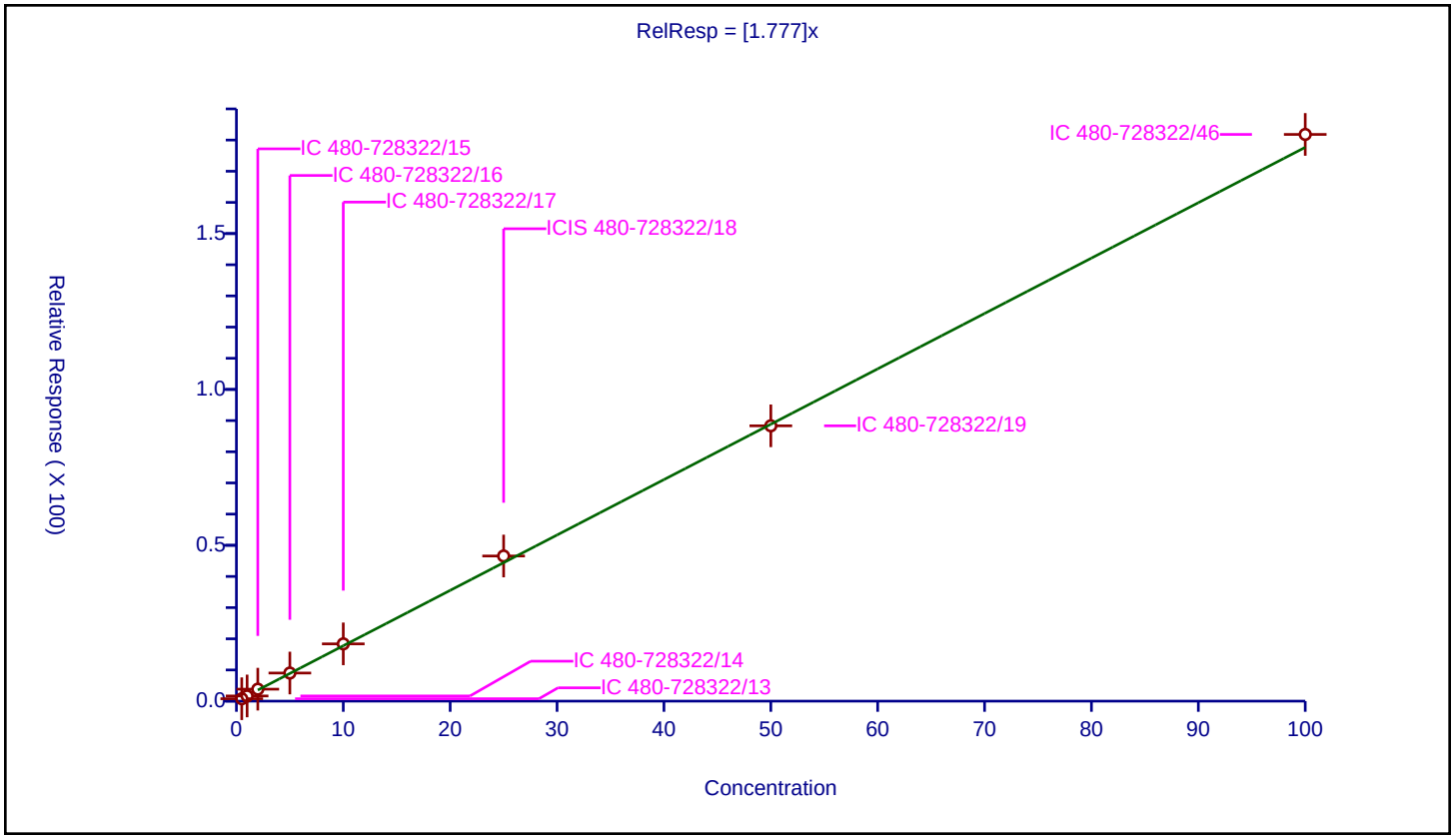
Curve Coefficients

Intercept:	0
Slope:	1.777

Error Coefficients

Relative Standard Deviation:	6.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.773262	25.0	151598.0	1.546524	Y
2	IC 480-728322/14	1.0	1.659409	25.0	161443.0	1.659409	Y
3	IC 480-728322/15	2.0	3.839619	25.0	155380.0	1.919809	Y
4	IC 480-728322/16	5.0	9.014541	25.0	164781.0	1.802908	Y
5	IC 480-728322/17	10.0	18.373355	25.0	158372.0	1.837336	Y
6	ICIS 480-728322/18	25.0	46.559597	25.0	166979.0	1.862384	Y
7	IC 480-728322/19	50.0	88.328035	25.0	168305.0	1.766561	Y
8	IC 480-728322/46	100.0	181.805427	25.0	168384.0	1.818054	Y



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

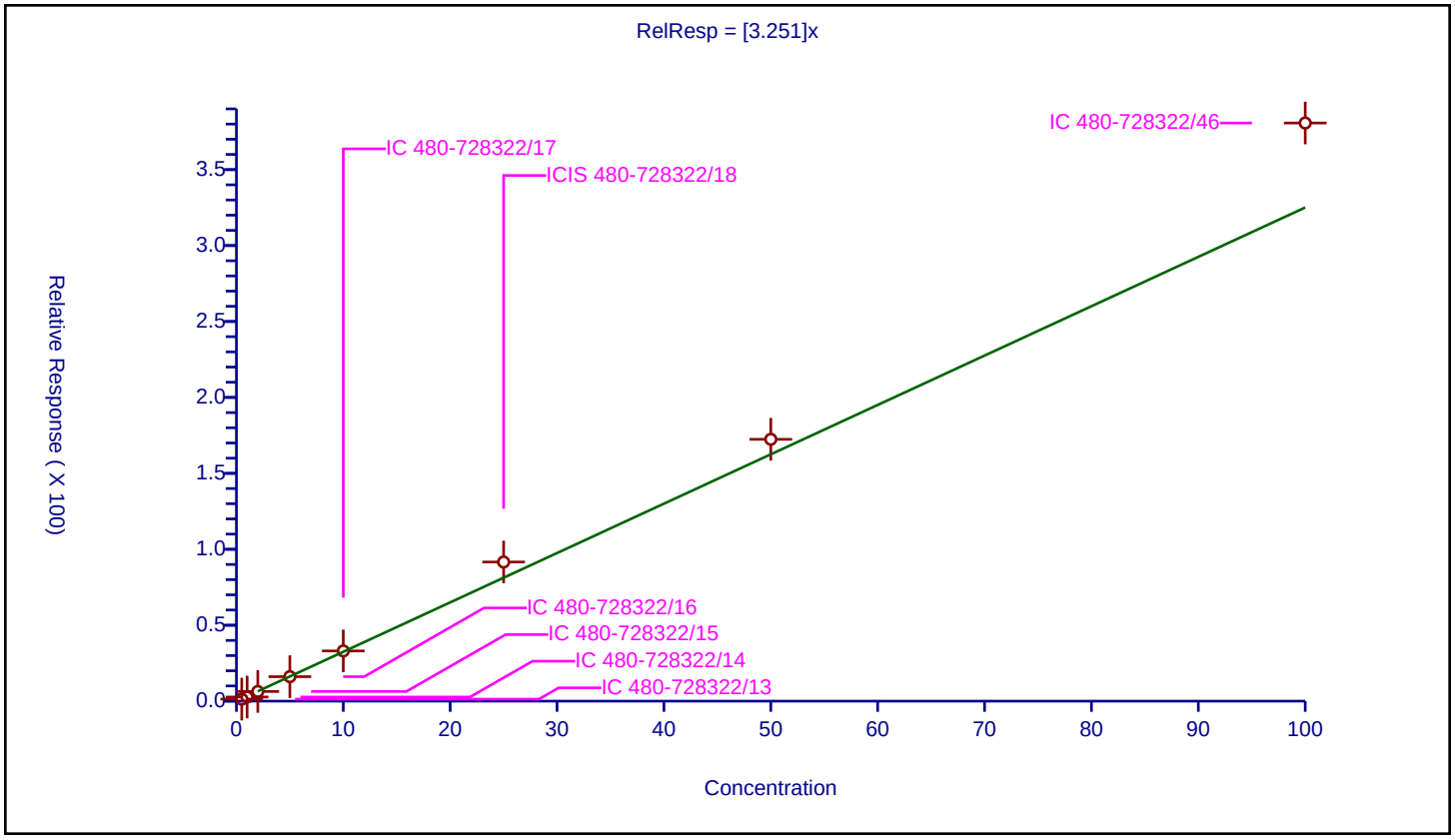
Curve Coefficients

Intercept:	0
Slope:	3.251

Error Coefficients

Relative Standard Deviation:	12.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	1.330657	25.0	151598.0	2.661315	Y
2	IC 480-728322/14	1.0	2.710709	25.0	161443.0	2.710709	Y
3	IC 480-728322/15	2.0	6.371155	25.0	155380.0	3.185577	Y
4	IC 480-728322/16	5.0	16.116694	25.0	164781.0	3.223339	Y
5	IC 480-728322/17	10.0	33.047351	25.0	158372.0	3.304735	Y
6	ICIS 480-728322/18	25.0	91.608675	25.0	166979.0	3.664347	Y
7	IC 480-728322/19	50.0	172.419714	25.0	168305.0	3.448394	Y
8	IC 480-728322/46	100.0	380.700215	25.0	168384.0	3.807002	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

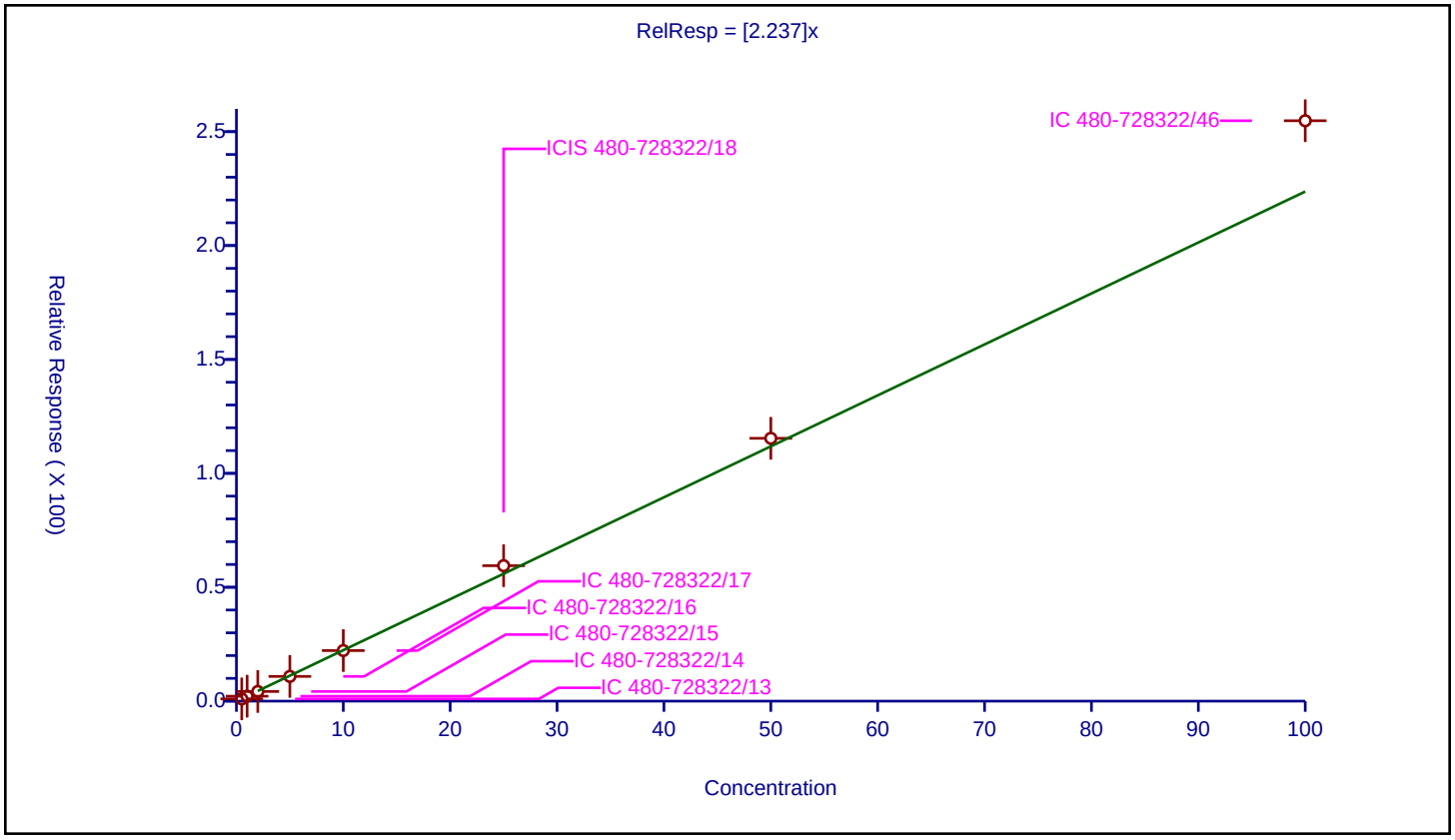
Curve Coefficients

Intercept:	0
Slope:	2.237

Error Coefficients

Relative Standard Deviation:	7.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.991933	25.0	151598.0	1.983865	Y
2	IC 480-728322/14	1.0	2.167328	25.0	161443.0	2.167328	Y
3	IC 480-728322/15	2.0	4.238158	25.0	155380.0	2.119079	Y
4	IC 480-728322/16	5.0	10.861993	25.0	164781.0	2.172399	Y
5	IC 480-728322/17	10.0	22.198842	25.0	158372.0	2.219884	Y
6	ICIS 480-728322/18	25.0	59.463316	25.0	166979.0	2.378533	Y
7	IC 480-728322/19	50.0	115.388135	25.0	168305.0	2.307763	Y
8	IC 480-728322/46	100.0	254.799447	25.0	168384.0	2.547994	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

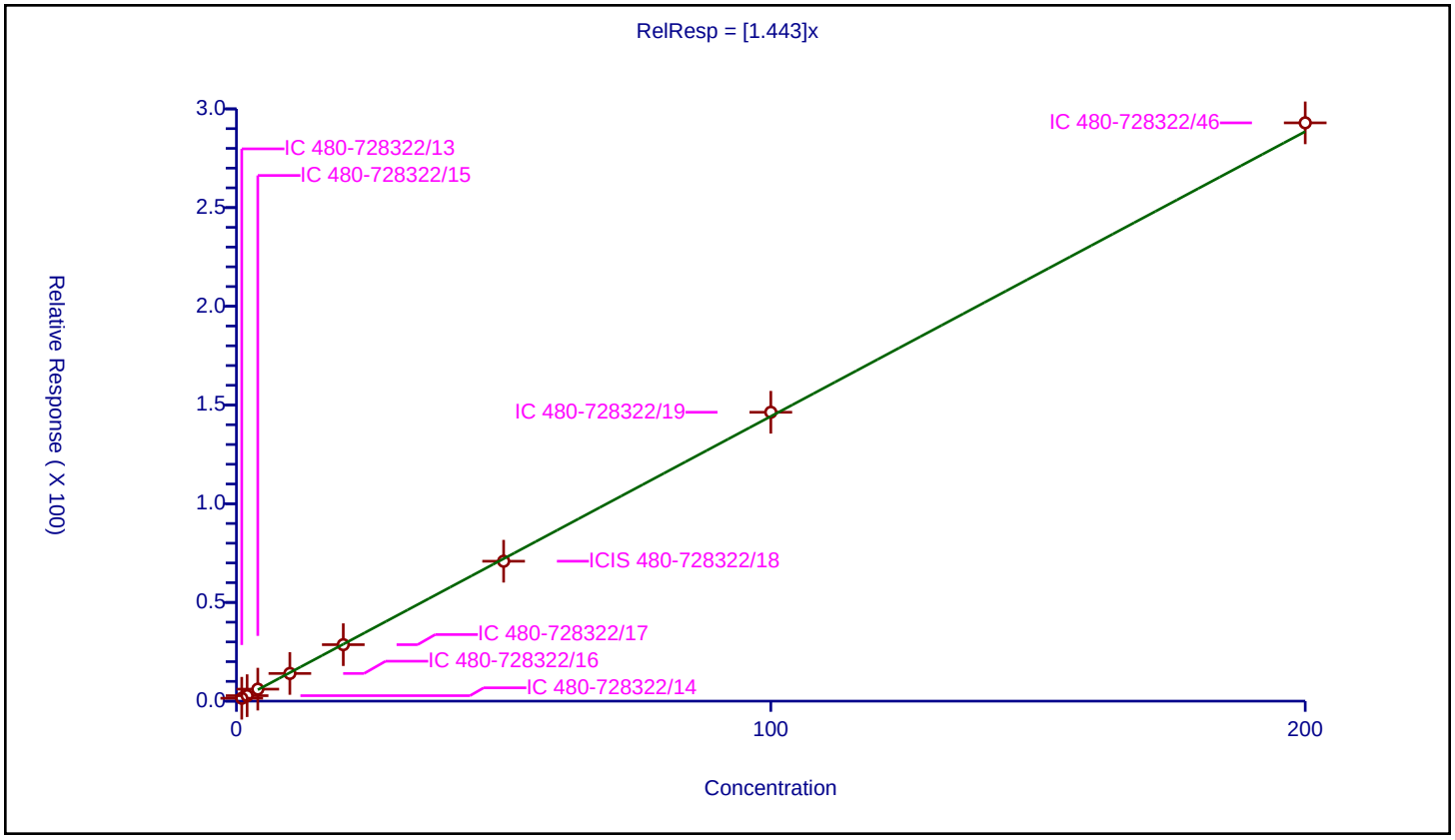
Curve Coefficients

Intercept:	0
Slope:	1.443

Error Coefficients

Relative Standard Deviation:	2.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	1.0	1.458463	25.0	151598.0	1.458463	Y
2	IC 480-728322/14	2.0	2.772341	25.0	161443.0	1.38617	Y
3	IC 480-728322/15	4.0	6.073336	25.0	155380.0	1.518334	Y
4	IC 480-728322/16	10.0	14.020124	25.0	164781.0	1.402012	Y
5	IC 480-728322/17	20.0	28.610487	25.0	158372.0	1.430524	Y
6	ICIS 480-728322/18	50.0	70.87538	25.0	166979.0	1.417508	Y
7	IC 480-728322/19	100.0	146.337156	25.0	168305.0	1.463372	Y
8	IC 480-728322/46	200.0	292.9251	25.0	168384.0	1.464625	Y



Calibration / Methylene Chloride

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

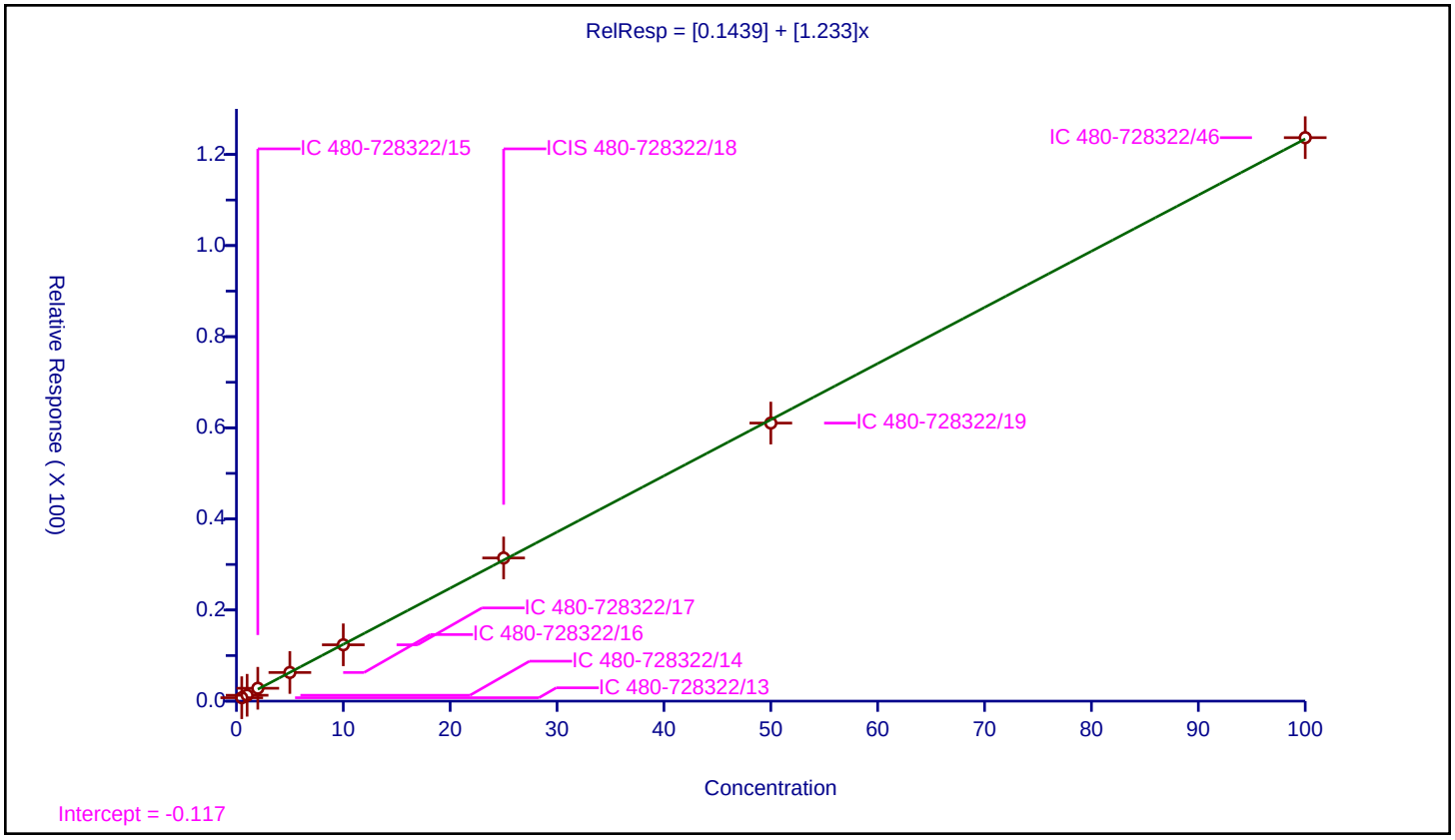
Curve Coefficients

Intercept:	0.1439
Slope:	1.233

Error Coefficients

Relative Standard Deviation:	4.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.754133	25.0	151598.0	1.508265	Y
2	IC 480-728322/14	1.0	1.28869	25.0	161443.0	1.28869	Y
3	IC 480-728322/15	2.0	2.824205	25.0	155380.0	1.412103	Y
4	IC 480-728322/16	5.0	6.288043	25.0	164781.0	1.257609	Y
5	IC 480-728322/17	10.0	12.366769	25.0	158372.0	1.236677	Y
6	ICIS 480-728322/18	25.0	31.426407	25.0	166979.0	1.257056	Y
7	IC 480-728322/19	50.0	61.035026	25.0	168305.0	1.220701	Y
8	IC 480-728322/46	100.0	123.683664	25.0	168384.0	1.236837	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

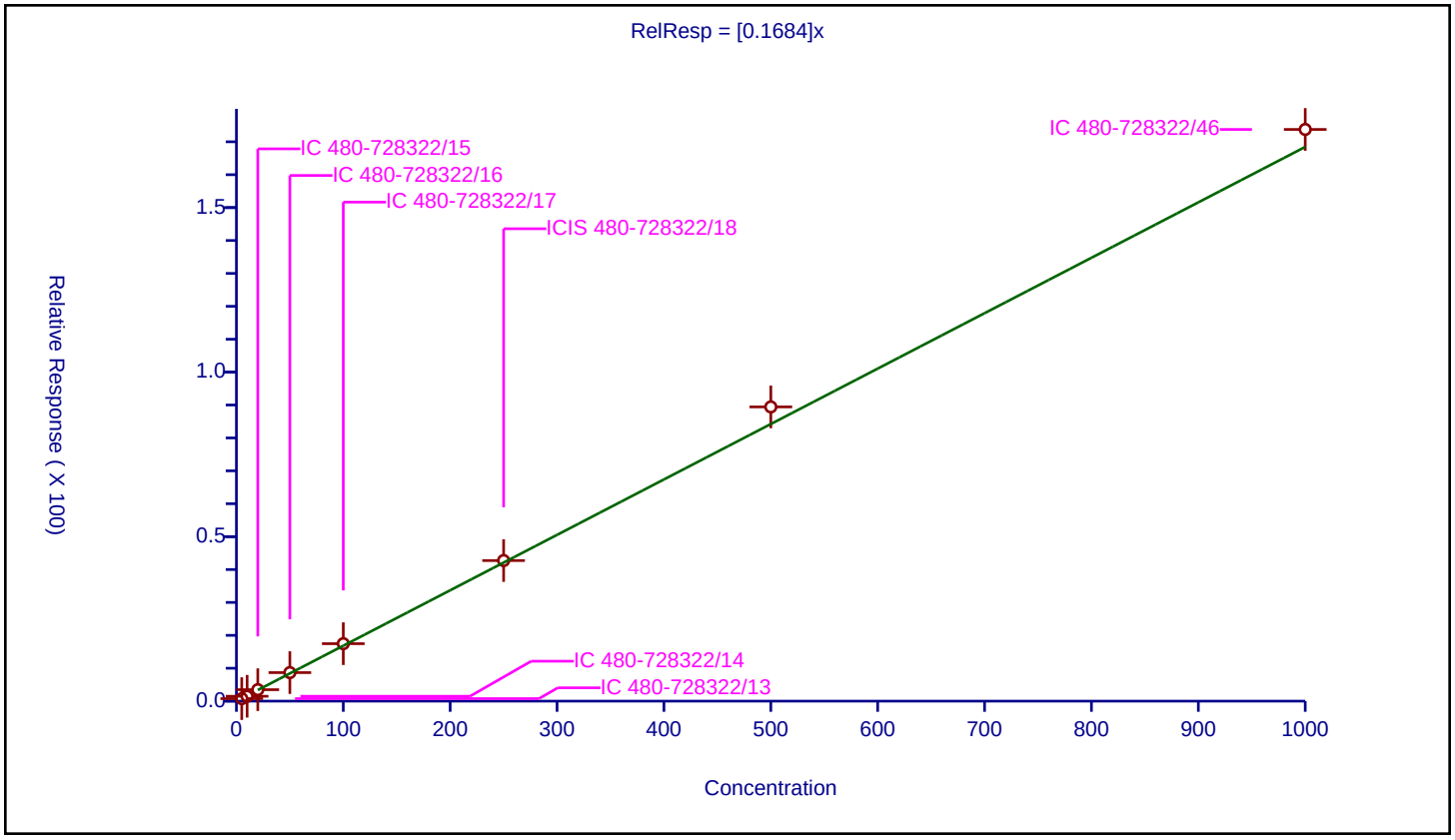
Curve Coefficients

Intercept:	0
Slope:	0.1684

Error Coefficients

Relative Standard Deviation:	6.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	5.0	0.765347	25.0	151598.0	0.153069	Y
2	IC 480-728322/14	10.0	1.483651	25.0	161443.0	0.148365	Y
3	IC 480-728322/15	20.0	3.48774	25.0	155380.0	0.174387	Y
4	IC 480-728322/16	50.0	8.677123	25.0	164781.0	0.173542	Y
5	IC 480-728322/17	100.0	17.460631	25.0	158372.0	0.174606	Y
6	ICIS 480-728322/18	250.0	42.731721	25.0	166979.0	0.170927	Y
7	IC 480-728322/19	500.0	89.425002	25.0	168305.0	0.17885	Y
8	IC 480-728322/46	1000.0	173.747654	25.0	168384.0	0.173748	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

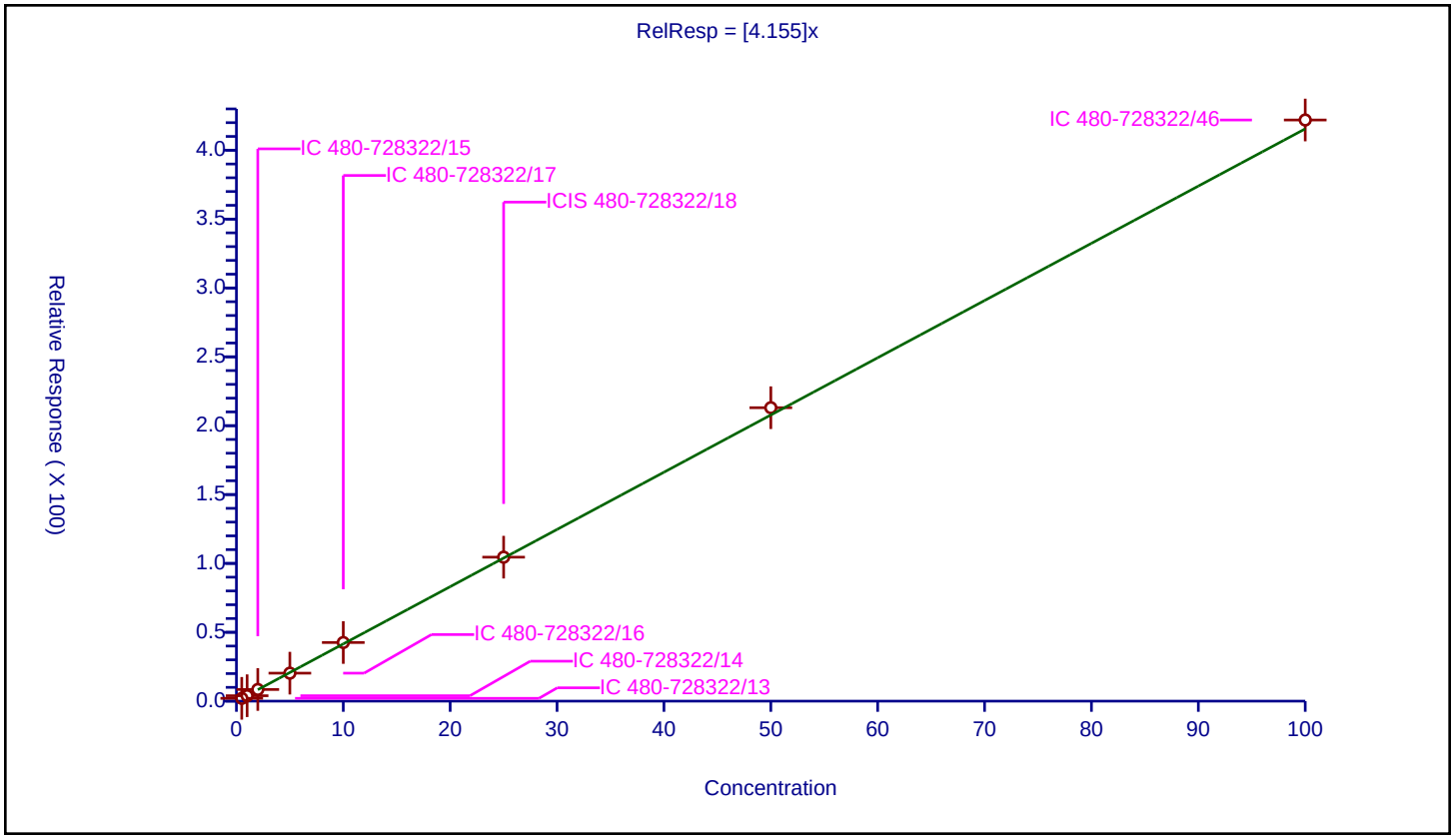
Curve Coefficients

Intercept:	0
Slope:	4.155

Error Coefficients

Relative Standard Deviation:	2.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	2.04917	25.0	151598.0	4.098339	Y
2	IC 480-728322/14	1.0	3.930335	25.0	161443.0	3.930335	Y
3	IC 480-728322/15	2.0	8.462318	25.0	155380.0	4.231159	Y
4	IC 480-728322/16	5.0	20.313022	25.0	164781.0	4.062604	Y
5	IC 480-728322/17	10.0	42.574445	25.0	158372.0	4.257444	Y
6	ICIS 480-728322/18	25.0	104.524521	25.0	166979.0	4.180981	Y
7	IC 480-728322/19	50.0	213.048929	25.0	168305.0	4.260979	Y
8	IC 480-728322/46	100.0	421.939881	25.0	168384.0	4.219399	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

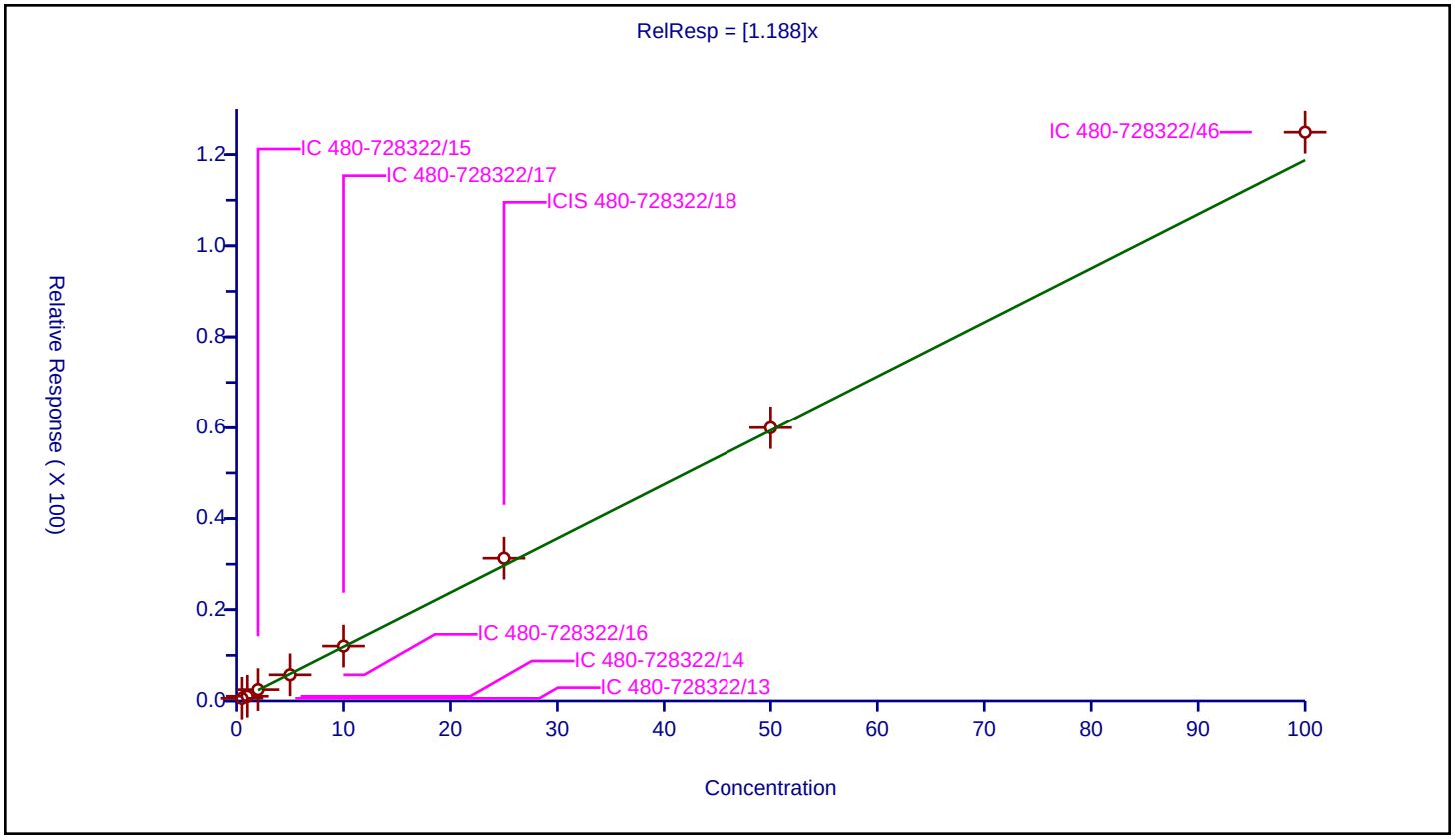
Curve Coefficients

Intercept:	0
Slope:	1.188

Error Coefficients

Relative Standard Deviation:	6.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.584935	25.0	151598.0	1.16987	Y
2	IC 480-728322/14	1.0	1.035195	25.0	161443.0	1.035195	Y
3	IC 480-728322/15	2.0	2.492277	25.0	155380.0	1.246138	Y
4	IC 480-728322/16	5.0	5.738526	25.0	164781.0	1.147705	Y
5	IC 480-728322/17	10.0	12.033377	25.0	158372.0	1.203338	Y
6	ICIS 480-728322/18	25.0	31.307679	25.0	166979.0	1.252307	Y
7	IC 480-728322/19	50.0	60.012626	25.0	168305.0	1.200253	Y
8	IC 480-728322/46	100.0	124.919529	25.0	168384.0	1.249195	Y



Calibration / Acrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

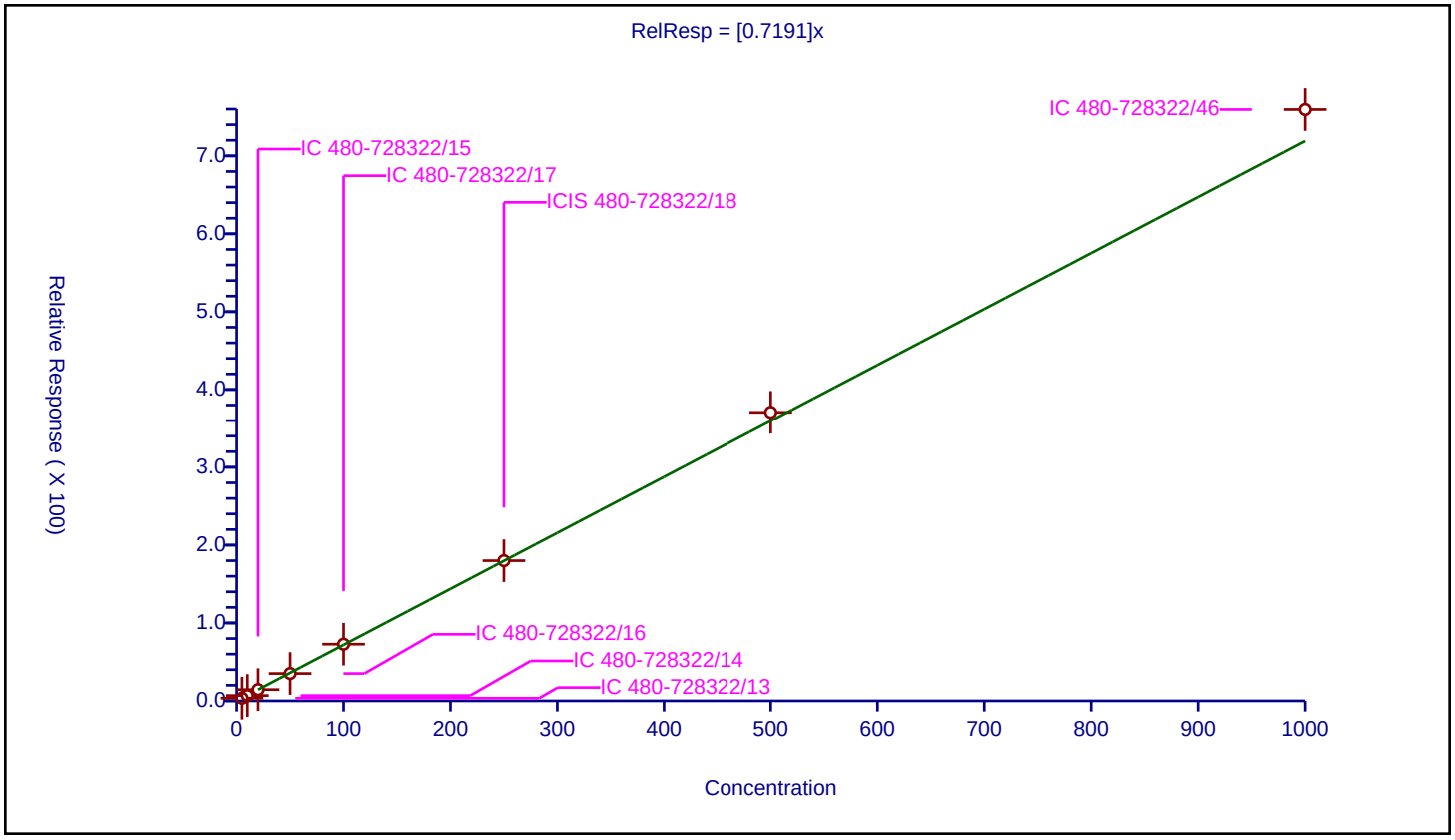
Curve Coefficients

Intercept:	0
Slope:	0.7191

Error Coefficients

Relative Standard Deviation:	3.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	5.0	3.479597	25.0	151598.0	0.695919	Y
2	IC 480-728322/14	10.0	6.845605	25.0	161443.0	0.68456	Y
3	IC 480-728322/15	20.0	14.45215	25.0	155380.0	0.722607	Y
4	IC 480-728322/16	50.0	35.072612	25.0	164781.0	0.701452	Y
5	IC 480-728322/17	100.0	72.743919	25.0	158372.0	0.727439	Y
6	ICIS 480-728322/18	250.0	180.008714	25.0	166979.0	0.720035	Y
7	IC 480-728322/19	500.0	370.634414	25.0	168305.0	0.741269	Y
8	IC 480-728322/46	1000.0	759.446711	25.0	168384.0	0.759447	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

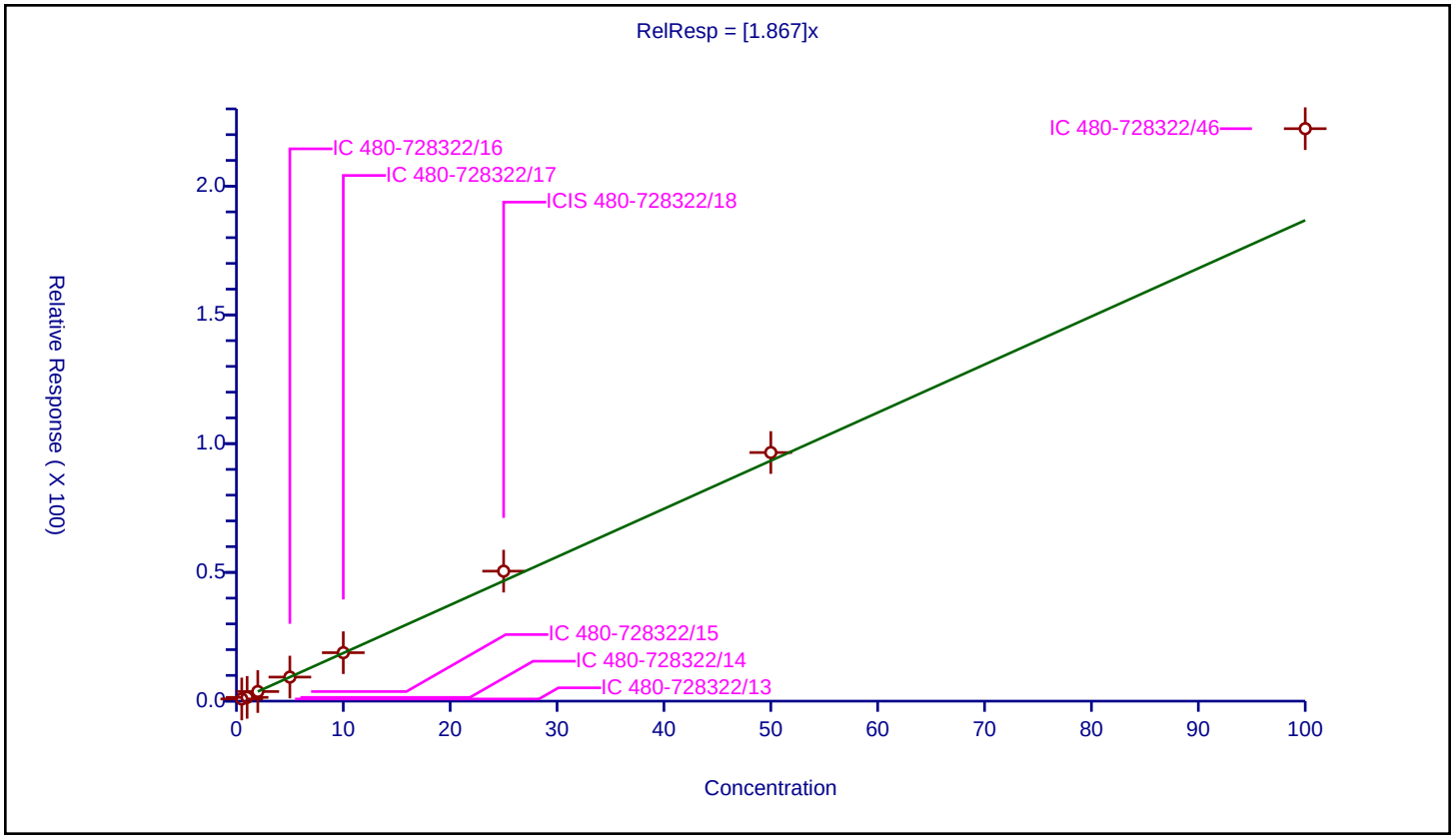
Curve Coefficients

Intercept:	0
Slope:	1.867

Error Coefficients

Relative Standard Deviation:	12.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.84104	25.0	151598.0	1.68208	Y
2	IC 480-728322/14	1.0	1.466617	25.0	161443.0	1.466617	Y
3	IC 480-728322/15	2.0	3.73375	25.0	155380.0	1.866875	Y
4	IC 480-728322/16	5.0	9.345889	25.0	164781.0	1.869178	Y
5	IC 480-728322/17	10.0	18.817878	25.0	158372.0	1.881788	Y
6	ICIS 480-728322/18	25.0	50.475808	25.0	166979.0	2.019032	Y
7	IC 480-728322/19	50.0	96.546151	25.0	168305.0	1.930923	Y
8	IC 480-728322/46	100.0	222.318926	25.0	168384.0	2.223189	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

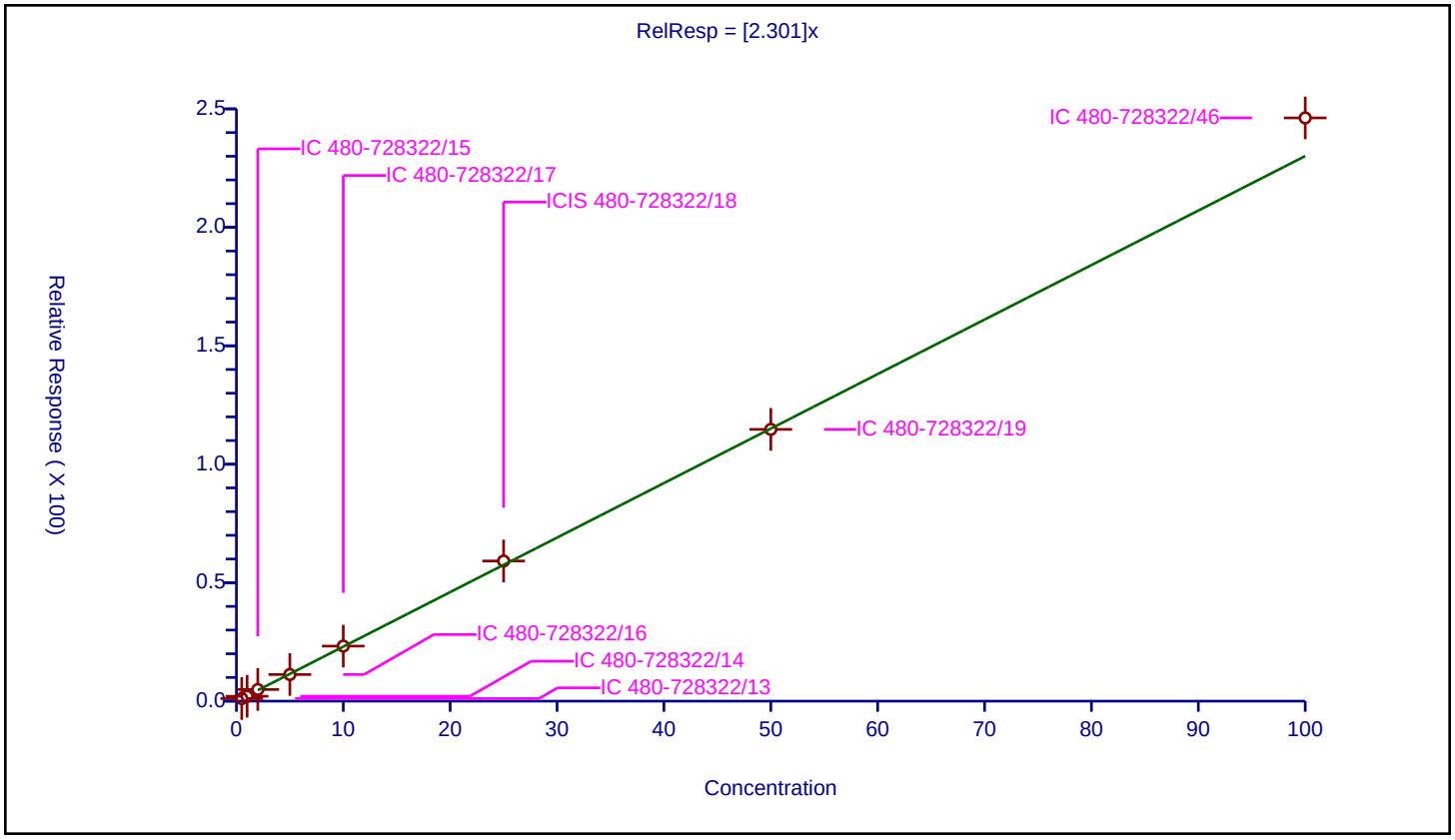
Curve Coefficients

Intercept:	0
Slope:	2.301

Error Coefficients

Relative Standard Deviation:	5.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	1.091208	25.0	151598.0	2.182417	Y
2	IC 480-728322/14	1.0	2.073952	25.0	161443.0	2.073952	Y
3	IC 480-728322/15	2.0	4.912151	25.0	155380.0	2.456075	Y
4	IC 480-728322/16	5.0	11.242649	25.0	164781.0	2.24853	Y
5	IC 480-728322/17	10.0	23.232011	25.0	158372.0	2.323201	Y
6	ICIS 480-728322/18	25.0	59.162529	25.0	166979.0	2.366501	Y
7	IC 480-728322/19	50.0	114.71109	25.0	168305.0	2.294222	Y
8	IC 480-728322/46	100.0	246.183723	25.0	168384.0	2.461837	Y



Calibration / Vinyl acetate

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

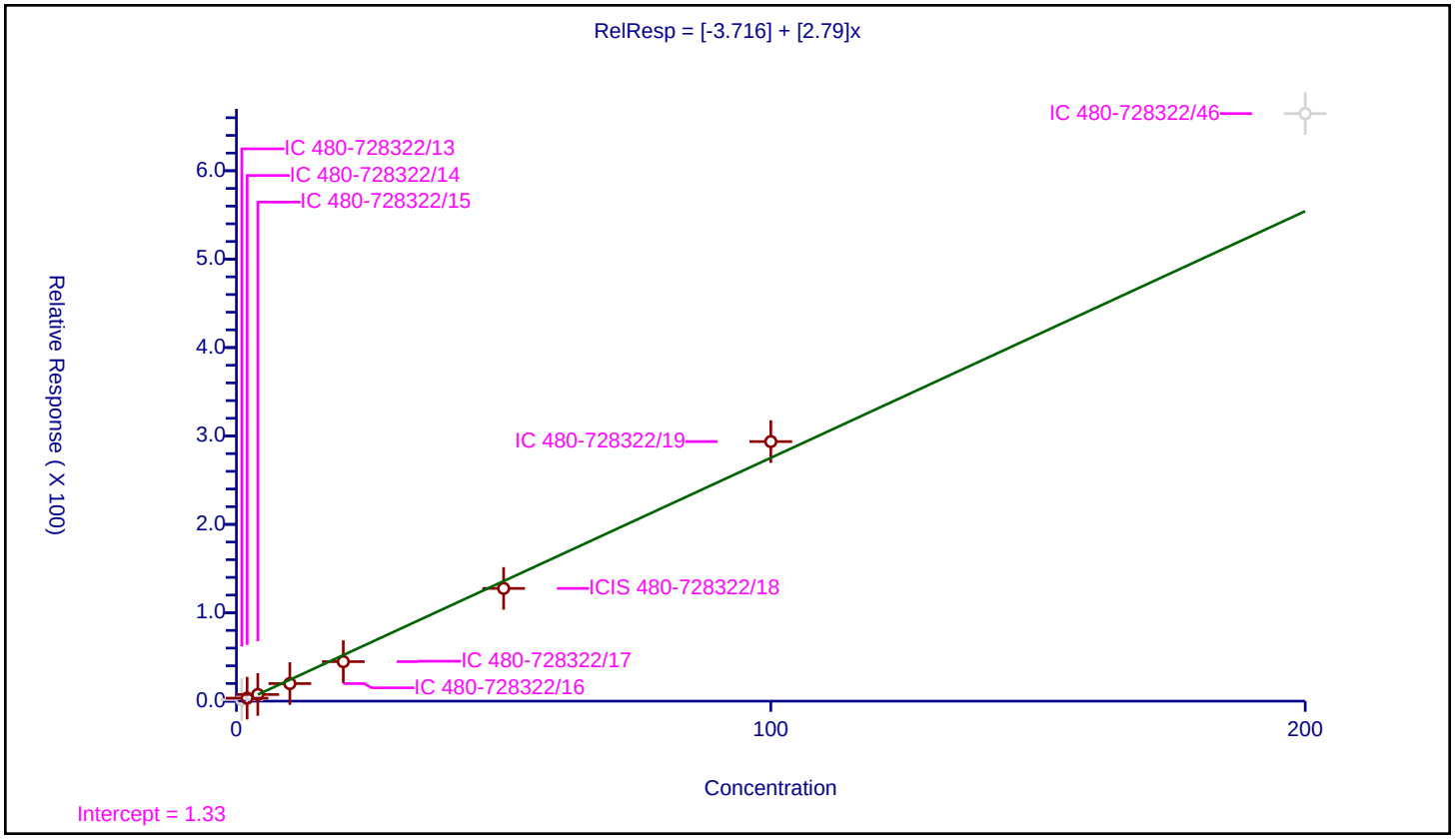
Curve Coefficients

Intercept:	-3.716
Slope:	2.79

Error Coefficients

Relative Standard Deviation:	17.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	1.0	1.677793	25.0	151598.0	1.677793	N
2	IC 480-728322/14	2.0	3.386489	25.0	161443.0	1.693245	Y
3	IC 480-728322/15	4.0	7.524778	25.0	155380.0	1.881194	Y
4	IC 480-728322/16	10.0	19.884119	25.0	164781.0	1.988412	Y
5	IC 480-728322/17	20.0	44.684666	25.0	158372.0	2.234233	Y
6	ICIS 480-728322/18	50.0	127.519928	25.0	166979.0	2.550399	Y
7	IC 480-728322/19	100.0	293.63477	25.0	168305.0	2.936348	Y
8	IC 480-728322/46	200.0	664.682214	25.0	168384.0	3.323411	N



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

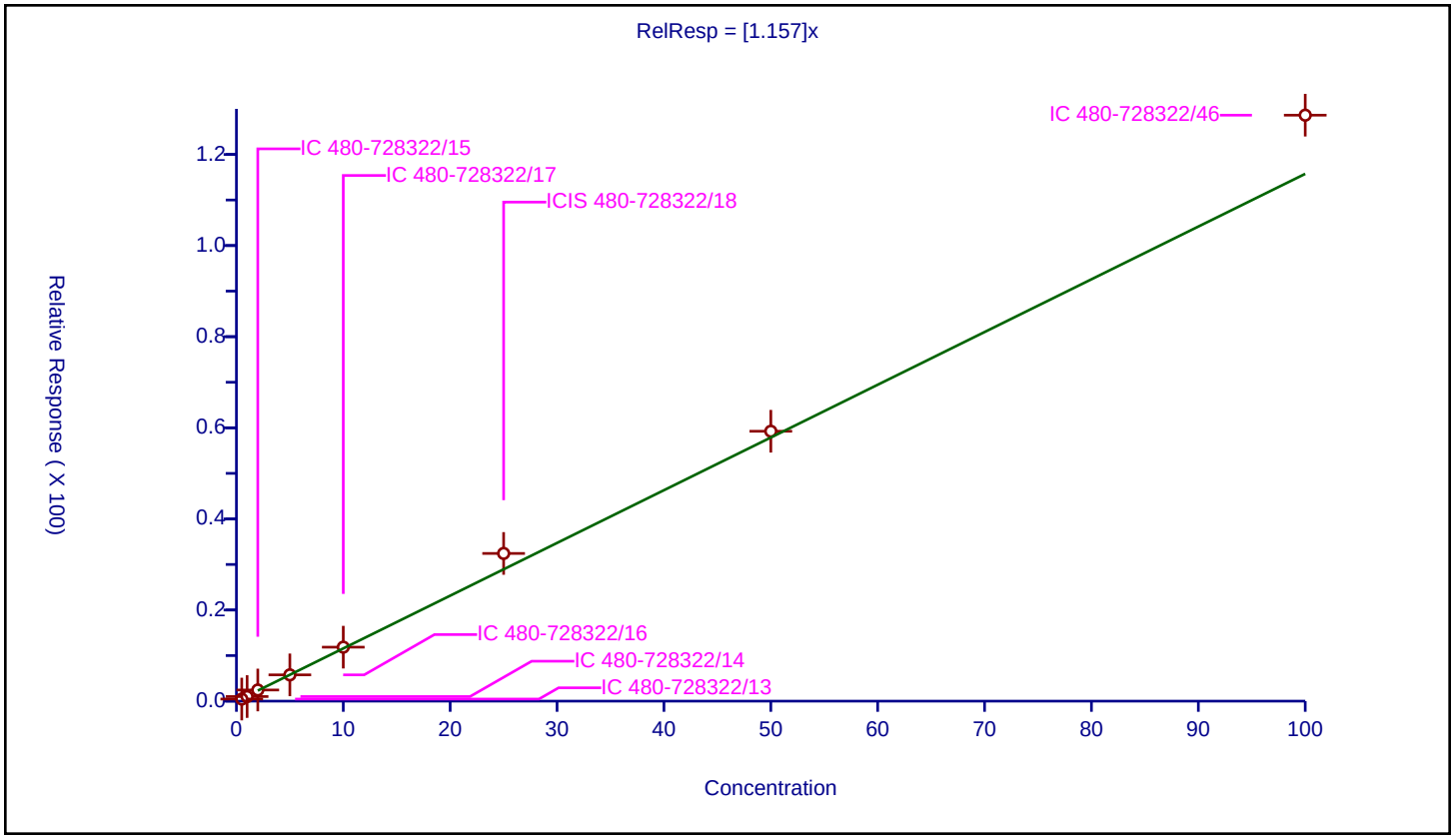
Curve Coefficients

Intercept:	0
Slope:	1.157

Error Coefficients

Relative Standard Deviation:	11.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.459769	25.0	151598.0	0.919537	Y
2	IC 480-728322/14	1.0	1.009954	25.0	161443.0	1.009954	Y
3	IC 480-728322/15	2.0	2.448513	25.0	155380.0	1.224257	Y
4	IC 480-728322/16	5.0	5.766442	25.0	164781.0	1.153288	Y
5	IC 480-728322/17	10.0	11.845528	25.0	158372.0	1.184553	Y
6	ICIS 480-728322/18	25.0	32.420244	25.0	166979.0	1.29681	Y
7	IC 480-728322/19	50.0	59.24007	25.0	168305.0	1.184801	Y
8	IC 480-728322/46	100.0	128.621039	25.0	168384.0	1.28621	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

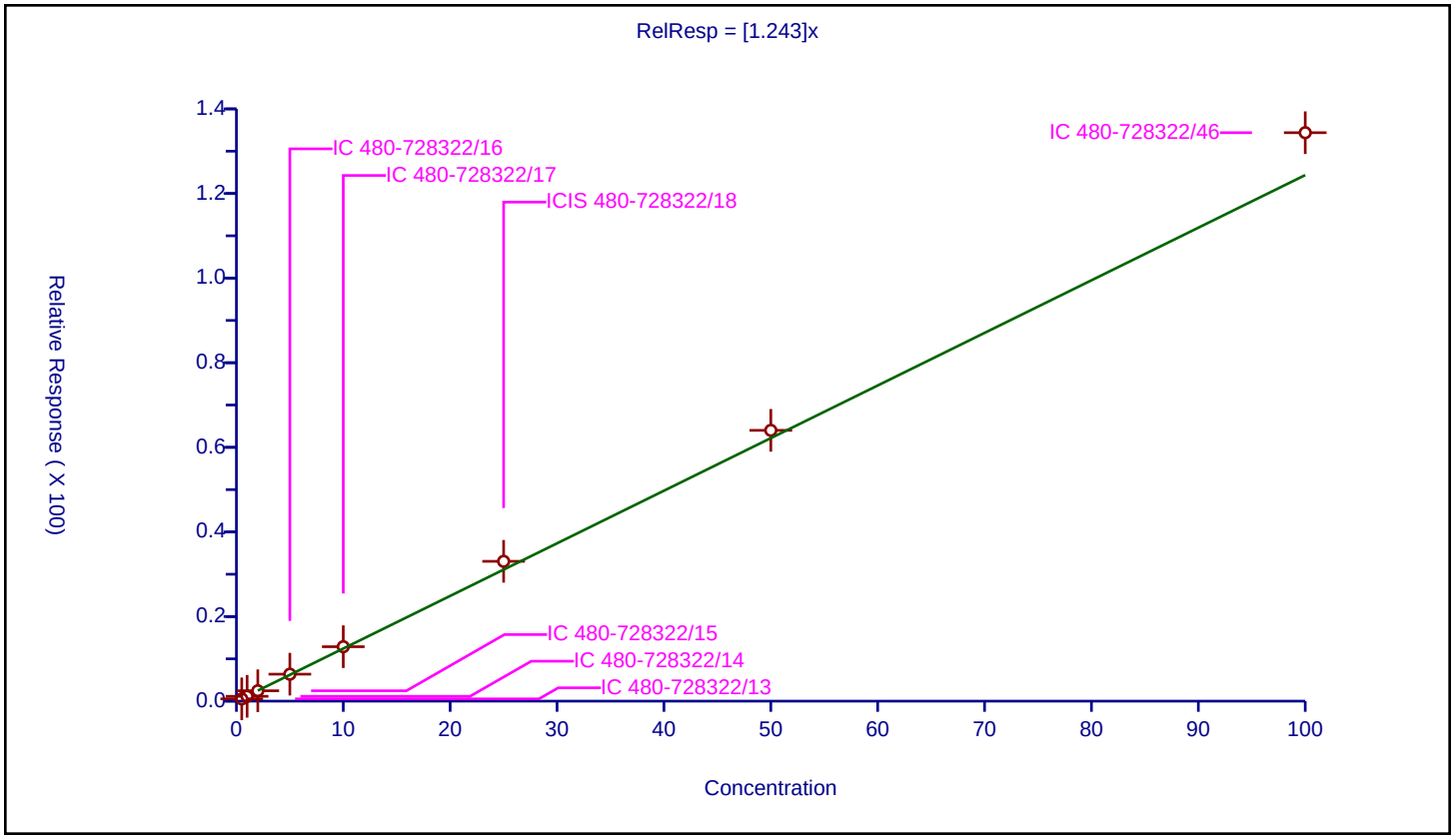
Curve Coefficients

Intercept:	0
Slope:	1.243

Error Coefficients

Relative Standard Deviation:	7.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.537276	25.0	151598.0	1.074552	Y
2	IC 480-728322/14	1.0	1.140186	25.0	161443.0	1.140186	Y
3	IC 480-728322/15	2.0	2.451088	25.0	155380.0	1.225544	Y
4	IC 480-728322/16	5.0	6.375128	25.0	164781.0	1.275026	Y
5	IC 480-728322/17	10.0	12.864016	25.0	158372.0	1.286402	Y
6	ICIS 480-728322/18	25.0	33.048617	25.0	166979.0	1.321945	Y
7	IC 480-728322/19	50.0	64.011764	25.0	168305.0	1.280235	Y
8	IC 480-728322/46	100.0	134.374406	25.0	168384.0	1.343744	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

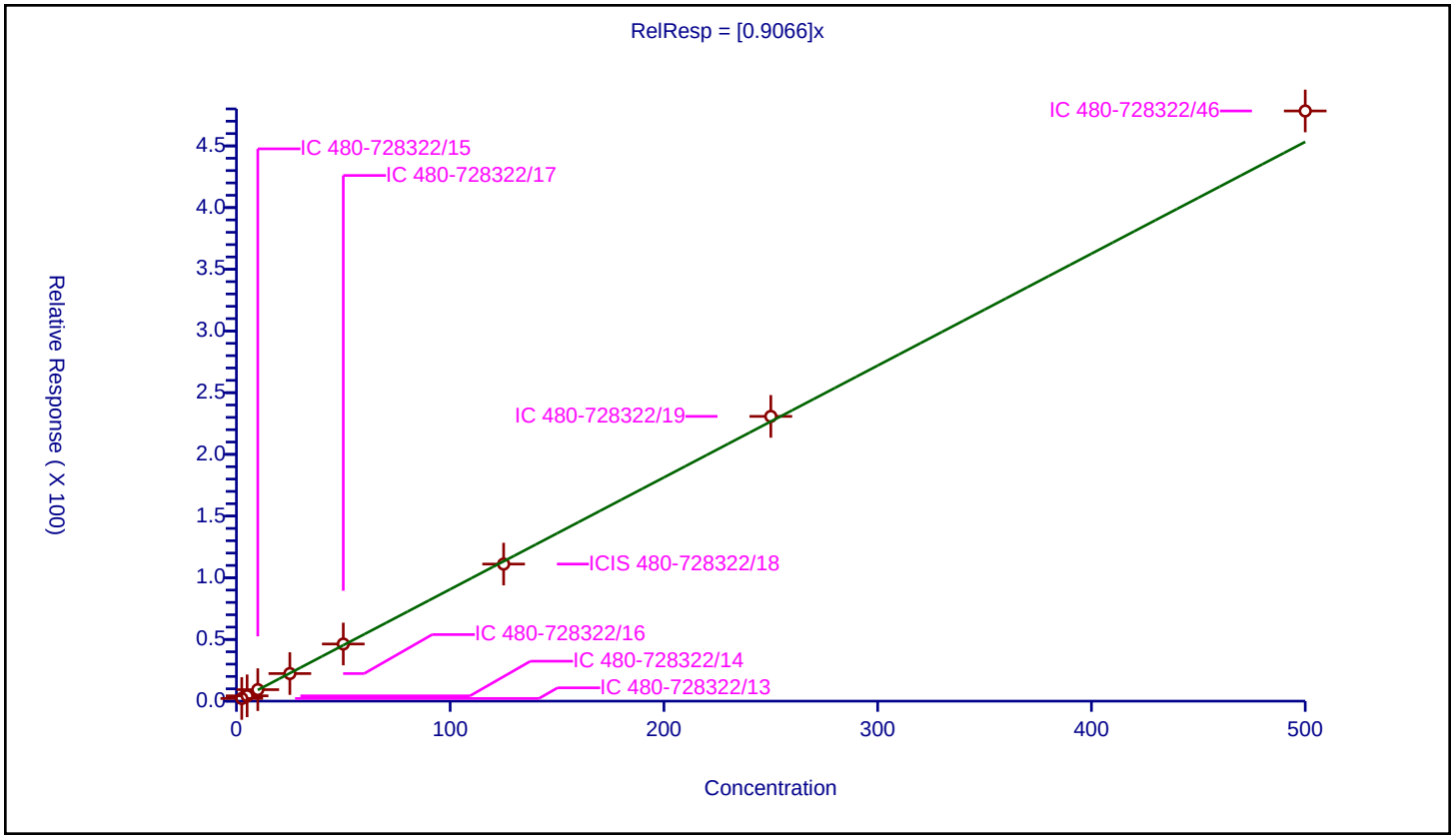
Curve Coefficients

Intercept:	0
Slope:	0.9066

Error Coefficients

Relative Standard Deviation:	3.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	2.5	2.174006	25.0	151598.0	0.869603	Y
2	IC 480-728322/14	5.0	4.3105	25.0	161443.0	0.8621	Y
3	IC 480-728322/15	10.0	9.318767	25.0	155380.0	0.931877	Y
4	IC 480-728322/16	25.0	22.353609	25.0	164781.0	0.894144	Y
5	IC 480-728322/17	50.0	46.312795	25.0	158372.0	0.926256	Y
6	ICIS 480-728322/18	125.0	111.101995	25.0	166979.0	0.888816	Y
7	IC 480-728322/19	250.0	230.778794	25.0	168305.0	0.923115	Y
8	IC 480-728322/46	500.0	478.319941	25.0	168384.0	0.95664	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

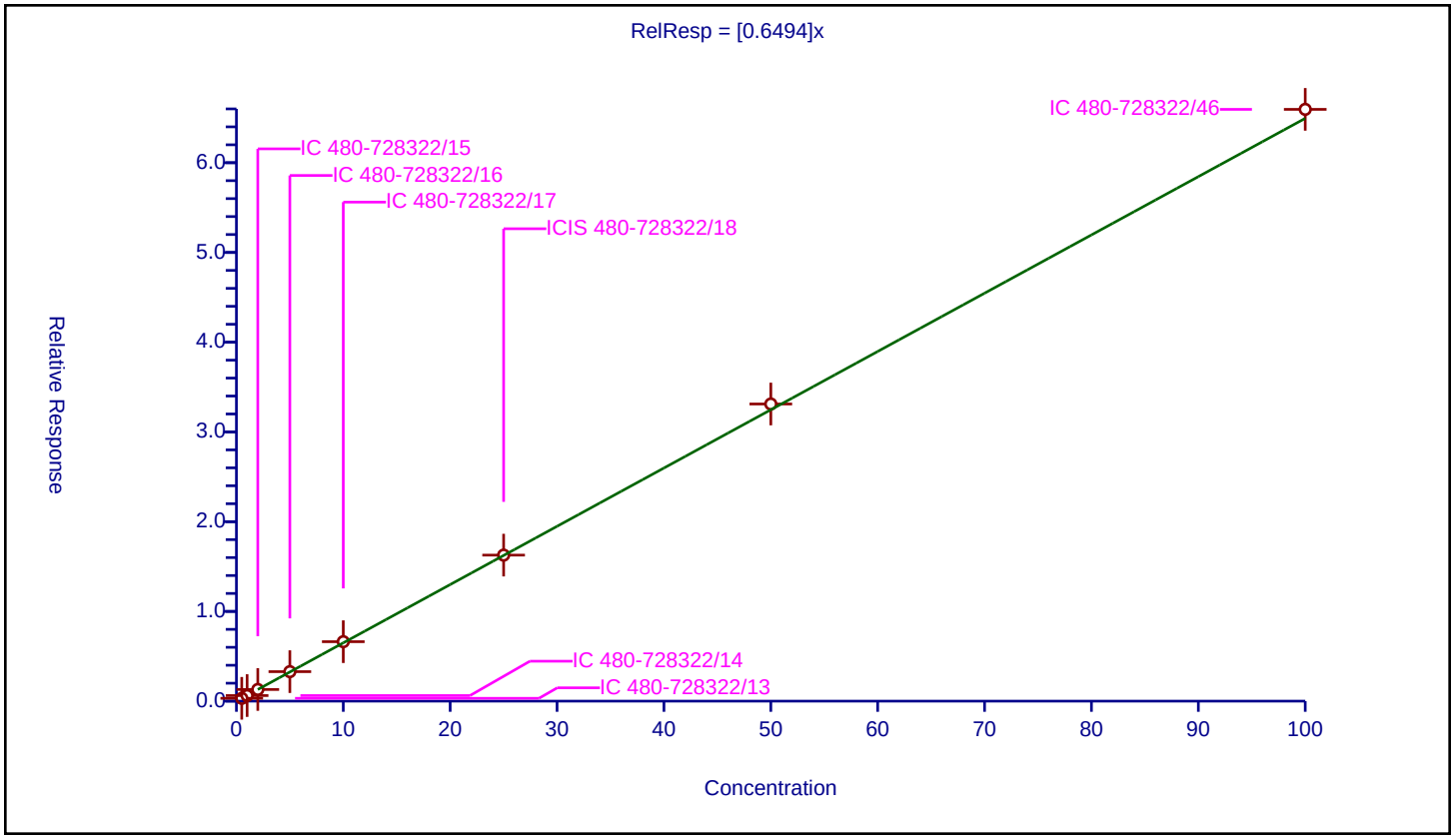
Curve Coefficients

Intercept:	0
Slope:	0.6494

Error Coefficients

Relative Standard Deviation:	2.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.314978	25.0	151598.0	0.629956	Y
2	IC 480-728322/14	1.0	0.62313	25.0	161443.0	0.62313	Y
3	IC 480-728322/15	2.0	1.299234	25.0	155380.0	0.649617	Y
4	IC 480-728322/16	5.0	3.288	25.0	164781.0	0.6576	Y
5	IC 480-728322/17	10.0	6.626329	25.0	158372.0	0.662633	Y
6	ICIS 480-728322/18	25.0	16.272256	25.0	166979.0	0.65089	Y
7	IC 480-728322/19	50.0	33.112058	25.0	168305.0	0.662241	Y
8	IC 480-728322/46	100.0	65.946438	25.0	168384.0	0.659464	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

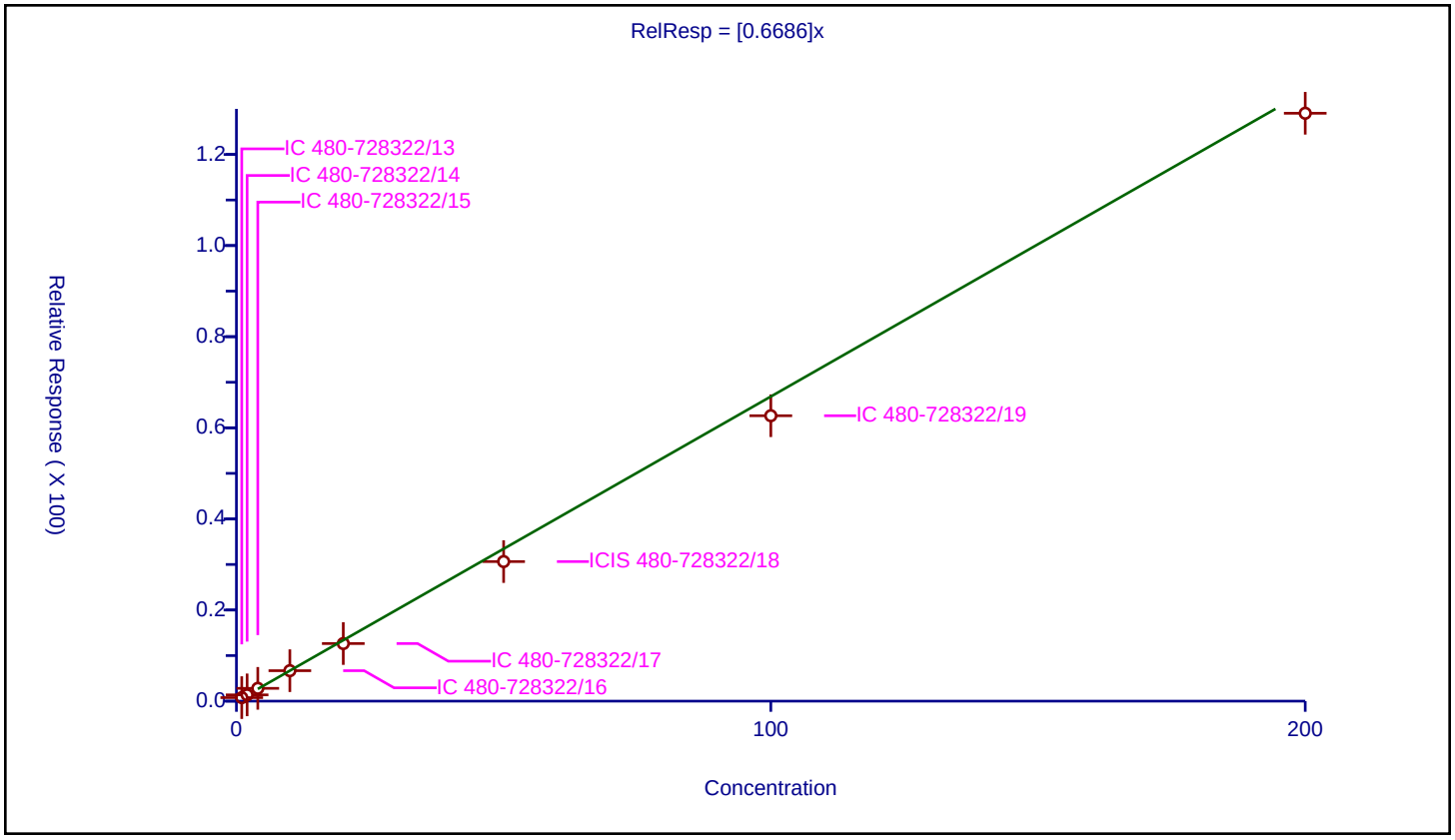
Curve Coefficients

Intercept:	0
Slope:	0.6686

Error Coefficients

Relative Standard Deviation:	7.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	1.0	0.773427	25.0	151598.0	0.773427	Y
2	IC 480-728322/14	2.0	1.377266	25.0	161443.0	0.688633	Y
3	IC 480-728322/15	4.0	2.807472	25.0	155380.0	0.701868	Y
4	IC 480-728322/16	10.0	6.684478	25.0	164781.0	0.668448	Y
5	IC 480-728322/17	20.0	12.642228	25.0	158372.0	0.632111	Y
6	ICIS 480-728322/18	50.0	30.636637	25.0	166979.0	0.612733	Y
7	IC 480-728322/19	100.0	62.648614	25.0	168305.0	0.626486	Y
8	IC 480-728322/46	200.0	129.038982	25.0	168384.0	0.645195	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

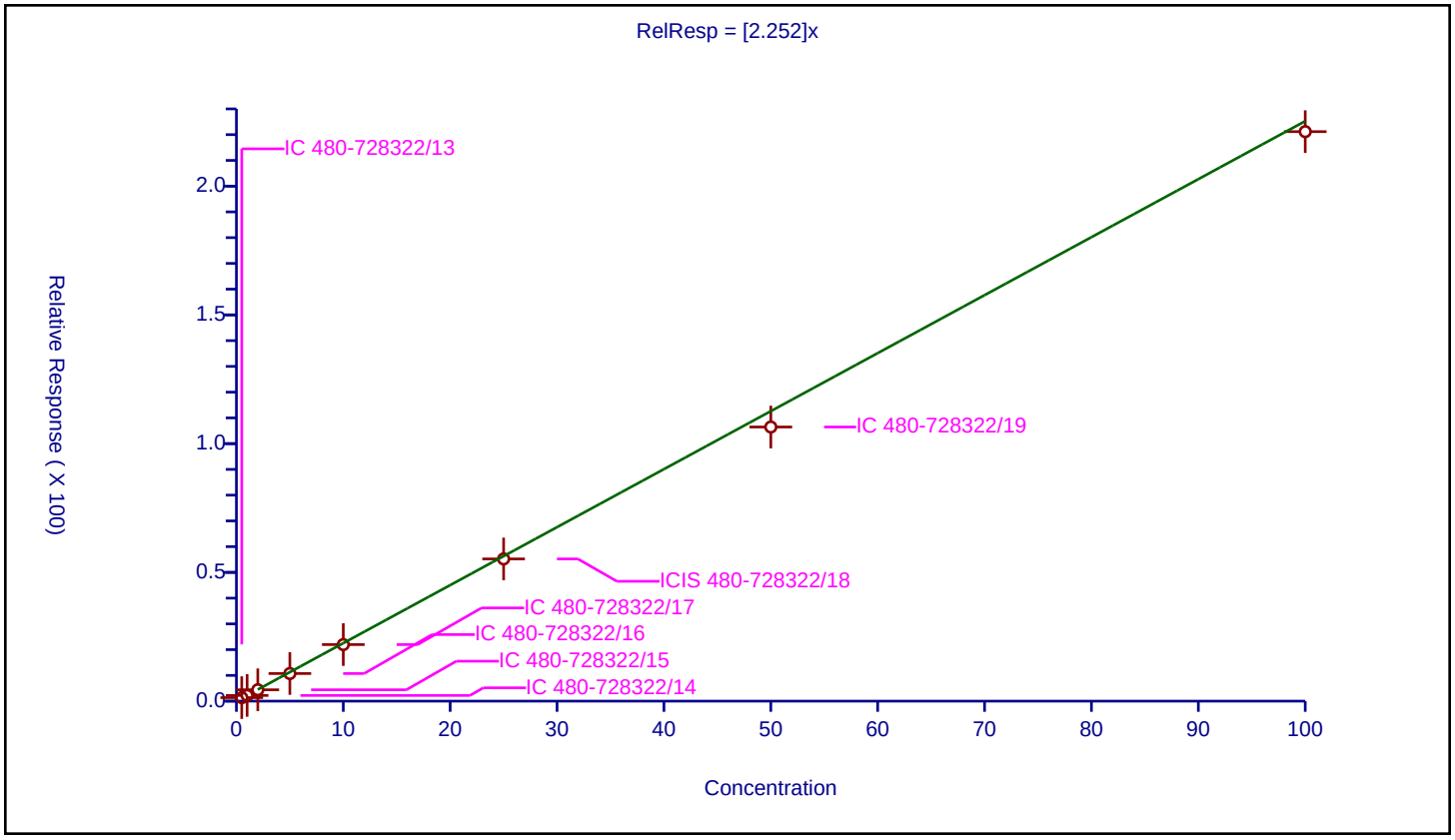
Curve Coefficients

Intercept:	0
Slope:	2.252

Error Coefficients

Relative Standard Deviation:	8.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	1.356548	25.0	151598.0	2.713096	Y
2	IC 480-728322/14	1.0	2.211616	25.0	161443.0	2.211616	Y
3	IC 480-728322/15	2.0	4.406777	25.0	155380.0	2.203388	Y
4	IC 480-728322/16	5.0	10.724689	25.0	164781.0	2.144938	Y
5	IC 480-728322/17	10.0	21.960163	25.0	158372.0	2.196016	Y
6	ICIS 480-728322/18	25.0	55.232245	25.0	166979.0	2.20929	Y
7	IC 480-728322/19	50.0	106.454948	25.0	168305.0	2.129099	Y
8	IC 480-728322/46	100.0	221.163531	25.0	168384.0	2.211635	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

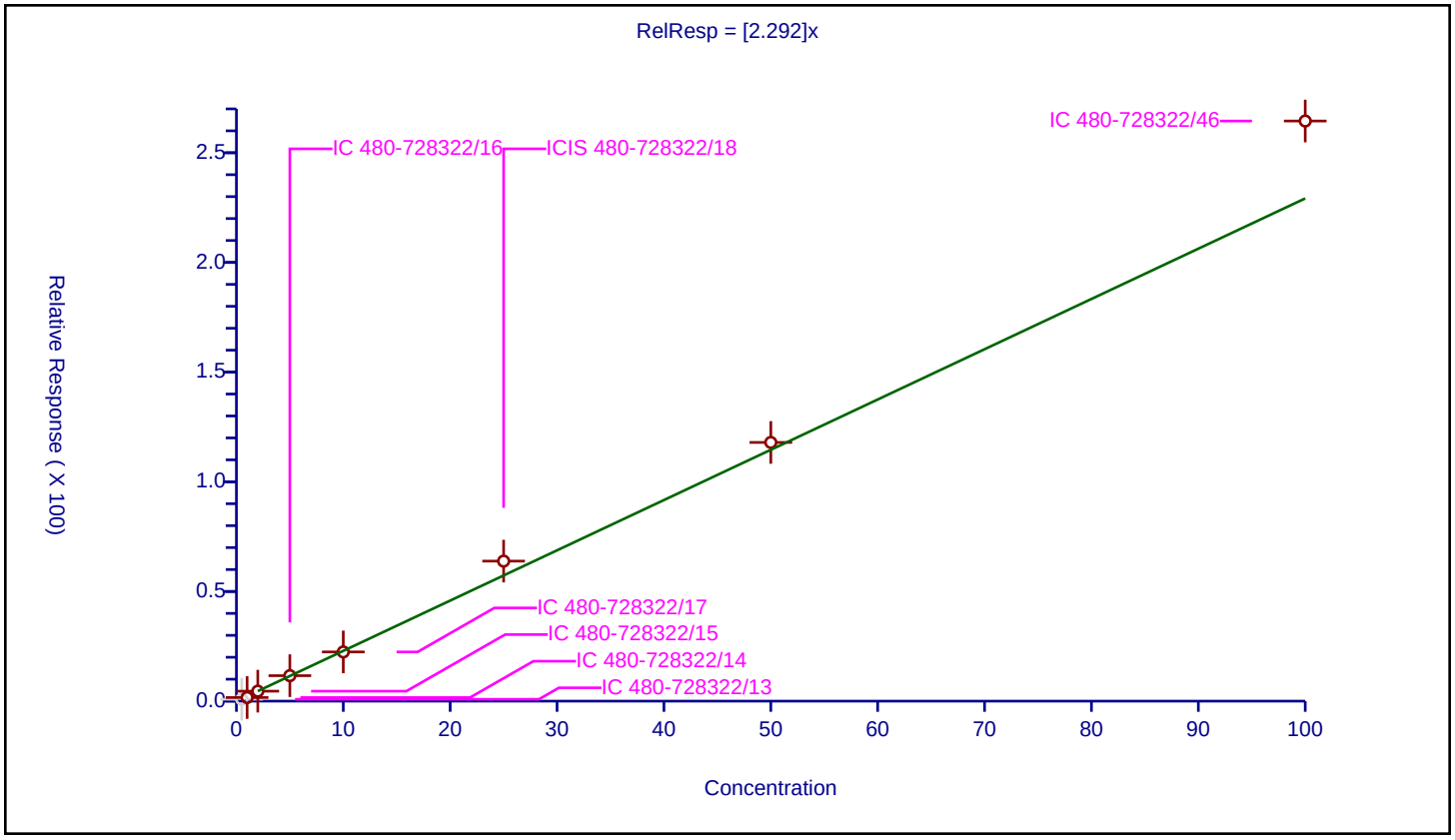
Curve Coefficients

Intercept:	0
Slope:	2.292

Error Coefficients

Relative Standard Deviation:	14.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.873033	25.0	151598.0	1.746065	N
2	IC 480-728322/14	1.0	1.647176	25.0	161443.0	1.647176	Y
3	IC 480-728322/15	2.0	4.546113	25.0	155380.0	2.273056	Y
4	IC 480-728322/16	5.0	11.611624	25.0	164781.0	2.322325	Y
5	IC 480-728322/17	10.0	22.426944	25.0	158372.0	2.242694	Y
6	ICIS 480-728322/18	25.0	63.840962	25.0	166979.0	2.553638	Y
7	IC 480-728322/19	50.0	117.94302	25.0	168305.0	2.35886	Y
8	IC 480-728322/46	100.0	264.472426	25.0	168384.0	2.644724	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

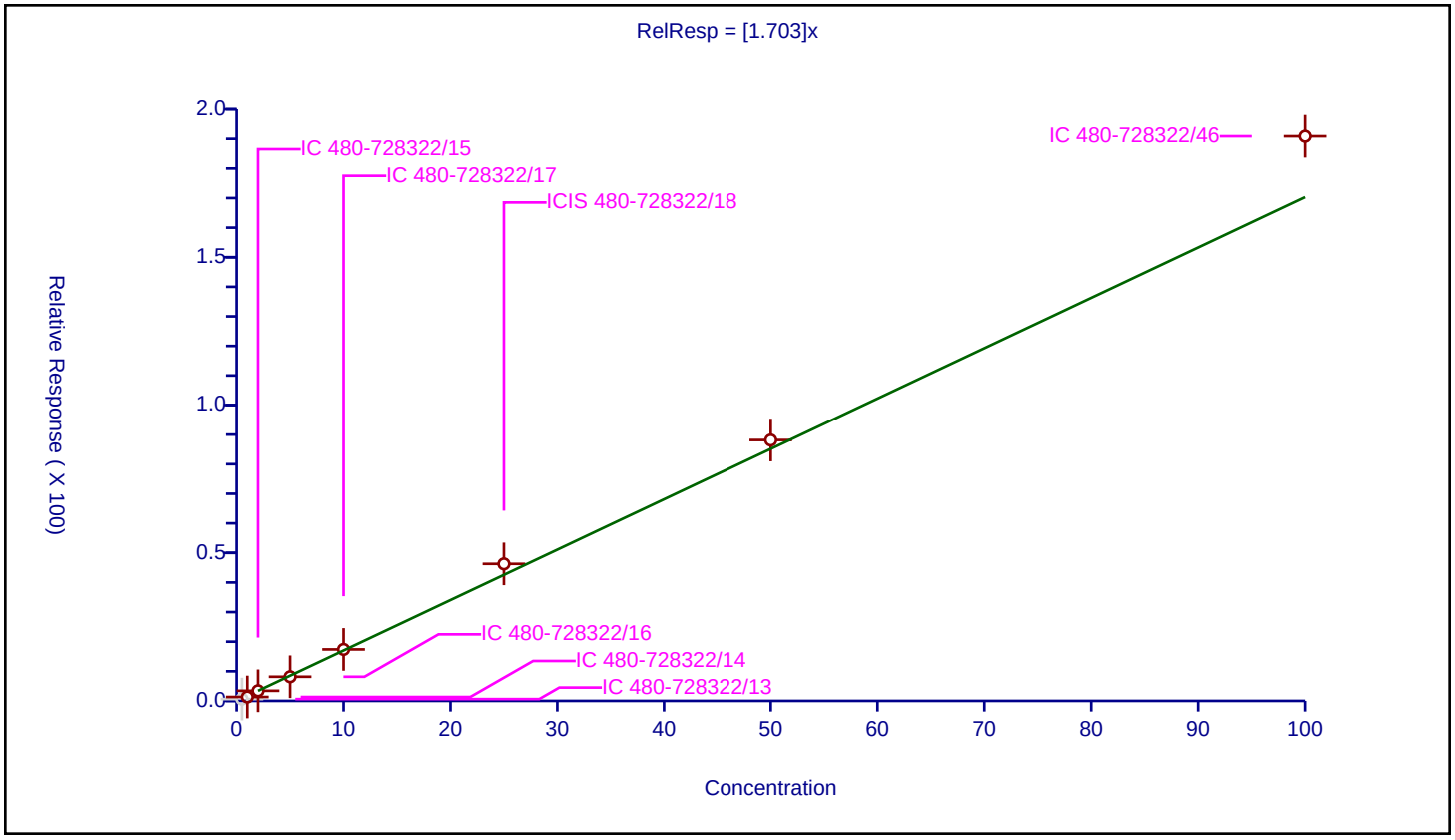
Curve Coefficients

Intercept:	0
Slope:	1.703

Error Coefficients

Relative Standard Deviation:	11.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.615938	25.0	151598.0	1.231876	N
2	IC 480-728322/14	1.0	1.324152	25.0	161443.0	1.324152	Y
3	IC 480-728322/15	2.0	3.41051	25.0	155380.0	1.705255	Y
4	IC 480-728322/16	5.0	8.154308	25.0	164781.0	1.630862	Y
5	IC 480-728322/17	10.0	17.386438	25.0	158372.0	1.738644	Y
6	ICIS 480-728322/18	25.0	46.284712	25.0	166979.0	1.851388	Y
7	IC 480-728322/19	50.0	88.156323	25.0	168305.0	1.763126	Y
8	IC 480-728322/46	100.0	190.891355	25.0	168384.0	1.908914	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

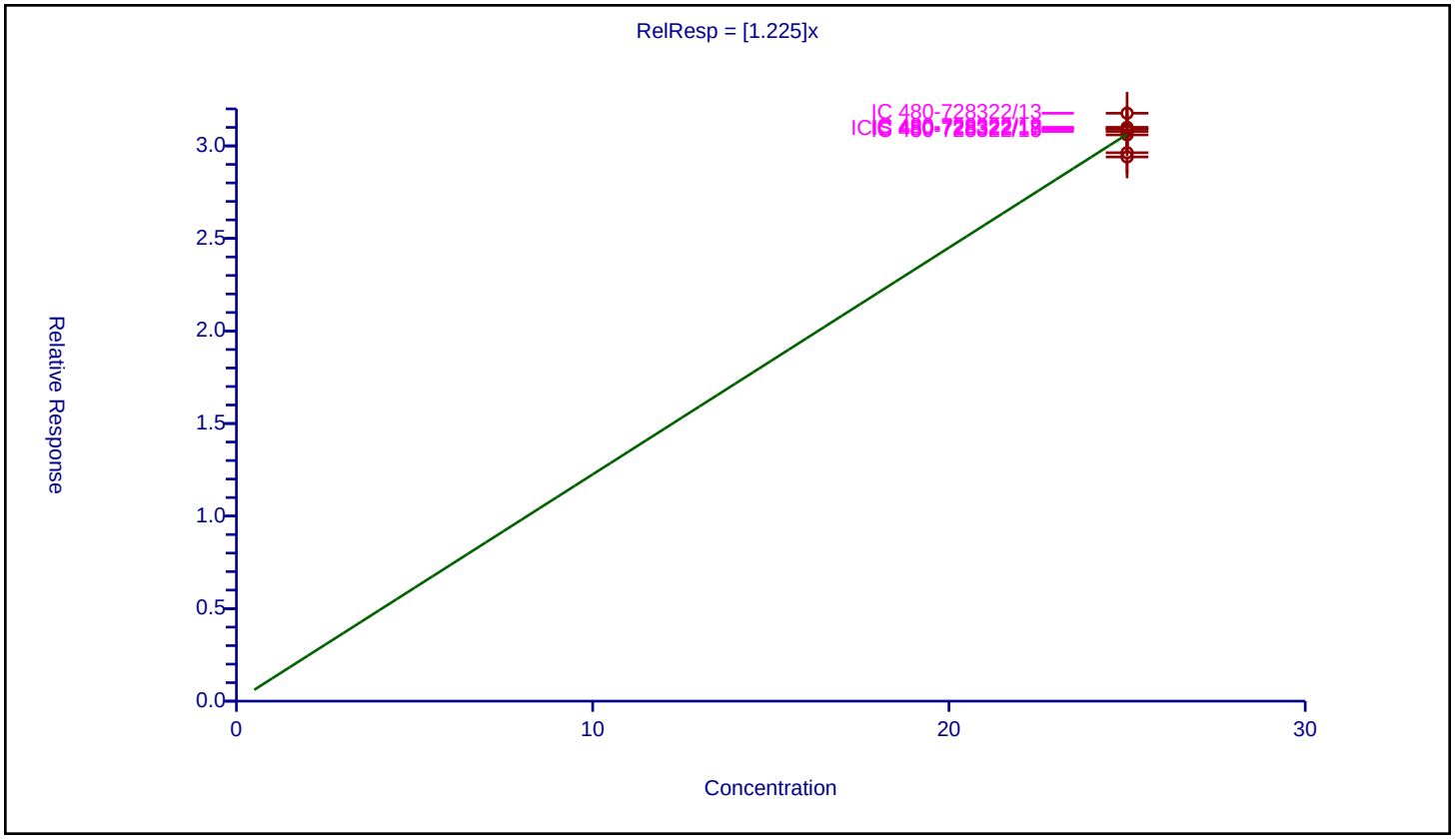
Curve Coefficients

Intercept:	0
Slope:	1.225

Error Coefficients

Relative Standard Deviation:	2.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	25.0	31.764436	25.0	151598.0	1.270577	Y
2	IC 480-728322/14	25.0	29.631356	25.0	161443.0	1.185254	Y
3	IC 480-728322/15	25.0	30.780989	25.0	155380.0	1.23124	Y
4	IC 480-728322/16	25.0	29.402055	25.0	164781.0	1.176082	Y
5	IC 480-728322/17	25.0	30.909188	25.0	158372.0	1.236368	Y
6	ICIS 480-728322/18	25.0	30.931285	25.0	166979.0	1.237251	Y
7	IC 480-728322/19	25.0	31.004129	25.0	168305.0	1.240165	Y
8	IC 480-728322/46	25.0	30.595989	25.0	168384.0	1.22384	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

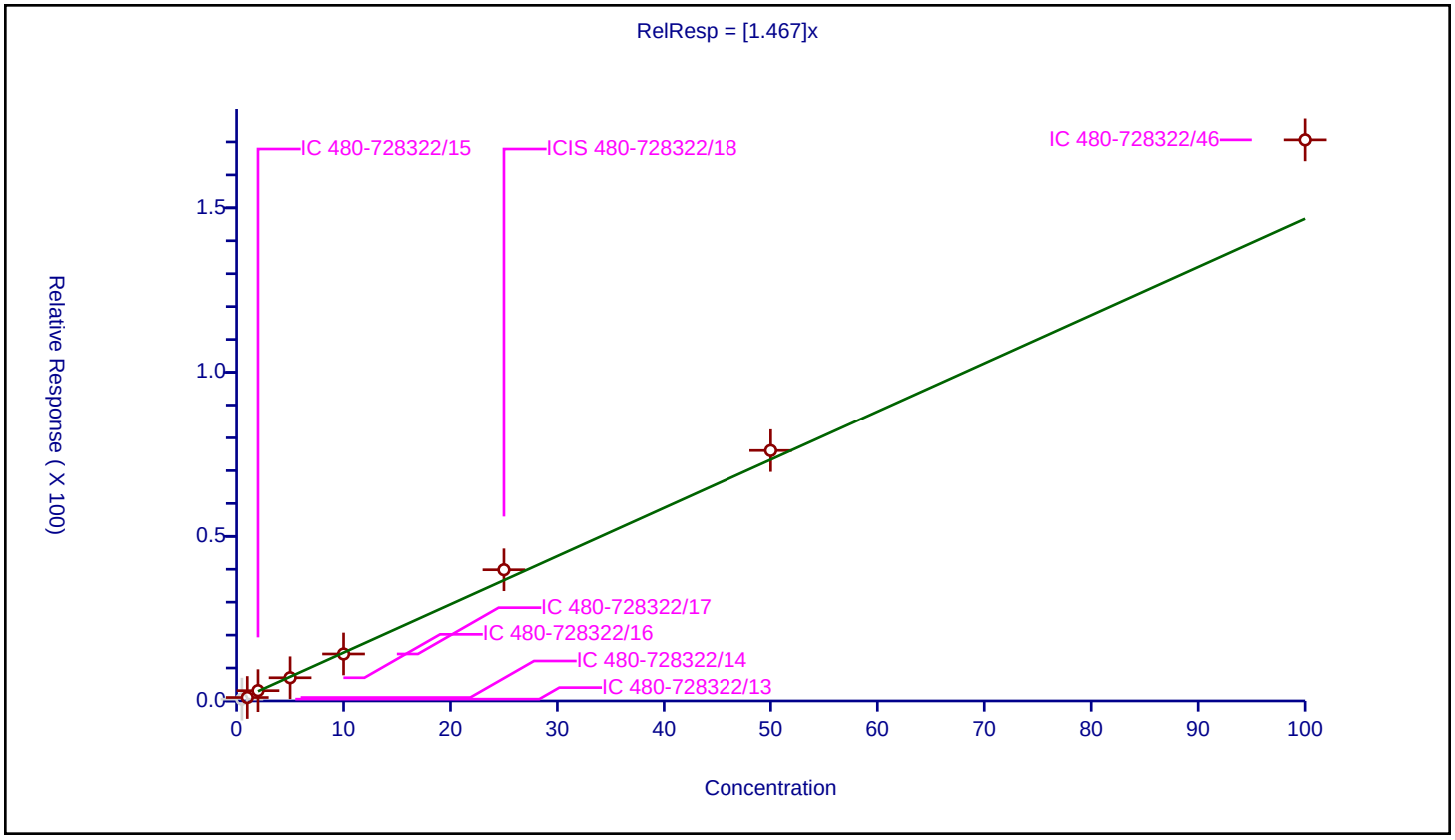
Curve Coefficients

Intercept:	0
Slope:	1.467

Error Coefficients

Relative Standard Deviation:	14.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.555581	25.0	151598.0	1.111162	N
2	IC 480-728322/14	1.0	1.046964	25.0	161443.0	1.046964	Y
3	IC 480-728322/15	2.0	3.126046	25.0	155380.0	1.563023	Y
4	IC 480-728322/16	5.0	7.050418	25.0	164781.0	1.410084	Y
5	IC 480-728322/17	10.0	14.265779	25.0	158372.0	1.426578	Y
6	ICIS 480-728322/18	25.0	39.851418	25.0	166979.0	1.594057	Y
7	IC 480-728322/19	50.0	76.117465	25.0	168305.0	1.522349	Y
8	IC 480-728322/46	100.0	170.637204	25.0	168384.0	1.706372	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

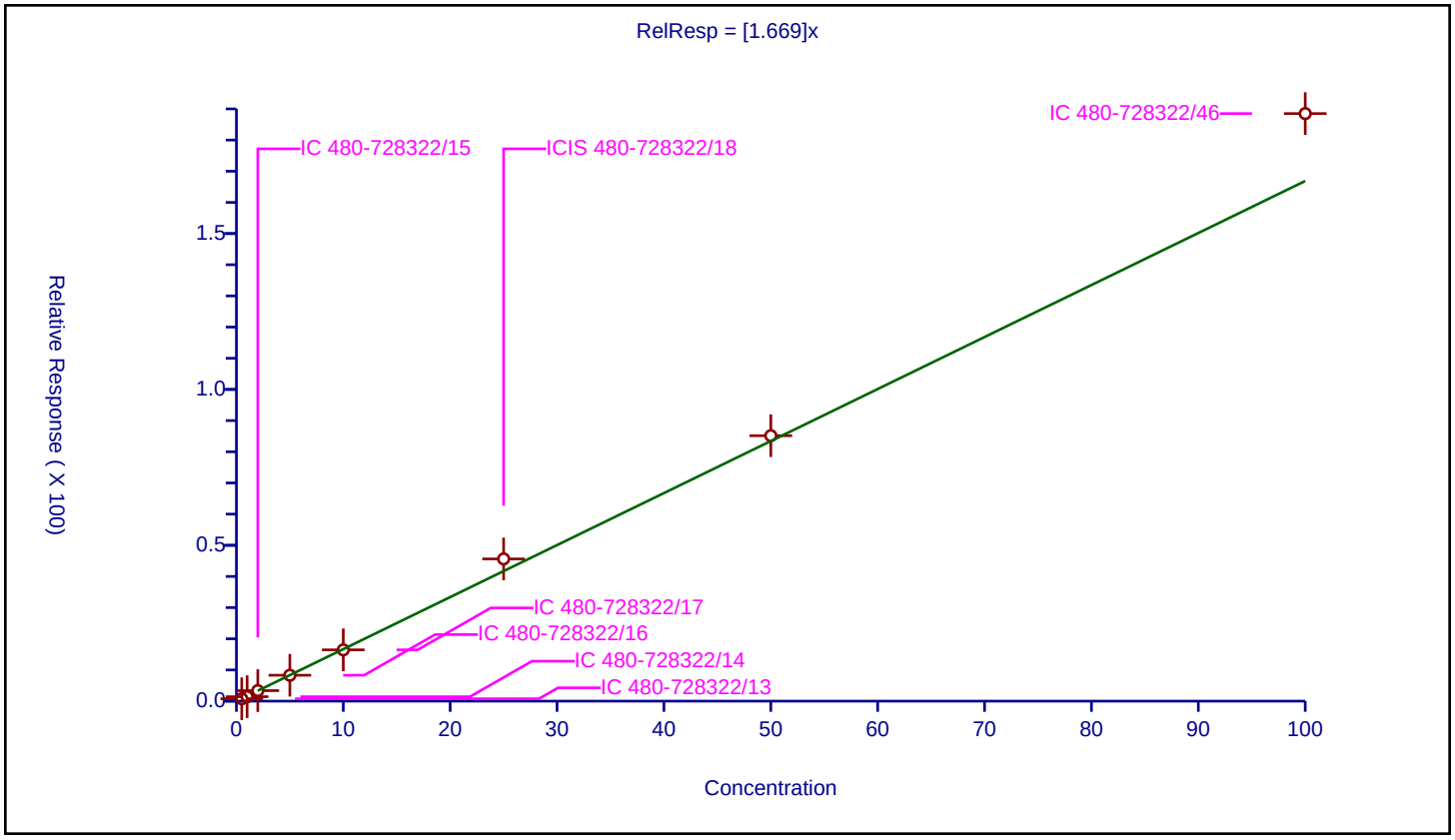
Curve Coefficients

Intercept:	0
Slope:	1.669

Error Coefficients

Relative Standard Deviation:	8.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.761718	25.0	151598.0	1.523437	Y
2	IC 480-728322/14	1.0	1.423103	25.0	161443.0	1.423103	Y
3	IC 480-728322/15	2.0	3.36739	25.0	155380.0	1.683695	Y
4	IC 480-728322/16	5.0	8.305569	25.0	164781.0	1.661114	Y
5	IC 480-728322/17	10.0	16.449404	25.0	158372.0	1.64494	Y
6	ICIS 480-728322/18	25.0	45.626246	25.0	166979.0	1.82505	Y
7	IC 480-728322/19	50.0	85.155521	25.0	168305.0	1.70311	Y
8	IC 480-728322/46	100.0	188.49668	25.0	168384.0	1.884967	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

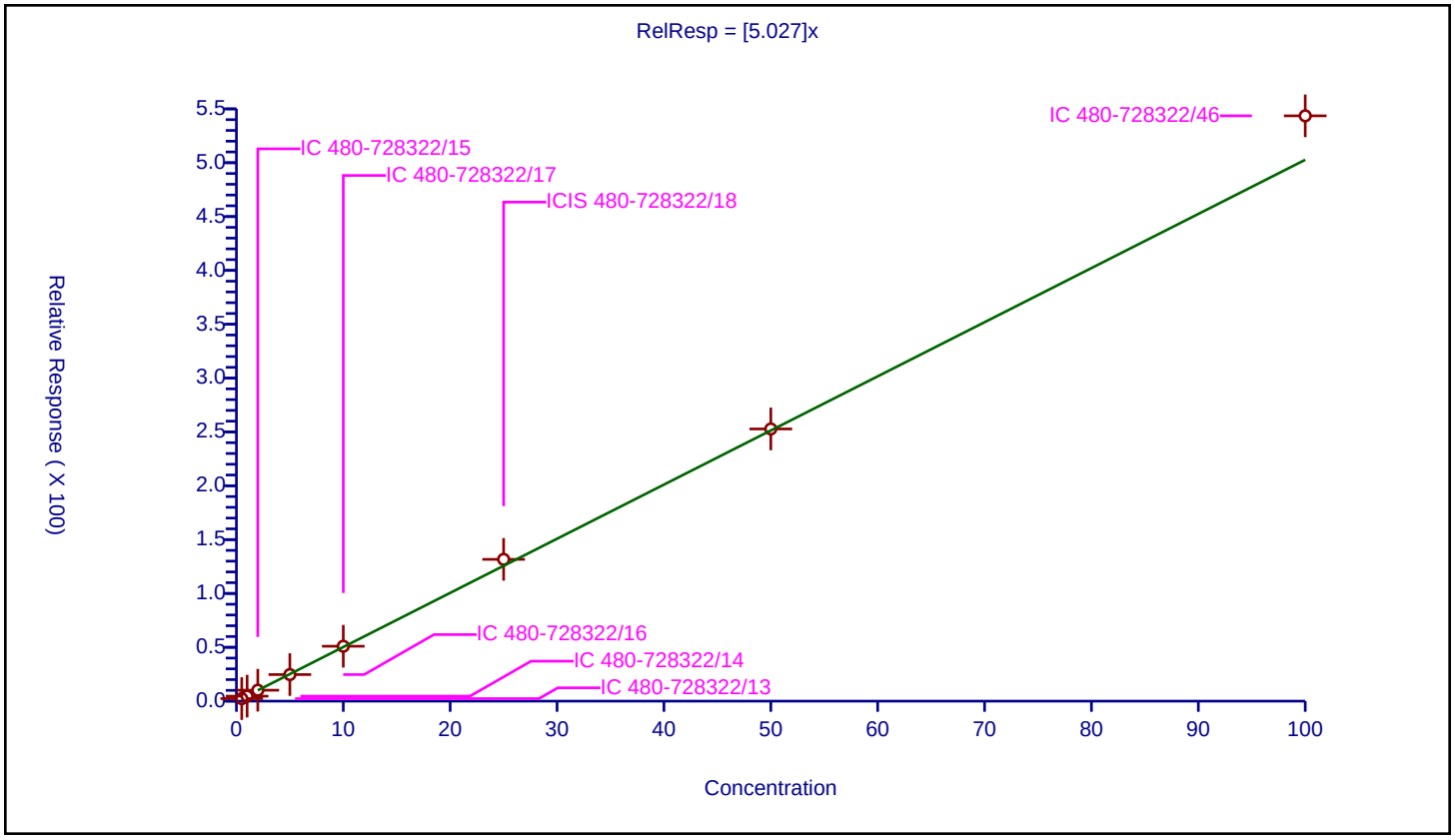
Curve Coefficients

Intercept:	0
Slope:	5.027

Error Coefficients

Relative Standard Deviation:	5.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	2.351449	25.0	151598.0	4.702898	Y
2	IC 480-728322/14	1.0	4.64777	25.0	161443.0	4.64777	Y
3	IC 480-728322/15	2.0	10.153173	25.0	155380.0	5.076586	Y
4	IC 480-728322/16	5.0	24.67032	25.0	164781.0	4.934064	Y
5	IC 480-728322/17	10.0	50.978551	25.0	158372.0	5.097855	Y
6	ICIS 480-728322/18	25.0	131.679133	25.0	166979.0	5.267165	Y
7	IC 480-728322/19	50.0	252.765961	25.0	168305.0	5.055319	Y
8	IC 480-728322/46	100.0	543.54229	25.0	168384.0	5.435423	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

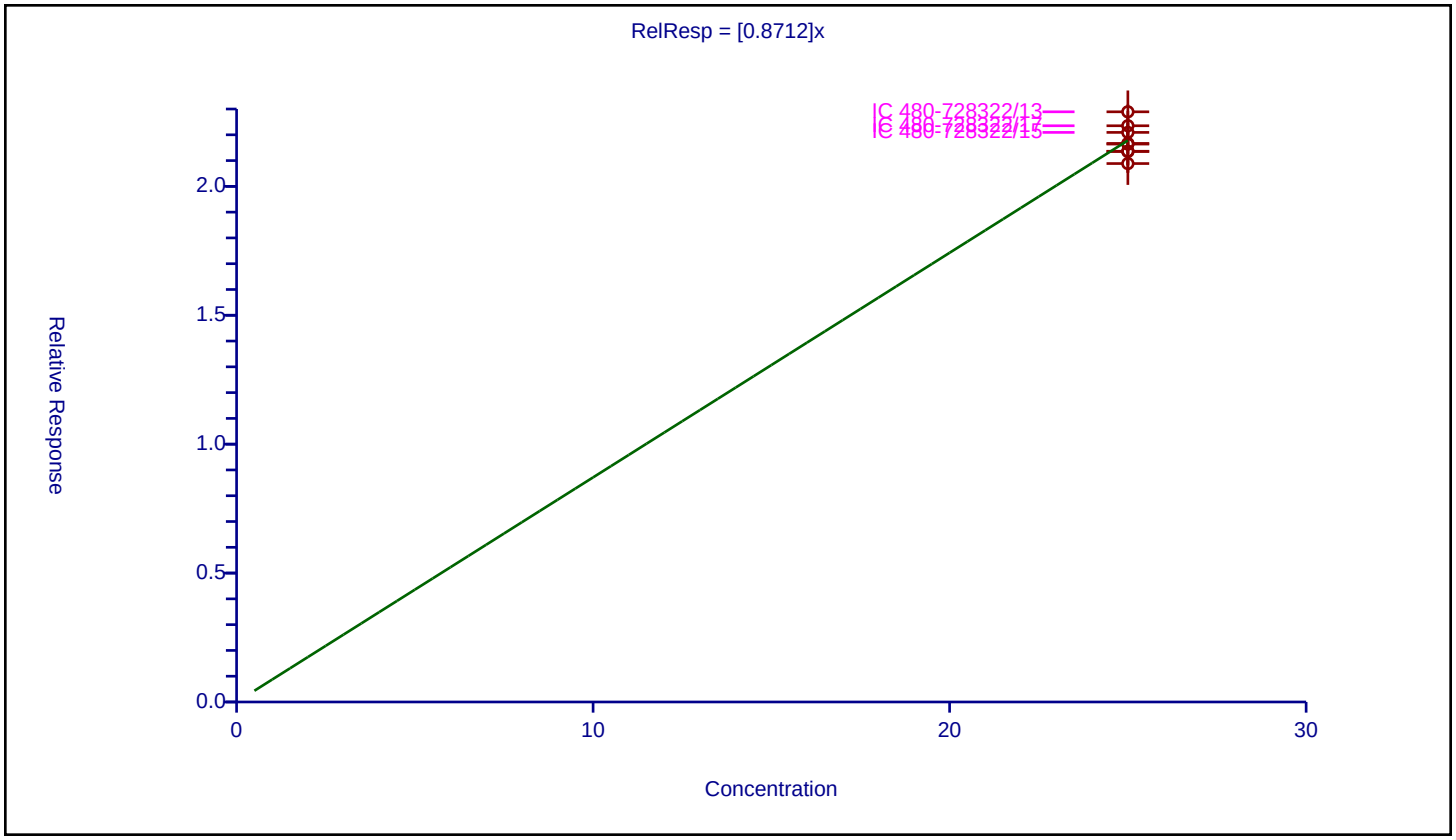
Curve Coefficients

Intercept:	0
Slope:	0.8712

Error Coefficients

Relative Standard Deviation:	2.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	25.0	22.891298	25.0	151598.0	0.915652	Y
2	IC 480-728322/14	25.0	21.639836	25.0	161443.0	0.865593	Y
3	IC 480-728322/15	25.0	22.092773	25.0	155380.0	0.883711	Y
4	IC 480-728322/16	25.0	20.884538	25.0	164781.0	0.835382	Y
5	IC 480-728322/17	25.0	22.350857	25.0	158372.0	0.894034	Y
6	ICIS 480-728322/18	25.0	21.6647	25.0	166979.0	0.866588	Y
7	IC 480-728322/19	25.0	21.352752	25.0	168305.0	0.85411	Y
8	IC 480-728322/46	25.0	21.361293	25.0	168384.0	0.854452	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

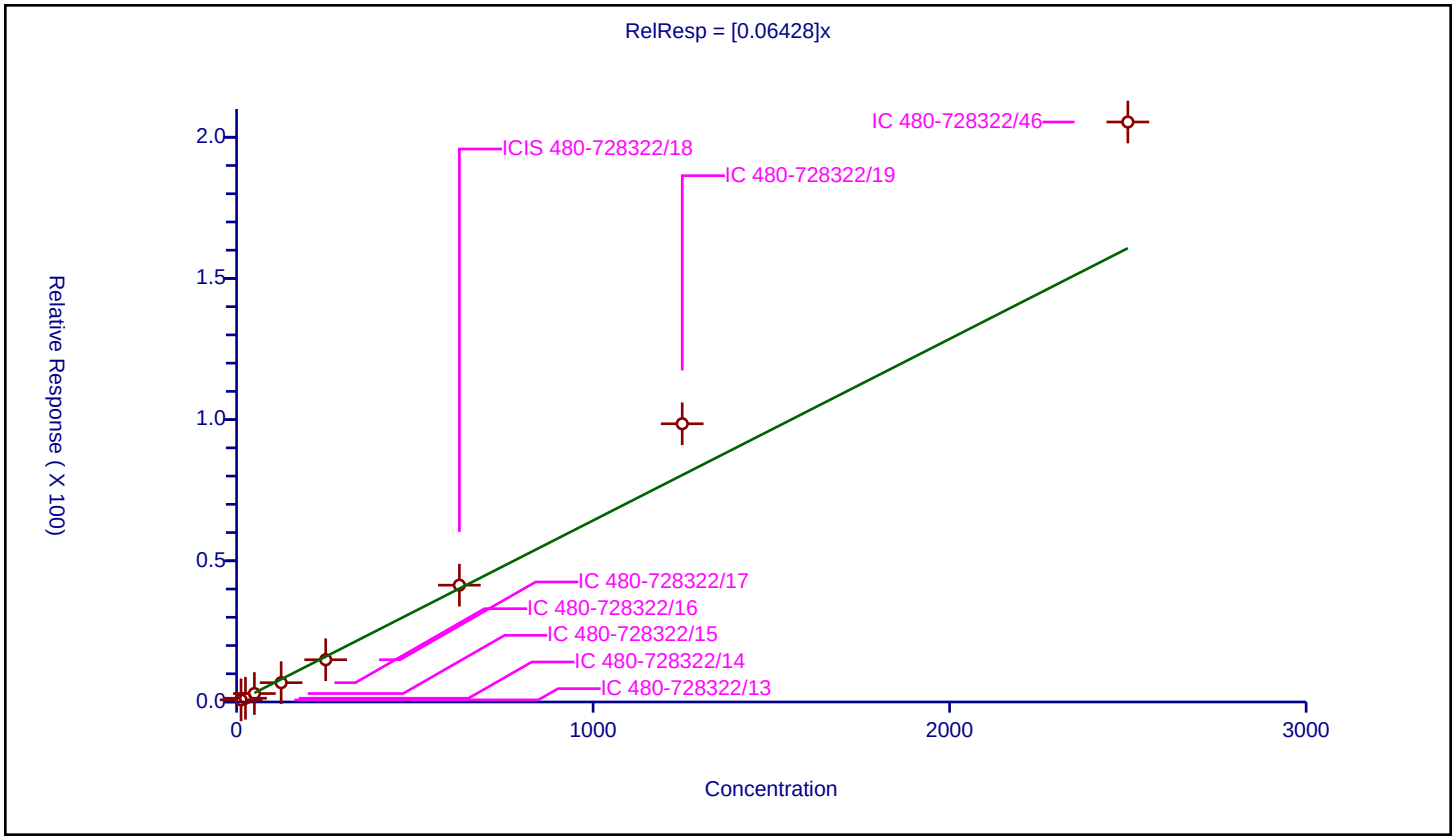
Curve Coefficients

Intercept:	0
Slope:	0.06428

Error Coefficients

Relative Standard Deviation:	16.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	12.5	0.747701	25.0	151598.0	0.059816	Y
2	IC 480-728322/14	25.0	1.322138	25.0	161443.0	0.052886	Y
3	IC 480-728322/15	50.0	2.992341	25.0	155380.0	0.059847	Y
4	IC 480-728322/16	125.0	6.837712	25.0	164781.0	0.054702	Y
5	IC 480-728322/17	250.0	14.962399	25.0	158372.0	0.05985	Y
6	ICIS 480-728322/18	625.0	41.370472	25.0	166979.0	0.066193	Y
7	IC 480-728322/19	1250.0	98.529753	25.0	168305.0	0.078824	Y
8	IC 480-728322/46	2500.0	205.402235	25.0	168384.0	0.082161	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

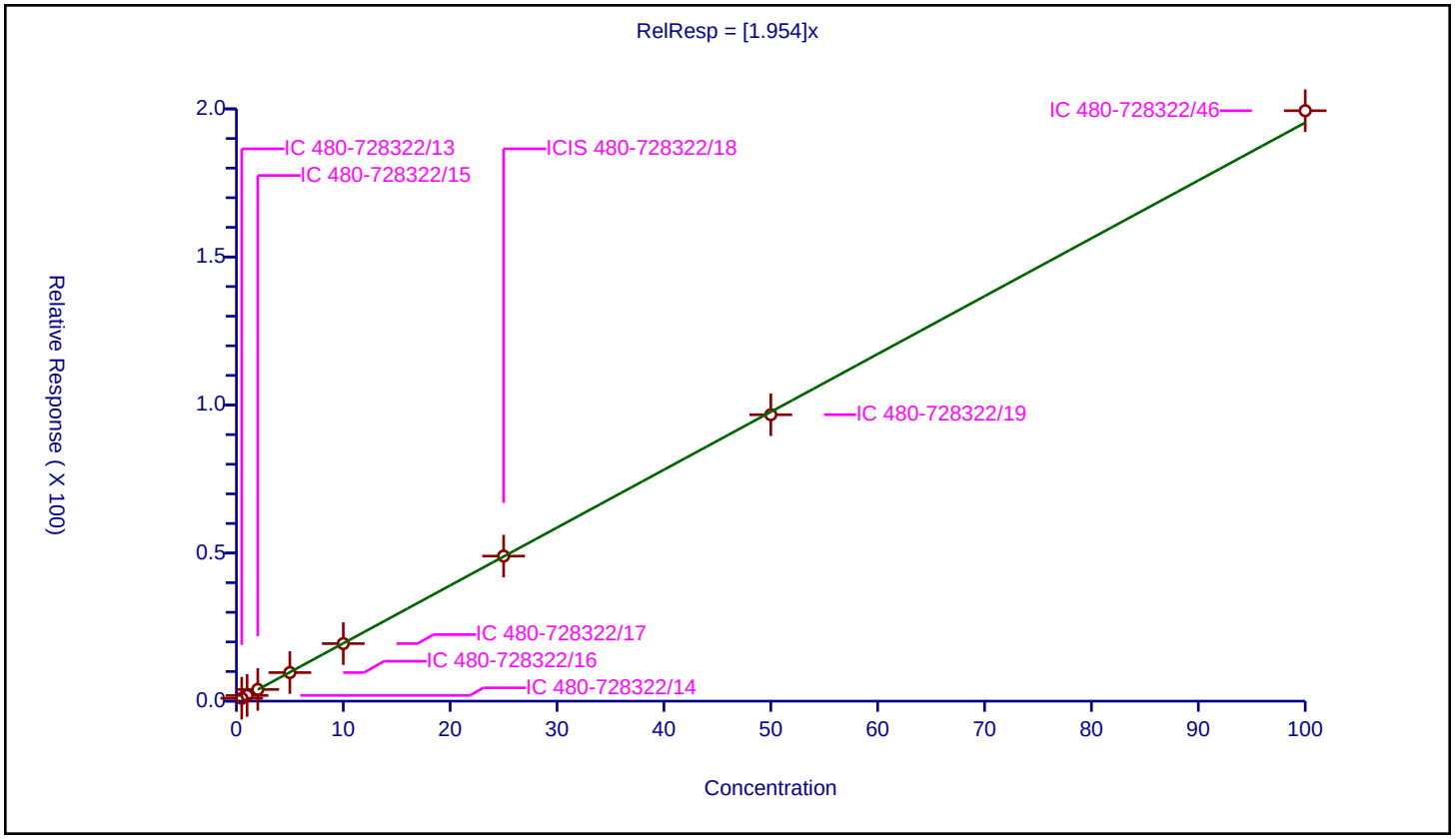
Curve Coefficients

Intercept:	0
Slope:	1.954

Error Coefficients

Relative Standard Deviation:	1.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.986161	25.0	151598.0	1.972322	Y
2	IC 480-728322/14	1.0	1.920647	25.0	161443.0	1.920647	Y
3	IC 480-728322/15	2.0	3.951603	25.0	155380.0	1.975801	Y
4	IC 480-728322/16	5.0	9.643102	25.0	164781.0	1.92862	Y
5	IC 480-728322/17	10.0	19.436359	25.0	158372.0	1.943636	Y
6	ICIS 480-728322/18	25.0	48.985351	25.0	166979.0	1.959414	Y
7	IC 480-728322/19	50.0	96.719052	25.0	168305.0	1.934381	Y
8	IC 480-728322/46	100.0	199.377019	25.0	168384.0	1.99377	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

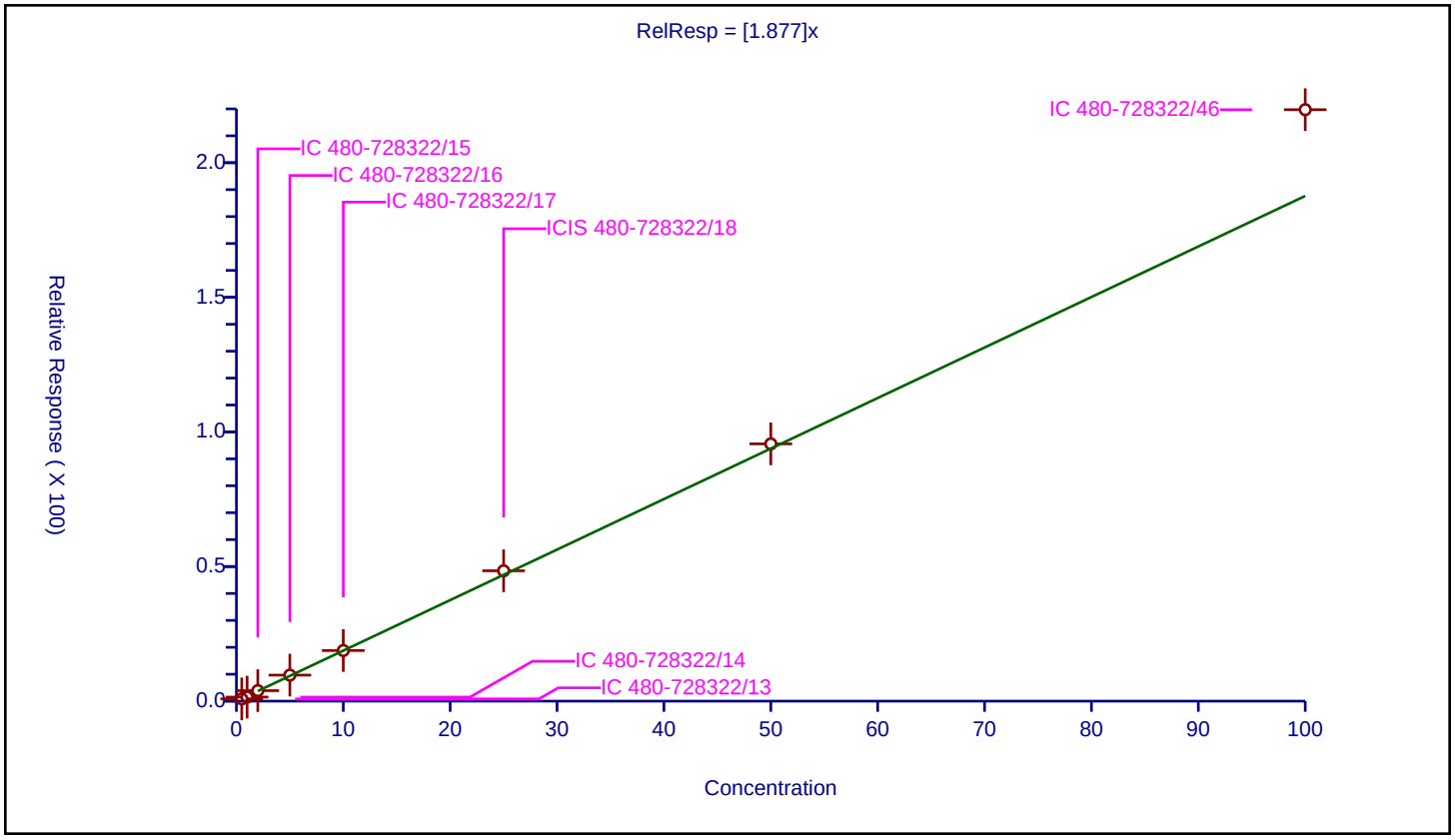
Curve Coefficients

Intercept:	0
Slope:	1.877

Error Coefficients

Relative Standard Deviation:	10.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.846152	25.0	151598.0	1.692305	Y
2	IC 480-728322/14	1.0	1.511679	25.0	161443.0	1.511679	Y
3	IC 480-728322/15	2.0	3.898507	25.0	155380.0	1.949253	Y
4	IC 480-728322/16	5.0	9.667377	25.0	164781.0	1.933475	Y
5	IC 480-728322/17	10.0	18.802093	25.0	158372.0	1.880209	Y
6	ICIS 480-728322/18	25.0	48.422107	25.0	166979.0	1.936884	Y
7	IC 480-728322/19	50.0	95.570839	25.0	168305.0	1.911417	Y
8	IC 480-728322/46	100.0	219.702288	25.0	168384.0	2.197023	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

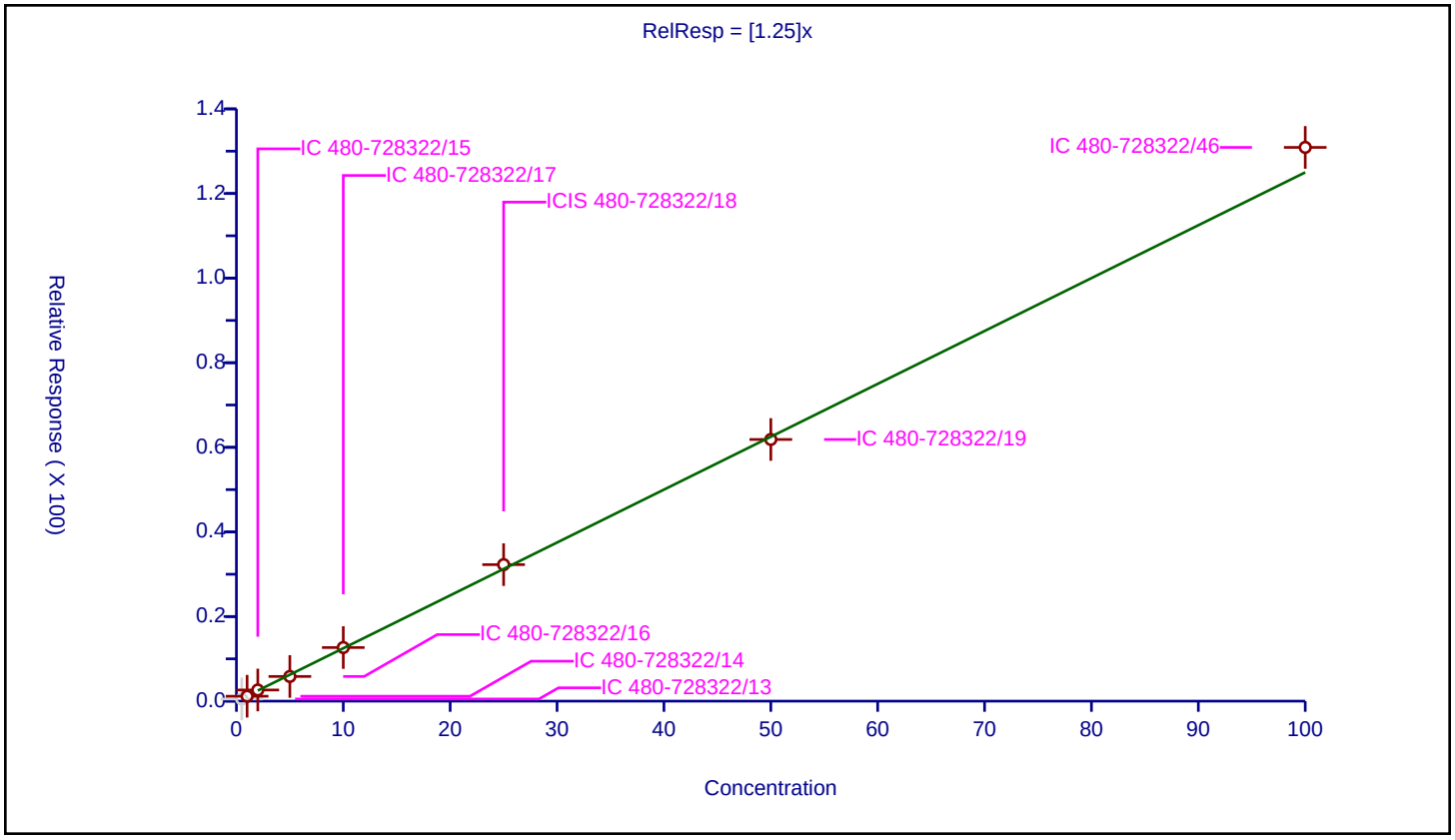
Curve Coefficients

Intercept:	0
Slope:	1.25

Error Coefficients

Relative Standard Deviation:	5.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.5038	25.0	151598.0	1.007599	N
2	IC 480-728322/14	1.0	1.159852	25.0	161443.0	1.159852	Y
3	IC 480-728322/15	2.0	2.637244	25.0	155380.0	1.318622	Y
4	IC 480-728322/16	5.0	5.835321	25.0	164781.0	1.167064	Y
5	IC 480-728322/17	10.0	12.672379	25.0	158372.0	1.267238	Y
6	ICIS 480-728322/18	25.0	32.26798	25.0	166979.0	1.290719	Y
7	IC 480-728322/19	50.0	61.853629	25.0	168305.0	1.237073	Y
8	IC 480-728322/46	100.0	130.894265	25.0	168384.0	1.308943	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

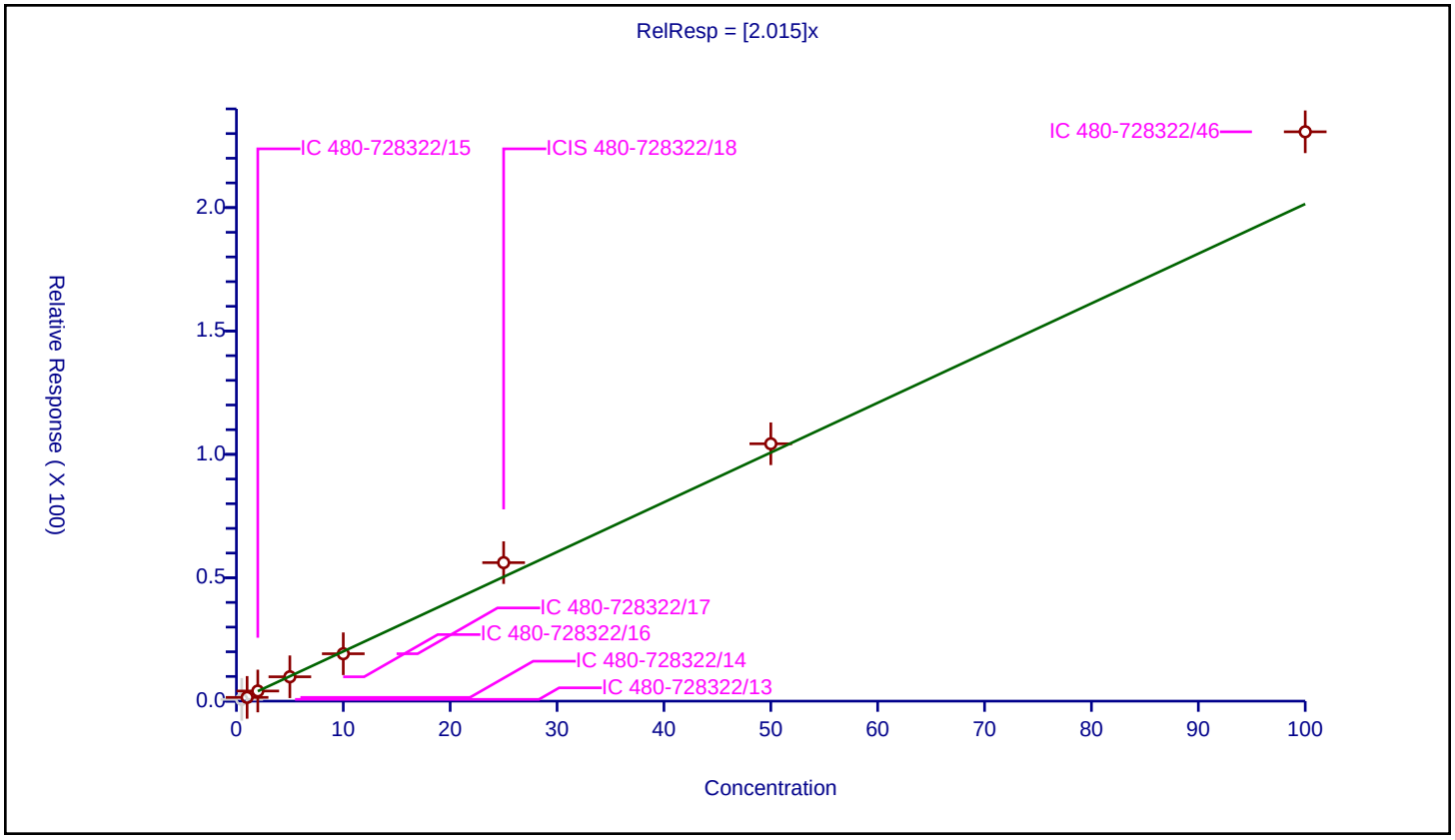
Curve Coefficients

Intercept:	0
Slope:	2.015

Error Coefficients

Relative Standard Deviation:	12.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.718512	25.0	151598.0	1.437024	N
2	IC 480-728322/14	1.0	1.51555	25.0	161443.0	1.51555	Y
3	IC 480-728322/15	2.0	4.107189	25.0	155380.0	2.053594	Y
4	IC 480-728322/16	5.0	9.874015	25.0	164781.0	1.974803	Y
5	IC 480-728322/17	10.0	19.206047	25.0	158372.0	1.920605	Y
6	ICIS 480-728322/18	25.0	56.133855	25.0	166979.0	2.245354	Y
7	IC 480-728322/19	50.0	104.29904	25.0	168305.0	2.085981	Y
8	IC 480-728322/46	100.0	230.714765	25.0	168384.0	2.307148	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

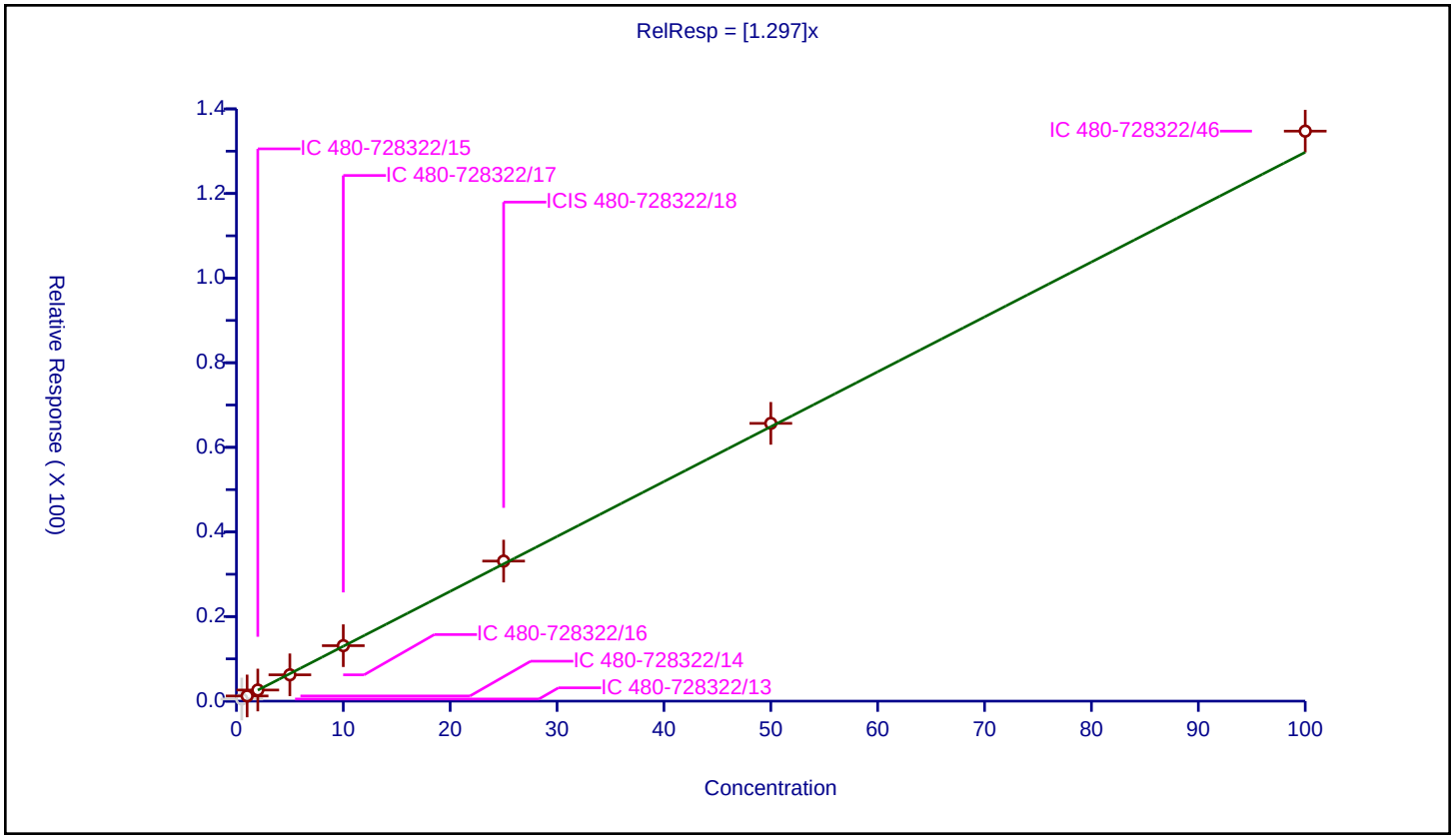
Curve Coefficients

Intercept:	0
Slope:	1.297

Error Coefficients

Relative Standard Deviation:	3.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.508912	25.0	151598.0	1.017823	N
2	IC 480-728322/14	1.0	1.225355	25.0	161443.0	1.225355	Y
3	IC 480-728322/15	2.0	2.631291	25.0	155380.0	1.315646	Y
4	IC 480-728322/16	5.0	6.225536	25.0	164781.0	1.245107	Y
5	IC 480-728322/17	10.0	13.113745	25.0	158372.0	1.311374	Y
6	ICIS 480-728322/18	25.0	33.106259	25.0	166979.0	1.32425	Y
7	IC 480-728322/19	50.0	65.66531	25.0	168305.0	1.313306	Y
8	IC 480-728322/46	100.0	134.745582	25.0	168384.0	1.347456	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

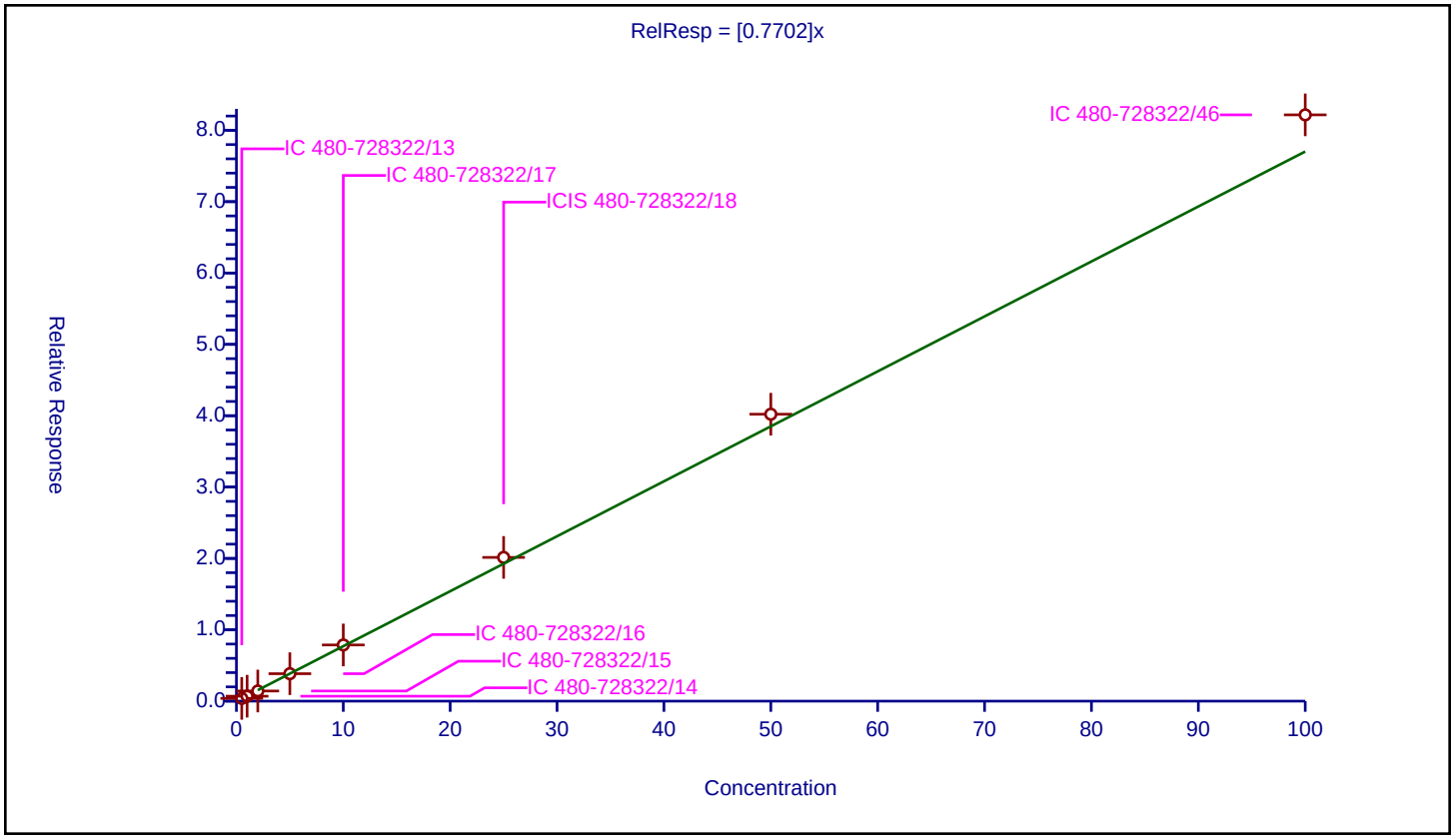
Curve Coefficients

Intercept:	0
Slope:	0.7702

Error Coefficients

Relative Standard Deviation:	6.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.386054	25.0	151598.0	0.772108	Y
2	IC 480-728322/14	1.0	0.691266	25.0	161443.0	0.691266	Y
3	IC 480-728322/15	2.0	1.420389	25.0	155380.0	0.710194	Y
4	IC 480-728322/16	5.0	3.846014	25.0	164781.0	0.769203	Y
5	IC 480-728322/17	10.0	7.873551	25.0	158372.0	0.787355	Y
6	ICIS 480-728322/18	25.0	20.141754	25.0	166979.0	0.80567	Y
7	IC 480-728322/19	50.0	40.214492	25.0	168305.0	0.80429	Y
8	IC 480-728322/46	100.0	82.165022	25.0	168384.0	0.82165	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

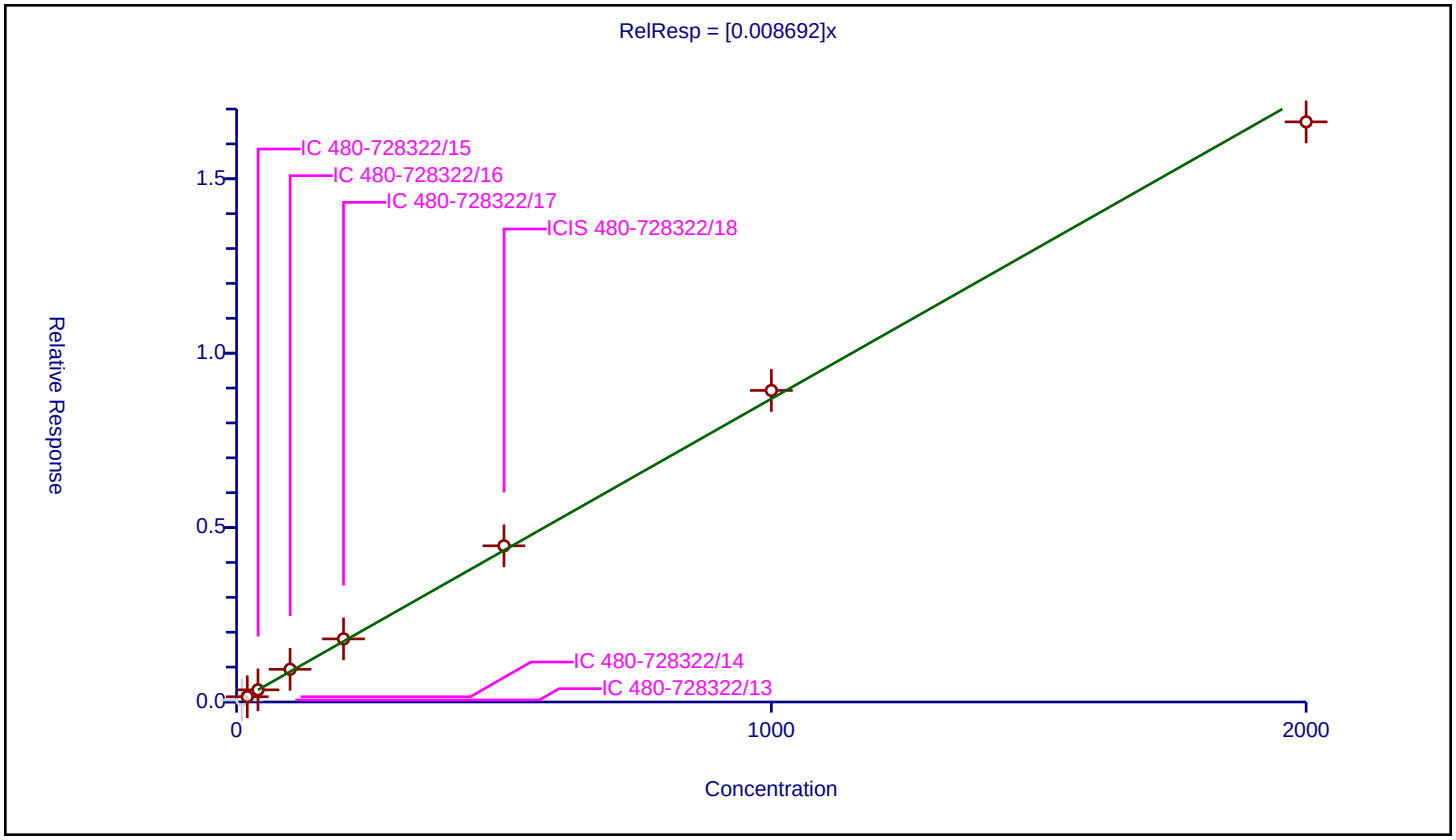
Curve Coefficients

Intercept:	0
Slope:	0.008692

Error Coefficients

Relative Standard Deviation:	7.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	10.0	0.05789	25.0	303163.0	0.005789	N
2	IC 480-728322/14	20.0	0.150288	25.0	309239.0	0.007514	Y
3	IC 480-728322/15	40.0	0.348522	25.0	298116.0	0.008713	Y
4	IC 480-728322/16	100.0	0.937727	25.0	306246.0	0.009377	Y
5	IC 480-728322/17	200.0	1.808204	25.0	303077.0	0.009041	Y
6	ICIS 480-728322/18	500.0	4.477002	25.0	306913.0	0.008954	Y
7	IC 480-728322/19	1000.0	8.931803	25.0	313856.0	0.008932	Y
8	IC 480-728322/46	2000.0	16.631421	25.0	319188.0	0.008316	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

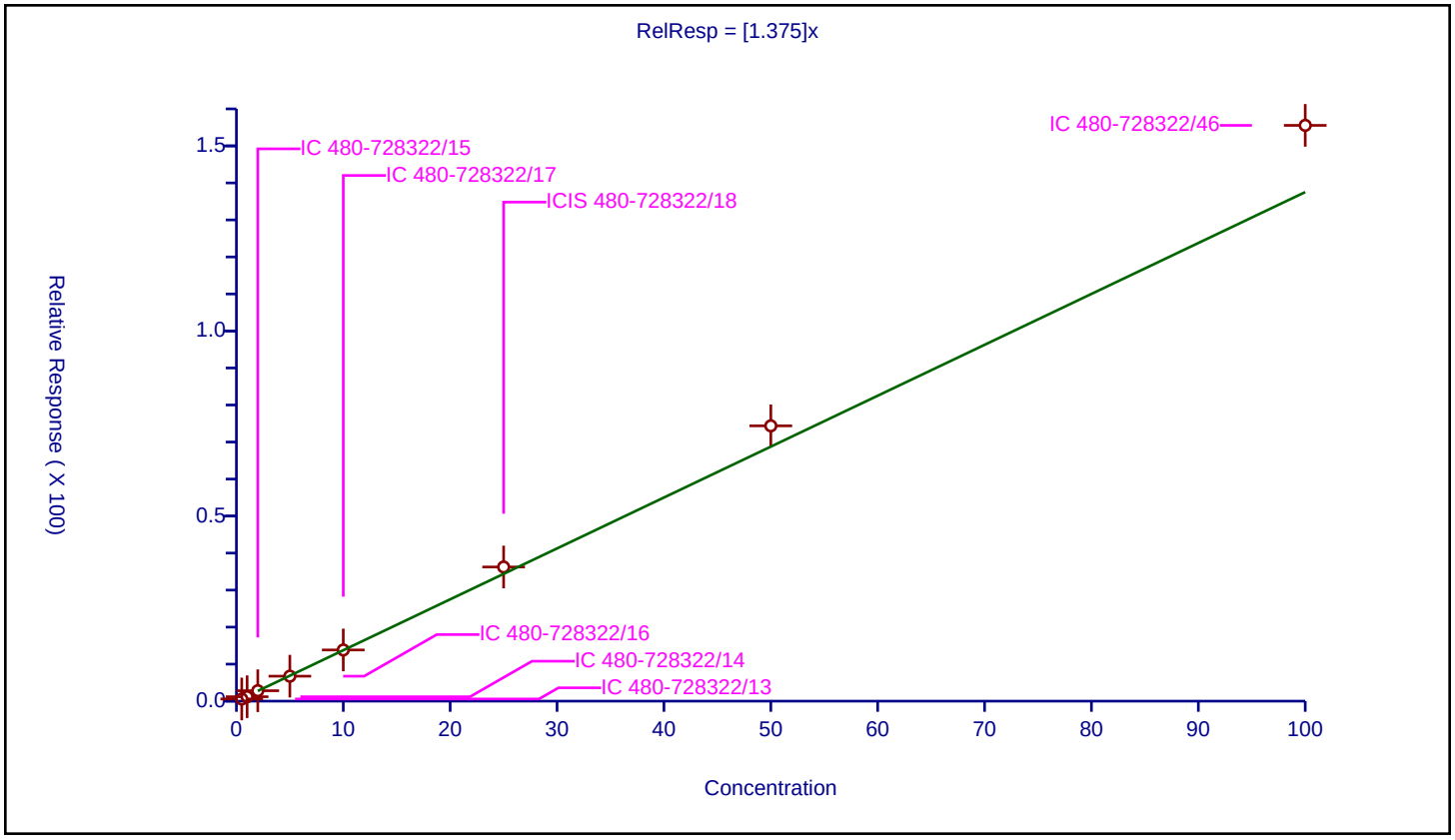
Curve Coefficients

Intercept:	0
Slope:	1.375

Error Coefficients

Relative Standard Deviation:	9.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.587244	25.0	151598.0	1.174488	Y
2	IC 480-728322/14	1.0	1.192836	25.0	161443.0	1.192836	Y
3	IC 480-728322/15	2.0	2.819539	25.0	155380.0	1.40977	Y
4	IC 480-728322/16	5.0	6.74471	25.0	164781.0	1.348942	Y
5	IC 480-728322/17	10.0	13.826623	25.0	158372.0	1.382662	Y
6	ICIS 480-728322/18	25.0	36.237641	25.0	166979.0	1.449506	Y
7	IC 480-728322/19	50.0	74.374796	25.0	168305.0	1.487496	Y
8	IC 480-728322/46	100.0	155.547291	25.0	168384.0	1.555473	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

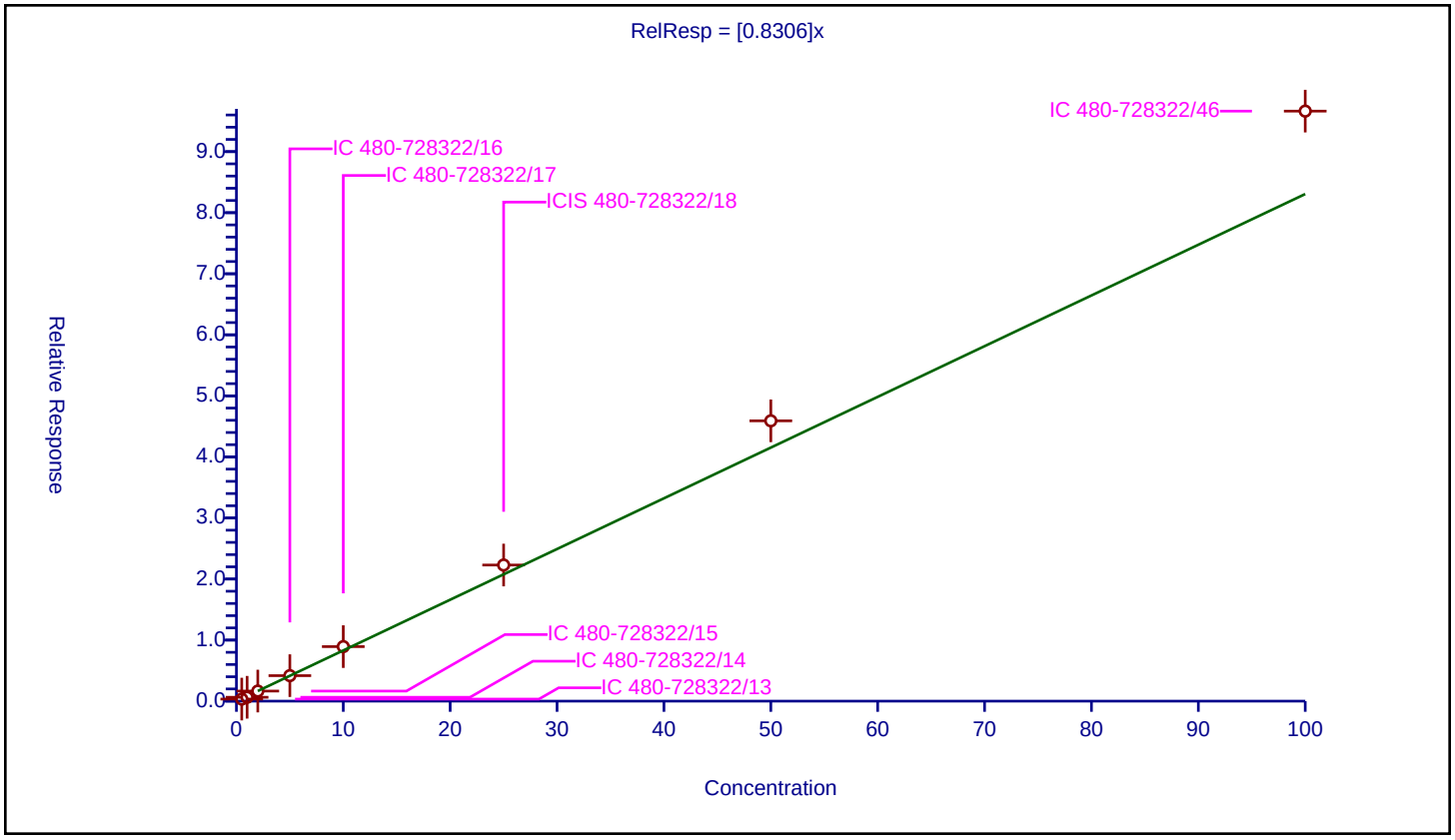
Curve Coefficients

Intercept:	0
Slope:	0.8306

Error Coefficients

Relative Standard Deviation:	14.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.339384	25.0	151598.0	0.678769	Y
2	IC 480-728322/14	1.0	0.634899	25.0	161443.0	0.634899	Y
3	IC 480-728322/15	2.0	1.652079	25.0	155380.0	0.826039	Y
4	IC 480-728322/16	5.0	4.176756	25.0	164781.0	0.835351	Y
5	IC 480-728322/17	10.0	8.929924	25.0	158372.0	0.892992	Y
6	ICIS 480-728322/18	25.0	22.29457	25.0	166979.0	0.891783	Y
7	IC 480-728322/19	50.0	45.911738	25.0	168305.0	0.918235	Y
8	IC 480-728322/46	100.0	96.634478	25.0	168384.0	0.966345	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

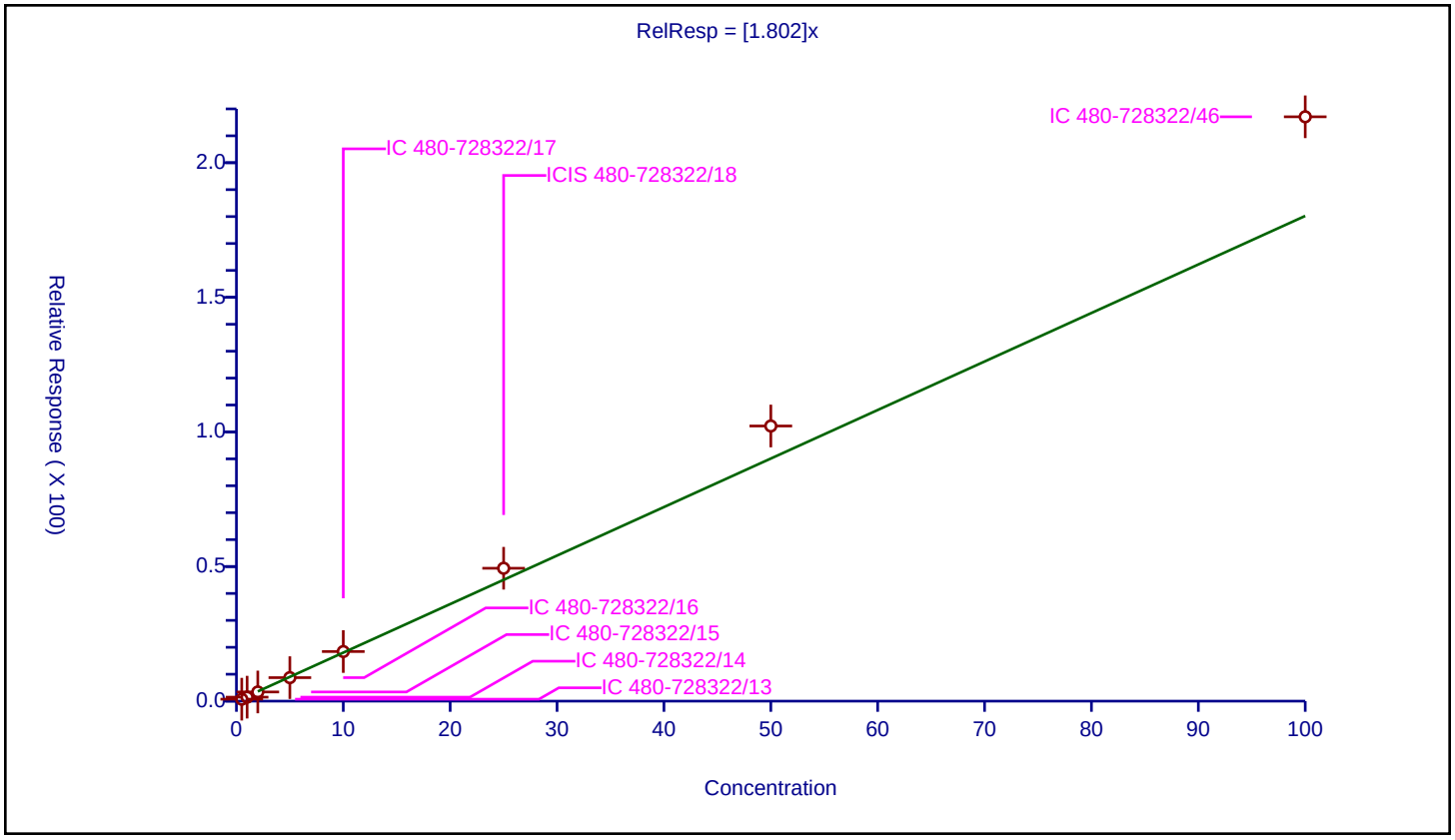
Curve Coefficients

Intercept:	0
Slope:	1.802

Error Coefficients

Relative Standard Deviation:	14.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.727912	25.0	151598.0	1.455824	Y
2	IC 480-728322/14	1.0	1.480554	25.0	161443.0	1.480554	Y
3	IC 480-728322/15	2.0	3.407453	25.0	155380.0	1.703726	Y
4	IC 480-728322/16	5.0	8.733258	25.0	164781.0	1.746652	Y
5	IC 480-728322/17	10.0	18.425921	25.0	158372.0	1.842592	Y
6	ICIS 480-728322/18	25.0	49.361147	25.0	166979.0	1.974446	Y
7	IC 480-728322/19	50.0	102.208193	25.0	168305.0	2.044164	Y
8	IC 480-728322/46	100.0	217.063973	25.0	168384.0	2.17064	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

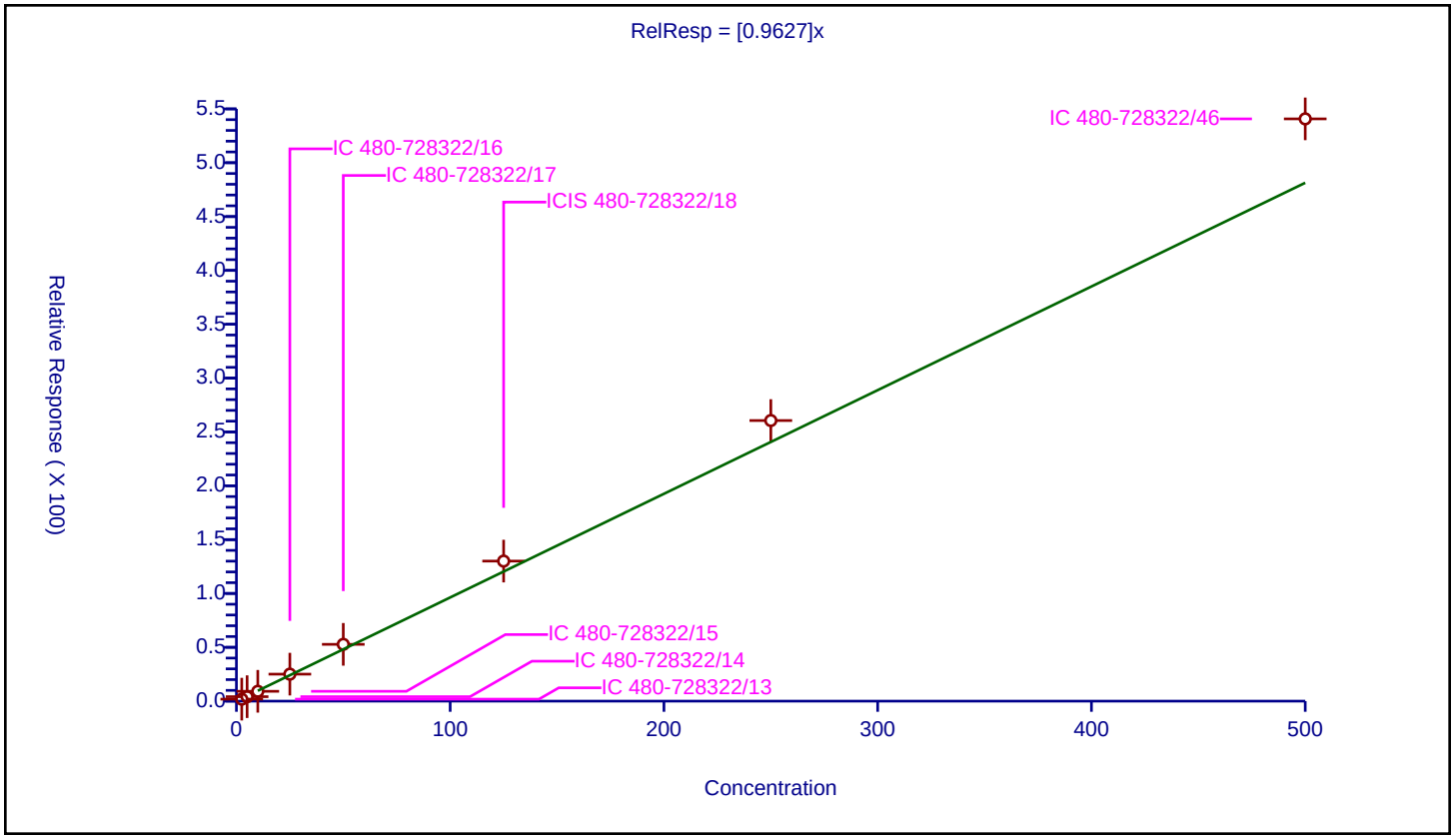
Curve Coefficients

Intercept:	0
Slope:	0.9627

Error Coefficients

Relative Standard Deviation:	12.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	2.5	1.844305	25.0	303163.0	0.737722	Y
2	IC 480-728322/14	5.0	4.14558	25.0	309239.0	0.829116	Y
3	IC 480-728322/15	10.0	9.129919	25.0	298116.0	0.912992	Y
4	IC 480-728322/16	25.0	25.071919	25.0	306246.0	1.002877	Y
5	IC 480-728322/17	50.0	52.735278	25.0	303077.0	1.054706	Y
6	ICIS 480-728322/18	125.0	130.06031	25.0	306913.0	1.040482	Y
7	IC 480-728322/19	250.0	260.580569	25.0	313856.0	1.042322	Y
8	IC 480-728322/46	500.0	540.719811	25.0	319188.0	1.08144	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

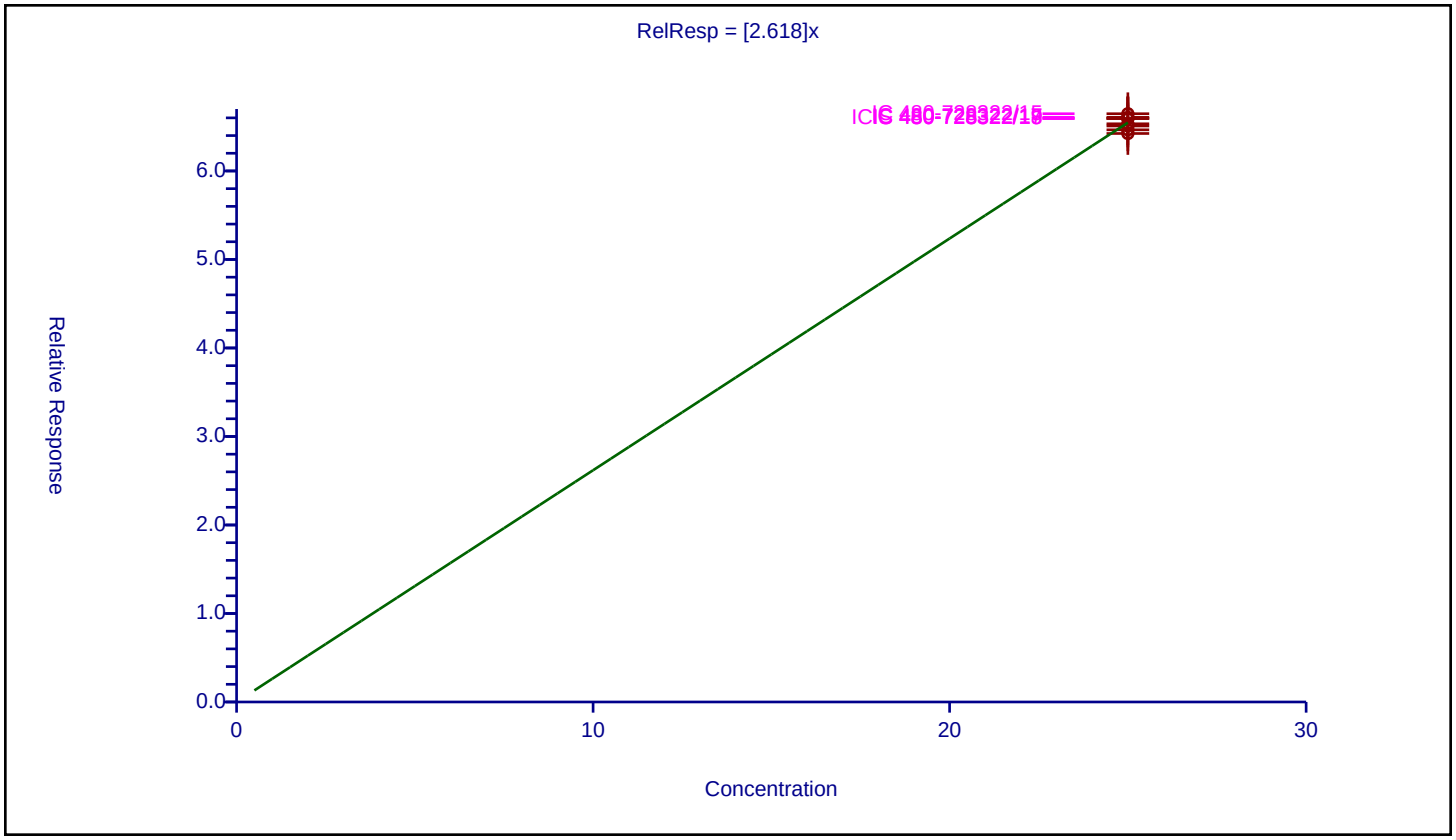
Curve Coefficients

Intercept:	0
Slope:	2.618

Error Coefficients

Relative Standard Deviation:	1.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	25.0	64.650617	25.0	303163.0	2.586025	Y
2	IC 480-728322/14	25.0	64.233489	25.0	309239.0	2.56934	Y
3	IC 480-728322/15	25.0	66.466157	25.0	298116.0	2.658646	Y
4	IC 480-728322/16	25.0	65.085177	25.0	306246.0	2.603407	Y
5	IC 480-728322/17	25.0	66.056728	25.0	303077.0	2.642269	Y
6	ICIS 480-728322/18	25.0	65.915422	25.0	306913.0	2.636617	Y
7	IC 480-728322/19	25.0	65.942423	25.0	313856.0	2.637697	Y
8	IC 480-728322/46	25.0	65.33156	25.0	319188.0	2.613262	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

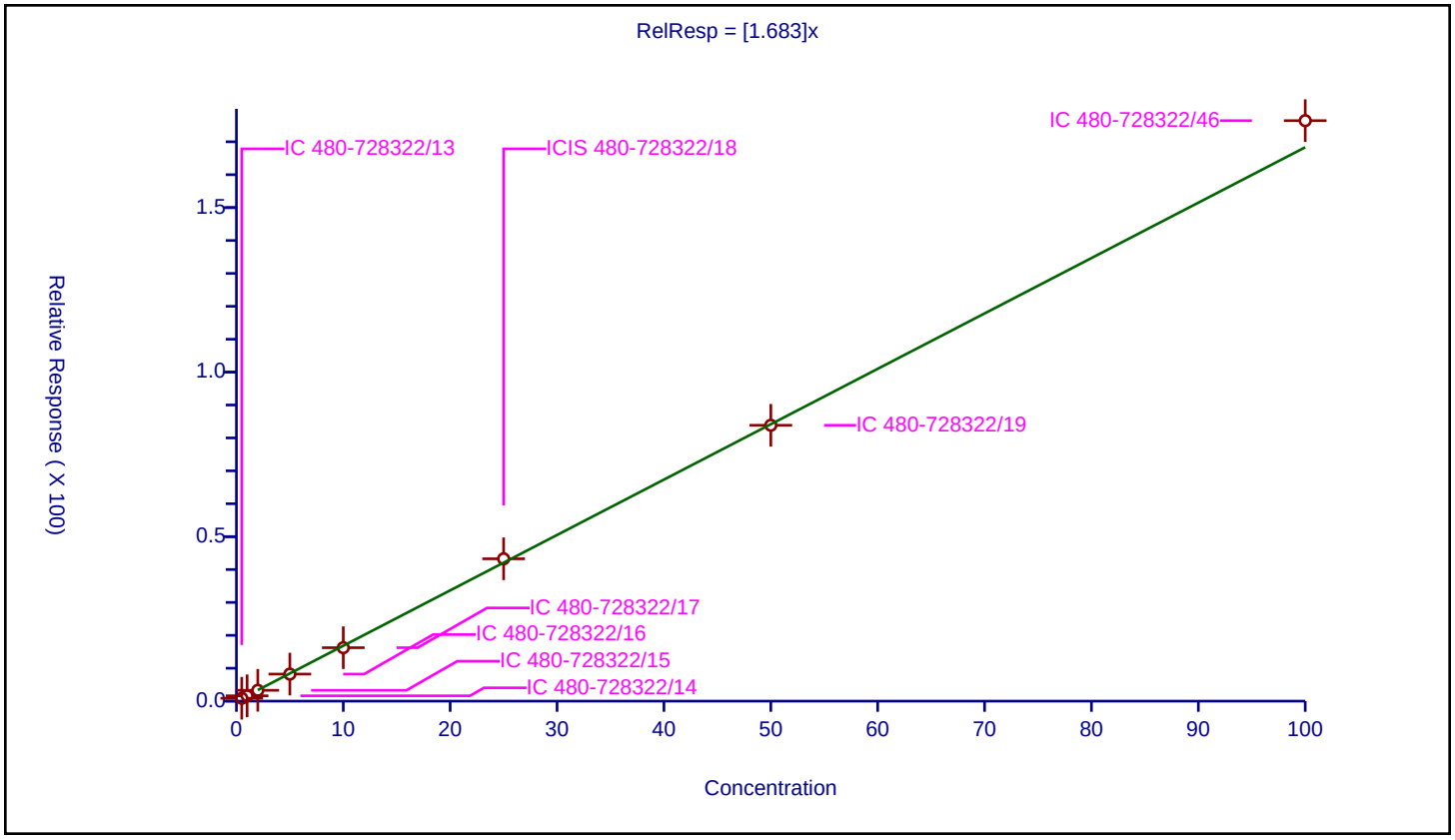
Curve Coefficients

Intercept:	0
Slope:	1.683

Error Coefficients

Relative Standard Deviation:	3.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.879148	25.0	303163.0	1.758295	Y
2	IC 480-728322/14	1.0	1.624957	25.0	309239.0	1.624957	Y
3	IC 480-728322/15	2.0	3.287898	25.0	298116.0	1.643949	Y
4	IC 480-728322/16	5.0	8.217822	25.0	306246.0	1.643564	Y
5	IC 480-728322/17	10.0	16.238283	25.0	303077.0	1.623828	Y
6	ICIS 480-728322/18	25.0	43.262423	25.0	306913.0	1.730497	Y
7	IC 480-728322/19	50.0	83.841156	25.0	313856.0	1.676823	Y
8	IC 480-728322/46	100.0	176.422203	25.0	319188.0	1.764222	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

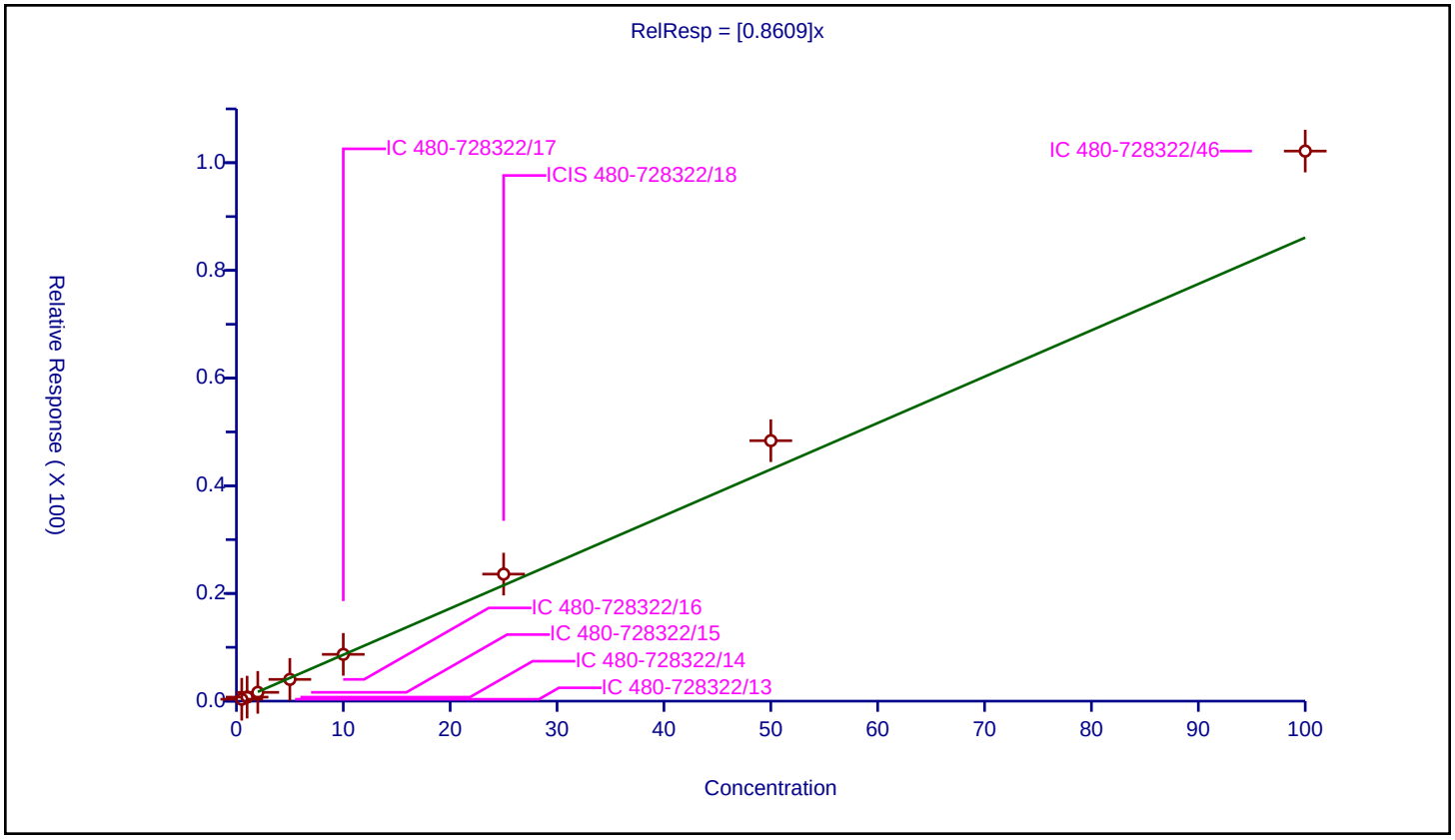
Curve Coefficients

Intercept:	0
Slope:	0.8609

Error Coefficients

Relative Standard Deviation:	12.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.354925	25.0	303163.0	0.709849	Y
2	IC 480-728322/14	1.0	0.750714	25.0	309239.0	0.750714	Y
3	IC 480-728322/15	2.0	1.633676	25.0	298116.0	0.816838	Y
4	IC 480-728322/16	5.0	4.040951	25.0	306246.0	0.80819	Y
5	IC 480-728322/17	10.0	8.687231	25.0	303077.0	0.868723	Y
6	ICIS 480-728322/18	25.0	23.592842	25.0	306913.0	0.943714	Y
7	IC 480-728322/19	50.0	48.377042	25.0	313856.0	0.967541	Y
8	IC 480-728322/46	100.0	102.163537	25.0	319188.0	1.021635	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

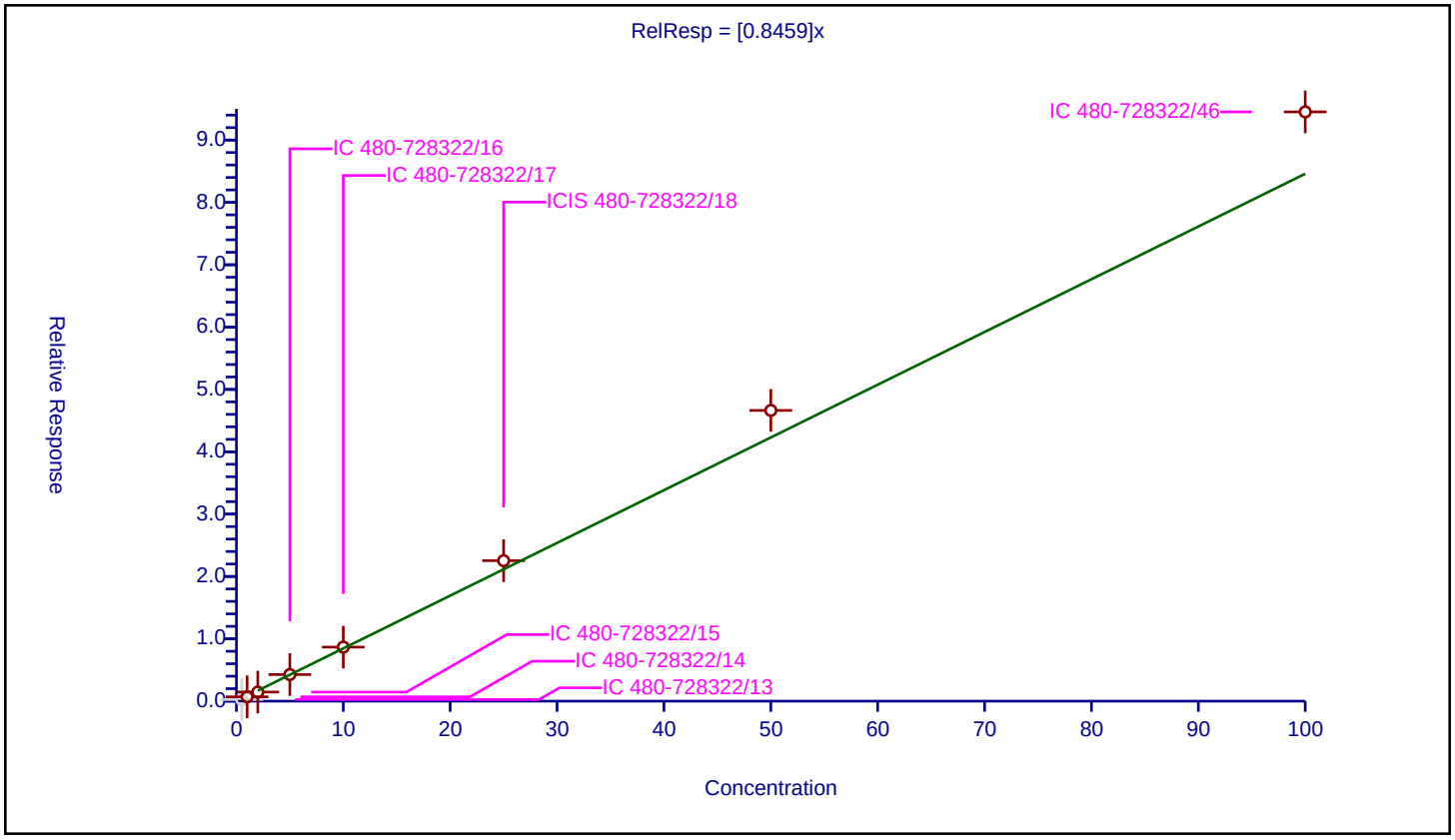
Curve Coefficients

Intercept:	0
Slope:	0.8459

Error Coefficients

Relative Standard Deviation:	11.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.25638	25.0	303163.0	0.51276	N
2	IC 480-728322/14	1.0	0.694528	25.0	309239.0	0.694528	Y
3	IC 480-728322/15	2.0	1.456983	25.0	298116.0	0.728492	Y
4	IC 480-728322/16	5.0	4.263892	25.0	306246.0	0.852778	Y
5	IC 480-728322/17	10.0	8.666774	25.0	303077.0	0.866677	Y
6	ICIS 480-728322/18	25.0	22.532933	25.0	306913.0	0.901317	Y
7	IC 480-728322/19	50.0	46.632054	25.0	313856.0	0.932641	Y
8	IC 480-728322/46	100.0	94.517416	25.0	319188.0	0.945174	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

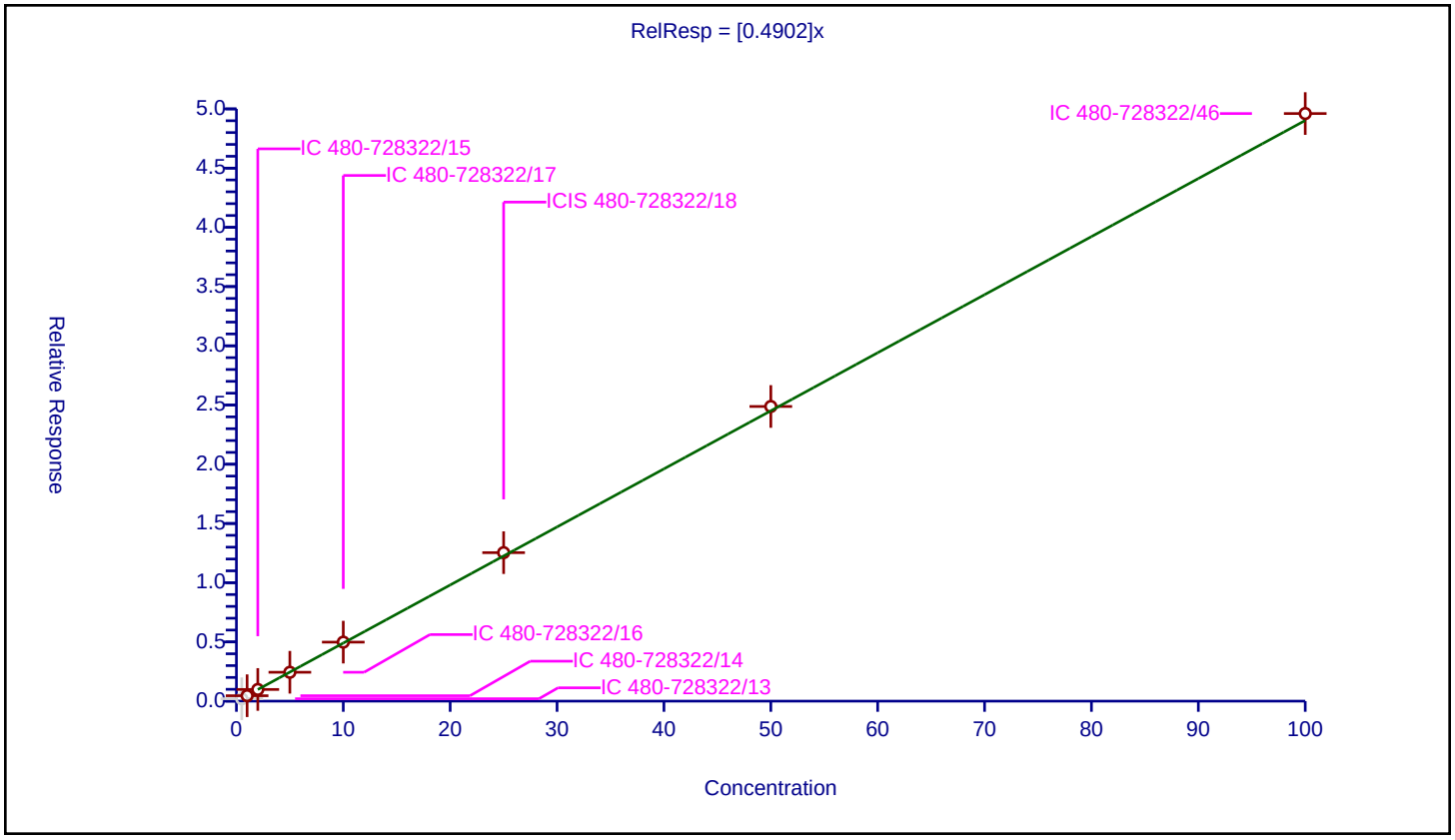
Curve Coefficients

Intercept:	0
Slope:	0.4902

Error Coefficients

Relative Standard Deviation:	3.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.202944	25.0	303163.0	0.405887	N
2	IC 480-728322/14	1.0	0.458302	25.0	309239.0	0.458302	Y
3	IC 480-728322/15	2.0	0.985187	25.0	298116.0	0.492593	Y
4	IC 480-728322/16	5.0	2.43742	25.0	306246.0	0.487484	Y
5	IC 480-728322/17	10.0	4.980582	25.0	303077.0	0.498058	Y
6	ICIS 480-728322/18	25.0	12.536452	25.0	306913.0	0.501458	Y
7	IC 480-728322/19	50.0	24.877332	25.0	313856.0	0.497547	Y
8	IC 480-728322/46	100.0	49.605562	25.0	319188.0	0.496056	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

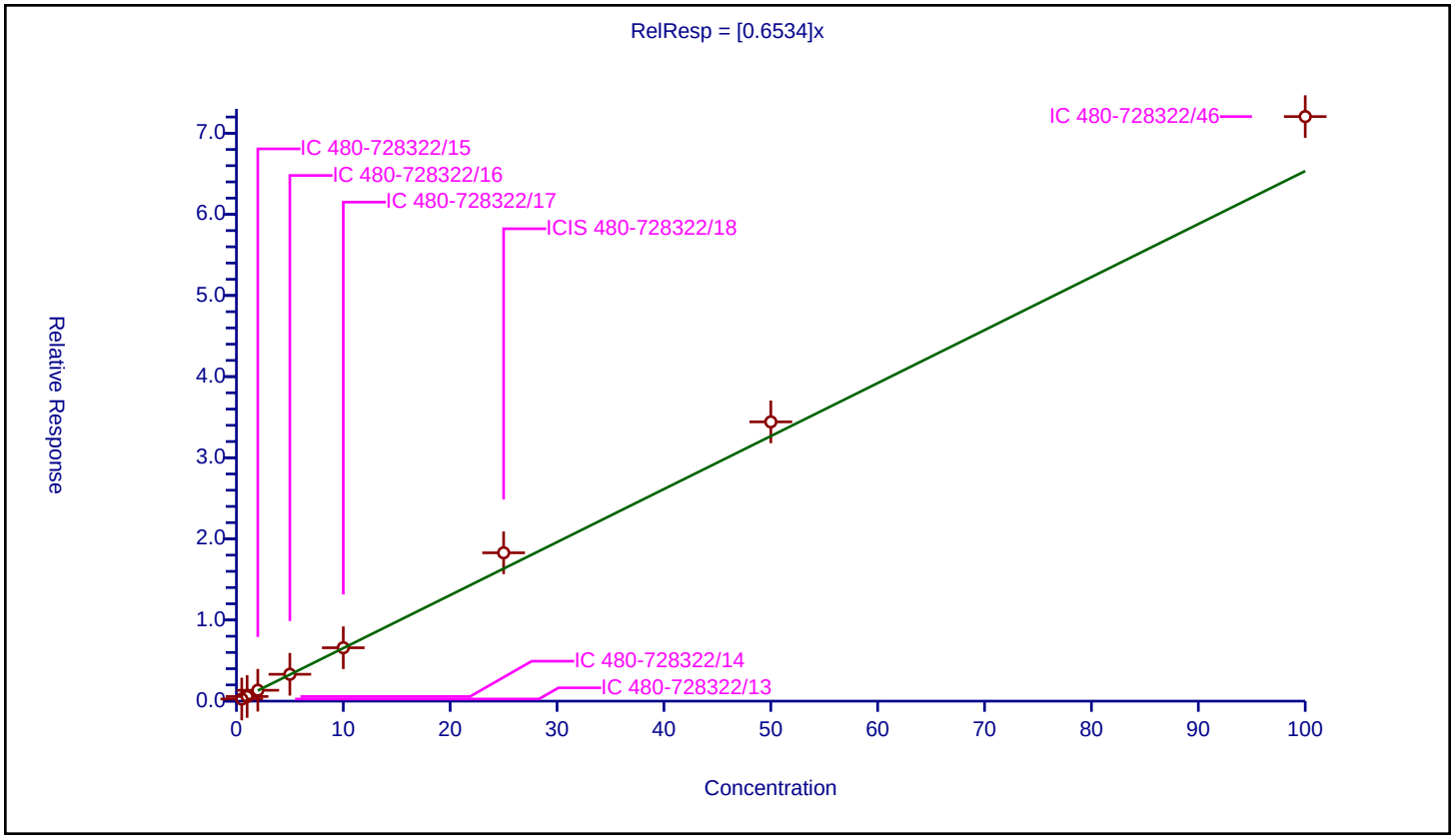
Curve Coefficients

Intercept:	0
Slope:	0.6534

Error Coefficients

Relative Standard Deviation:	10.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.263637	25.0	303163.0	0.527274	Y
2	IC 480-728322/14	1.0	0.568088	25.0	309239.0	0.568088	Y
3	IC 480-728322/15	2.0	1.342598	25.0	298116.0	0.671299	Y
4	IC 480-728322/16	5.0	3.309349	25.0	306246.0	0.66187	Y
5	IC 480-728322/17	10.0	6.581908	25.0	303077.0	0.658191	Y
6	ICIS 480-728322/18	25.0	18.28466	25.0	306913.0	0.731386	Y
7	IC 480-728322/19	50.0	34.423748	25.0	313856.0	0.688475	Y
8	IC 480-728322/46	100.0	72.050249	25.0	319188.0	0.720502	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

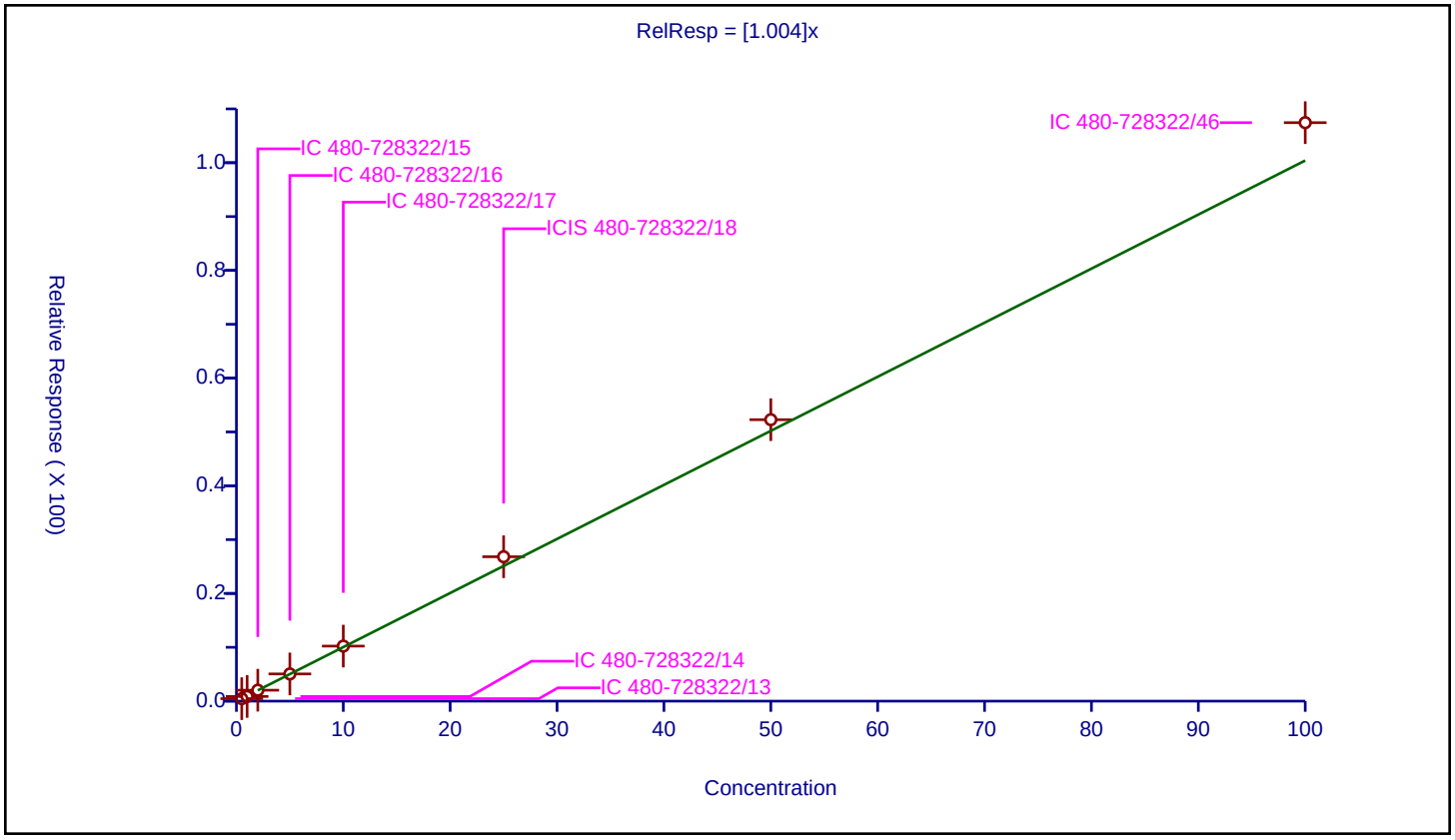
Curve Coefficients

Intercept:	0
Slope:	1.004

Error Coefficients

Relative Standard Deviation:	7.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.461468	25.0	303163.0	0.922936	Y
2	IC 480-728322/14	1.0	0.868665	25.0	309239.0	0.868665	Y
3	IC 480-728322/15	2.0	2.032011	25.0	298116.0	1.016006	Y
4	IC 480-728322/16	5.0	5.050923	25.0	306246.0	1.010185	Y
5	IC 480-728322/17	10.0	10.221825	25.0	303077.0	1.022182	Y
6	ICIS 480-728322/18	25.0	26.820711	25.0	306913.0	1.072828	Y
7	IC 480-728322/19	50.0	52.277876	25.0	313856.0	1.045558	Y
8	IC 480-728322/46	100.0	107.444046	25.0	319188.0	1.07444	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

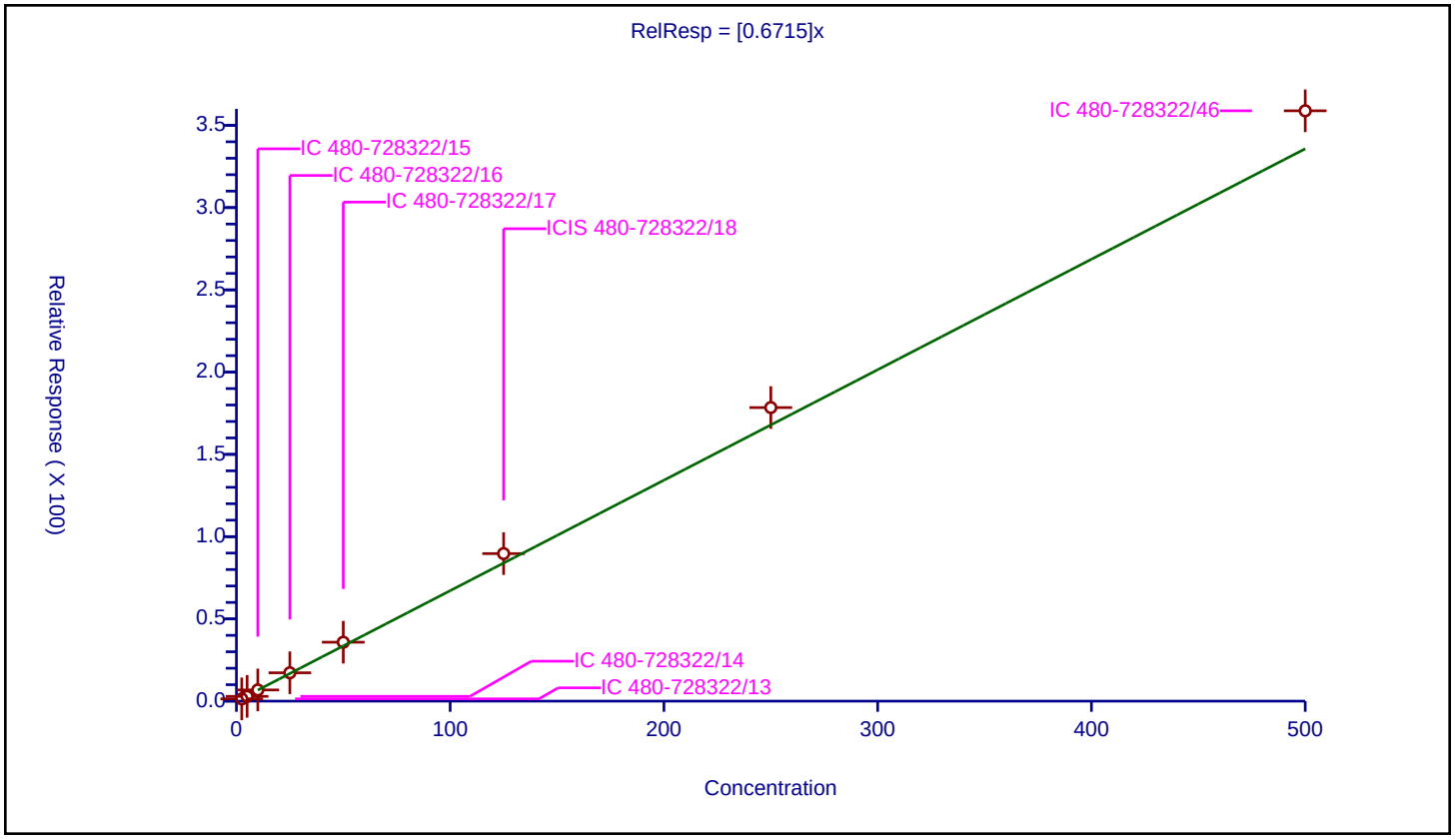
Curve Coefficients

Intercept:	0
Slope:	0.6715

Error Coefficients

Relative Standard Deviation:	9.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	2.5	1.389022	25.0	303163.0	0.555609	Y
2	IC 480-728322/14	5.0	2.902043	25.0	309239.0	0.580409	Y
3	IC 480-728322/15	10.0	6.811443	25.0	298116.0	0.681144	Y
4	IC 480-728322/16	25.0	17.240144	25.0	306246.0	0.689606	Y
5	IC 480-728322/17	50.0	35.818785	25.0	303077.0	0.716376	Y
6	ICIS 480-728322/18	125.0	89.683803	25.0	306913.0	0.71747	Y
7	IC 480-728322/19	250.0	178.455406	25.0	313856.0	0.713822	Y
8	IC 480-728322/46	500.0	358.826851	25.0	319188.0	0.717654	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

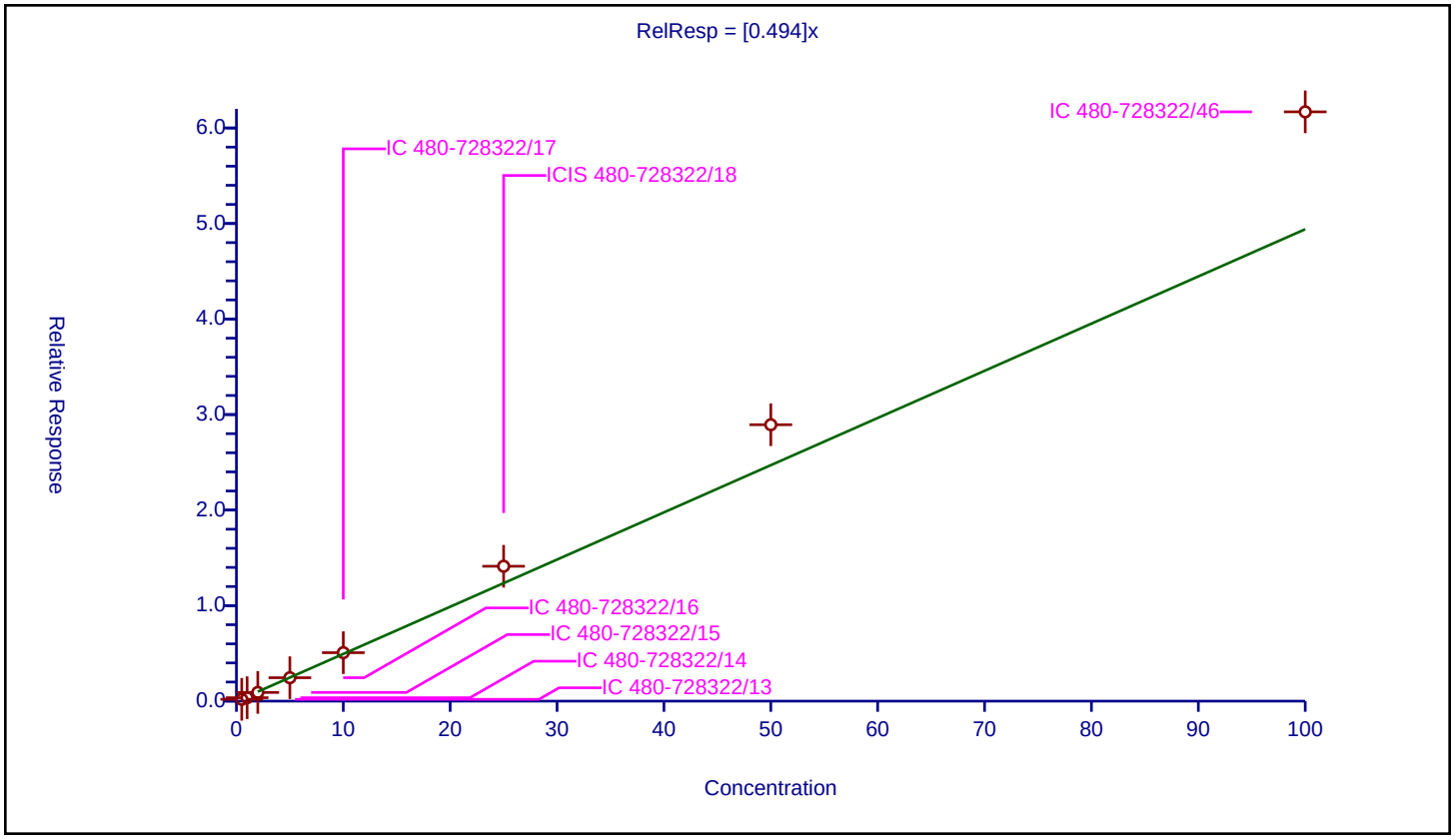
Curve Coefficients

Intercept:	0
Slope:	0.494

Error Coefficients

Relative Standard Deviation:	18.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.190492	25.0	303163.0	0.380983	Y
2	IC 480-728322/14	1.0	0.357571	25.0	309239.0	0.357571	Y
3	IC 480-728322/15	2.0	0.910887	25.0	298116.0	0.455444	Y
4	IC 480-728322/16	5.0	2.451705	25.0	306246.0	0.490341	Y
5	IC 480-728322/17	10.0	5.072556	25.0	303077.0	0.507256	Y
6	ICIS 480-728322/18	25.0	14.121999	25.0	306913.0	0.56488	Y
7	IC 480-728322/19	50.0	28.937076	25.0	313856.0	0.578742	Y
8	IC 480-728322/46	100.0	61.690759	25.0	319188.0	0.616908	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

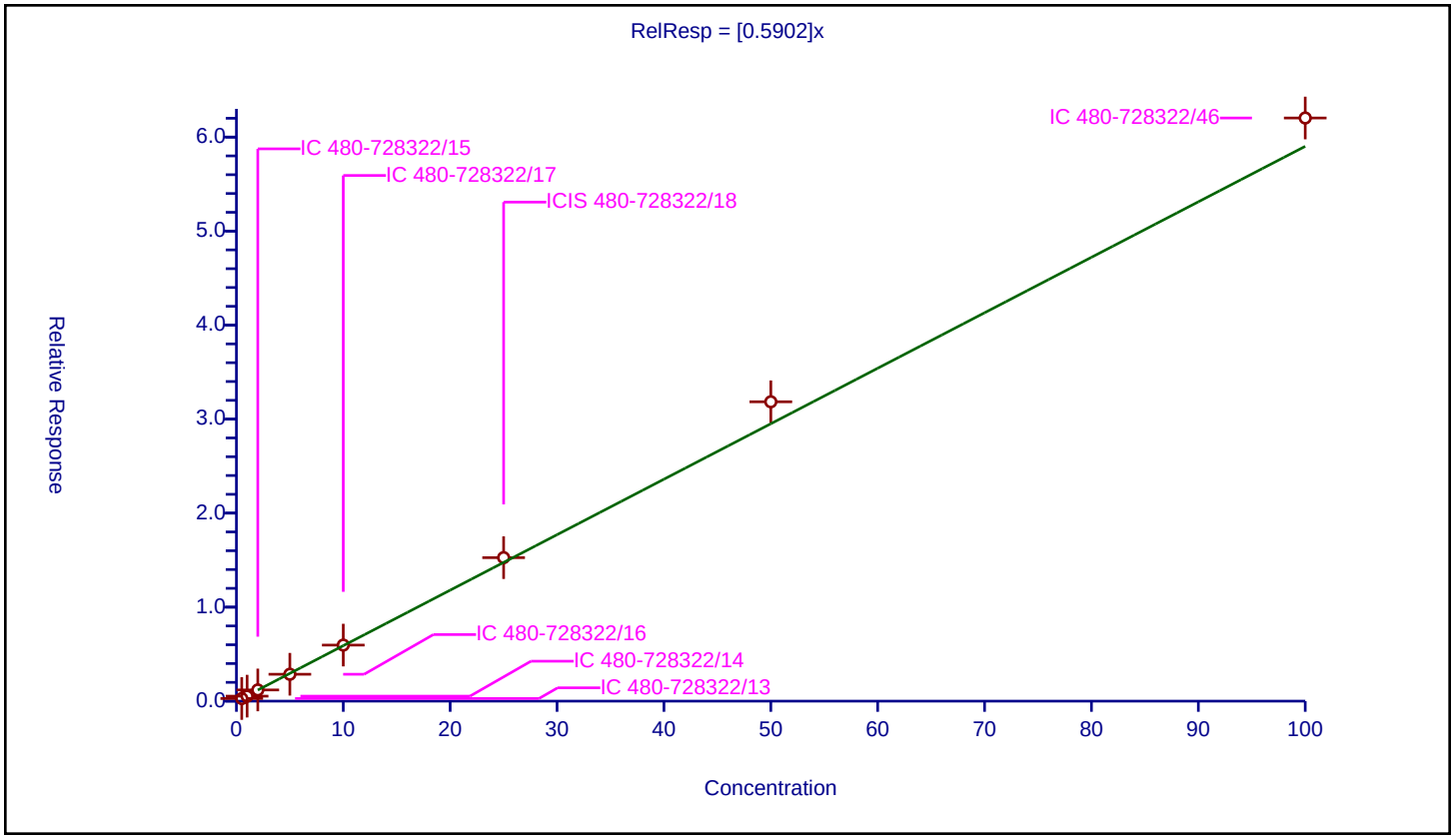
Curve Coefficients

Intercept:	0
Slope:	0.5902

Error Coefficients

Relative Standard Deviation:	5.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.278975	25.0	303163.0	0.557951	Y
2	IC 480-728322/14	1.0	0.531385	25.0	309239.0	0.531385	Y
3	IC 480-728322/15	2.0	1.192237	25.0	298116.0	0.596119	Y
4	IC 480-728322/16	5.0	2.859139	25.0	306246.0	0.571828	Y
5	IC 480-728322/17	10.0	5.962346	25.0	303077.0	0.596235	Y
6	ICIS 480-728322/18	25.0	15.264831	25.0	306913.0	0.610593	Y
7	IC 480-728322/19	50.0	31.84231	25.0	313856.0	0.636846	Y
8	IC 480-728322/46	100.0	62.031859	25.0	319188.0	0.620319	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

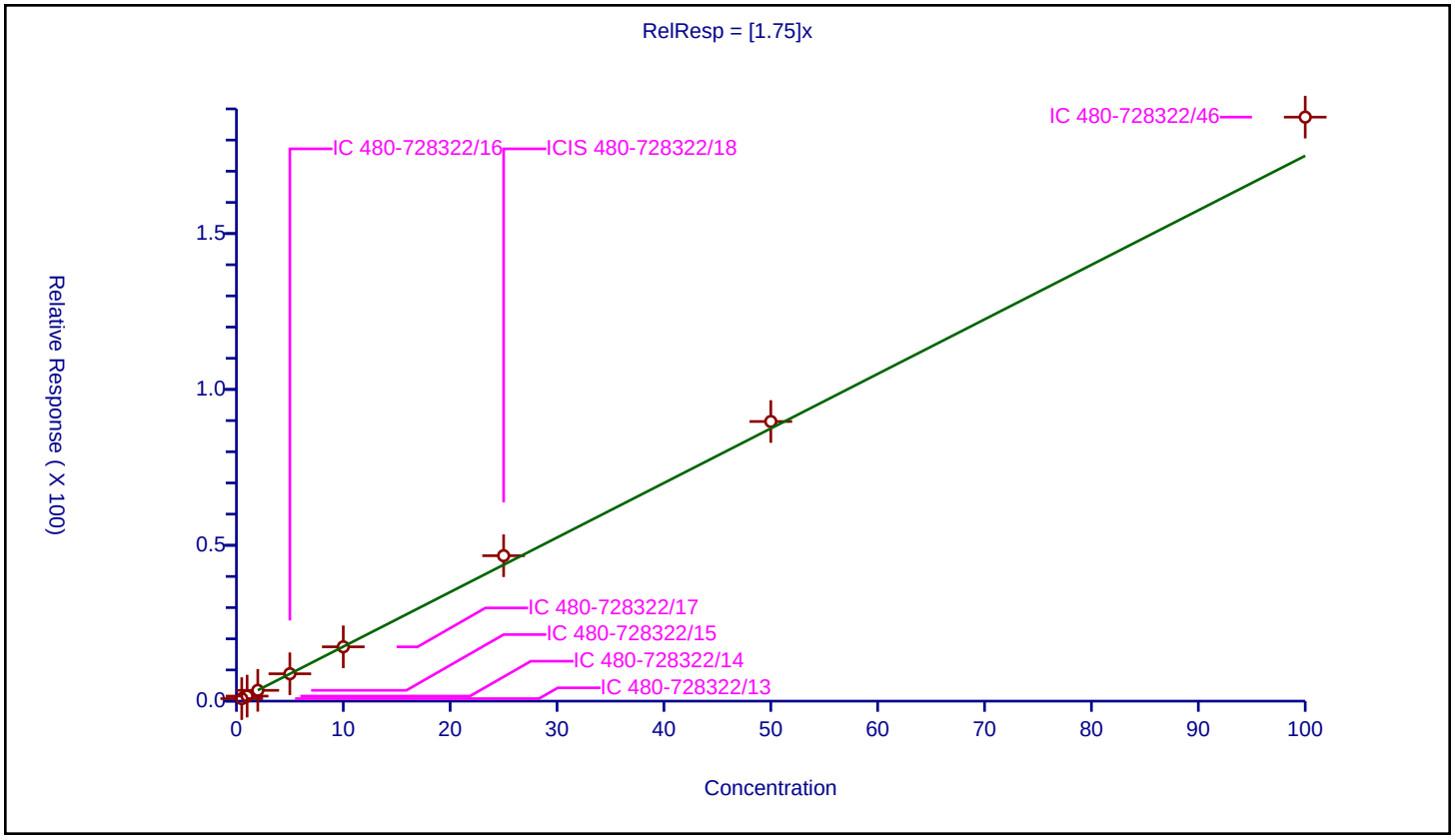
Curve Coefficients

Intercept:	0
Slope:	1.75

Error Coefficients

Relative Standard Deviation:	5.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.8046	25.0	303163.0	1.6092	Y
2	IC 480-728322/14	1.0	1.622208	25.0	309239.0	1.622208	Y
3	IC 480-728322/15	2.0	3.466771	25.0	298116.0	1.733386	Y
4	IC 480-728322/16	5.0	8.77636	25.0	306246.0	1.755272	Y
5	IC 480-728322/17	10.0	17.426017	25.0	303077.0	1.742602	Y
6	ICIS 480-728322/18	25.0	46.656707	25.0	306913.0	1.866268	Y
7	IC 480-728322/19	50.0	89.715984	25.0	313856.0	1.79432	Y
8	IC 480-728322/46	100.0	187.361837	25.0	319188.0	1.873618	Y



Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

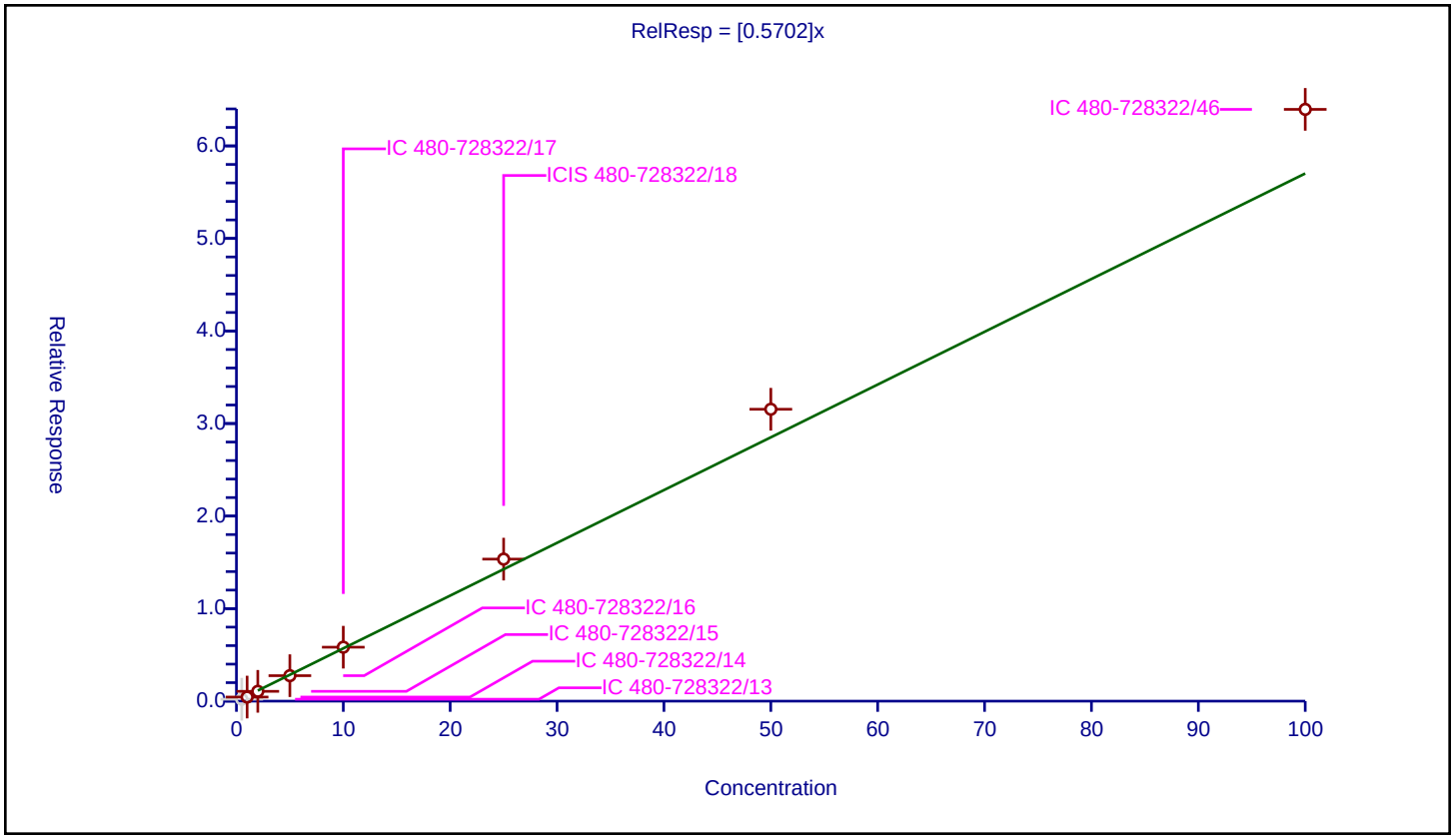
Curve Coefficients

Intercept:	0
Slope:	0.5702

Error Coefficients

Relative Standard Deviation:	12.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.208634	25.0	303163.0	0.417267	N
2	IC 480-728322/14	1.0	0.442942	25.0	309239.0	0.442942	Y
3	IC 480-728322/15	2.0	1.061416	25.0	298116.0	0.530708	Y
4	IC 480-728322/16	5.0	2.752362	25.0	306246.0	0.550472	Y
5	IC 480-728322/17	10.0	5.830614	25.0	303077.0	0.583061	Y
6	ICIS 480-728322/18	25.0	15.346531	25.0	306913.0	0.613861	Y
7	IC 480-728322/19	50.0	31.543287	25.0	313856.0	0.630866	Y
8	IC 480-728322/46	100.0	63.949146	25.0	319188.0	0.639491	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

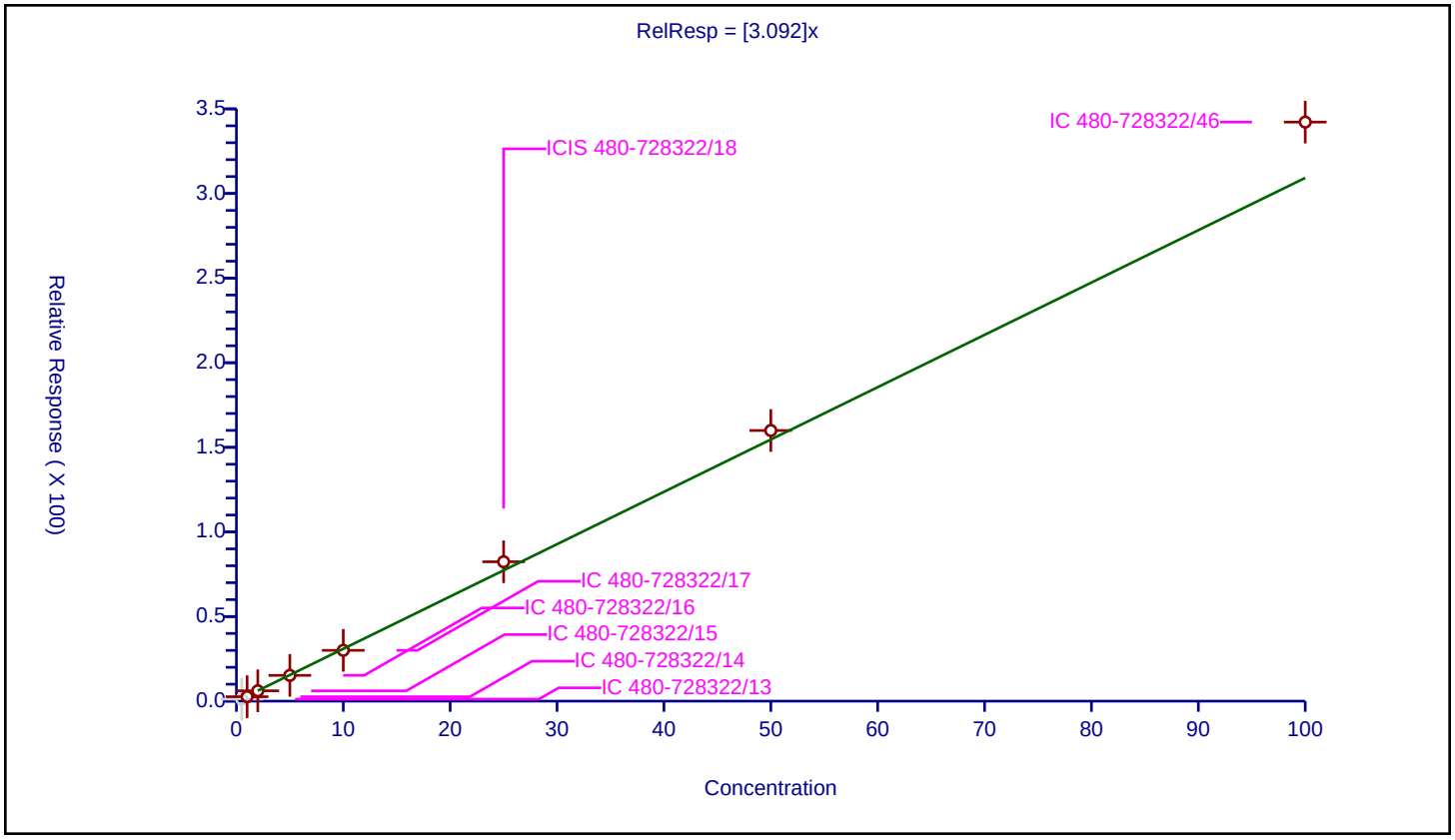
Curve Coefficients

Intercept:	0
Slope:	3.092

Error Coefficients

Relative Standard Deviation:	8.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	1.198695	25.0	303163.0	2.39739	N
2	IC 480-728322/14	1.0	2.628388	25.0	309239.0	2.628388	Y
3	IC 480-728322/15	2.0	6.110709	25.0	298116.0	3.055354	Y
4	IC 480-728322/16	5.0	15.225587	25.0	306246.0	3.045117	Y
5	IC 480-728322/17	10.0	30.018857	25.0	303077.0	3.001886	Y
6	ICIS 480-728322/18	25.0	82.357052	25.0	306913.0	3.294282	Y
7	IC 480-728322/19	50.0	159.933616	25.0	313856.0	3.198672	Y
8	IC 480-728322/46	100.0	342.200756	25.0	319188.0	3.422008	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

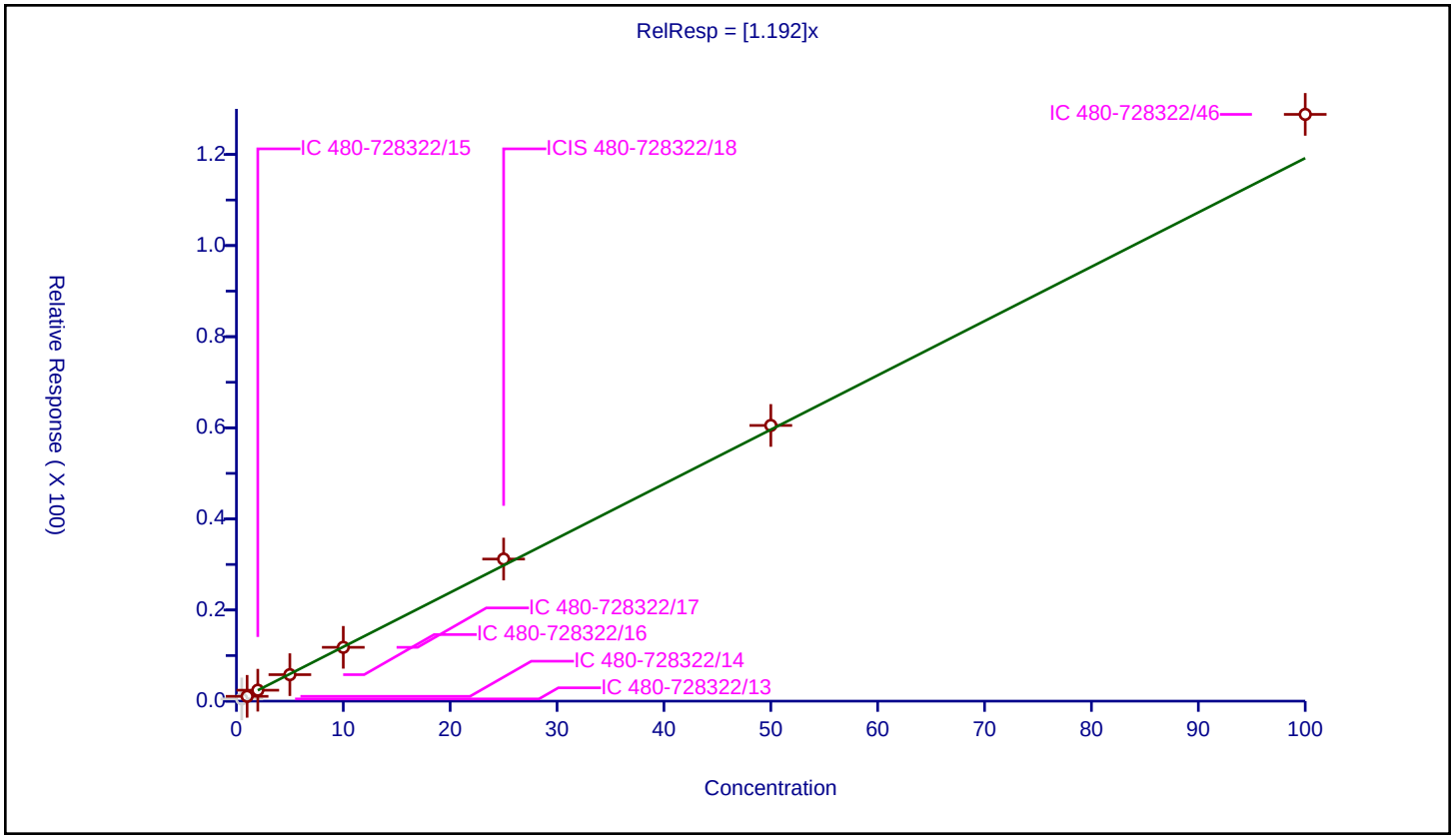
Curve Coefficients

Intercept:	0
Slope:	1.192

Error Coefficients

Relative Standard Deviation:	6.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.489093	25.0	303163.0	0.978187	N
2	IC 480-728322/14	1.0	1.054201	25.0	309239.0	1.054201	Y
3	IC 480-728322/15	2.0	2.399318	25.0	298116.0	1.199659	Y
4	IC 480-728322/16	5.0	5.812239	25.0	306246.0	1.162448	Y
5	IC 480-728322/17	10.0	11.811602	25.0	303077.0	1.18116	Y
6	ICIS 480-728322/18	25.0	31.187258	25.0	306913.0	1.24749	Y
7	IC 480-728322/19	50.0	60.51804	25.0	313856.0	1.210361	Y
8	IC 480-728322/46	100.0	128.798075	25.0	319188.0	1.287981	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

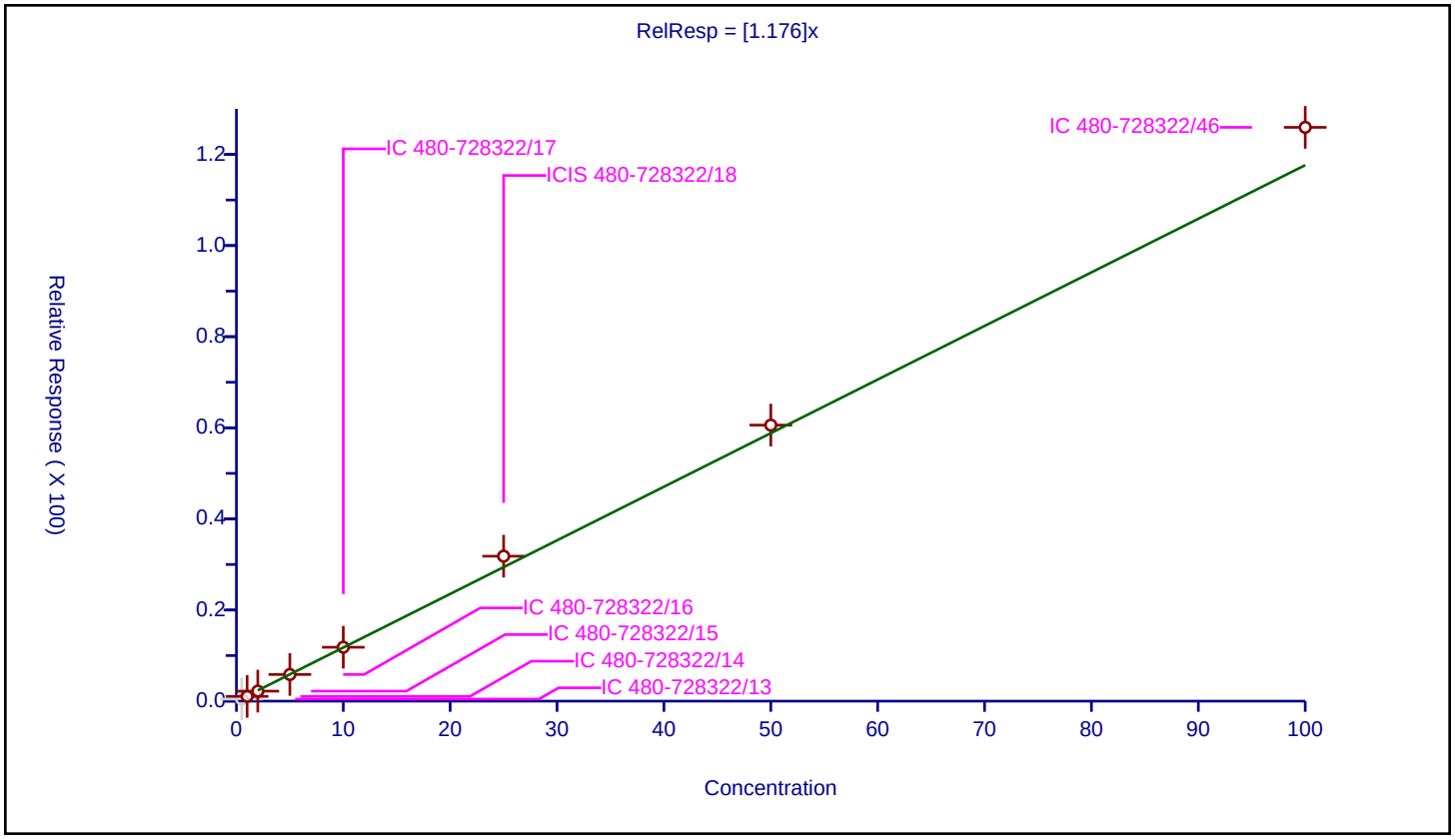
Curve Coefficients

Intercept:	0
Slope:	1.176

Error Coefficients

Relative Standard Deviation:	7.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.452562	25.0	303163.0	0.905124	N
2	IC 480-728322/14	1.0	1.042074	25.0	309239.0	1.042074	Y
3	IC 480-728322/15	2.0	2.193106	25.0	298116.0	1.096553	Y
4	IC 480-728322/16	5.0	5.850117	25.0	306246.0	1.170023	Y
5	IC 480-728322/17	10.0	11.82876	25.0	303077.0	1.182876	Y
6	ICIS 480-728322/18	25.0	31.81602	25.0	306913.0	1.272641	Y
7	IC 480-728322/19	50.0	60.585746	25.0	313856.0	1.211715	Y
8	IC 480-728322/46	100.0	125.947796	25.0	319188.0	1.259478	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

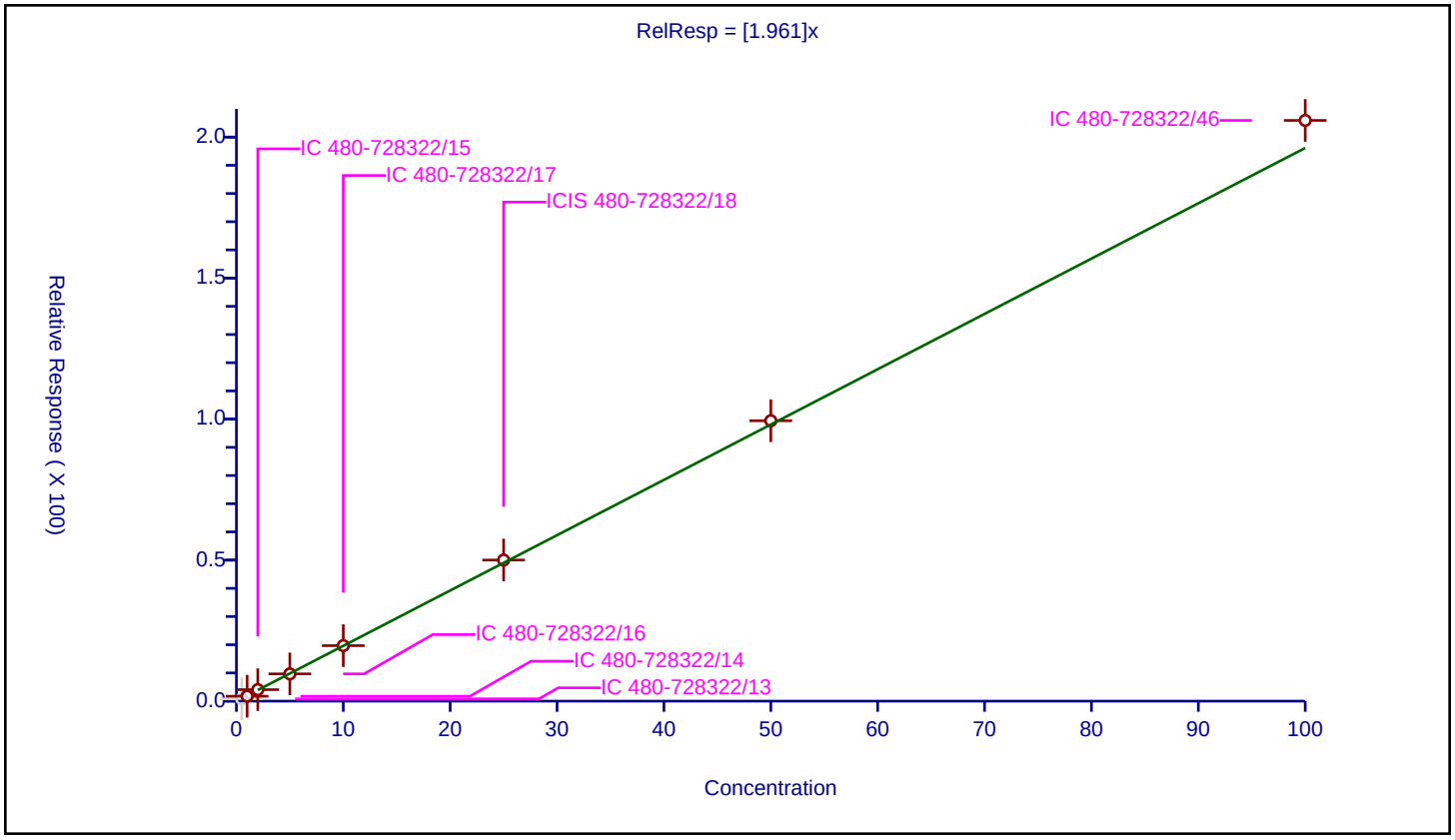
Curve Coefficients

Intercept:	0
Slope:	1.961

Error Coefficients

Relative Standard Deviation:	5.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.804435	25.0	303163.0	1.60887	N
2	IC 480-728322/14	1.0	1.745495	25.0	309239.0	1.745495	Y
3	IC 480-728322/15	2.0	4.070815	25.0	298116.0	2.035407	Y
4	IC 480-728322/16	5.0	9.662983	25.0	306246.0	1.932597	Y
5	IC 480-728322/17	10.0	19.673631	25.0	303077.0	1.967363	Y
6	ICIS 480-728322/18	25.0	50.02631	25.0	306913.0	2.001052	Y
7	IC 480-728322/19	50.0	99.433578	25.0	313856.0	1.988672	Y
8	IC 480-728322/46	100.0	205.91125	25.0	319188.0	2.059112	Y



Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

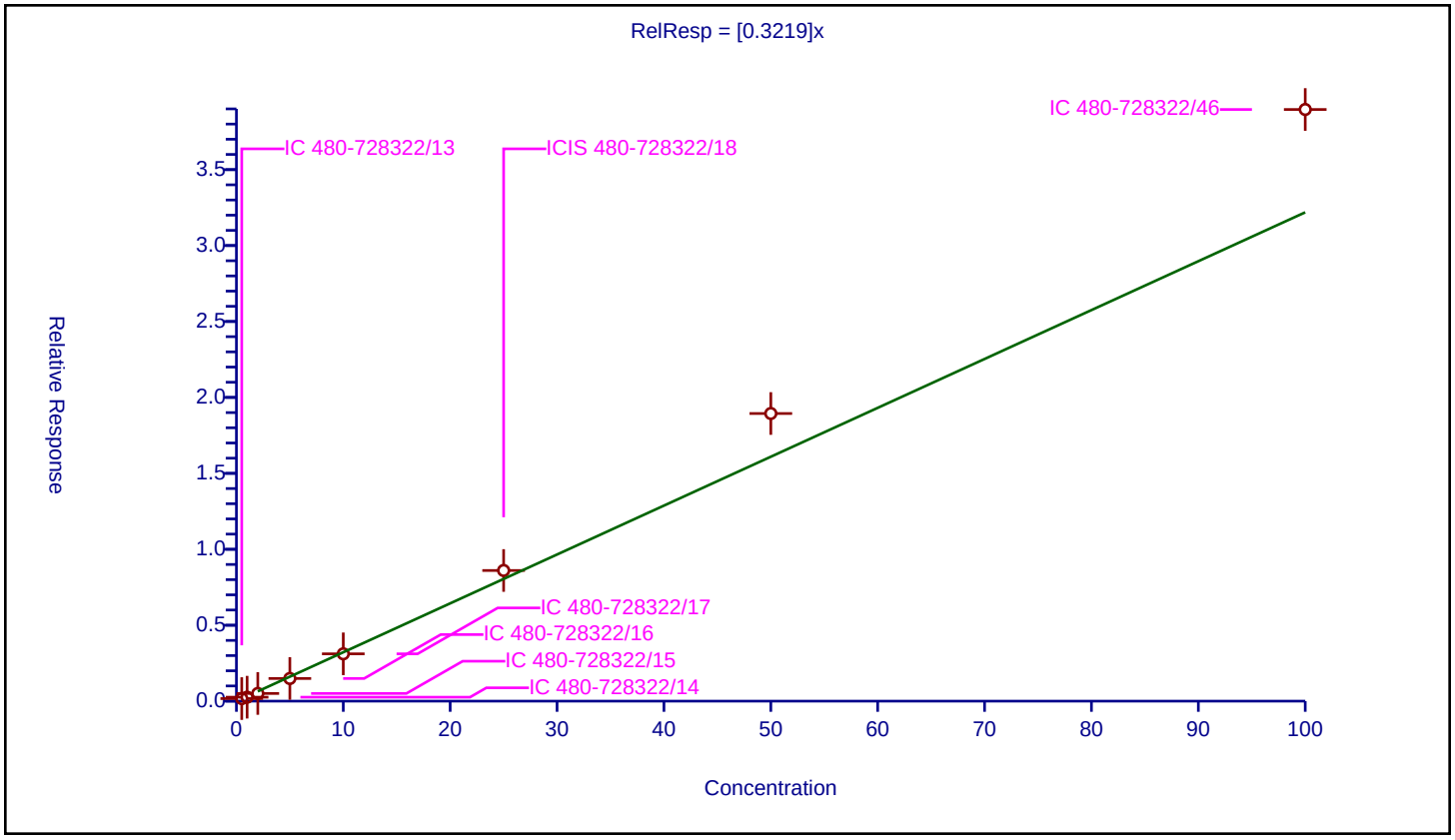
Curve Coefficients

Intercept:	0
Slope:	0.3219

Error Coefficients

Relative Standard Deviation:	15.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.169133	25.0	303163.0	0.338267	Y
2	IC 480-728322/14	1.0	0.260963	25.0	309239.0	0.260963	Y
3	IC 480-728322/15	2.0	0.50685	25.0	298116.0	0.253425	Y
4	IC 480-728322/16	5.0	1.49153	25.0	306246.0	0.298306	Y
5	IC 480-728322/17	10.0	3.115297	25.0	303077.0	0.31153	Y
6	ICIS 480-728322/18	25.0	8.604067	25.0	306913.0	0.344163	Y
7	IC 480-728322/19	50.0	18.941569	25.0	313856.0	0.378831	Y
8	IC 480-728322/46	100.0	38.95972	25.0	319188.0	0.389597	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

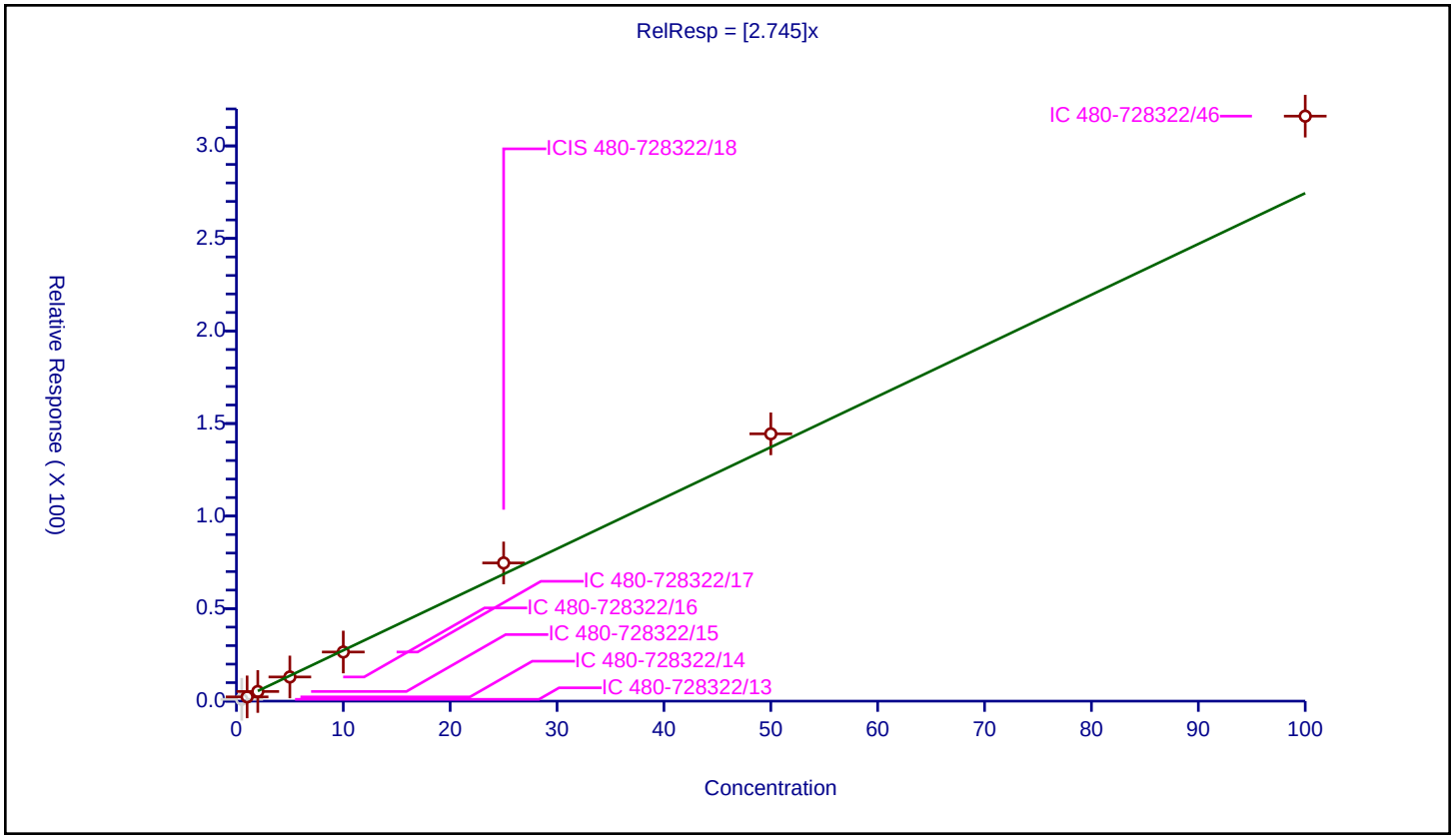
Curve Coefficients

Intercept:	0
Slope:	2.745

Error Coefficients

Relative Standard Deviation:	10.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.98174	25.0	321241.0	1.963479	N
2	IC 480-728322/14	1.0	2.299112	25.0	323538.0	2.299112	Y
3	IC 480-728322/15	2.0	5.220079	25.0	322816.0	2.610039	Y
4	IC 480-728322/16	5.0	13.061614	25.0	320950.0	2.612323	Y
5	IC 480-728322/17	10.0	26.546378	25.0	313038.0	2.654638	Y
6	ICIS 480-728322/18	25.0	74.659184	25.0	314686.0	2.986367	Y
7	IC 480-728322/19	50.0	144.430703	25.0	321221.0	2.888614	Y
8	IC 480-728322/46	100.0	316.080423	25.0	315867.0	3.160804	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

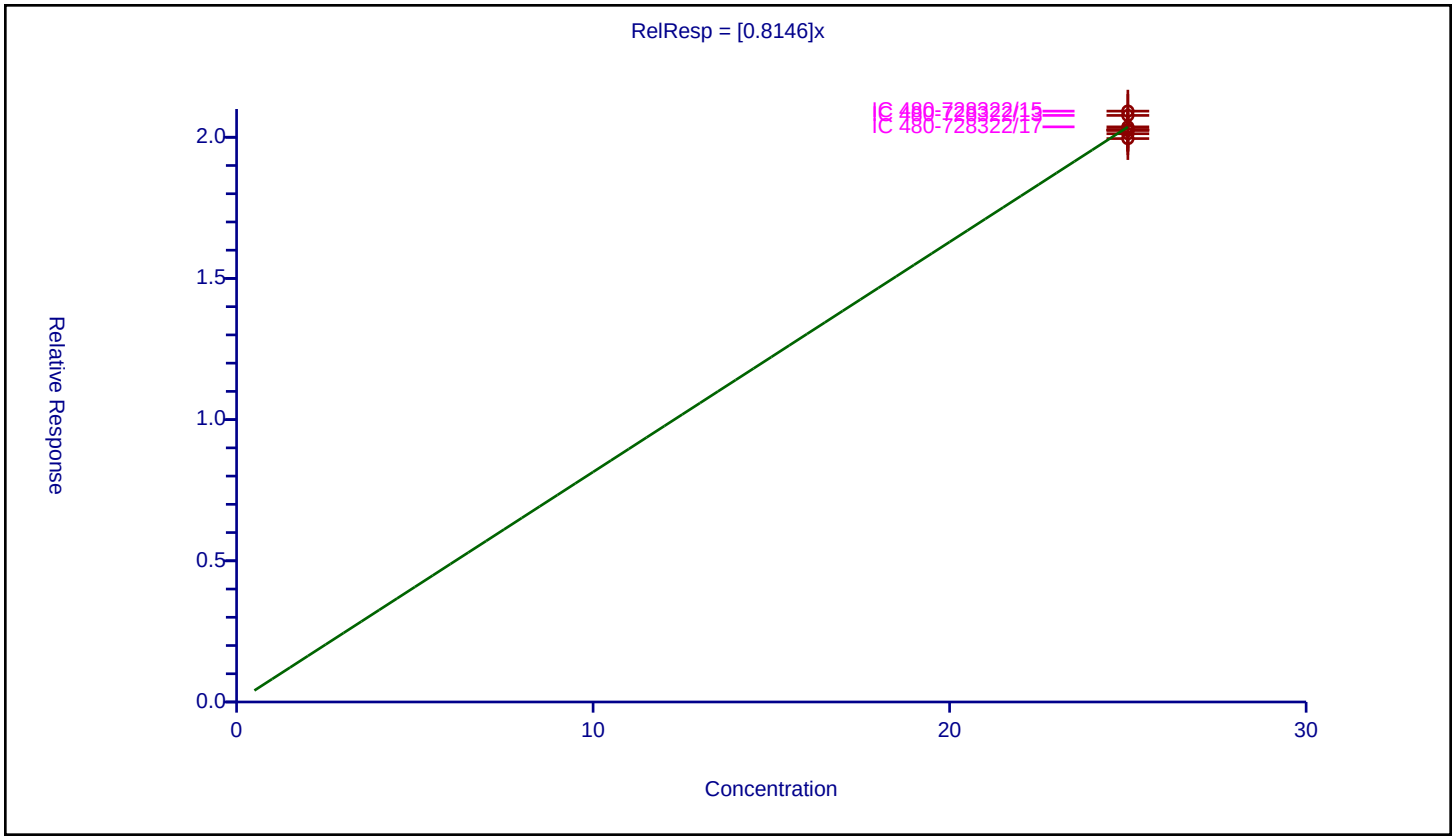
Curve Coefficients

Intercept:	0
Slope:	0.8146

Error Coefficients

Relative Standard Deviation:	1.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	25.0	20.773478	25.0	303163.0	0.830939	Y
2	IC 480-728322/14	25.0	20.245102	25.0	309239.0	0.809804	Y
3	IC 480-728322/15	25.0	20.925244	25.0	298116.0	0.83701	Y
4	IC 480-728322/16	25.0	20.248264	25.0	306246.0	0.809931	Y
5	IC 480-728322/17	25.0	20.367761	25.0	303077.0	0.81471	Y
6	ICIS 480-728322/18	25.0	20.124351	25.0	306913.0	0.804974	Y
7	IC 480-728322/19	25.0	20.276735	25.0	313856.0	0.811069	Y
8	IC 480-728322/46	25.0	19.953053	25.0	319188.0	0.798122	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

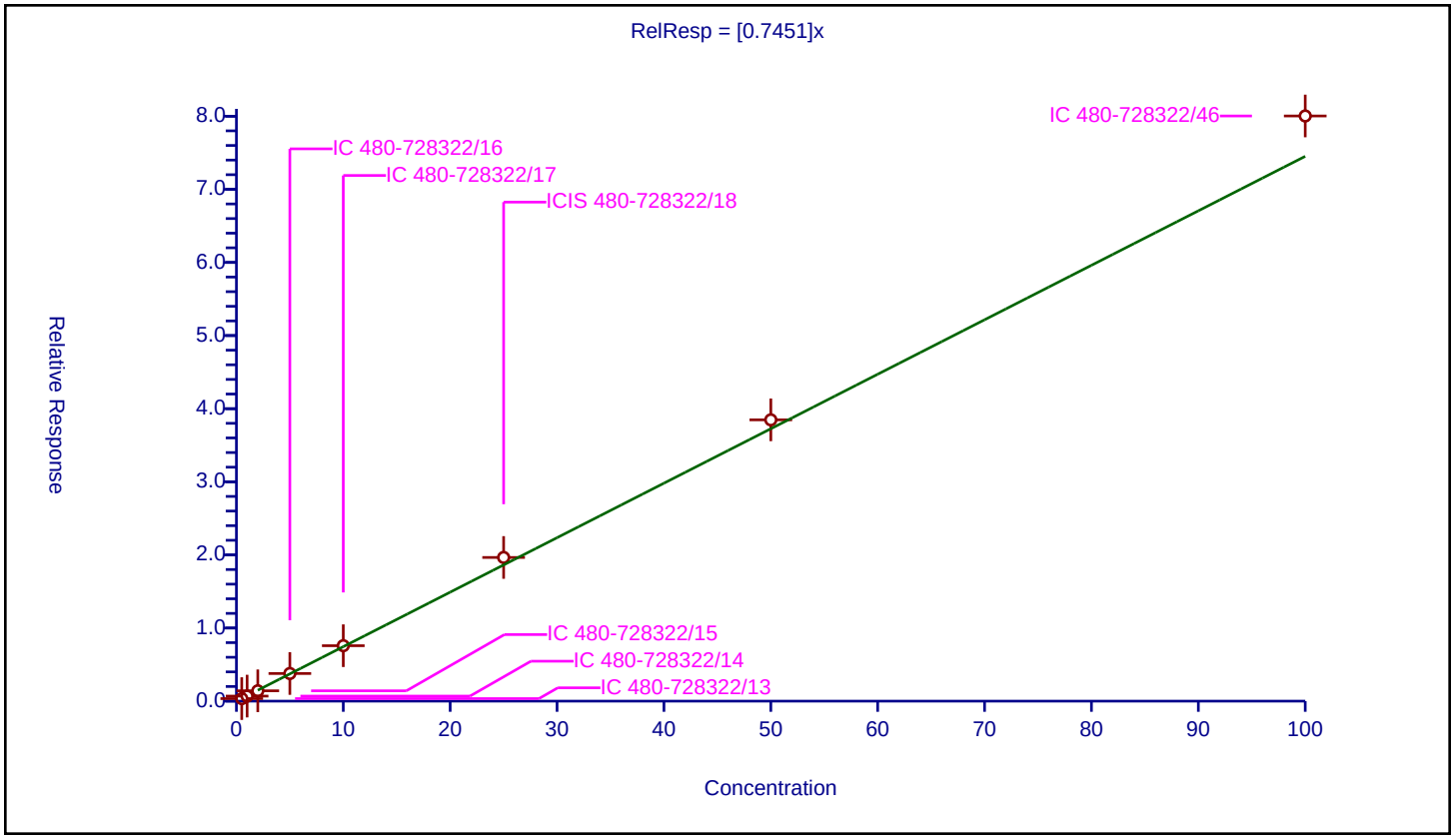
Curve Coefficients

Intercept:	0
Slope:	0.7451

Error Coefficients

Relative Standard Deviation:	5.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.347636	25.0	321241.0	0.695272	Y
2	IC 480-728322/14	1.0	0.688559	25.0	323538.0	0.688559	Y
3	IC 480-728322/15	2.0	1.414273	25.0	322816.0	0.707137	Y
4	IC 480-728322/16	5.0	3.779483	25.0	320950.0	0.755897	Y
5	IC 480-728322/17	10.0	7.583584	25.0	313038.0	0.758358	Y
6	ICIS 480-728322/18	25.0	19.648793	25.0	314686.0	0.785952	Y
7	IC 480-728322/19	50.0	38.473279	25.0	321221.0	0.769466	Y
8	IC 480-728322/46	100.0	80.031469	25.0	315867.0	0.800315	Y



Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

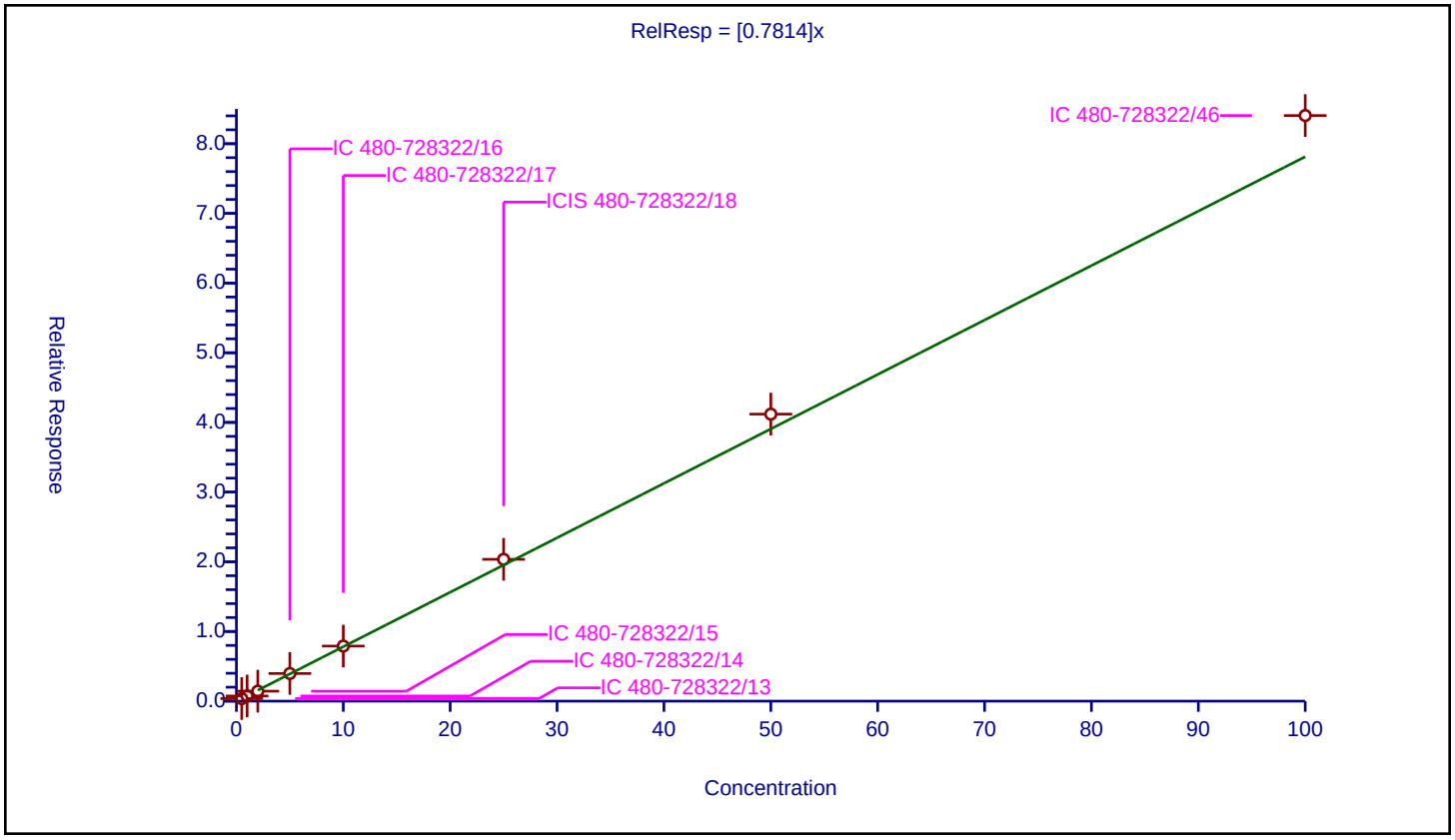
Curve Coefficients

Intercept:	0
Slope:	0.7814

Error Coefficients

Relative Standard Deviation:	5.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.366936	25.0	321241.0	0.733873	Y
2	IC 480-728322/14	1.0	0.738708	25.0	323538.0	0.738708	Y
3	IC 480-728322/15	2.0	1.432085	25.0	322816.0	0.716043	Y
4	IC 480-728322/16	5.0	3.967674	25.0	320950.0	0.793535	Y
5	IC 480-728322/17	10.0	7.903274	25.0	313038.0	0.790327	Y
6	ICIS 480-728322/18	25.0	20.351875	25.0	314686.0	0.814075	Y
7	IC 480-728322/19	50.0	41.194536	25.0	321221.0	0.823891	Y
8	IC 480-728322/46	100.0	84.045896	25.0	315867.0	0.840459	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

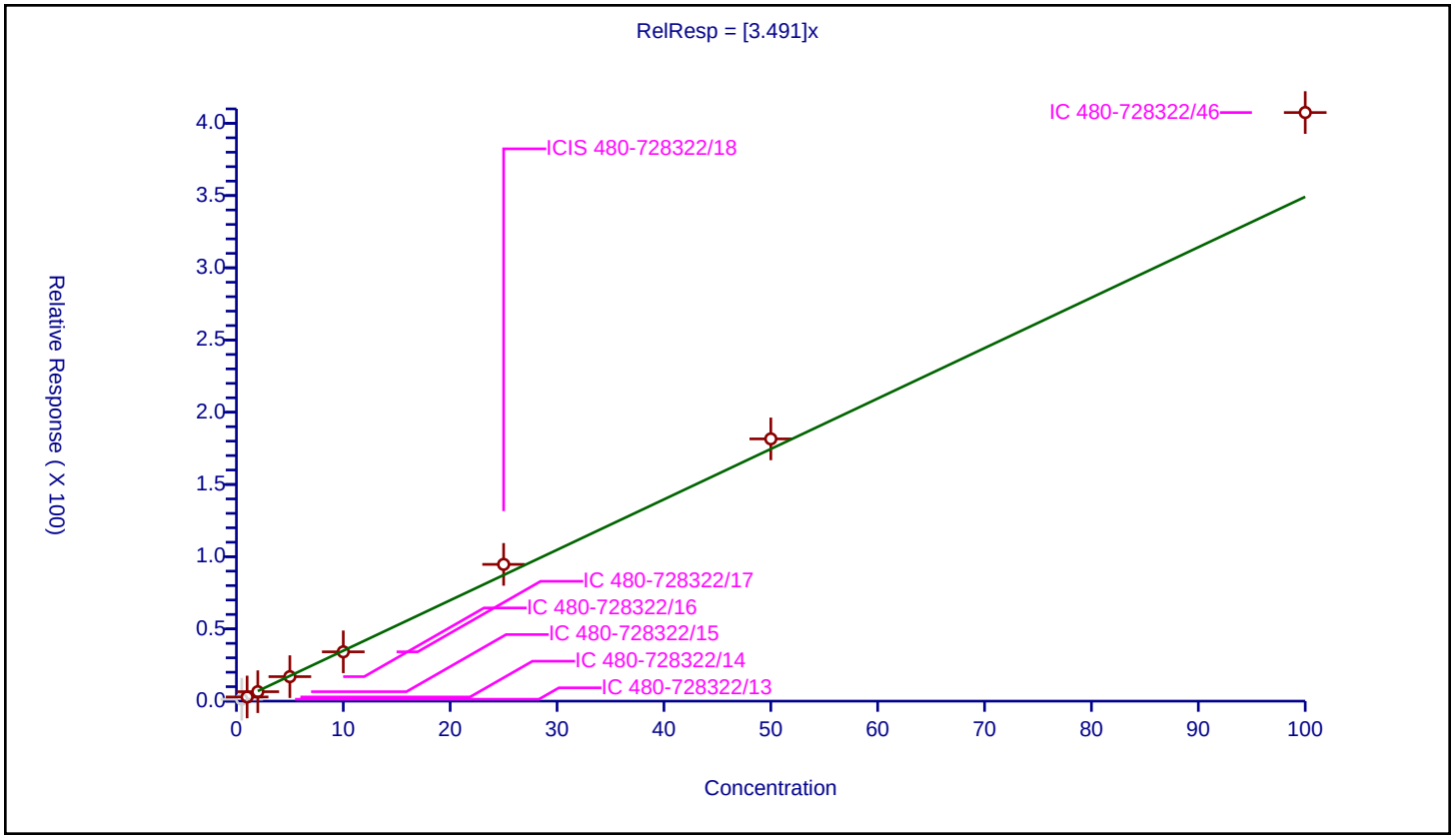
Curve Coefficients

Intercept:	0
Slope:	3.491

Error Coefficients

Relative Standard Deviation:	11.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	1.328753	25.0	321241.0	2.657506	N
2	IC 480-728322/14	1.0	2.878024	25.0	323538.0	2.878024	Y
3	IC 480-728322/15	2.0	6.530268	25.0	322816.0	3.265134	Y
4	IC 480-728322/16	5.0	16.9475	25.0	320950.0	3.3895	Y
5	IC 480-728322/17	10.0	34.146653	25.0	313038.0	3.414665	Y
6	ICIS 480-728322/18	25.0	94.676519	25.0	314686.0	3.787061	Y
7	IC 480-728322/19	50.0	181.551253	25.0	321221.0	3.631025	Y
8	IC 480-728322/46	100.0	407.4696	25.0	315867.0	4.074696	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

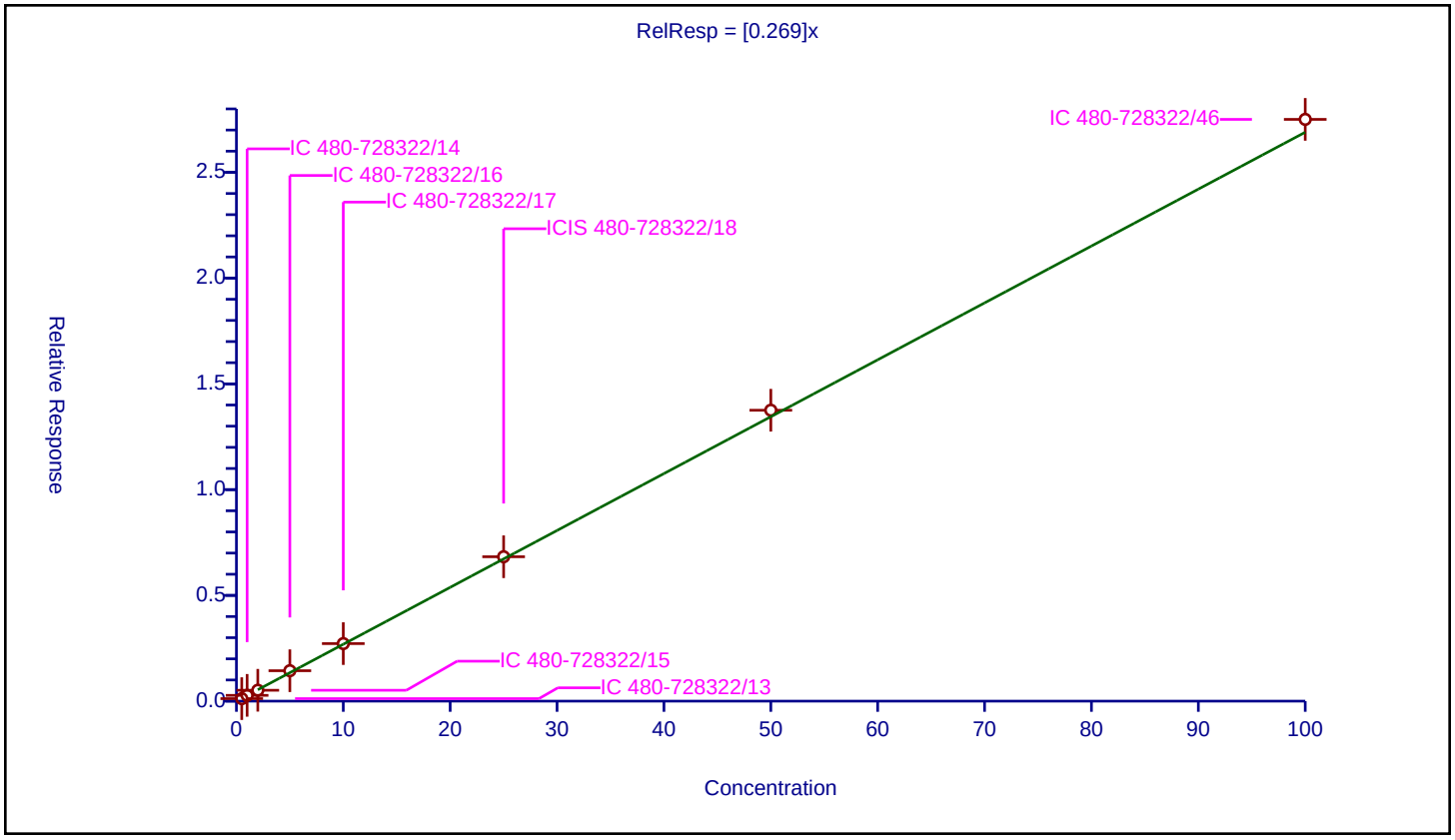
Curve Coefficients

Intercept:	0
Slope:	0.269

Error Coefficients

Relative Standard Deviation:	5.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.118525	25.0	321241.0	0.237049	Y
2	IC 480-728322/14	1.0	0.274156	25.0	323538.0	0.274156	Y
3	IC 480-728322/15	2.0	0.514767	25.0	322816.0	0.257383	Y
4	IC 480-728322/16	5.0	1.438931	25.0	320950.0	0.287786	Y
5	IC 480-728322/17	10.0	2.720836	25.0	313038.0	0.272084	Y
6	ICIS 480-728322/18	25.0	6.826726	25.0	314686.0	0.273069	Y
7	IC 480-728322/19	50.0	13.753926	25.0	321221.0	0.275079	Y
8	IC 480-728322/46	100.0	27.504298	25.0	315867.0	0.275043	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

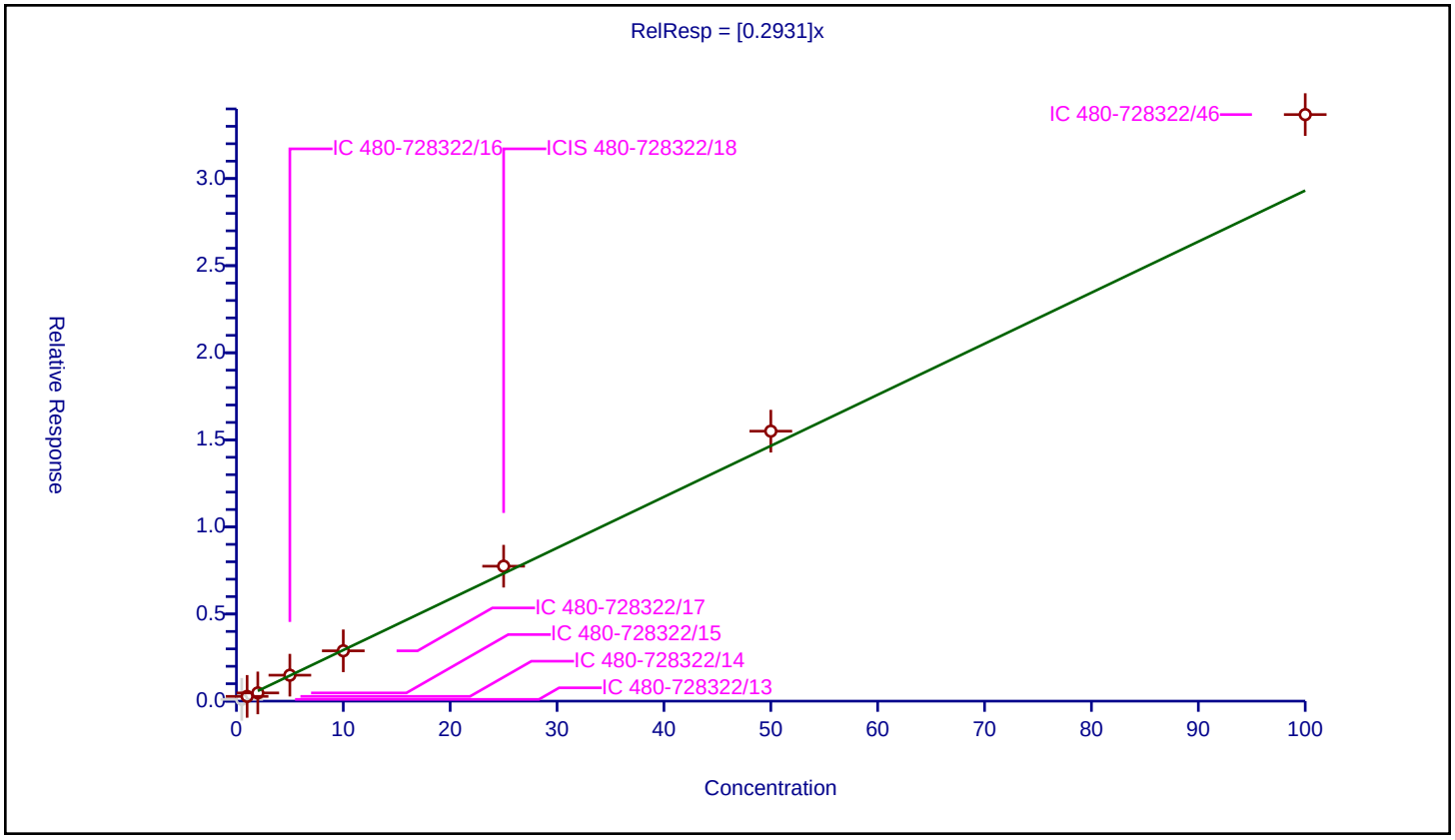
Curve Coefficients

Intercept:	0
Slope:	0.2931

Error Coefficients

Relative Standard Deviation:	11.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.102415	25.0	321241.0	0.204831	N
2	IC 480-728322/14	1.0	0.272534	25.0	323538.0	0.272534	Y
3	IC 480-728322/15	2.0	0.471863	25.0	322816.0	0.235932	Y
4	IC 480-728322/16	5.0	1.489251	25.0	320950.0	0.29785	Y
5	IC 480-728322/17	10.0	2.889266	25.0	313038.0	0.288927	Y
6	ICIS 480-728322/18	25.0	7.747167	25.0	314686.0	0.309887	Y
7	IC 480-728322/19	50.0	15.499609	25.0	321221.0	0.309992	Y
8	IC 480-728322/46	100.0	33.673112	25.0	315867.0	0.336731	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

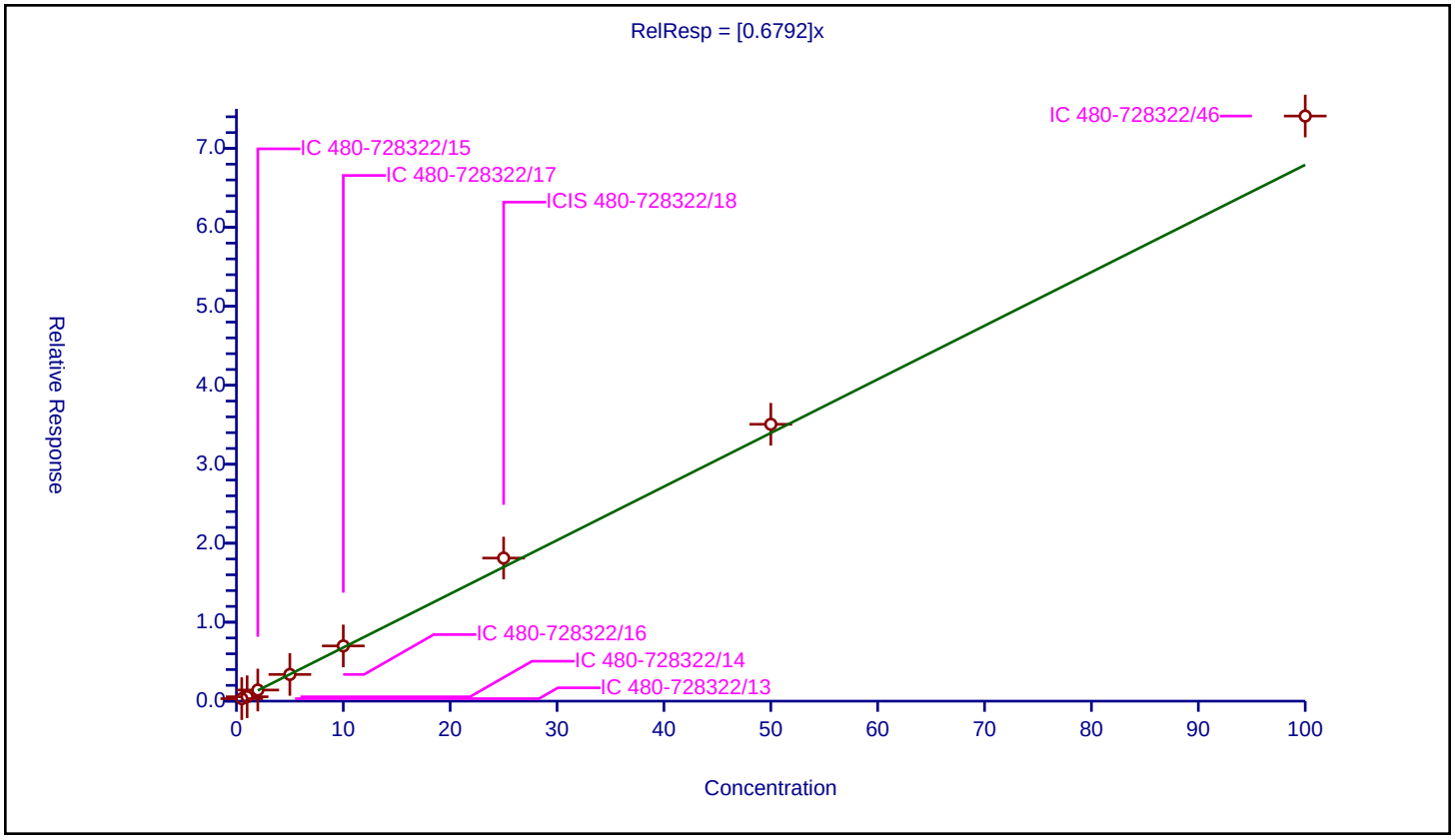
Curve Coefficients

Intercept:	0
Slope:	0.6792

Error Coefficients

Relative Standard Deviation:	8.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.316585	25.0	321241.0	0.633169	Y
2	IC 480-728322/14	1.0	0.554108	25.0	323538.0	0.554108	Y
3	IC 480-728322/15	2.0	1.407845	25.0	322816.0	0.703923	Y
4	IC 480-728322/16	5.0	3.380122	25.0	320950.0	0.676024	Y
5	IC 480-728322/17	10.0	6.991643	25.0	313038.0	0.699164	Y
6	ICIS 480-728322/18	25.0	18.117187	25.0	314686.0	0.724687	Y
7	IC 480-728322/19	50.0	35.06262	25.0	321221.0	0.701252	Y
8	IC 480-728322/46	100.0	74.096455	25.0	315867.0	0.740965	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

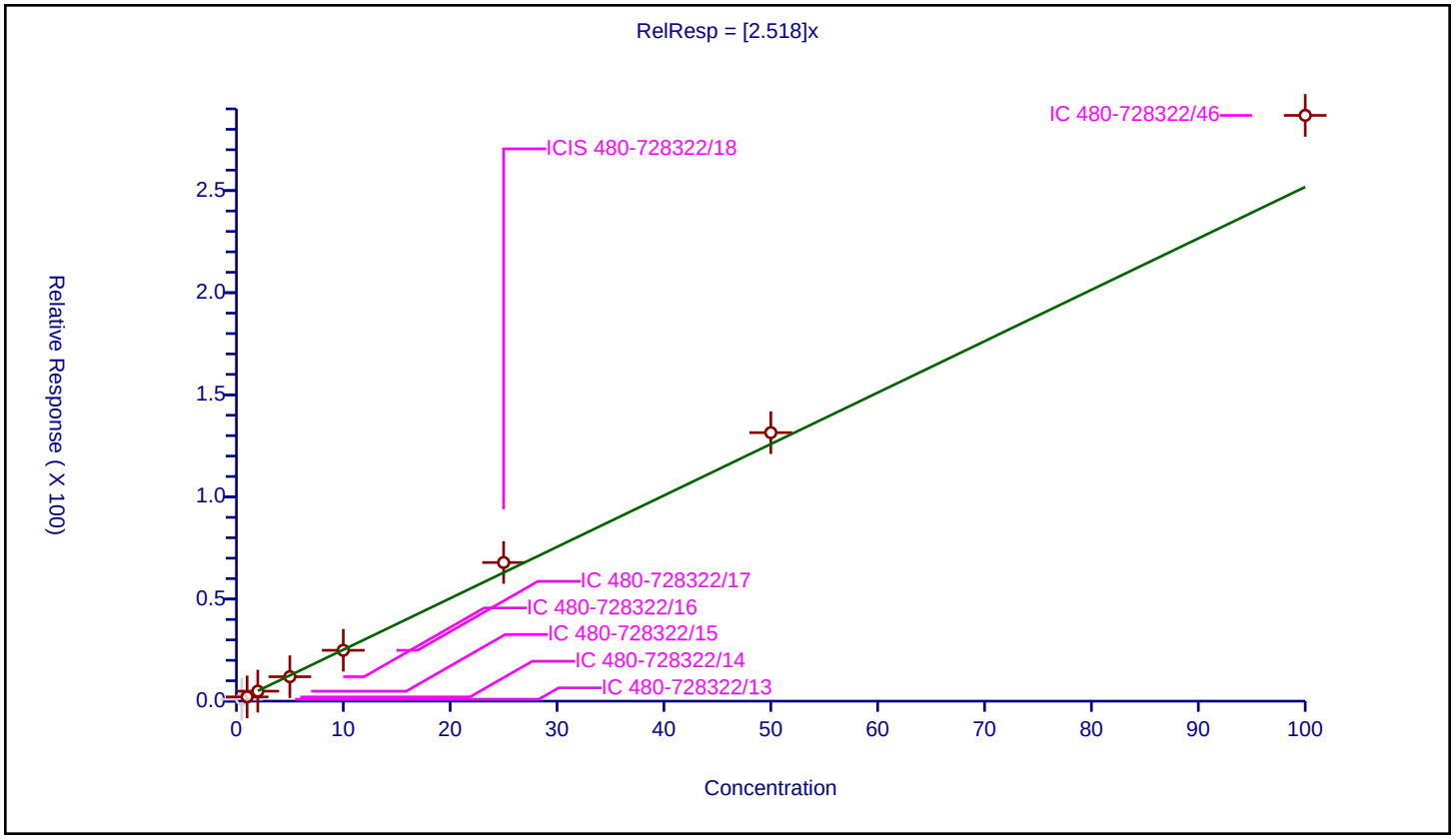
Curve Coefficients

Intercept:	0
Slope:	2.518

Error Coefficients

Relative Standard Deviation:	10.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.961739	25.0	321241.0	1.923478	N
2	IC 480-728322/14	1.0	2.076495	25.0	323538.0	2.076495	Y
3	IC 480-728322/15	2.0	4.901089	25.0	322816.0	2.450545	Y
4	IC 480-728322/16	5.0	11.961053	25.0	320950.0	2.392211	Y
5	IC 480-728322/17	10.0	24.904724	25.0	313038.0	2.490472	Y
6	ICIS 480-728322/18	25.0	67.884097	25.0	314686.0	2.715364	Y
7	IC 480-728322/19	50.0	131.485333	25.0	321221.0	2.629707	Y
8	IC 480-728322/46	100.0	286.823726	25.0	315867.0	2.868237	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

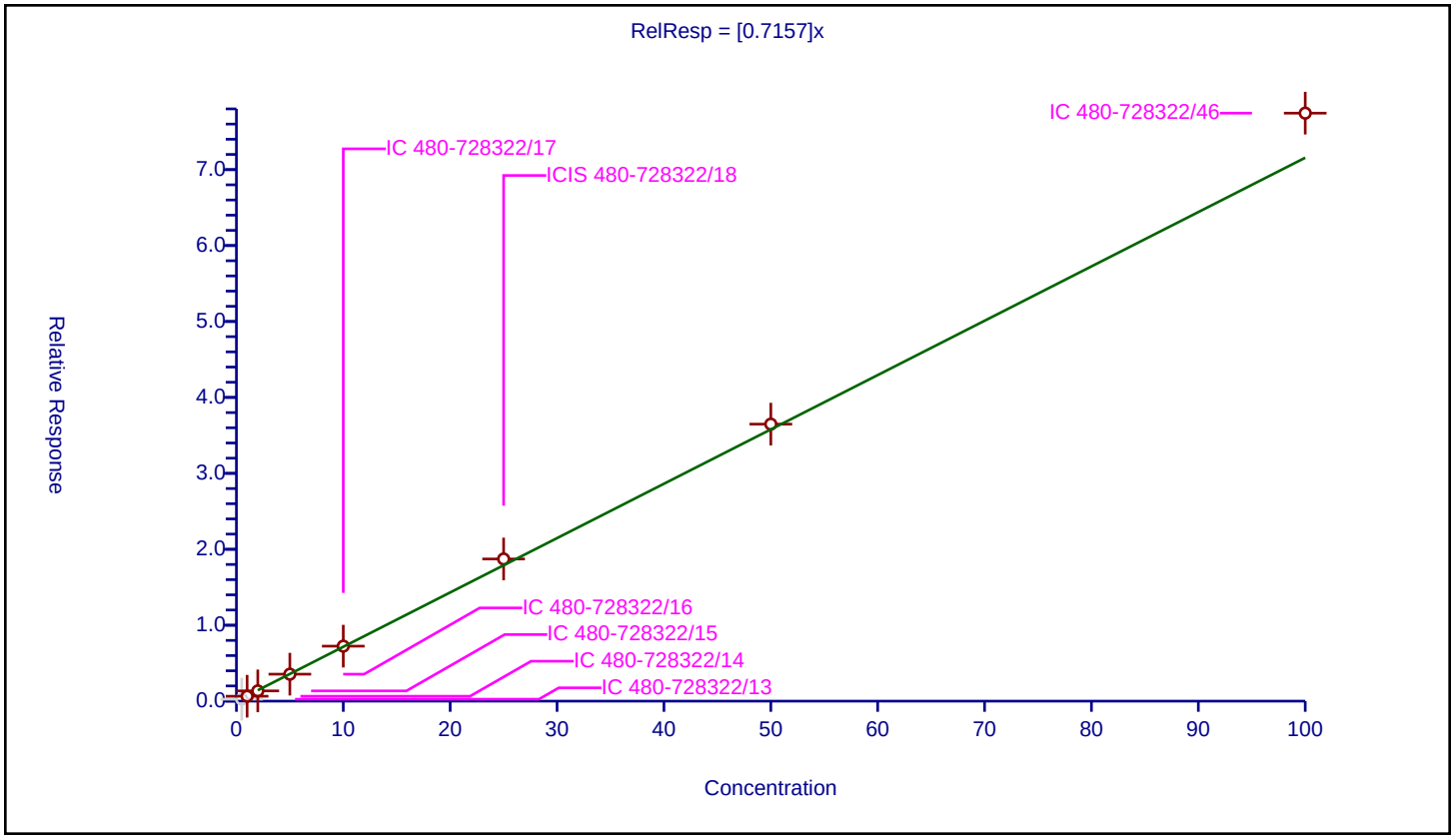
Curve Coefficients

Intercept:	0
Slope:	0.7157

Error Coefficients

Relative Standard Deviation:	6.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.25705	25.0	321241.0	0.5141	N
2	IC 480-728322/14	1.0	0.64776	25.0	323538.0	0.64776	Y
3	IC 480-728322/15	2.0	1.34984	25.0	322816.0	0.67492	Y
4	IC 480-728322/16	5.0	3.550397	25.0	320950.0	0.710079	Y
5	IC 480-728322/17	10.0	7.240575	25.0	313038.0	0.724057	Y
6	ICIS 480-728322/18	25.0	18.721519	25.0	314686.0	0.748861	Y
7	IC 480-728322/19	50.0	36.483371	25.0	321221.0	0.729667	Y
8	IC 480-728322/46	100.0	77.437418	25.0	315867.0	0.774374	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

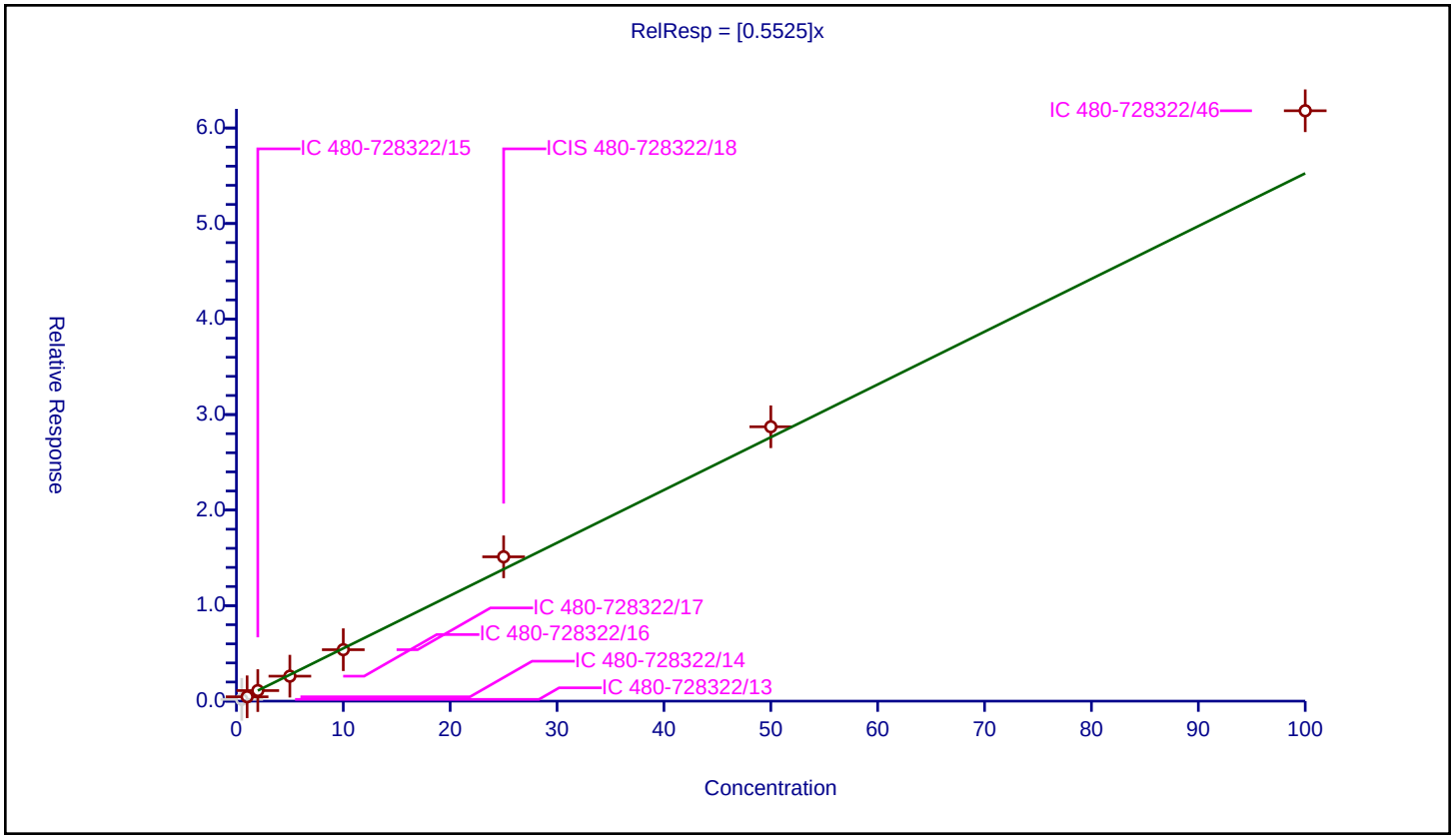
Curve Coefficients

Intercept:	0
Slope:	0.5525

Error Coefficients

Relative Standard Deviation:	9.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.186698	25.0	321241.0	0.373396	N
2	IC 480-728322/14	1.0	0.456283	25.0	323538.0	0.456283	Y
3	IC 480-728322/15	2.0	1.105738	25.0	322816.0	0.552869	Y
4	IC 480-728322/16	5.0	2.615049	25.0	320950.0	0.52301	Y
5	IC 480-728322/17	10.0	5.386487	25.0	313038.0	0.538649	Y
6	ICIS 480-728322/18	25.0	15.108314	25.0	314686.0	0.604333	Y
7	IC 480-728322/19	50.0	28.722749	25.0	321221.0	0.574455	Y
8	IC 480-728322/46	100.0	61.803465	25.0	315867.0	0.618035	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

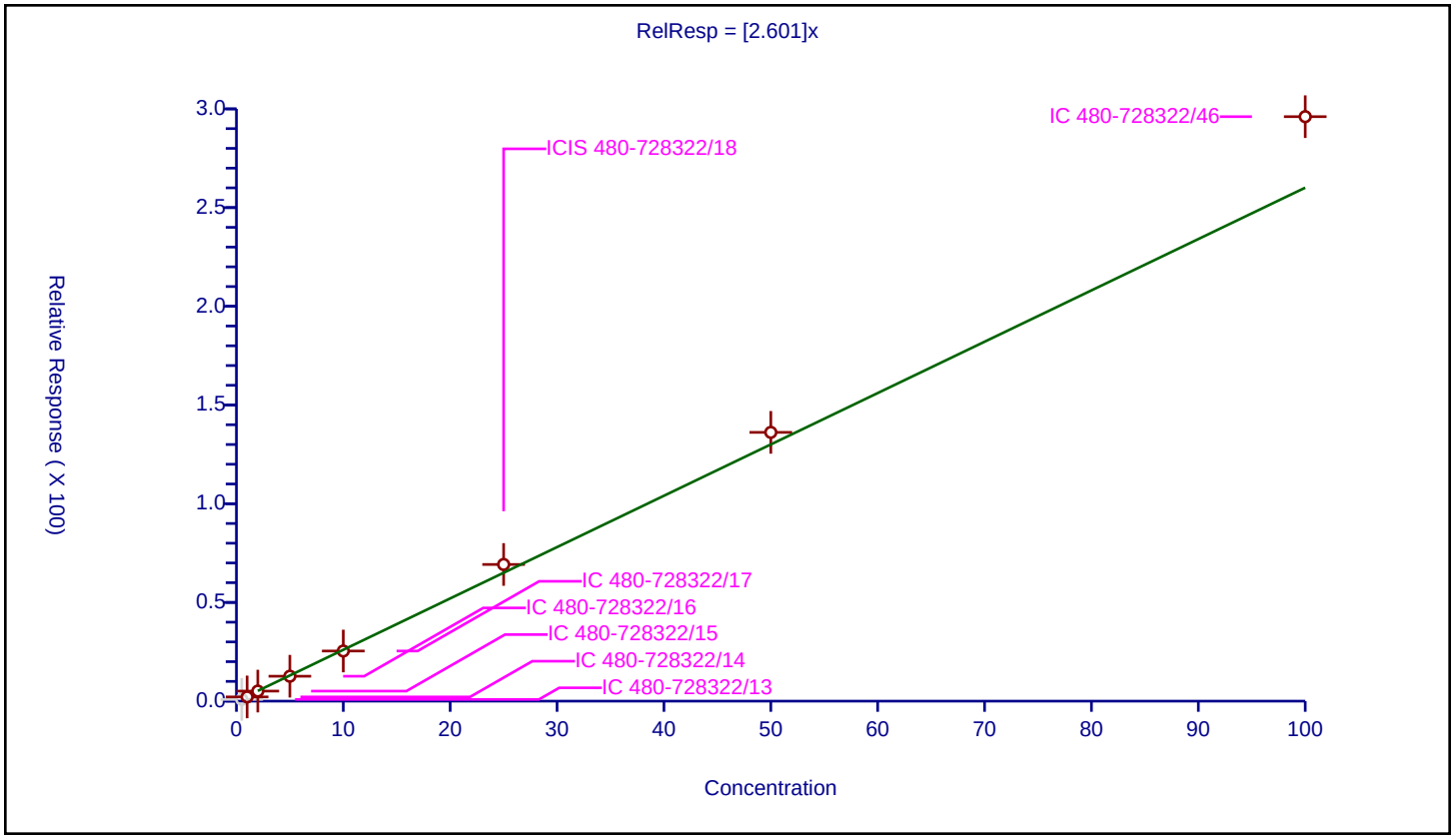
Curve Coefficients

Intercept:	0
Slope:	2.601

Error Coefficients

Relative Standard Deviation:	9.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.872554	25.0	321241.0	1.745107	N
2	IC 480-728322/14	1.0	2.143489	25.0	323538.0	2.143489	Y
3	IC 480-728322/15	2.0	5.089277	25.0	322816.0	2.544638	Y
4	IC 480-728322/16	5.0	12.624396	25.0	320950.0	2.524879	Y
5	IC 480-728322/17	10.0	25.396917	25.0	313038.0	2.539692	Y
6	ICIS 480-728322/18	25.0	69.229009	25.0	314686.0	2.76916	Y
7	IC 480-728322/19	50.0	136.154159	25.0	321221.0	2.723083	Y
8	IC 480-728322/46	100.0	296.064404	25.0	315867.0	2.960644	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

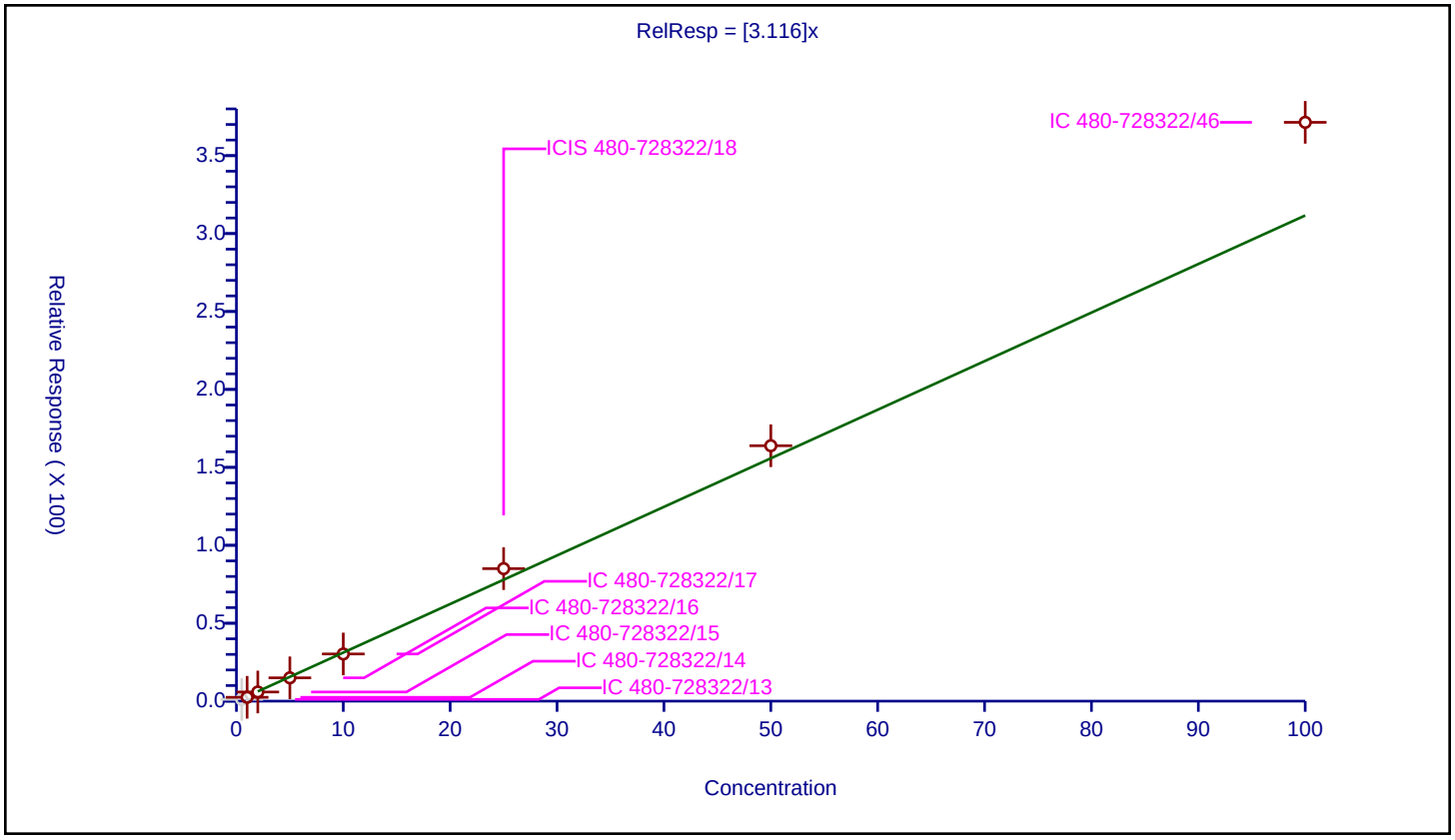
Curve Coefficients

Intercept:	0
Slope:	3.116

Error Coefficients

Relative Standard Deviation:	12.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	1.138865	25.0	321241.0	2.277729	N
2	IC 480-728322/14	1.0	2.468875	25.0	323538.0	2.468875	Y
3	IC 480-728322/15	2.0	5.866655	25.0	322816.0	2.933327	Y
4	IC 480-728322/16	5.0	14.962611	25.0	320950.0	2.992522	Y
5	IC 480-728322/17	10.0	30.266453	25.0	313038.0	3.026645	Y
6	ICIS 480-728322/18	25.0	85.001319	25.0	314686.0	3.400053	Y
7	IC 480-728322/19	50.0	163.880708	25.0	321221.0	3.277614	Y
8	IC 480-728322/46	100.0	371.373632	25.0	315867.0	3.713736	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

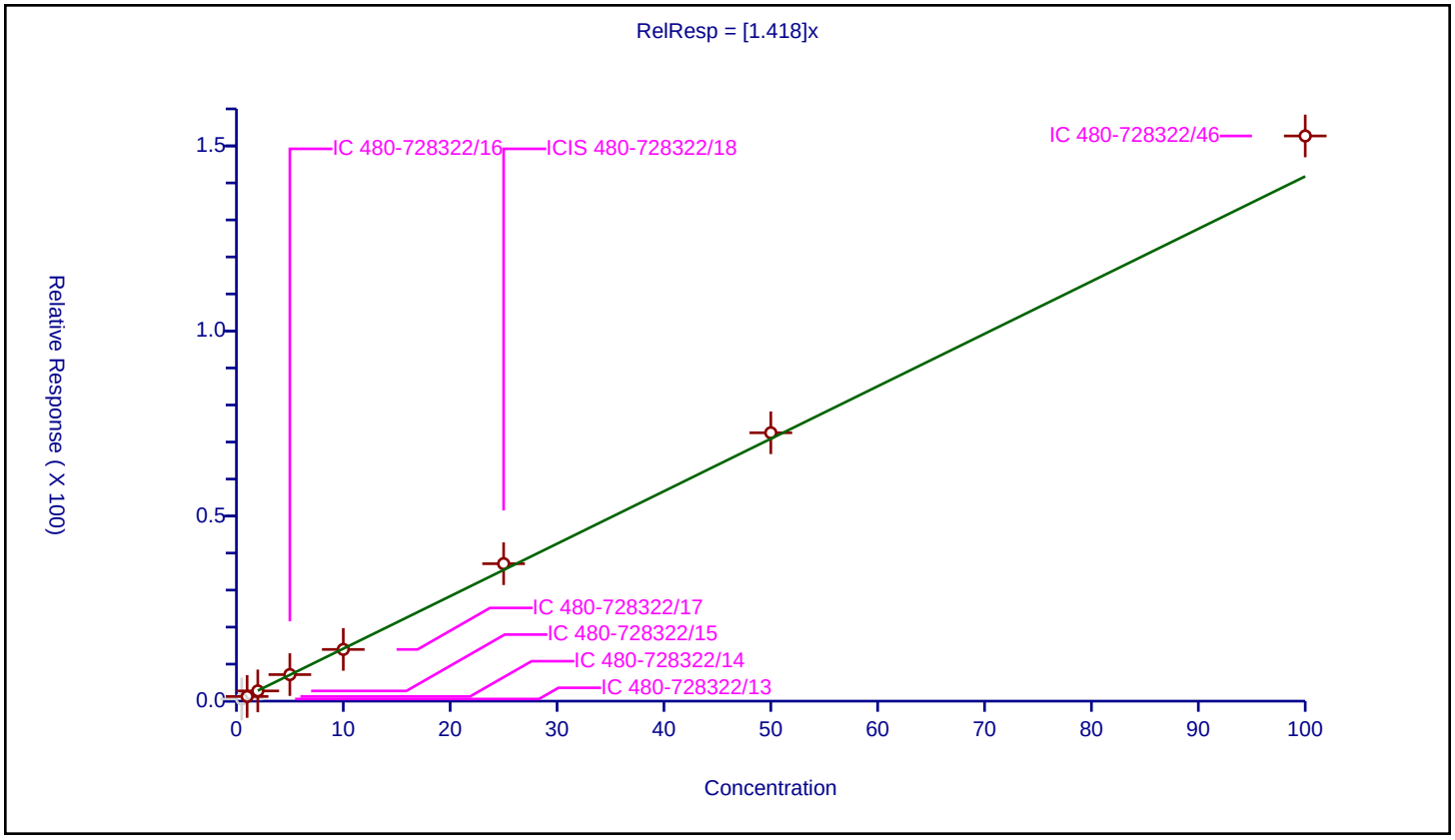
Curve Coefficients

Intercept:	0
Slope:	1.418

Error Coefficients

Relative Standard Deviation:	6.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.580405	25.0	321241.0	1.160811	N
2	IC 480-728322/14	1.0	1.252171	25.0	323538.0	1.252171	Y
3	IC 480-728322/15	2.0	2.756679	25.0	322816.0	1.378339	Y
4	IC 480-728322/16	5.0	7.168952	25.0	320950.0	1.43379	Y
5	IC 480-728322/17	10.0	13.96955	25.0	313038.0	1.396955	Y
6	ICIS 480-728322/18	25.0	37.134	25.0	314686.0	1.48536	Y
7	IC 480-728322/19	50.0	72.50421	25.0	321221.0	1.450084	Y
8	IC 480-728322/46	100.0	152.688315	25.0	315867.0	1.526883	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

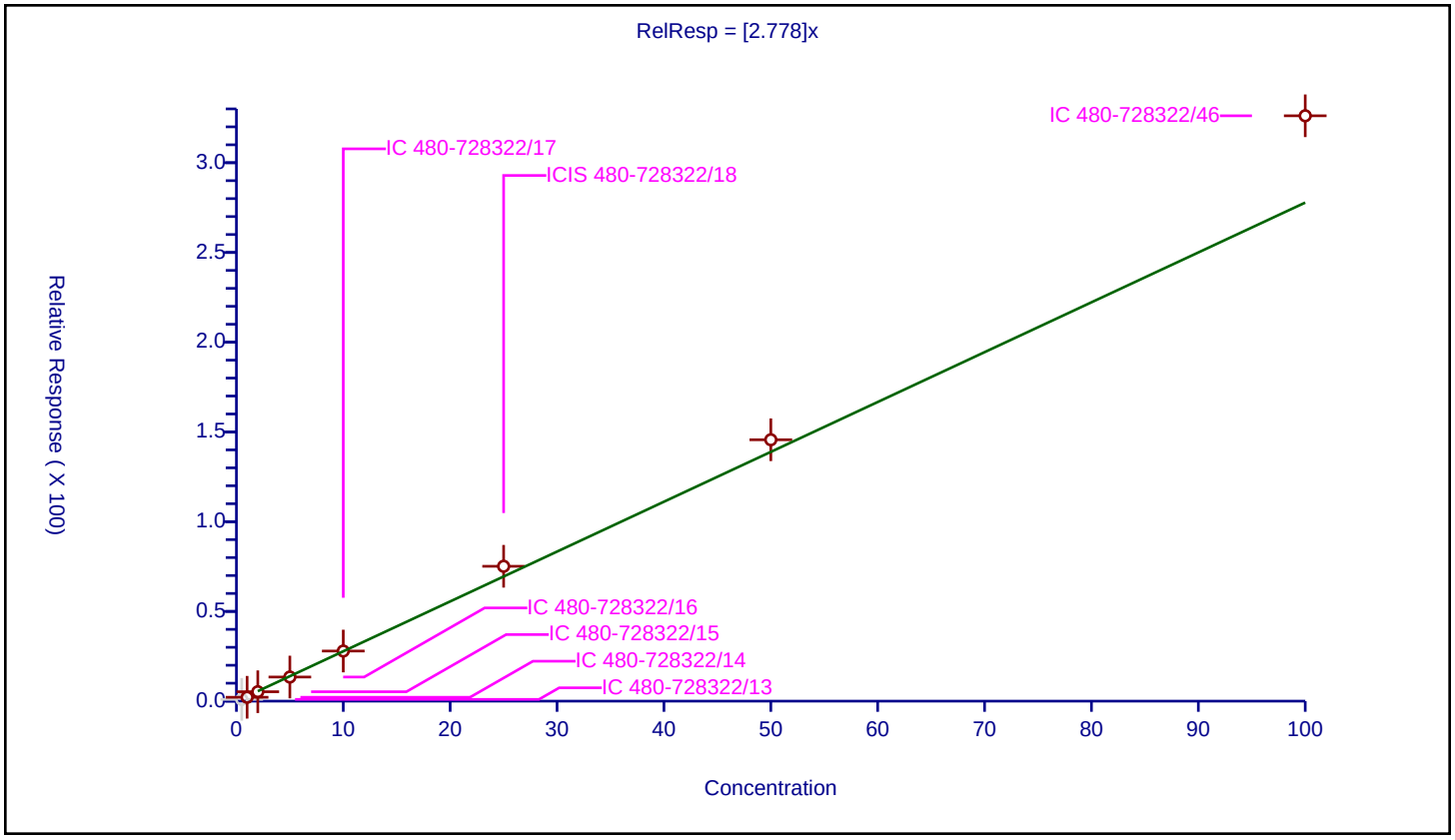
Curve Coefficients

Intercept:	0
Slope:	2.778

Error Coefficients

Relative Standard Deviation:	12.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.984541	25.0	321241.0	1.969082	N
2	IC 480-728322/14	1.0	2.162652	25.0	323538.0	2.162652	Y
3	IC 480-728322/15	2.0	5.242383	25.0	322816.0	2.621191	Y
4	IC 480-728322/16	5.0	13.442281	25.0	320950.0	2.688456	Y
5	IC 480-728322/17	10.0	27.92185	25.0	313038.0	2.792185	Y
6	ICIS 480-728322/18	25.0	75.138312	25.0	314686.0	3.005532	Y
7	IC 480-728322/19	50.0	145.641941	25.0	321221.0	2.912839	Y
8	IC 480-728322/46	100.0	326.149534	25.0	315867.0	3.261495	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

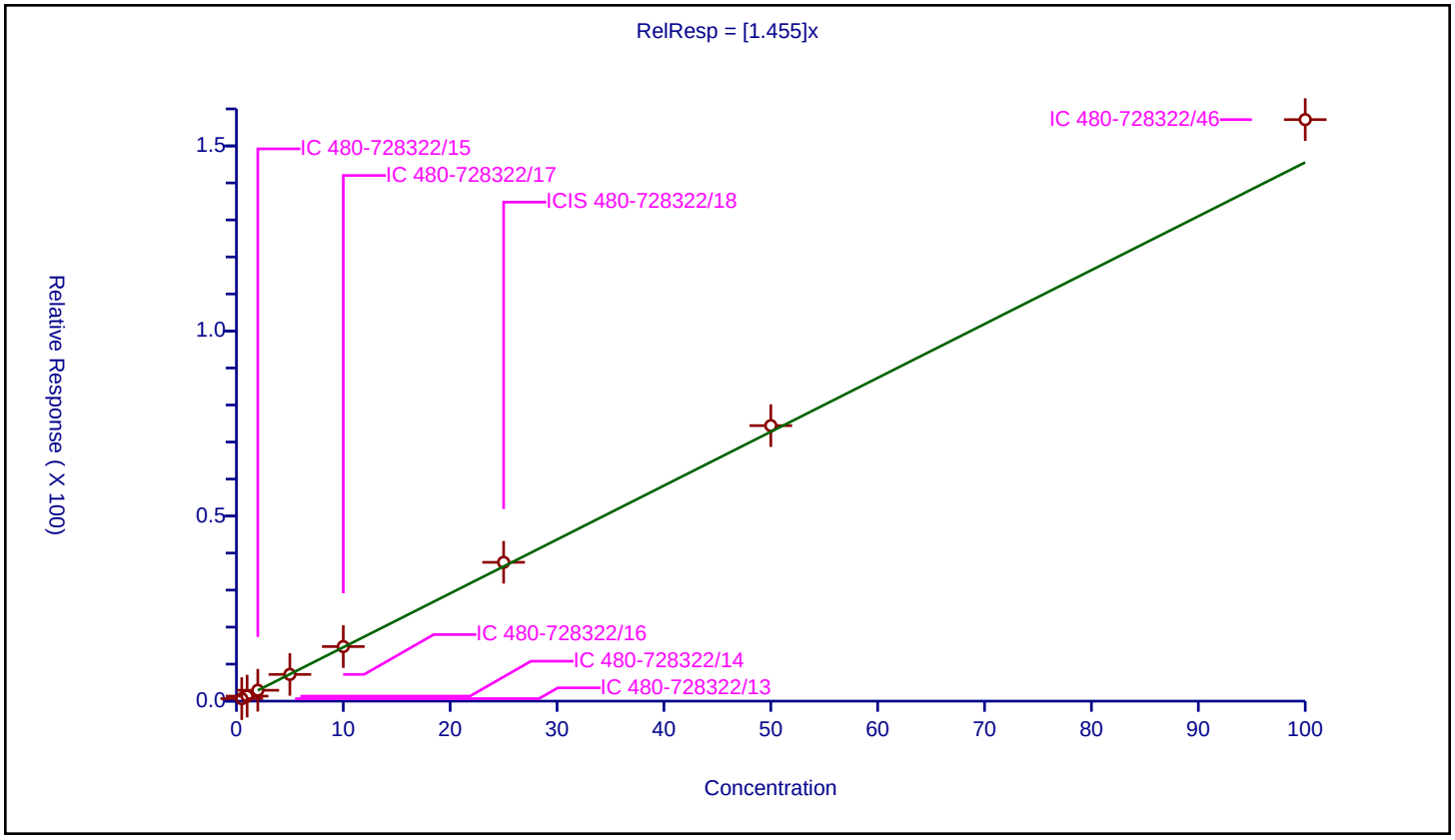
Curve Coefficients

Intercept:	0
Slope:	1.455

Error Coefficients

Relative Standard Deviation:	5.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.670602	25.0	321241.0	1.341205	Y
2	IC 480-728322/14	1.0	1.355328	25.0	323538.0	1.355328	Y
3	IC 480-728322/15	2.0	2.939445	25.0	322816.0	1.469723	Y
4	IC 480-728322/16	5.0	7.21818	25.0	320950.0	1.443636	Y
5	IC 480-728322/17	10.0	14.74238	25.0	313038.0	1.474238	Y
6	ICIS 480-728322/18	25.0	37.503654	25.0	314686.0	1.500146	Y
7	IC 480-728322/19	50.0	74.435591	25.0	321221.0	1.488712	Y
8	IC 480-728322/46	100.0	157.100615	25.0	315867.0	1.571006	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

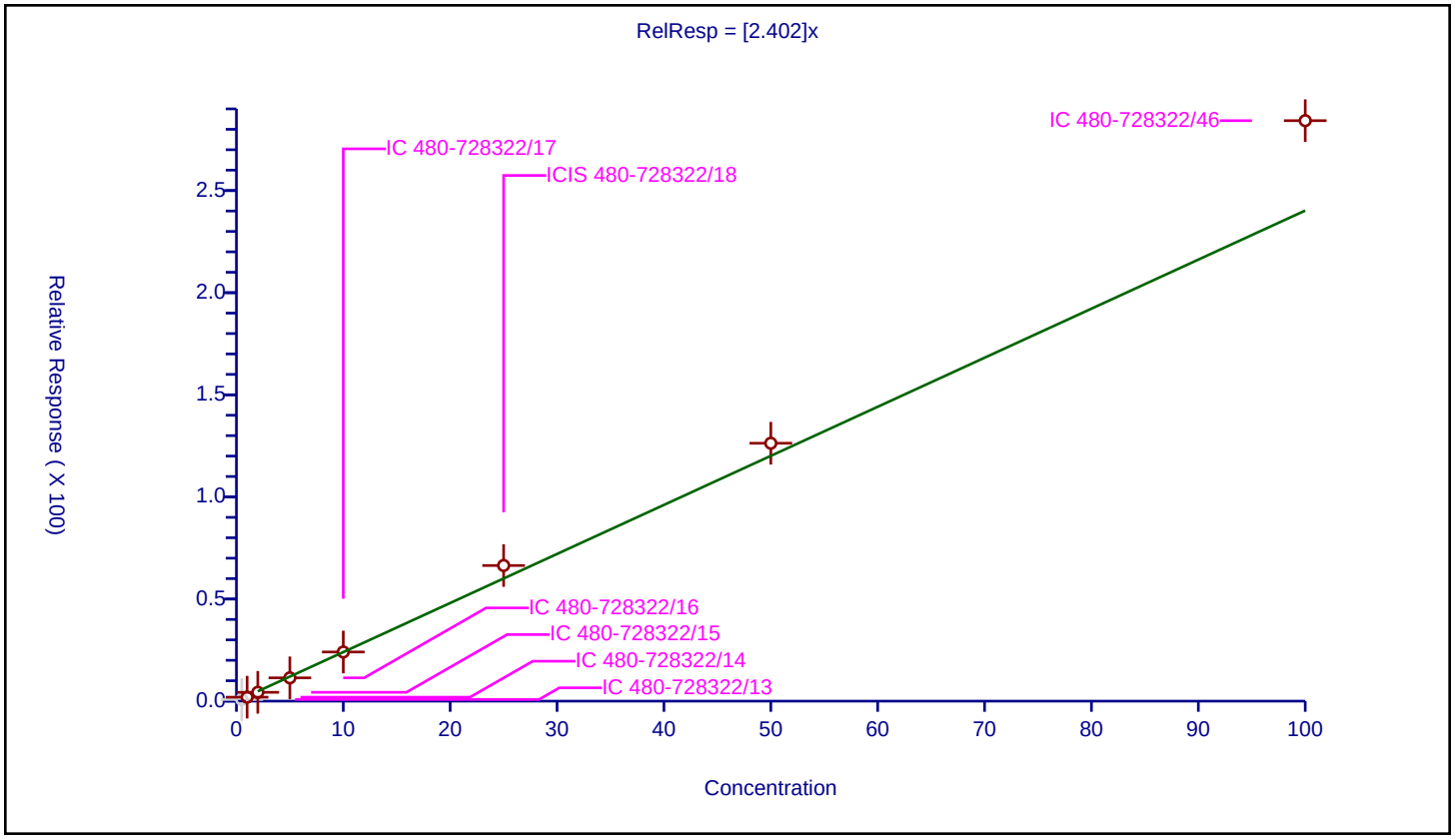
Curve Coefficients

Intercept:	0
Slope:	2.402

Error Coefficients

Relative Standard Deviation:	12.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.807338	25.0	321241.0	1.614676	N
2	IC 480-728322/14	1.0	1.935862	25.0	323538.0	1.935862	Y
3	IC 480-728322/15	2.0	4.329401	25.0	322816.0	2.164701	Y
4	IC 480-728322/16	5.0	11.410656	25.0	320950.0	2.282131	Y
5	IC 480-728322/17	10.0	24.074394	25.0	313038.0	2.407439	Y
6	ICIS 480-728322/18	25.0	66.417556	25.0	314686.0	2.656702	Y
7	IC 480-728322/19	50.0	126.2907	25.0	321221.0	2.525814	Y
8	IC 480-728322/46	100.0	284.229122	25.0	315867.0	2.842291	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

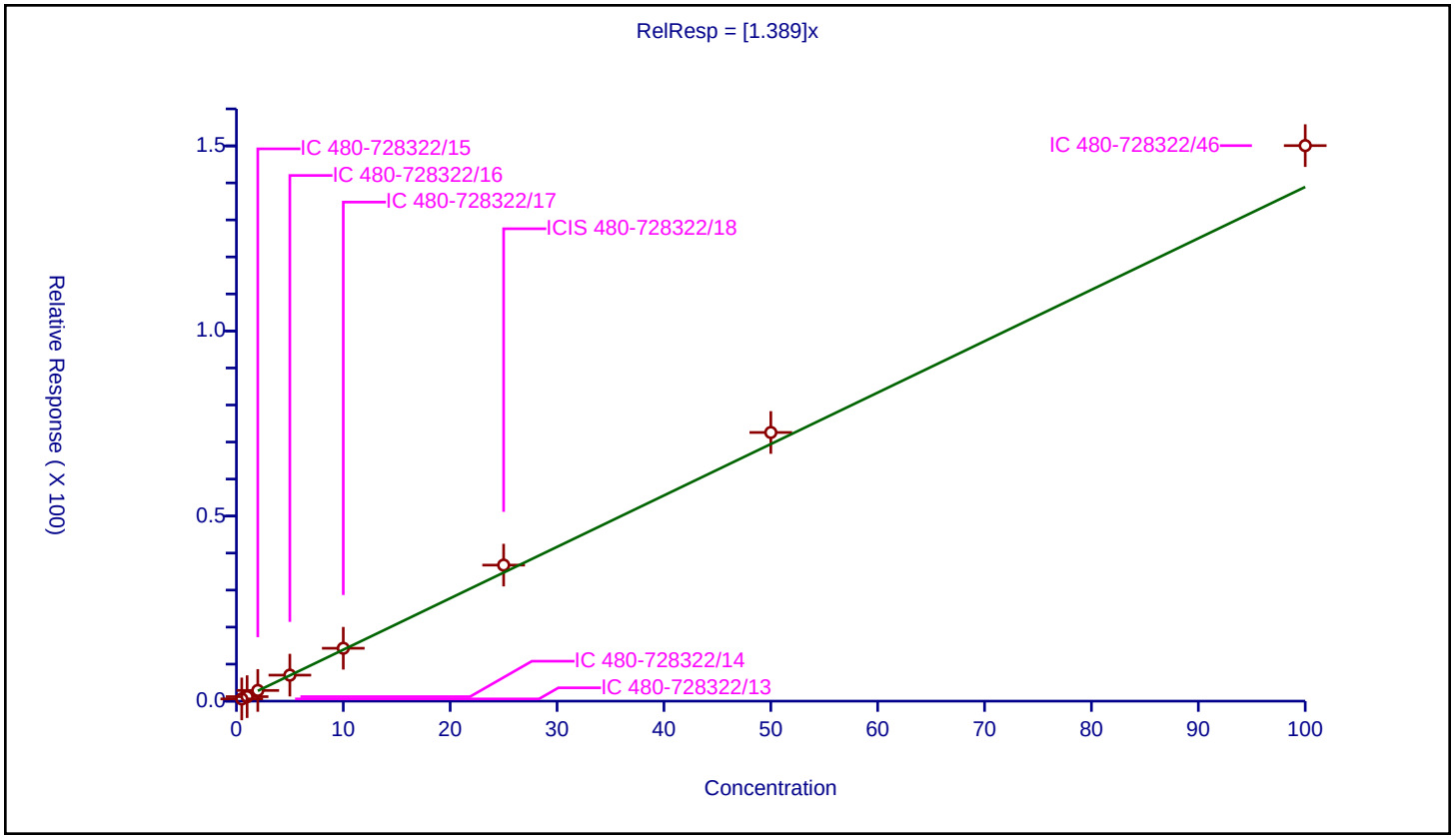
Curve Coefficients

Intercept:	0
Slope:	1.389

Error Coefficients

Relative Standard Deviation:	8.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.599628	25.0	321241.0	1.199255	Y
2	IC 480-728322/14	1.0	1.213845	25.0	323538.0	1.213845	Y
3	IC 480-728322/15	2.0	2.888797	25.0	322816.0	1.444399	Y
4	IC 480-728322/16	5.0	7.023057	25.0	320950.0	1.404611	Y
5	IC 480-728322/17	10.0	14.284528	25.0	313038.0	1.428453	Y
6	ICIS 480-728322/18	25.0	36.748616	25.0	314686.0	1.469945	Y
7	IC 480-728322/19	50.0	72.582739	25.0	321221.0	1.451655	Y
8	IC 480-728322/46	100.0	150.078831	25.0	315867.0	1.500788	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

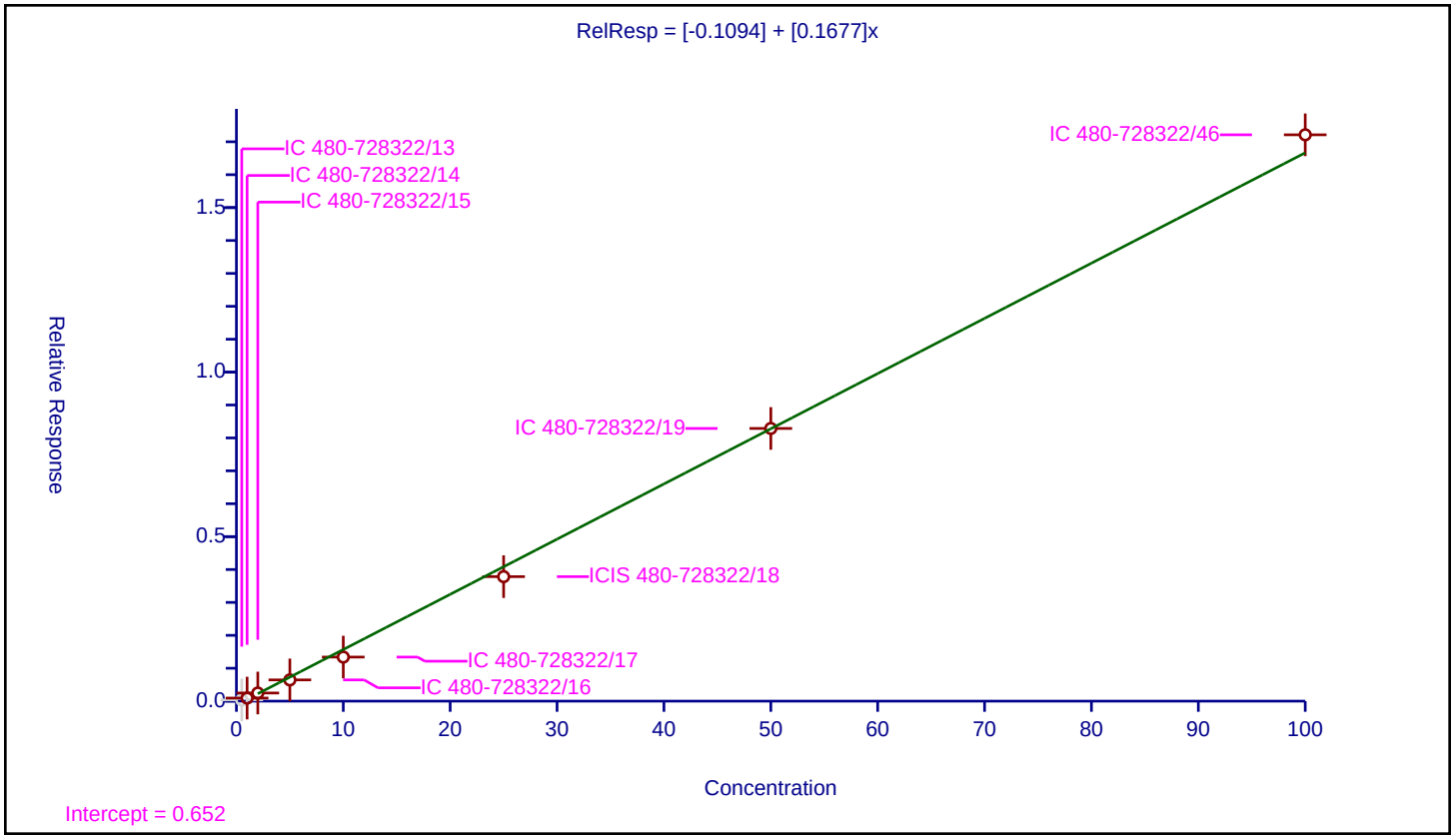
Curve Coefficients

Intercept:	-0.1094
Slope:	0.1677

Error Coefficients

Relative Standard Deviation:	12.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.037277	25.0	321241.0	0.074555	N
2	IC 480-728322/14	1.0	0.093729	25.0	323538.0	0.093729	Y
3	IC 480-728322/15	2.0	0.247277	25.0	322816.0	0.123639	Y
4	IC 480-728322/16	5.0	0.64535	25.0	320950.0	0.12907	Y
5	IC 480-728322/17	10.0	1.339614	25.0	313038.0	0.133961	Y
6	ICIS 480-728322/18	25.0	3.783613	25.0	314686.0	0.151345	Y
7	IC 480-728322/19	50.0	8.287986	25.0	321221.0	0.16576	Y
8	IC 480-728322/46	100.0	17.211991	25.0	315867.0	0.17212	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

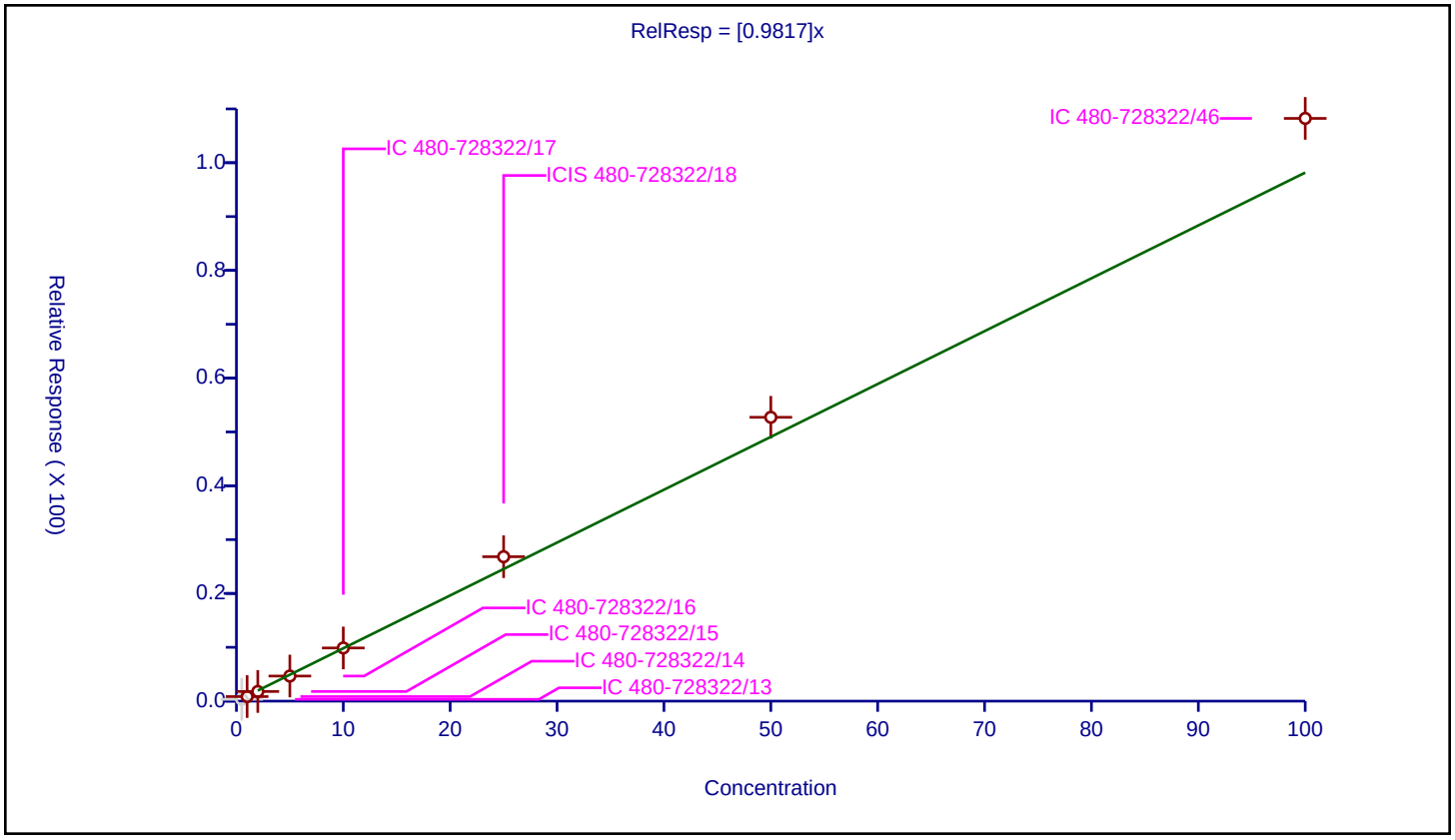
Curve Coefficients

Intercept:	0
Slope:	0.9817

Error Coefficients

Relative Standard Deviation:	9.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.341255	25.0	321241.0	0.682509	N
2	IC 480-728322/14	1.0	0.845882	25.0	323538.0	0.845882	Y
3	IC 480-728322/15	2.0	1.791965	25.0	322816.0	0.895983	Y
4	IC 480-728322/16	5.0	4.66311	25.0	320950.0	0.932622	Y
5	IC 480-728322/17	10.0	9.874999	25.0	313038.0	0.9875	Y
6	ICIS 480-728322/18	25.0	26.823325	25.0	314686.0	1.072933	Y
7	IC 480-728322/19	50.0	52.722892	25.0	321221.0	1.054458	Y
8	IC 480-728322/46	100.0	108.234478	25.0	315867.0	1.082345	Y



Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

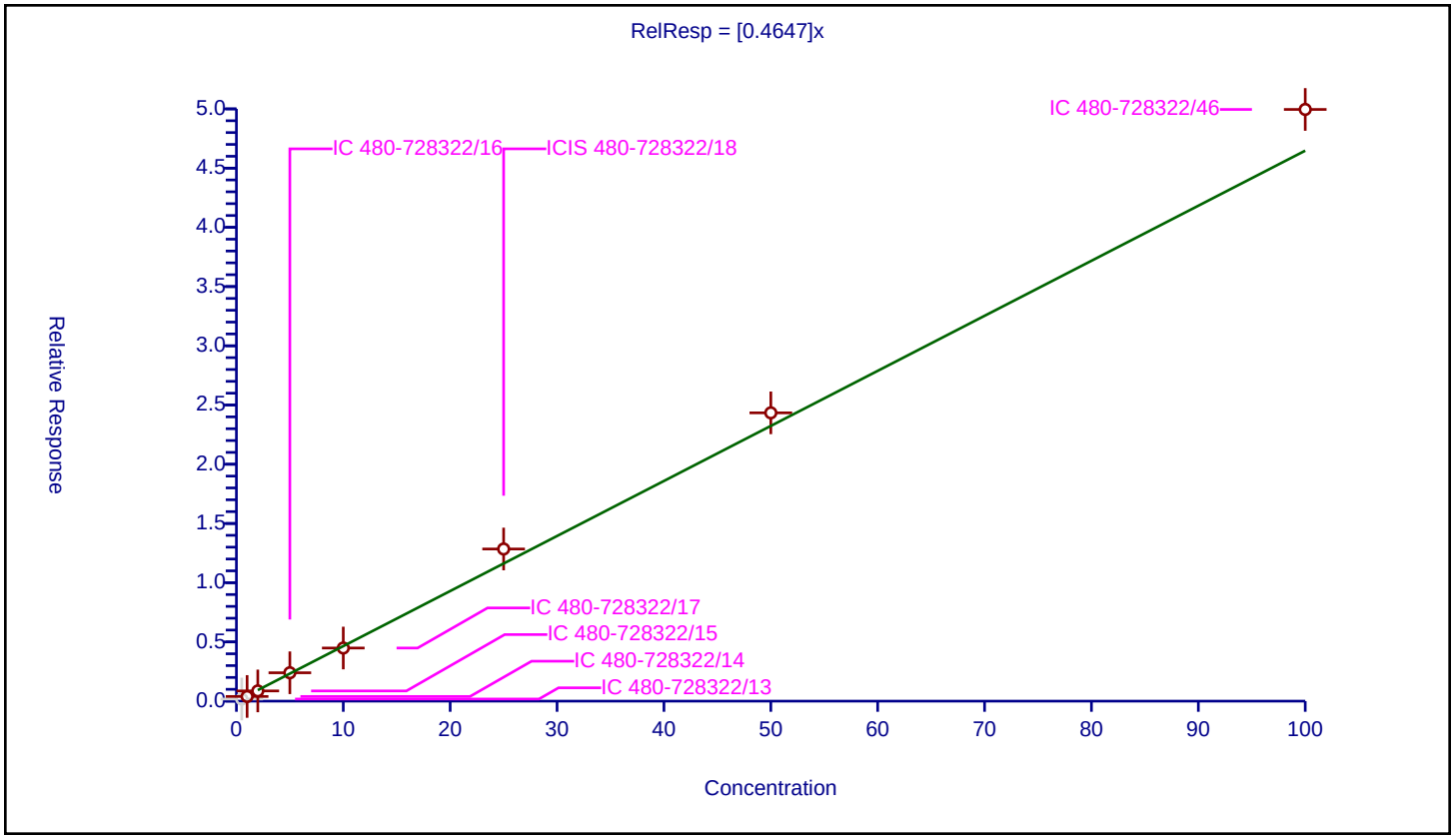
Curve Coefficients

Intercept:	0
Slope:	0.4647

Error Coefficients

Relative Standard Deviation:	9.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.179305	25.0	321241.0	0.358609	N
2	IC 480-728322/14	1.0	0.393771	25.0	323538.0	0.393771	Y
3	IC 480-728322/15	2.0	0.862333	25.0	322816.0	0.431167	Y
4	IC 480-728322/16	5.0	2.396791	25.0	320950.0	0.479358	Y
5	IC 480-728322/17	10.0	4.485797	25.0	313038.0	0.44858	Y
6	ICIS 480-728322/18	25.0	12.845503	25.0	314686.0	0.51382	Y
7	IC 480-728322/19	50.0	24.339707	25.0	321221.0	0.486794	Y
8	IC 480-728322/46	100.0	49.953778	25.0	315867.0	0.499538	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

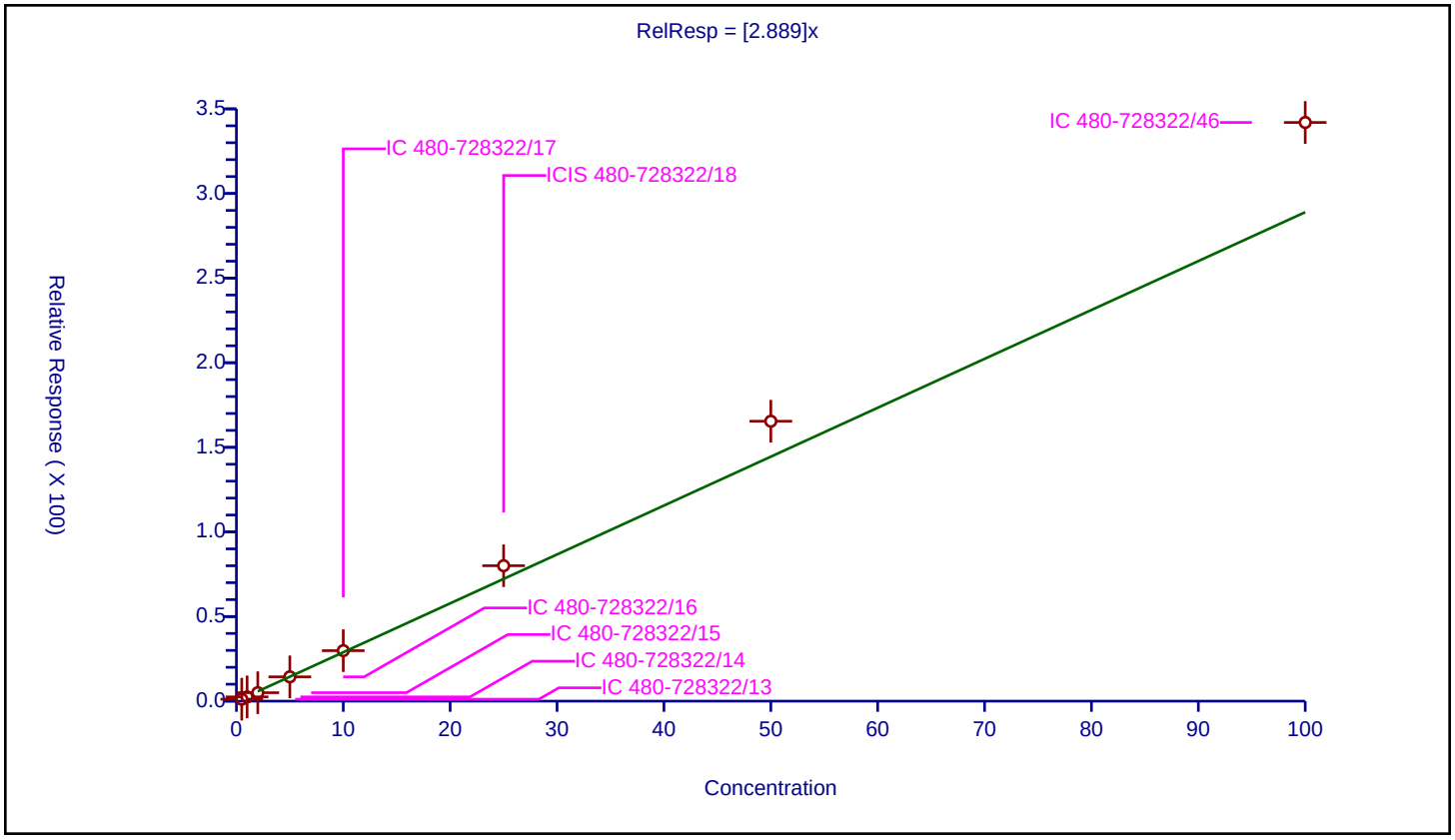
Curve Coefficients

Intercept:	0
Slope:	2.889

Error Coefficients

Relative Standard Deviation:	14.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	1.160266	25.0	321241.0	2.320532	Y
2	IC 480-728322/14	1.0	2.508206	25.0	323538.0	2.508206	Y
3	IC 480-728322/15	2.0	5.004786	25.0	322816.0	2.502393	Y
4	IC 480-728322/16	5.0	14.360181	25.0	320950.0	2.872036	Y
5	IC 480-728322/17	10.0	29.836873	25.0	313038.0	2.983687	Y
6	ICIS 480-728322/18	25.0	80.02485	25.0	314686.0	3.200994	Y
7	IC 480-728322/19	50.0	165.417189	25.0	321221.0	3.308344	Y
8	IC 480-728322/46	100.0	341.974866	25.0	315867.0	3.419749	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

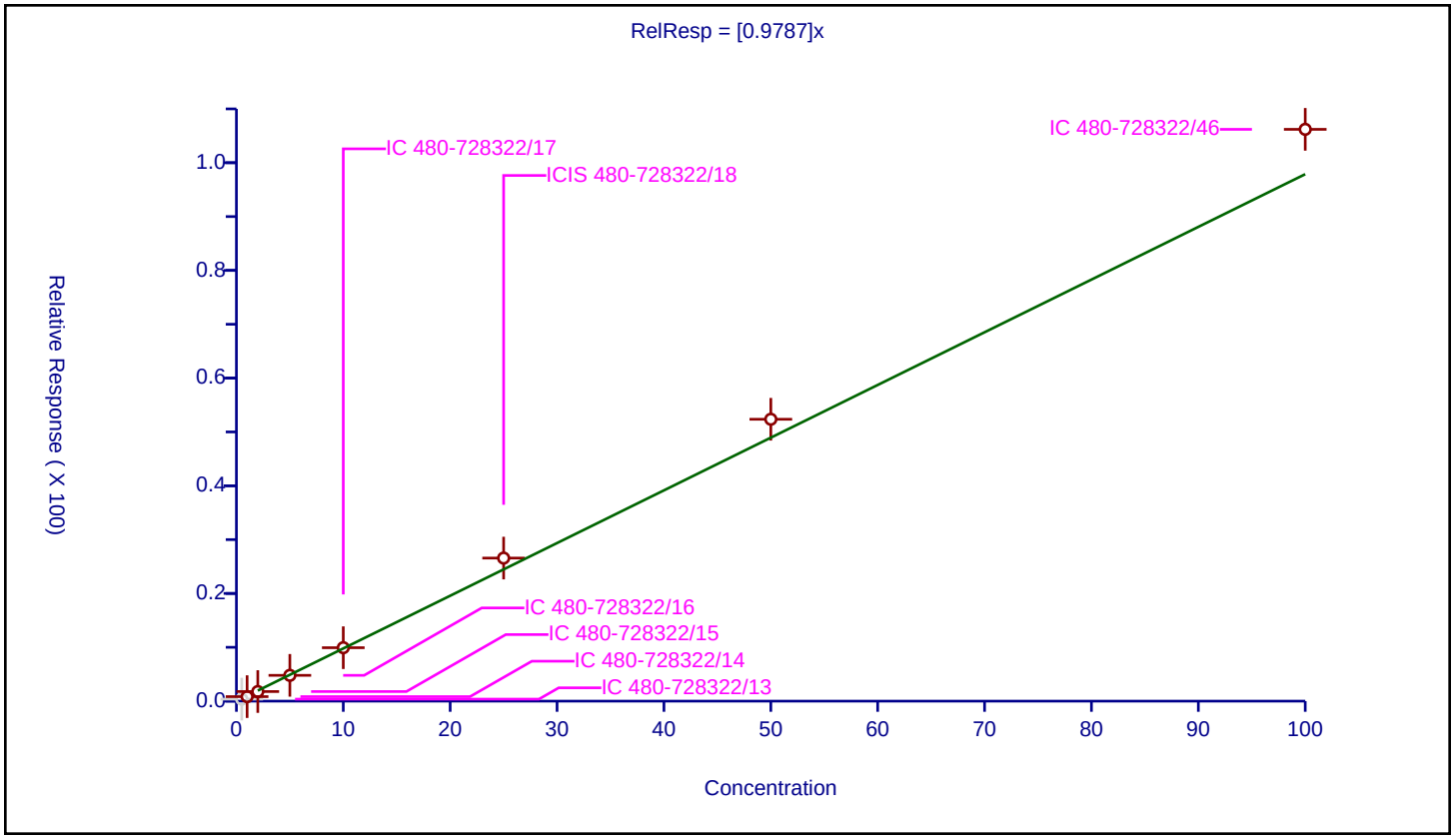
Curve Coefficients

Intercept:	0
Slope:	0.9787

Error Coefficients

Relative Standard Deviation:	9.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 480-728322/13	0.5	0.375808	25.0	321241.0	0.751616	N
2	IC 480-728322/14	1.0	0.837151	25.0	323538.0	0.837151	Y
3	IC 480-728322/15	2.0	1.781975	25.0	322816.0	0.890987	Y
4	IC 480-728322/16	5.0	4.792024	25.0	320950.0	0.958405	Y
5	IC 480-728322/17	10.0	9.925792	25.0	313038.0	0.992579	Y
6	ICIS 480-728322/18	25.0	26.570375	25.0	314686.0	1.062815	Y
7	IC 480-728322/19	50.0	52.353831	25.0	321221.0	1.047077	Y
8	IC 480-728322/46	100.0	106.19897	25.0	315867.0	1.06199	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: ICV 480-728511/10 Calibration Date: 10/16/2024 14:09

Instrument ID: HP5973S Calib Start Date: 10/15/2024 15:49

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/16/2024 11:36

Lab File ID: S3013.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.342	1.538	0.1000	28.7	25.0	14.6	50.0
Chloromethane	Ave	1.717	1.856	0.1000	27.0	25.0	8.1	30.0
Vinyl chloride	Ave	1.236	1.304	0.1000	26.4	25.0	5.5	30.0
Butadiene	Ave	1.453	1.605		27.6	25.0	10.4	30.0
Bromomethane	Ave	0.7860	0.7493	0.1000	23.8	25.0	-4.7	50.0
Chloroethane	Ave	0.9579	0.9427	0.1000	24.6	25.0	-1.6	50.0
Dichlorofluoromethane	Ave	2.116	2.168		25.6	25.0	2.5	30.0
Trichlorofluoromethane	Ave	1.528	1.788	0.1000	29.2	25.0	17.0	30.0
Ethyl ether	Ave	1.292	1.306		25.3	25.0	1.1	30.0
Acrolein	Ave	0.1657	0.1619		122	125	-2.3	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.9438	1.100	0.1000	29.1	25.0	16.5	30.0
1,1-Dichloroethene	Ave	0.9530	1.054	0.1000	27.7	25.0	10.6	30.0
Acetone	Ave	0.6289	0.6024	0.1000	120	125	-4.2	50.0
Iodomethane	Ave	1.777	1.851		26.0	25.0	4.2	30.0
Carbon disulfide	Ave	3.251	3.671	0.1000	28.2	25.0	12.9	30.0
Allyl chloride	Ave	2.237	2.496		27.9	25.0	11.6	30.0
Methyl acetate	Ave	1.443	1.418	0.1000	49.1	50.0	-1.7	50.0
Methylene Chloride	Lin1		1.254	0.1000	25.3	25.0	1.3	30.0
2-Methyl-2-propanol	Ave	0.1684	0.1780		264	250	5.7	50.0
Methyl tert-butyl ether	Ave	4.155	4.208	0.1000	25.3	25.0	1.3	30.0
trans-1,2-Dichloroethene	Ave	1.188	1.239	0.1000	26.1	25.0	4.3	30.0
Acrylonitrile	Ave	0.7191	0.7194		250	250	0.0	30.0
Hexane	Ave	1.867	2.211		29.6	25.0	18.4	30.0
1,1-Dichloroethane	Ave	2.301	2.408	0.2000	26.2	25.0	4.7	30.0
Vinyl acetate	Lin1		2.717		50.0	50.0	0.0	30.0
2,2-Dichloropropane	Ave	1.157	1.299		28.1	25.0	12.2	30.0
cis-1,2-Dichloroethene	Ave	1.243	1.356	0.1000	27.3	25.0	9.0	30.0
2-Butanone (MEK)	Ave	0.9066	0.9122	0.1000	126	125	0.6	30.0
Chlorobromomethane	Ave	0.6494	0.6623		25.5	25.0	2.0	30.0
Tetrahydrofuran	Ave	0.6686	0.6248		46.7	50.0	-6.6	30.0
Chloroform	Ave	2.252	2.176	0.2000	24.2	25.0	-3.4	30.0
1,1,1-Trichloroethane	Ave	1.703	1.875	0.1000	27.5	25.0	10.1	30.0
Cyclohexane	Ave	2.292	2.573	0.1000	28.1	25.0	12.3	30.0
Carbon tetrachloride	Ave	1.467	1.664	0.1000	28.4	25.0	13.4	30.0
1,1-Dichloropropene	Ave	1.669	1.804		27.0	25.0	8.1	30.0
Benzene	Ave	5.027	5.215	0.5000	25.9	25.0	3.7	30.0
Isobutyl alcohol	Ave	0.0643	0.0759		738	625	18.0	50.0
1,2-Dichloroethane	Ave	1.954	1.987	0.1000	25.4	25.0	1.7	30.0
n-Heptane	Ave	1.877	2.288		30.5	25.0	21.9	30.0
Trichloroethene	Ave	1.250	1.287	0.2000	25.7	25.0	3.0	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: ICV 480-728511/10 Calibration Date: 10/16/2024 14:09

Instrument ID: HP5973S Calib Start Date: 10/15/2024 15:49

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/16/2024 11:36

Lab File ID: S3013.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.015	2.269	0.1000	28.2	25.0	12.6	30.0
1,2-Dichloropropane	Ave	1.297	1.325	0.1000	25.5	25.0	2.1	30.0
Dibromomethane	Ave	0.7702	0.8002	0.1000	26.0	25.0	3.9	30.0
1,4-Dioxane	Ave	0.0087	0.0090		516	500	3.2	50.0
Bromodichloromethane	Ave	1.375	1.482	0.2000	26.9	25.0	7.8	30.0
2-Chloroethyl vinyl ether	Ave	0.8306	0.9033		27.2	25.0	8.8	30.0
cis-1,3-Dichloropropene	Ave	1.802	2.009	0.2000	27.9	25.0	11.5	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9627	1.031	0.1000	134	125	7.1	30.0
Toluene	Ave	1.683	1.722	0.4000	25.6	25.0	2.3	30.0
trans-1,3-Dichloropropene	Ave	0.8609	0.9580	0.1000	27.8	25.0	11.3	30.0
Ethyl methacrylate	Ave	0.8459	0.9156		27.1	25.0	8.2	30.0
1,1,2-Trichloroethane	Ave	0.4902	0.4935	0.1000	25.2	25.0	0.7	30.0
Tetrachloroethene	Ave	0.6534	0.7126	0.2000	27.3	25.0	9.1	30.0
1,3-Dichloropropane	Ave	1.004	1.043		26.0	25.0	3.9	30.0
2-Hexanone	Ave	0.6715	0.7287	0.1000	136	125	8.5	30.0
Dibromochloromethane	Ave	0.4940	0.5676	0.1000	28.7	25.0	14.9	30.0
1,2-Dibromoethane	Ave	0.5902	0.6114		25.9	25.0	3.6	30.0
Chlorobenzene	Ave	1.750	1.801	0.5000	25.7	25.0	3.0	30.0
Ethylbenzene	Ave	3.092	3.191	0.1000	25.8	25.0	3.2	30.0
1,1,1,2-Tetrachloroethane	Ave	0.5702	0.6204		27.2	25.0	8.8	30.0
m,p-Xylene	Ave	1.192	1.238	0.1000	26.0	25.0	3.9	30.0
o-Xylene	Ave	1.176	1.228	0.3000	26.1	25.0	4.3	30.0
Styrene	Ave	1.961	1.966	0.3000	25.1	25.0	0.2	30.0
Bromoform	Ave	0.3219	0.3647	0.1000	28.3	25.0	13.3	50.0
Isopropylbenzene	Ave	2.745	2.908	0.1000	26.5	25.0	6.0	30.0
Bromobenzene	Ave	0.7451	0.7593		25.5	25.0	1.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7814	0.8275	0.3000	26.5	25.0	5.9	30.0
N-Propylbenzene	Ave	3.491	3.723		26.7	25.0	6.6	30.0
1,2,3-Trichloropropane	Ave	0.2690	0.2790		25.9	25.0	3.7	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2931	0.2967		25.3	25.0	1.2	50.0
2-Chlorotoluene	Ave	0.6792	0.7133		26.3	25.0	5.0	30.0
1,3,5-Trimethylbenzene	Ave	2.518	2.634		26.2	25.0	4.6	30.0
4-Chlorotoluene	Ave	0.7157	0.7423		25.9	25.0	3.7	30.0
tert-Butylbenzene	Ave	0.5525	0.5871		26.6	25.0	6.3	30.0
1,2,4-Trimethylbenzene	Ave	2.601	2.736		26.3	25.0	5.2	30.0
sec-Butylbenzene	Ave	3.116	3.359		26.9	25.0	7.8	30.0
1,3-Dichlorobenzene	Ave	1.418	1.458	0.6000	25.7	25.0	2.8	30.0
4-Isopropyltoluene	Ave	2.778	2.988		26.9	25.0	7.6	30.0
1,4-Dichlorobenzene	Ave	1.455	1.515	0.5000	26.0	25.0	4.1	30.0
n-Butylbenzene	Ave	2.402	2.658		27.7	25.0	10.6	30.0
1,2-Dichlorobenzene	Ave	1.389	1.451	0.4000	26.1	25.0	4.5	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: ICV 480-728511/10 Calibration Date: 10/16/2024 14:09

Instrument ID: HP5973S Calib Start Date: 10/15/2024 15:49

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/16/2024 11:36

Lab File ID: S3013.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1544	0.0500	23.7	25.0	-5.4	50.0
1,2,4-Trichlorobenzene	Ave	0.9817	1.072	0.2000	27.3	25.0	9.2	30.0
Hexachlorobutadiene	Ave	0.4647	0.5173		27.8	25.0	11.3	30.0
Naphthalene	Ave	2.889	3.200		27.7	25.0	10.7	30.0
1,2,3-Trichlorobenzene	Ave	0.9787	1.037		26.5	25.0	5.9	30.0
Dibromofluoromethane (Surr)	Ave	1.225	1.248		25.5	25.0	1.8	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.8712	0.8582		24.6	25.0	-1.5	30.0
Toluene-d8 (Surr)	Ave	2.618	2.653		25.3	25.0	1.3	30.0
4-Bromofluorobenzene (Surr)	Ave	0.8146	0.7891		24.2	25.0	-3.1	30.0

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S3013.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Oct-2024 14:09:30 ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 480-0120591-010
Operator ID: ZN Instrument ID: HP5973S
Sublist:

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2024 11:27:42 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1694

First Level Reviewer: QR3Z Date: 17-Oct-2024 11:37:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	159072	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	87	299987	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	70	304075	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	55	198455	25.0	25.5	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	61	136512	25.0	24.6	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	66	795861	25.0	25.3	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	88	236719	25.0	24.2	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	97	244730	25.0	28.7	
12 Chloromethane	50	1.132	1.132	0.000	82	295201	25.0	27.0	
13 Vinyl chloride	62	1.211	1.205	0.006	66	207368	25.0	26.4	
151 Butadiene	54	1.217	1.217	0.000	95	255261	25.0	27.6	
14 Bromomethane	94	1.454	1.448	0.006	91	119186	25.0	23.8	
15 Chloroethane	64	1.509	1.509	0.000	94	149953	25.0	24.6	
16 Dichlorofluoromethane	67	1.692	1.686	0.006	97	344943	25.0	25.6	
17 Trichlorofluoromethane	101	1.704	1.692	0.012	79	284348	25.0	29.2	
18 Ethyl ether	59	1.917	1.917	0.006	95	207669	25.0	25.3	
20 Acrolein	56	2.081	2.075	0.006	95	128739	125.0	122.1	
22 1,1-Dichloroethene	96	2.105	2.105	0.000	93	167709	25.0	27.7	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.105	2.105	0.000	68	174969	25.0	29.1	
23 Acetone	43	2.221	2.221	0.000	97	479115	125.0	119.7	
25 Iodomethane	142	2.251	2.245	0.006	99	294444	25.0	26.0	
26 Carbon disulfide	76	2.282	2.276	0.006	99	584030	25.0	28.2	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	85	397057	25.0	27.9	
27 Methyl acetate	43	2.495	2.495	0.000	97	450981	50.0	49.1	
30 Methylene Chloride	84	2.586	2.586	0.006	92	199459	25.0	25.3	
31 2-Methyl-2-propanol	59	2.756	2.762	-0.006	89	283165	250.0	264.2	
32 Methyl tert-butyl ether	73	2.781	2.781	0.000	93	669320	25.0	25.3	
34 trans-1,2-Dichloroethene	96	2.793	2.793	0.000	72	197059	25.0	26.1	
33 Acrylonitrile	53	2.860	2.854	0.006	99	1144344	250.0	250.1	
35 Hexane	57	2.981	2.981	0.000	95	351749	25.0	29.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.194	3.194	0.000	86	383108	25.0	26.2	
37 Vinyl acetate	43	3.261	3.261	0.000	97	864282	50.0	50.0	
44 2,2-Dichloropropane	77	3.693	3.693	0.000	89	206590	25.0	28.1	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	69	215637	25.0	27.3	
43 2-Butanone (MEK)	43	3.772	3.778	0.000	97	725489	125.0	125.8	
48 Chlorobromomethane	128	3.961	3.961	0.000	96	105356	25.0	25.5	
49 Tetrahydrofuran	42	3.973	3.973	0.000	89	198778	50.0	46.7	
50 Chloroform	83	4.046	4.046	0.000	81	346207	25.0	24.2	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	78	298269	25.0	27.5	
52 Cyclohexane	56	4.137	4.137	0.000	96	409244	25.0	28.1	
55 Carbon tetrachloride	117	4.271	4.271	0.000	79	264733	25.0	28.4	
54 1,1-Dichloropropene	75	4.289	4.283	0.006	90	286947	25.0	27.0	
57 Benzene	78	4.484	4.484	0.000	96	829589	25.0	25.9	
53 Isobutyl alcohol	43	4.545	4.575	0.000	61	301787	625.0	737.8	
58 1,2-Dichloroethane	62	4.563	4.557	0.006	79	316010	25.0	25.4	
59 n-Heptane	43	4.679	4.679	0.000	95	364000	25.0	30.5	
62 Trichloroethene	95	5.092	5.092	0.000	95	204697	25.0	25.7	
64 Methylcyclohexane	83	5.196	5.196	0.000	95	360888	25.0	28.2	
65 1,2-Dichloropropane	63	5.330	5.324	0.006	90	210832	25.0	25.5	
67 Dibromomethane	93	5.463	5.464	-0.001	90	127282	25.0	26.0	
66 1,4-Dioxane	88	5.476	5.488	0.000	76	53817	500.0	516.0	
68 Dichlorobromomethane	83	5.622	5.622	0.000	94	235760	25.0	26.9	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	93	143697	25.0	27.2	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	86	319648	25.0	27.9	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.194	0.000	99	1546838	125.0	133.9	
74 Toluene	92	6.309	6.315	0.000	86	516637	25.0	25.6	
77 trans-1,3-Dichloropropene	75	6.607	6.601	0.006	95	287381	25.0	27.8	
75 Ethyl methacrylate	69	6.662	6.662	0.000	75	274672	25.0	27.1	
79 1,1,2-Trichloroethane	83	6.784	6.784	0.000	93	148056	25.0	25.2	
81 Tetrachloroethene	166	6.826	6.826	0.000	89	213758	25.0	27.3	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	97	312827	25.0	26.0	
80 2-Hexanone	43	7.021	7.021	0.000	99	1093070	125.0	135.7	
83 Chlorodibromomethane	129	7.167	7.167	0.000	87	170260	25.0	28.7	
84 Ethylene Dibromide	107	7.258	7.258	0.000	96	183414	25.0	25.9	
87 Chlorobenzene	112	7.733	7.733	0.000	92	540414	25.0	25.7	
88 Ethylbenzene	91	7.830	7.830	0.000	99	957174	25.0	25.8	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	44	186126	25.0	27.2	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	371505	25.0	26.0	
91 o-Xylene	106	8.377	8.371	0.006	98	368240	25.0	26.1	
92 Styrene	104	8.408	8.408	0.000	92	589762	25.0	25.1	
95 Bromoform	173	8.645	8.645	0.000	94	109398	25.0	28.3	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	884395	25.0	26.5	
101 Bromobenzene	156	9.101	9.101	0.000	95	230871	25.0	25.5	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	59	251632	25.0	26.5	
99 N-Propylbenzene	91	9.205	9.205	0.000	97	1131973	25.0	26.7	
100 1,2,3-Trichloropropane	110	9.217	9.211	0.006	64	84838	25.0	25.9	
98 trans-1,4-Dichloro-2-butene	53	9.241	9.241	0.000	62	90218	25.0	25.3	
103 2-Chlorotoluene	126	9.302	9.302	0.000	95	216883	25.0	26.3	
102 1,3,5-Trimethylbenzene	105	9.400	9.399	0.000	93	800930	25.0	26.2	
105 4-Chlorotoluene	126	9.424	9.424	0.000	99	225714	25.0	25.9	
106 tert-Butylbenzene	134	9.734	9.734	0.000	91	178508	25.0	26.6	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	49	831947	25.0	26.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.953	9.953	0.000	94	1021375	25.0	26.9	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	96	443281	25.0	25.7	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	94	908709	25.0	26.9	
113 1,4-Dichlorobenzene	146	10.172	10.178	-0.006	92	460717	25.0	26.0	
115 n-Butylbenzene	91	10.507	10.507	0.000	95	808121	25.0	27.7	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	96	441311	25.0	26.1	
117 1,2-Dibromo-3-Chloropropane	75	11.292	11.291	0.000	70	46940	25.0	23.7	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	92	326089	25.0	27.3	
120 Hexachlorobutadiene	225	12.088	12.089	0.000	94	157311	25.0	27.8	
121 Naphthalene	128	12.180	12.180	0.000	98	972909	25.0	27.7	
122 1,2,3-Trichlorobenzene	180	12.387	12.387	0.000	94	315260	25.0	26.5	

QC Flag Legend

Processing Flags

Reagents:

SS 8260 CORP_00117	Amount Added: 12.50	Units: uL	
SS GAS CORP_00598	Amount Added: 12.50	Units: uL	
S_8260_IS_00403	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added: 1.00	Units: uL	Run Reagent

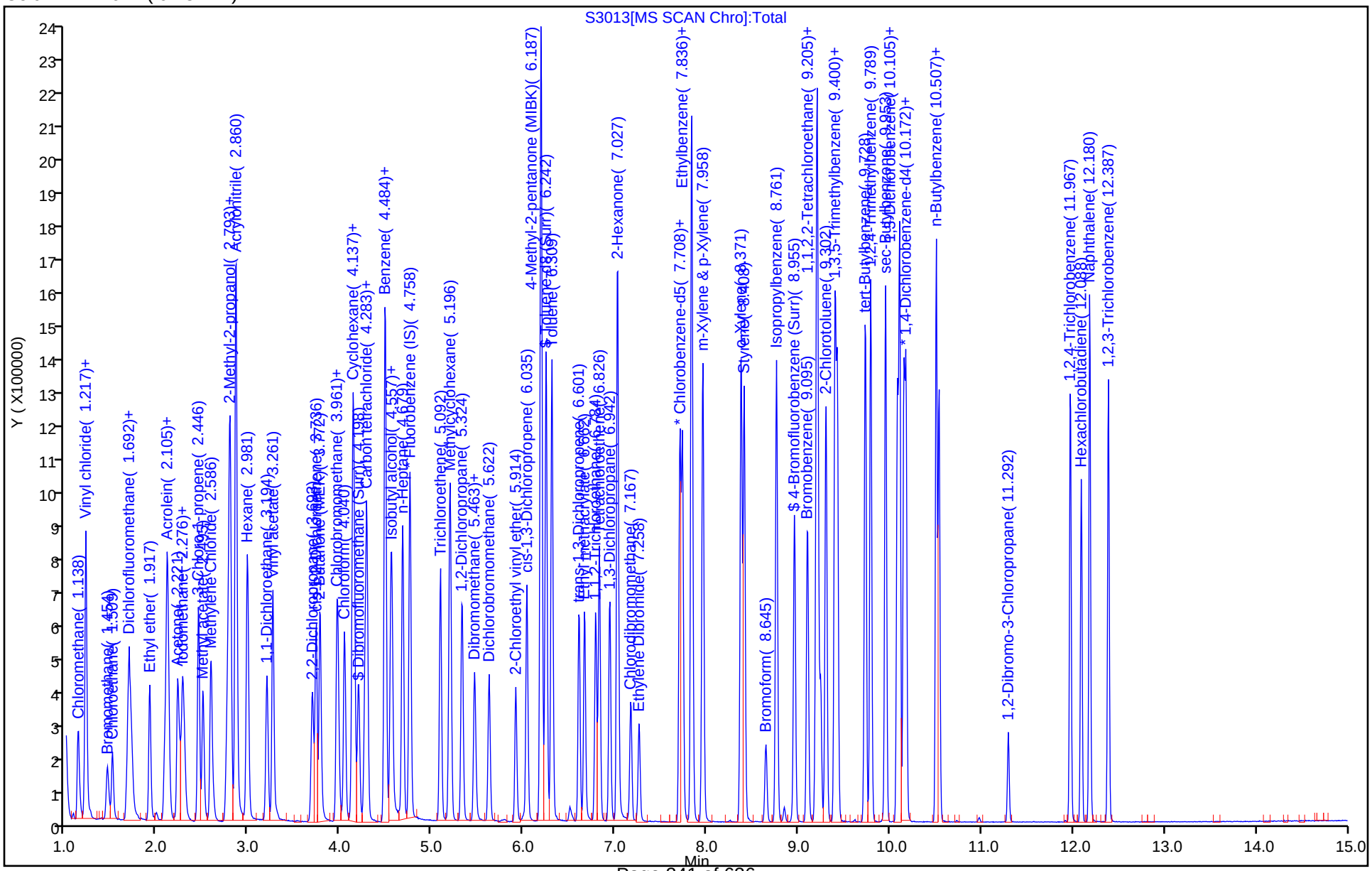
Report Date: 17-Oct-2024 11:37:32 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S3013.d

Injection Date:	16-Oct-2024 14:09:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	ICV			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: ICV 480-728511/11 Calibration Date: 10/16/2024 14:45

Instrument ID: HP5973S Calib Start Date: 10/15/2024 15:49

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/16/2024 11:36

Lab File ID: S3014.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	1.225	1.250		25.5	25.0	2.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.8712	0.9367		26.9	25.0	7.5	30.0
Toluene-d8 (Surr)	Ave	2.618	2.617		25.0	25.0	-0.0	30.0
4-Bromofluorobenzene (Surr)	Ave	0.8146	0.7614		23.4	25.0	-6.5	30.0

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S3014.d
Lims ID: ICV ADD
Client ID:
Sample Type: ICV
Inject. Date: 16-Oct-2024 14:45:30 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV ADD
Misc. Info.: 480-0120591-011
Operator ID: ZN Instrument ID: HP5973S
Sublist:

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2024 11:27:42 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1694

First Level Reviewer: QR3Z Date: 17-Oct-2024 11:38:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	156095	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	87	300625	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	88	288665	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	57	195135	25.0	25.5	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	58	146213	25.0	26.9	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	84	786724	25.0	25.0	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	88	228895	25.0	23.4	
11 Chlorodifluoromethane	51	1.016	1.016	0.000	79	276709	25.0	28.6	
148 Ethanol	45	1.923	1.923	0.000	99	68298	1000.0	838.9	
19 Propene oxide	58	1.990	1.990	0.000	95	334621	NC	NC	
24 Isopropyl alcohol	45	2.397	2.397	0.000	97	123304	250.0	264.1	
29 Acetonitrile	40	2.507	2.507	0.000	99	158148	250.0	208.2	
36 Isopropyl ether	45	3.219	3.219	0.000	94	778651	25.0	26.3	
40 2-Chloro-1,3-butadiene	53	3.249	3.249	0.000	87	365238	25.0	28.8	
38 1,1-Dimethoxyethane	75	3.292	3.286	0.006	63	209279	125.0	121.9	
41 Tert-butyl ethyl ether	59	3.547	3.541	0.006	98	697122	25.0	25.2	
42 Ethyl acetate	43	3.815	3.821	0.000	99	504096	50.0	52.1	
46 Propionitrile	54	3.876	3.876	0.000	98	405643	250.0	251.6	
47 Methacrylonitrile	41	3.979	3.979	0.000	96	1944447	250.0	248.8	
152 Isooctane	57	4.484	4.484	0.000	97	784429	25.0	31.1	
56 Tert-amyl methyl ether	73	4.575	4.575	0.000	90	721526	25.0	26.2	
147 t-Amyl alcohol	59	4.594	4.593	0.001	61	184782	250.0	218.6	
1 1,4-Difluorobenzene	114	4.879	4.873	0.006	92	582545	25.0	27.1	
60 n-Butanol	56	5.159	5.190	0.000	95	104781	625.0	786.6	
142 Ethyl acrylate	55	5.238	5.238	0.000	92	270199	25.0	26.6	
63 Methyl methacrylate	41	5.451	5.451	0.000	90	446694	50.0	52.6	
70 2-Nitropropane	43	5.877	5.877	0.000	98	71638	50.0	50.2	
71 Epichlorohydrin	57	5.993	5.993	0.000	99	265360	250.0	251.5	
155 n-Butyl acetate	43	7.149	7.142	0.007	97	325117	25.0	27.4	
146 1-Chlorohexane	55	7.702	7.702	0.000	70	207359	25.0	28.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
85 3-Chlorobenzotrifluoride	180	7.733	7.733	0.000	86	294277	25.0	28.3	
86 4-Chlorobenzotrifluoride	180	7.794	7.793	0.001	96	274604	25.0	28.8	
93 2-Chlorobenzotrifluoride	180	8.694	8.694	0.000	93	289420	25.0	26.3	
96 Cyclohexanone	55	8.931	8.956	0.000	92	78682	250.0	249.2	
104 3-Chlorotoluene	126	9.375	9.375	0.000	98	217178	25.0	25.9	
108 Pentachloroethane	167	9.789	9.789	0.000	81	113034	25.0	30.8	
114 Dicyclopentadiene	66	10.142	10.142	0.000	97	1033958	25.0	24.9	
112 1,2,3-Trimethylbenzene	105	10.215	10.215	0.000	73	853457	25.0	26.5	
150 Benzyl chloride	126	10.336	10.336	0.000	99	77659	25.0	30.5	
118 1,3,5-Trichlorobenzene	180	11.425	11.425	0.000	96	324057	25.0	26.1	
149 2-Methylnaphthalene	142	13.104	13.104	0.000	89	526584	25.0	26.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SS ADD CORP_00094	Amount Added: 12.50	Units: uL	
S_8260_IS_00403	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added: 1.00	Units: uL	Run Reagent

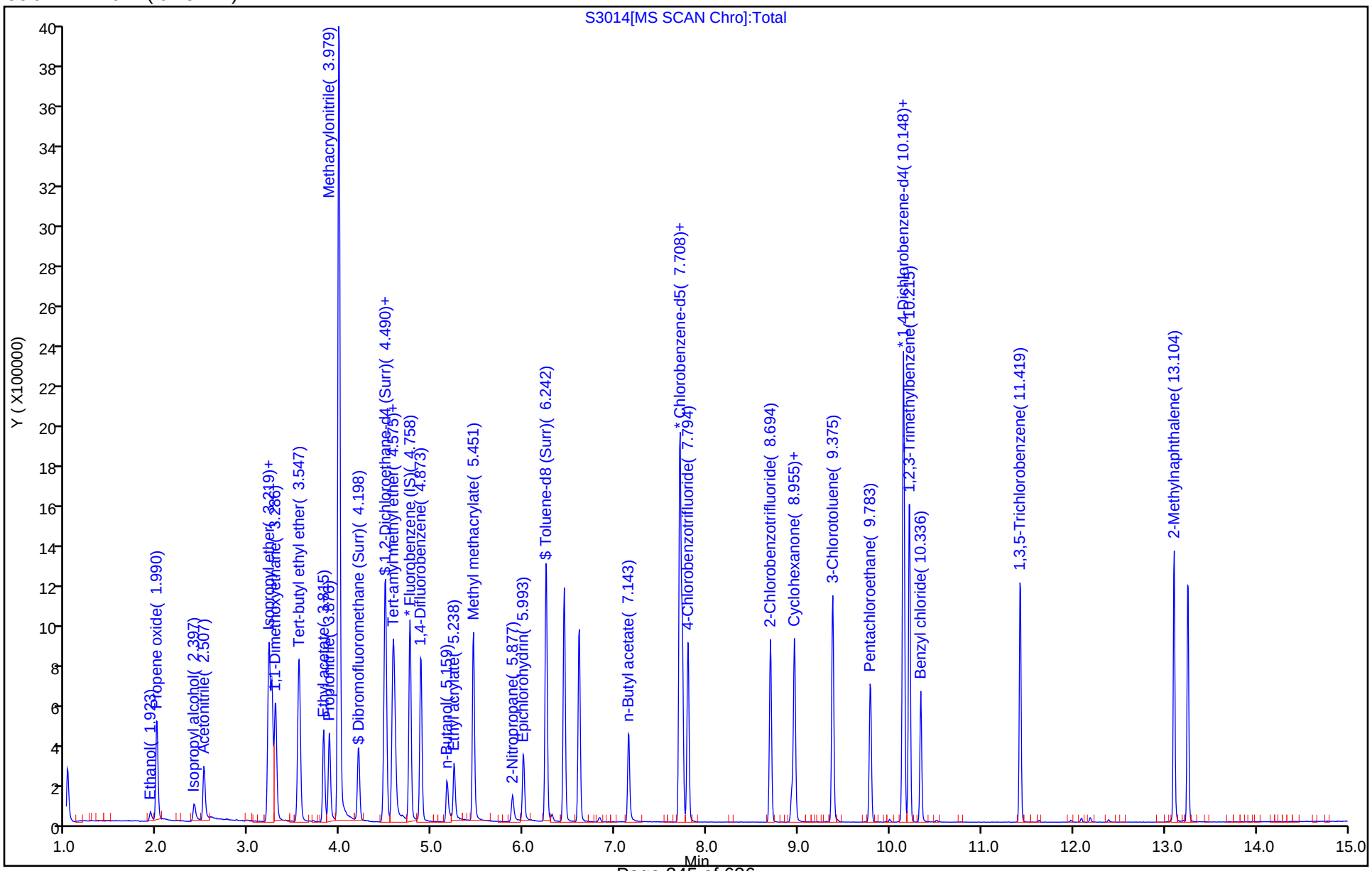
Report Date: 17-Oct-2024 11:38:40 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S3014.d

Injection Date:	16-Oct-2024 14:45:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	ICV ADD			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: ICV 480-728511/11 Calibration Date: 10/16/2024 14:45

Instrument ID: HP5973S Calib Start Date: 10/15/2024 20:32

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/15/2024 22:53

Lab File ID: S3014.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	1.552	1.773		28.6	25.0	14.2	30.0
Ethanol	Ave	0.0130	0.0109		839	1000	-16.1	30.0
Isopropyl alcohol	Ave	0.0748	0.0790		264	250	5.6	30.0
Acetonitrile	Ave	0.1217	0.1013		208	250	-16.7	30.0
Isopropyl ether	Ave	4.733	4.988		26.3	25.0	5.4	30.0
Chloroprene	Ave	2.034	2.340		28.8	25.0	15.1	30.0
1,1-Dimethoxyethane	Ave	0.2750	0.2681		122	125	-2.5	30.0
Tert-butyl ethyl ether	Ave	4.436	4.466		25.2	25.0	0.7	30.0
Ethyl acetate	Ave	1.551	1.615		52.1	50.0	4.1	30.0
Propionitrile	Ave	0.2582	0.2599		252	250	0.7	30.0
Methacrylonitrile	Ave	1.251	1.246		249	250	-0.5	30.0
Isooctane	Ave	4.037	5.025		31.1	25.0	24.5	30.0
Tert-amyl methyl ether	Ave	4.402	4.622		26.2	25.0	5.0	30.0
t-Amyl alcohol	Lin1		0.1184		219	250	-12.5	30.0
1,4-Difluorobenzene	Ave	3.437	3.732		27.1	25.0	8.6	30.0
n-Butanol	Ave	0.0213	0.0269		787	625	25.9	30.0
Ethyl acrylate	Ave	1.627	1.731		26.6	25.0	6.4	30.0
Methyl methacrylate	Ave	1.360	1.431		52.6	50.0	5.2	30.0
2-Nitropropane	Ave	0.1235	0.1241		50.2	50.0	0.5	30.0
Epichlorohydrin	Ave	0.1690	0.1700		252	250	0.6	30.0
n-Butyl acetate	Ave	1.898	2.083	0.1000	27.4	25.0	9.8	30.0
1-Chlorohexane	Lin1		0.6898		28.9	25.0	15.8	30.0
3-Chlorobenzotrifluoride	Ave	0.9021	1.019		28.3	25.0	13.0	30.0
4-Chlorobenzotrifluoride	Ave	0.8270	0.9513		28.8	25.0	15.0	30.0
2-Chlorobenzotrifluoride	Ave	0.9513	1.003		26.3	25.0	5.4	30.0
Cyclohexanone	Ave	0.0273	0.0273		249	250	-0.3	30.0
3-Chlorotoluene	Ave	0.7275	0.7524		25.9	25.0	3.4	30.0
Pentachloroethane	Ave	0.3175	0.3916		30.8	25.0	23.3	30.0
Dicyclopentadiene	Ave	3.592	3.582		24.9	25.0	-0.3	30.0
1,2,3-Trimethylbenzene	Ave	2.790	2.957		26.5	25.0	6.0	30.0
Benzyl chloride	Ave	0.2116	0.2583		30.5	25.0	22.1	30.0
1,3,5-Trichlorobenzene	Ave	1.075	1.123		26.1	25.0	4.4	30.0
2-Methylnaphthalene	Ave	1.702	1.824		26.8	25.0	7.2	30.0

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S3014.d
Lims ID: ICV ADD
Client ID:
Sample Type: ICV
Inject. Date: 16-Oct-2024 14:45:30 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV ADD
Misc. Info.: 480-0120591-011
Operator ID: ZN Instrument ID: HP5973S
Sublist:

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2024 11:27:42 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1694

First Level Reviewer: QR3Z Date: 17-Oct-2024 11:38:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	156095	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	87	300625	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	88	288665	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	57	195135	25.0	25.5	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	58	146213	25.0	26.9	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	84	786724	25.0	25.0	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	88	228895	25.0	23.4	
11 Chlorodifluoromethane	51	1.016	1.016	0.000	79	276709	25.0	28.6	
148 Ethanol	45	1.923	1.923	0.000	99	68298	1000.0	838.9	
19 Propene oxide	58	1.990	1.990	0.000	95	334621	NC	NC	
24 Isopropyl alcohol	45	2.397	2.397	0.000	97	123304	250.0	264.1	
29 Acetonitrile	40	2.507	2.507	0.000	99	158148	250.0	208.2	
36 Isopropyl ether	45	3.219	3.219	0.000	94	778651	25.0	26.3	
40 2-Chloro-1,3-butadiene	53	3.249	3.249	0.000	87	365238	25.0	28.8	
38 1,1-Dimethoxyethane	75	3.292	3.286	0.006	63	209279	125.0	121.9	
41 Tert-butyl ethyl ether	59	3.547	3.541	0.006	98	697122	25.0	25.2	
42 Ethyl acetate	43	3.815	3.821	0.000	99	504096	50.0	52.1	
46 Propionitrile	54	3.876	3.876	0.000	98	405643	250.0	251.6	
47 Methacrylonitrile	41	3.979	3.979	0.000	96	1944447	250.0	248.8	
152 Isooctane	57	4.484	4.484	0.000	97	784429	25.0	31.1	
56 Tert-amyl methyl ether	73	4.575	4.575	0.000	90	721526	25.0	26.2	
147 t-Amyl alcohol	59	4.594	4.593	0.001	61	184782	250.0	218.6	
1 1,4-Difluorobenzene	114	4.879	4.873	0.006	92	582545	25.0	27.1	
60 n-Butanol	56	5.159	5.190	0.000	95	104781	625.0	786.6	
142 Ethyl acrylate	55	5.238	5.238	0.000	92	270199	25.0	26.6	
63 Methyl methacrylate	41	5.451	5.451	0.000	90	446694	50.0	52.6	
70 2-Nitropropane	43	5.877	5.877	0.000	98	71638	50.0	50.2	
71 Epichlorohydrin	57	5.993	5.993	0.000	99	265360	250.0	251.5	
155 n-Butyl acetate	43	7.149	7.142	0.007	97	325117	25.0	27.4	
146 1-Chlorohexane	55	7.702	7.702	0.000	70	207359	25.0	28.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
85 3-Chlorobenzotrifluoride	180	7.733	7.733	0.000	86	294277	25.0	28.3	
86 4-Chlorobenzotrifluoride	180	7.794	7.793	0.001	96	274604	25.0	28.8	
93 2-Chlorobenzotrifluoride	180	8.694	8.694	0.000	93	289420	25.0	26.3	
96 Cyclohexanone	55	8.931	8.956	0.000	92	78682	250.0	249.2	
104 3-Chlorotoluene	126	9.375	9.375	0.000	98	217178	25.0	25.9	
108 Pentachloroethane	167	9.789	9.789	0.000	81	113034	25.0	30.8	
114 Dicyclopentadiene	66	10.142	10.142	0.000	97	1033958	25.0	24.9	
112 1,2,3-Trimethylbenzene	105	10.215	10.215	0.000	73	853457	25.0	26.5	
150 Benzyl chloride	126	10.336	10.336	0.000	99	77659	25.0	30.5	
118 1,3,5-Trichlorobenzene	180	11.425	11.425	0.000	96	324057	25.0	26.1	
149 2-Methylnaphthalene	142	13.104	13.104	0.000	89	526584	25.0	26.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SS ADD CORP_00094	Amount Added: 12.50	Units: uL	
S_8260_IS_00403	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added: 1.00	Units: uL	Run Reagent

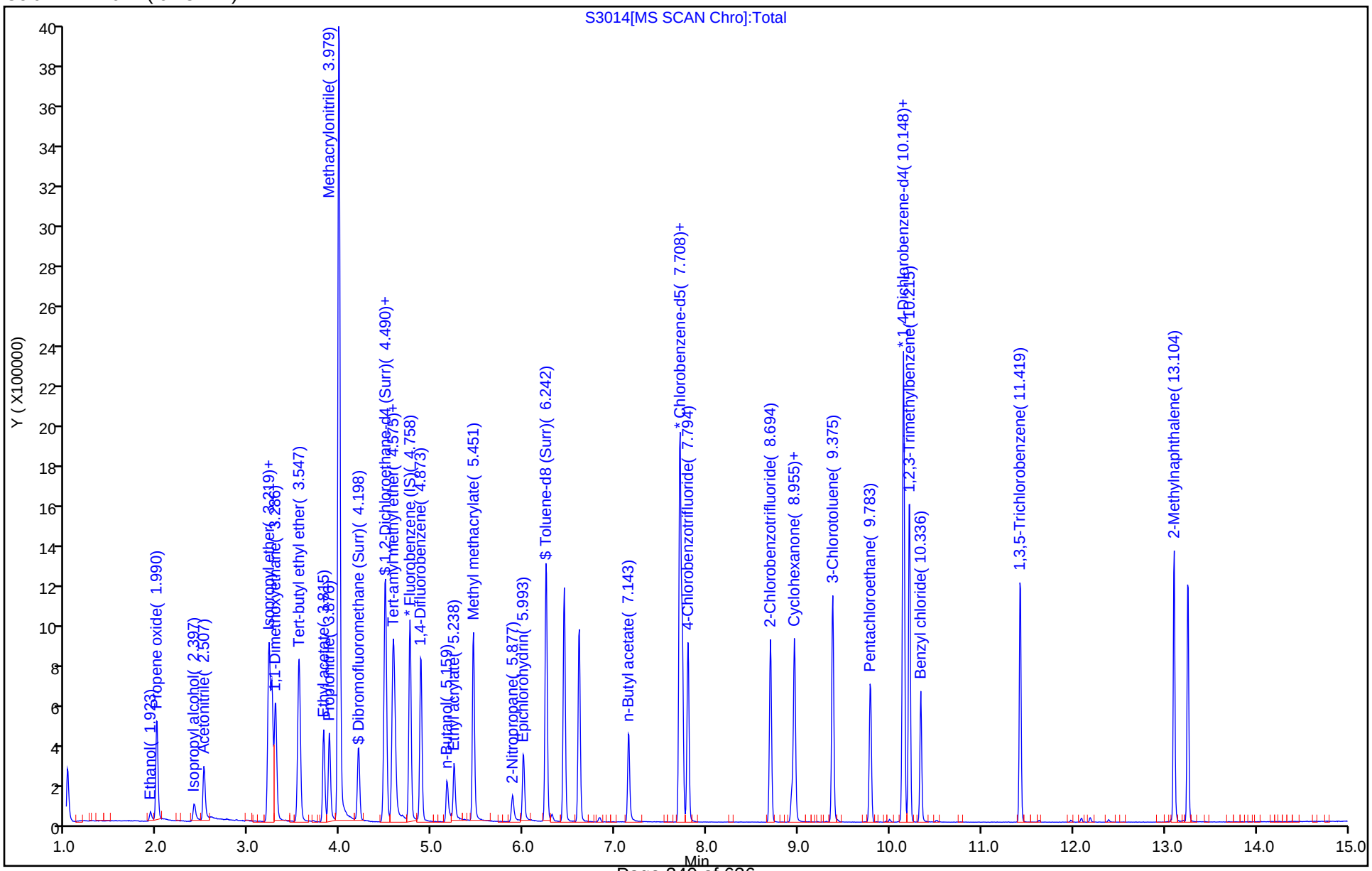
Report Date: 17-Oct-2024 11:38:40 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S3014.d

Injection Date:	16-Oct-2024 14:45:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	ICV ADD			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: CCVIS 480-728892/4 Calibration Date: 10/18/2024 21:09

Instrument ID: HP5973S Calib Start Date: 10/15/2024 15:49

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/16/2024 11:36

Lab File ID: S3127.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.342	1.664	0.1000	31.0	25.0	24.0	50.0
Chloromethane	Ave	1.717	2.001	0.1000	29.1	25.0	16.6	20.0
Vinyl chloride	Ave	1.236	1.369	0.1000	27.7	25.0	10.8	20.0
Butadiene	Ave	1.453	1.878		32.3	25.0	29.2*	20.0
Bromomethane	Ave	0.7860	0.7927	0.1000	25.2	25.0	0.8	50.0
Chloroethane	Ave	0.9579	0.9836	0.1000	25.7	25.0	2.7	50.0
Dichlorofluoromethane	Ave	2.116	2.360		27.9	25.0	11.5	20.0
Trichlorofluoromethane	Ave	1.528	1.814	0.1000	29.7	25.0	18.7	20.0
Ethyl ether	Ave	1.292	1.317		25.5	25.0	2.0	20.0
Acrolein	Ave	0.1657	0.1540		116	125	-7.0	50.0
1,1-Dichloroethene	Ave	0.9530	0.9736	0.1000	25.5	25.0	2.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.9438	1.043	0.1000	27.6	25.0	10.5	20.0
Acetone	Ave	0.6289	0.6016	0.1000	120	125	-4.3	50.0
Iodomethane	Ave	1.777	1.739		24.5	25.0	-2.1	20.0
Carbon disulfide	Ave	3.251	3.511	0.1000	27.0	25.0	8.0	20.0
Allyl chloride	Ave	2.237	2.472		27.6	25.0	10.5	20.0
Methyl acetate	Ave	1.443	1.476	0.1000	51.2	50.0	2.3	50.0
Methylene Chloride	Lin1		1.188	0.1000	24.0	25.0	-4.1	20.0
2-Methyl-2-propanol	Ave	0.1684	0.1692		251	250	0.5	50.0
Methyl tert-butyl ether	Ave	4.155	4.019	0.1000	24.2	25.0	-3.3	20.0
trans-1,2-Dichloroethene	Ave	1.188	1.178	0.1000	24.8	25.0	-0.8	20.0
Acrylonitrile	Ave	0.7191	0.7383		257	250	2.7	20.0
Hexane	Ave	1.867	2.165		29.0	25.0	15.9	20.0
1,1-Dichloroethane	Ave	2.301	2.366	0.2000	25.7	25.0	2.8	20.0
Vinyl acetate	Lin1		2.313		42.8	50.0	-14.4	20.0
2,2-Dichloropropane	Ave	1.157	1.274		27.5	25.0	10.0	20.0
cis-1,2-Dichloroethene	Ave	1.243	1.256	0.1000	25.3	25.0	1.0	20.0
2-Butanone (MEK)	Ave	0.9066	0.9336	0.1000	129	125	3.0	20.0
Chlorobromomethane	Ave	0.6494	0.6410		24.7	25.0	-1.3	20.0
Tetrahydrofuran	Ave	0.6686	0.6415		48.0	50.0	-4.1	20.0
Chloroform	Ave	2.252	2.120	0.2000	23.5	25.0	-5.9	20.0
1,1,1-Trichloroethane	Ave	1.703	1.781	0.1000	26.1	25.0	4.6	20.0
Cyclohexane	Ave	2.292	2.671	0.1000	29.1	25.0	16.5	20.0
Carbon tetrachloride	Ave	1.467	1.567	0.1000	26.7	25.0	6.8	20.0
1,1-Dichloropropene	Ave	1.669	1.775		26.6	25.0	6.3	20.0
Benzene	Ave	5.027	4.962	0.5000	24.7	25.0	-1.3	20.0
Isobutyl alcohol	Ave	0.0643	0.0590		574	625	-8.2	50.0
1,2-Dichloroethane	Ave	1.954	1.971	0.1000	25.2	25.0	0.9	20.0
n-Heptane	Ave	1.877	2.292		30.5	25.0	22.2*	20.0
Trichloroethene	Ave	1.250	1.188	0.2000	23.8	25.0	-4.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: CCVIS 480-728892/4 Calibration Date: 10/18/2024 21:09

Instrument ID: HP5973S Calib Start Date: 10/15/2024 15:49

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/16/2024 11:36

Lab File ID: S3127.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.015	2.218	0.1000	27.5	25.0	10.1	20.0
1,2-Dichloropropane	Ave	1.297	1.296	0.1000	25.0	25.0	-0.1	20.0
Dibromomethane	Ave	0.7702	0.7654	0.1000	24.8	25.0	-0.6	20.0
1,4-Dioxane	Ave	0.0087	0.0065		372	500	-25.6	50.0
Bromodichloromethane	Ave	1.375	1.360	0.2000	24.7	25.0	-1.1	20.0
2-Chloroethyl vinyl ether	Ave	0.8306	0.8984		27.0	25.0	8.2	20.0
cis-1,3-Dichloropropene	Ave	1.802	1.834	0.2000	25.4	25.0	1.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9627	1.019	0.1000	132	125	5.9	20.0
Toluene	Ave	1.683	1.592	0.4000	23.6	25.0	-5.4	20.0
trans-1,3-Dichloropropene	Ave	0.8609	0.8678	0.1000	25.2	25.0	0.8	20.0
Ethyl methacrylate	Ave	0.8459	0.7931		23.4	25.0	-6.2	20.0
1,1,2-Trichloroethane	Ave	0.4902	0.4748	0.1000	24.2	25.0	-3.1	20.0
Tetrachloroethene	Ave	0.6534	0.6546	0.2000	25.0	25.0	0.2	20.0
1,3-Dichloropropane	Ave	1.004	1.003		25.0	25.0	-0.0	20.0
2-Hexanone	Ave	0.6715	0.6645	0.1000	124	125	-1.0	20.0
Dibromochloromethane	Ave	0.4940	0.5014	0.1000	25.4	25.0	1.5	20.0
1,2-Dibromoethane	Ave	0.5902	0.5743		24.3	25.0	-2.7	20.0
Chlorobenzene	Ave	1.750	1.691	0.5000	24.2	25.0	-3.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5702	0.5589		24.5	25.0	-2.0	20.0
Ethylbenzene	Ave	3.092	3.056	0.1000	24.7	25.0	-1.2	20.0
m,p-Xylene	Ave	1.192	1.138	0.1000	23.9	25.0	-4.5	20.0
o-Xylene	Ave	1.176	1.147	0.3000	24.4	25.0	-2.5	20.0
Styrene	Ave	1.961	1.801	0.3000	23.0	25.0	-8.2	20.0
Bromoform	Ave	0.3219	0.3026	0.1000	23.5	25.0	-6.0	50.0
Isopropylbenzene	Ave	2.745	2.861	0.1000	26.1	25.0	4.2	20.0
Bromobenzene	Ave	0.7451	0.7417		24.9	25.0	-0.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7814	0.7902	0.3000	25.3	25.0	1.1	20.0
N-Propylbenzene	Ave	3.491	3.639		26.1	25.0	4.2	20.0
1,2,3-Trichloropropane	Ave	0.2690	0.2591		24.1	25.0	-3.6	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2931	0.2669		22.8	25.0	-9.0	50.0
2-Chlorotoluene	Ave	0.6792	0.7015		25.8	25.0	3.3	20.0
1,3,5-Trimethylbenzene	Ave	2.518	2.574		25.6	25.0	2.3	20.0
4-Chlorotoluene	Ave	0.7157	0.7289		25.5	25.0	1.9	20.0
tert-Butylbenzene	Ave	0.5525	0.5656		25.6	25.0	2.4	20.0
1,2,4-Trimethylbenzene	Ave	2.601	2.650		25.5	25.0	1.9	20.0
sec-Butylbenzene	Ave	3.116	3.284		26.3	25.0	5.4	20.0
1,3-Dichlorobenzene	Ave	1.418	1.388	0.6000	24.5	25.0	-2.1	20.0
4-Isopropyltoluene	Ave	2.778	2.873		25.9	25.0	3.4	20.0
1,4-Dichlorobenzene	Ave	1.455	1.411	0.5000	24.2	25.0	-3.0	20.0
n-Butylbenzene	Ave	2.402	2.534		26.4	25.0	5.5	20.0
1,2-Dichlorobenzene	Ave	1.389	1.357	0.4000	24.4	25.0	-2.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: CCVIS 480-728892/4 Calibration Date: 10/18/2024 21:09

Instrument ID: HP5973S Calib Start Date: 10/15/2024 15:49

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/16/2024 11:36

Lab File ID: S3127.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1395	0.0500	21.4	25.0	-14.2	50.0
1,2,4-Trichlorobenzene	Ave	0.9817	0.9737	0.2000	24.8	25.0	-0.8	20.0
Hexachlorobutadiene	Ave	0.4647	0.4676		25.2	25.0	0.6	20.0
Naphthalene	Ave	2.889	2.966		25.7	25.0	2.6	20.0
1,2,3-Trichlorobenzene	Ave	0.9787	0.9584		24.5	25.0	-2.1	20.0
Dibromofluoromethane (Surr)	Ave	1.225	1.190		24.3	25.0	-2.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.8712	0.8691		24.9	25.0	-0.2	20.0
Toluene-d8 (Surr)	Ave	2.618	2.592		24.7	25.0	-1.0	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8146	0.7663		23.5	25.0	-5.9	20.0

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3127.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 18-Oct-2024 21:09:30 ALS Bottle#: 32 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 09:54:23 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 09:54:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	97	146825	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	88	278116	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	68	269898	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	56	174744	25.0	24.3	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	58	127612	25.0	24.9	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	72	720767	25.0	24.7	
$ 6 4-Bromofluorobenzene (Surr)	174	8.956	8.956	0.000	86	213117	25.0	23.5	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	87	244337	25.0	31.0	
12 Chloromethane	50	1.132	1.132	0.000	82	293805	25.0	29.1	
13 Vinyl chloride	62	1.205	1.205	0.000	80	201049	25.0	27.7	
151 Butadiene	54	1.217	1.217	0.000	97	275669	25.0	32.3	
14 Bromomethane	94	1.448	1.448	0.000	91	116386	25.0	25.2	
15 Chloroethane	64	1.503	1.503	0.000	97	144419	25.0	25.7	
16 Dichlorofluoromethane	67	1.686	1.686	0.000	97	346436	25.0	27.9	
17 Trichlorofluoromethane	101	1.698	1.698	0.000	75	266338	25.0	29.7	
18 Ethyl ether	59	1.917	1.917	0.000	98	193388	25.0	25.5	
20 Acrolein	56	2.075	2.075	0.000	91	113071	125.0	116.2	
22 1,1-Dichloroethene	96	2.099	2.099	0.000	91	142956	25.0	25.5	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.105	2.105	0.000	55	153140	25.0	27.6	
23 Acetone	43	2.221	2.221	0.000	98	441666	125.0	119.6	
25 Iodomethane	142	2.245	2.245	0.000	99	255397	25.0	24.5	
26 Carbon disulfide	76	2.276	2.276	0.000	99	515530	25.0	27.0	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	84	362913	25.0	27.6	
27 Methyl acetate	43	2.495	2.495	0.000	97	433464	50.0	51.2	
30 Methylene Chloride	84	2.580	2.580	0.000	90	174407	25.0	24.0	
31 2-Methyl-2-propanol	59	2.756	2.756	0.000	83	248439	250.0	251.1	
32 Methyl tert-butyl ether	73	2.781	2.781	0.000	92	590023	25.0	24.2	
34 trans-1,2-Dichloroethene	96	2.799	2.799	0.000	91	172962	25.0	24.8	
33 Acrylonitrile	53	2.854	2.854	0.000	99	1083977	250.0	256.7	
35 Hexane	57	2.981	2.981	0.000	95	317853	25.0	29.0	
39 1,1-Dichloroethane	63	3.194	3.194	0.000	86	347375	25.0	25.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.261	3.261	0.000	97	679273	50.0	42.8	
44 2,2-Dichloropropane	77	3.687	3.687	0.000	86	187010	25.0	27.5	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	84	184465	25.0	25.3	
43 2-Butanone (MEK)	43	3.772	3.772	0.000	97	685385	125.0	128.7	
48 Chlorobromomethane	128	3.961	3.961	0.000	93	94113	25.0	24.7	
49 Tetrahydrofuran	42	3.973	3.973	0.000	90	188383	50.0	48.0	
50 Chloroform	83	4.040	4.040	0.000	83	311318	25.0	23.5	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	73	261550	25.0	26.1	
52 Cyclohexane	56	4.137	4.137	0.000	93	392128	25.0	29.1	
55 Carbon tetrachloride	117	4.271	4.271	0.000	87	230013	25.0	26.7	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	90	260545	25.0	26.6	
57 Benzene	78	4.484	4.484	0.000	96	728502	25.0	24.7	
53 Isobutyl alcohol	43	4.551	4.551	0.000	59	216700	625.0	574.0	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	76	289325	25.0	25.2	
59 n-Heptane	43	4.679	4.679	0.000	96	336565	25.0	30.5	
62 Trichloroethene	95	5.092	5.092	0.000	93	174497	25.0	23.8	
64 Methylcyclohexane	83	5.196	5.196	0.000	95	325687	25.0	27.5	
65 1,2-Dichloropropane	63	5.324	5.324	0.000	86	190319	25.0	25.0	
67 Dibromomethane	93	5.464	5.464	0.000	90	112377	25.0	24.8	
66 1,4-Dioxane	88	5.476	5.476	0.000	62	35965	500.0	371.9	
68 Dichlorobromomethane	83	5.622	5.622	0.000	96	199717	25.0	24.7	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	92	131906	25.0	27.0	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	82	269285	25.0	25.4	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.187	0.000	99	1417589	125.0	132.4	
74 Toluene	92	6.309	6.309	0.000	86	442810	25.0	23.6	
77 trans-1,3-Dichloropropene	75	6.607	6.607	0.000	94	241350	25.0	25.2	
75 Ethyl methacrylate	69	6.668	6.668	0.000	87	220587	25.0	23.4	
79 1,1,2-Trichloroethane	83	6.790	6.790	0.000	89	132045	25.0	24.2	
81 Tetrachloroethene	166	6.826	6.826	0.000	82	182053	25.0	25.0	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	97	279049	25.0	25.0	
80 2-Hexanone	43	7.021	7.021	0.000	99	924046	125.0	123.7	
83 Chlorodibromomethane	129	7.167	7.167	0.000	88	139445	25.0	25.4	
84 Ethylene Dibromide	107	7.258	7.258	0.000	97	159733	25.0	24.3	
87 Chlorobenzene	112	7.733	7.733	0.000	91	470243	25.0	24.2	
88 Ethylbenzene	91	7.836	7.836	0.000	99	849945	25.0	24.7	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	39	155440	25.0	24.5	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	316587	25.0	23.9	
91 o-Xylene	106	8.371	8.371	0.000	99	319107	25.0	24.4	
92 Styrene	104	8.408	8.408	0.000	93	500987	25.0	23.0	
95 Bromoform	173	8.645	8.645	0.000	92	84150	25.0	23.5	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	772209	25.0	26.1	
101 Bromobenzene	156	9.102	9.102	0.000	97	200196	25.0	24.9	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	58	213274	25.0	25.3	
99 N-Propylbenzene	91	9.205	9.205	0.000	98	982293	25.0	26.1	
100 1,2,3-Trichloropropane	110	9.217	9.217	0.000	63	69942	25.0	24.1	
98 trans-1,4-Dichloro-2-butene	53	9.241	9.241	0.000	81	72028	25.0	22.8	
103 2-Chlorotoluene	126	9.302	9.302	0.000	95	189324	25.0	25.8	
102 1,3,5-Trimethylbenzene	105	9.400	9.400	0.000	94	694782	25.0	25.6	
105 4-Chlorotoluene	126	9.424	9.424	0.000	99	196739	25.0	25.5	
106 tert-Butylbenzene	134	9.734	9.734	0.000	92	152650	25.0	25.6	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	97	715268	25.0	25.5	
109 sec-Butylbenzene	105	9.953	9.953	0.000	95	886394	25.0	26.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	96	374625	25.0	24.5	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	96	775490	25.0	25.9	
113 1,4-Dichlorobenzene	146	10.172	10.172	0.000	89	380871	25.0	24.2	
115 n-Butylbenzene	91	10.507	10.507	0.000	95	683951	25.0	26.4	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	96	366346	25.0	24.4	
117 1,2-Dibromo-3-Chloropropane	75	11.292	11.292	0.000	64	37663	25.0	21.4	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	90	262808	25.0	24.8	
120 Hexachlorobutadiene	225	12.089	12.089	0.000	96	126196	25.0	25.2	
121 Naphthalene	128	12.180	12.180	0.000	98	800389	25.0	25.7	
122 1,2,3-Trichlorobenzene	180	12.387	12.387	0.000	93	258668	25.0	24.5	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00260	Amount Added:	12.50	Units: uL	
GAS CORP mix_00645	Amount Added:	12.50	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: CCVIS 480-728964/4 Calibration Date: 10/19/2024 23:41

Instrument ID: HP5973S Calib Start Date: 10/15/2024 15:49

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/16/2024 11:36

Lab File ID: S3161.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.342	1.571	0.1000	29.3	25.0	17.1	50.0
Chloromethane	Ave	1.717	2.075	0.1000	30.2	25.0	20.9*	20.0
Vinyl chloride	Ave	1.236	1.362	0.1000	27.6	25.0	10.2	20.0
Butadiene	Ave	1.453	1.930		33.2	25.0	32.8*	20.0
Bromomethane	Ave	0.7860	0.7131	0.1000	22.7	25.0	-9.3	50.0
Chloroethane	Ave	0.9579	1.018	0.1000	26.6	25.0	6.3	50.0
Dichlorofluoromethane	Ave	2.116	2.220		26.2	25.0	4.9	20.0
Trichlorofluoromethane	Ave	1.528	1.824	0.1000	29.8	25.0	19.4	20.0
Ethyl ether	Ave	1.292	1.265		24.5	25.0	-2.0	20.0
Acrolein	Ave	0.1657	0.1430		108	125	-13.7	50.0
1,1-Dichloroethene	Ave	0.9530	0.9889	0.1000	25.9	25.0	3.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.9438	1.028	0.1000	27.2	25.0	8.9	20.0
Acetone	Ave	0.6289	0.6112	0.1000	121	125	-2.8	50.0
Iodomethane	Ave	1.777	1.635		23.0	25.0	-8.0	20.0
Carbon disulfide	Ave	3.251	3.232	0.1000	24.9	25.0	-0.6	20.0
Allyl chloride	Ave	2.237	2.376		26.5	25.0	6.2	20.0
Methyl acetate	Ave	1.443	1.413	0.1000	49.0	50.0	-2.0	50.0
Methylene Chloride	Lin1		1.168	0.1000	23.6	25.0	-5.7	20.0
2-Methyl-2-propanol	Ave	0.1684	0.1523		226	250	-9.6	50.0
Methyl tert-butyl ether	Ave	4.155	3.837	0.1000	23.1	25.0	-7.7	20.0
trans-1,2-Dichloroethene	Ave	1.188	1.132	0.1000	23.8	25.0	-4.7	20.0
Acrylonitrile	Ave	0.7191	0.7108		247	250	-1.2	20.0
Hexane	Ave	1.867	2.030		27.2	25.0	8.7	20.0
1,1-Dichloroethane	Ave	2.301	2.301	0.2000	25.0	25.0	0.0	20.0
Vinyl acetate	Lin1		1.871		34.9	50.0	-30.3*	20.0
2,2-Dichloropropane	Ave	1.157	1.094		23.6	25.0	-5.5	20.0
cis-1,2-Dichloroethene	Ave	1.243	1.244	0.1000	25.0	25.0	0.0	20.0
2-Butanone (MEK)	Ave	0.9066	0.9060	0.1000	125	125	-0.0	20.0
Chlorobromomethane	Ave	0.6494	0.6020		23.2	25.0	-7.3	20.0
Tetrahydrofuran	Ave	0.6686	0.6139		45.9	50.0	-8.2	20.0
Chloroform	Ave	2.252	2.029	0.2000	22.5	25.0	-9.9	20.0
1,1,1-Trichloroethane	Ave	1.703	1.707	0.1000	25.1	25.0	0.2	20.0
Cyclohexane	Ave	2.292	2.509	0.1000	27.4	25.0	9.5	20.0
Carbon tetrachloride	Ave	1.467	1.473	0.1000	25.1	25.0	0.4	20.0
1,1-Dichloropropene	Ave	1.669	1.718		25.7	25.0	3.0	20.0
Benzene	Ave	5.027	4.761	0.5000	23.7	25.0	-5.3	20.0
Isobutyl alcohol	Ave	0.0643	0.0650		632	625	1.1	50.0
1,2-Dichloroethane	Ave	1.954	1.869	0.1000	23.9	25.0	-4.3	20.0
n-Heptane	Ave	1.877	2.127		28.3	25.0	13.3	20.0
Trichloroethene	Ave	1.250	1.155	0.2000	23.1	25.0	-7.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: CCVIS 480-728964/4 Calibration Date: 10/19/2024 23:41

Instrument ID: HP5973S Calib Start Date: 10/15/2024 15:49

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/16/2024 11:36

Lab File ID: S3161.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.015	2.075	0.1000	25.7	25.0	3.0	20.0
1,2-Dichloropropane	Ave	1.297	1.235	0.1000	23.8	25.0	-4.8	20.0
Dibromomethane	Ave	0.7702	0.7327	0.1000	23.8	25.0	-4.9	20.0
1,4-Dioxane	Ave	0.0087	0.0080		459	500	-8.3	50.0
Bromodichloromethane	Ave	1.375	1.315	0.2000	23.9	25.0	-4.4	20.0
2-Chloroethyl vinyl ether	Ave	0.8306	0.8355		25.1	25.0	0.6	20.0
cis-1,3-Dichloropropene	Ave	1.802	1.680	0.2000	23.3	25.0	-6.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9627	1.042	0.1000	135	125	8.2	20.0
Toluene	Ave	1.683	1.561	0.4000	23.2	25.0	-7.2	20.0
trans-1,3-Dichloropropene	Ave	0.8609	0.8043	0.1000	23.4	25.0	-6.6	20.0
Ethyl methacrylate	Ave	0.8459	0.7941		23.5	25.0	-6.1	20.0
1,1,2-Trichloroethane	Ave	0.4902	0.4482	0.1000	22.9	25.0	-8.6	20.0
Tetrachloroethene	Ave	0.6534	0.6159	0.2000	23.6	25.0	-5.7	20.0
1,3-Dichloropropane	Ave	1.004	0.9552		23.8	25.0	-4.9	20.0
2-Hexanone	Ave	0.6715	0.7263	0.1000	135	125	8.2	20.0
Dibromochloromethane	Ave	0.4940	0.4847	0.1000	24.5	25.0	-1.9	20.0
1,2-Dibromoethane	Ave	0.5902	0.5542		23.5	25.0	-6.1	20.0
Chlorobenzene	Ave	1.750	1.648	0.5000	23.5	25.0	-5.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5702	0.5458		23.9	25.0	-4.3	20.0
Ethylbenzene	Ave	3.092	2.977	0.1000	24.1	25.0	-3.7	20.0
m,p-Xylene	Ave	1.192	1.117	0.1000	23.4	25.0	-6.3	20.0
o-Xylene	Ave	1.176	1.116	0.3000	23.7	25.0	-5.2	20.0
Styrene	Ave	1.961	1.754	0.3000	22.4	25.0	-10.6	20.0
Bromoform	Ave	0.3219	0.2846	0.1000	22.1	25.0	-11.6	50.0
Isopropylbenzene	Ave	2.745	2.755	0.1000	25.1	25.0	0.4	20.0
Bromobenzene	Ave	0.7451	0.6972		23.4	25.0	-6.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7814	0.7721	0.3000	24.7	25.0	-1.2	20.0
N-Propylbenzene	Ave	3.491	3.504		25.1	25.0	0.4	20.0
1,2,3-Trichloropropane	Ave	0.2690	0.2508		23.3	25.0	-6.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2931	0.2250		19.2	25.0	-23.2	50.0
2-Chlorotoluene	Ave	0.6792	0.6819		25.1	25.0	0.4	20.0
1,3,5-Trimethylbenzene	Ave	2.518	2.495		24.8	25.0	-0.9	20.0
4-Chlorotoluene	Ave	0.7157	0.6976		24.4	25.0	-2.5	20.0
tert-Butylbenzene	Ave	0.5525	0.5733		25.9	25.0	3.8	20.0
1,2,4-Trimethylbenzene	Ave	2.601	2.584		24.8	25.0	-0.7	20.0
sec-Butylbenzene	Ave	3.116	3.195		25.6	25.0	2.5	20.0
1,3-Dichlorobenzene	Ave	1.418	1.342	0.6000	23.7	25.0	-5.3	20.0
4-Isopropyltoluene	Ave	2.778	2.793		25.1	25.0	0.6	20.0
1,4-Dichlorobenzene	Ave	1.455	1.358	0.5000	23.3	25.0	-6.7	20.0
n-Butylbenzene	Ave	2.402	2.493		25.9	25.0	3.8	20.0
1,2-Dichlorobenzene	Ave	1.389	1.331	0.4000	23.9	25.0	-4.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: CCVIS 480-728964/4 Calibration Date: 10/19/2024 23:41

Instrument ID: HP5973S Calib Start Date: 10/15/2024 15:49

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/16/2024 11:36

Lab File ID: S3161.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1340	0.0500	20.6	25.0	-17.5	50.0
1,2,4-Trichlorobenzene	Ave	0.9817	0.9447	0.2000	24.1	25.0	-3.8	20.0
Hexachlorobutadiene	Ave	0.4647	0.4455		24.0	25.0	-4.1	20.0
Naphthalene	Ave	2.889	2.882		24.9	25.0	-0.3	20.0
1,2,3-Trichlorobenzene	Ave	0.9787	0.9220		23.6	25.0	-5.8	20.0
Dibromofluoromethane (Surr)	Ave	1.225	1.183		24.1	25.0	-3.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.8712	0.8615		24.7	25.0	-1.1	20.0
Toluene-d8 (Surr)	Ave	2.618	2.533		24.2	25.0	-3.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8146	0.7449		22.9	25.0	-8.6	20.0

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3161.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 19-Oct-2024 23:41:30 ALS Bottle#: 37 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0120662-004
Operator ID: ZN Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Oct-2024 07:58:22 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: QR3Z Date: 20-Oct-2024 07:58:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	97	143670	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	89	266960	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	71	262981	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.198	0.000	57	169987	25.0	24.1	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	63	123766	25.0	24.7	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	80	676197	25.0	24.2	
$ 6 4-Bromofluorobenzene (Surr)	174	8.956	8.956	0.000	84	198857	25.0	22.9	
10 Dichlorodifluoromethane	85	1.004	1.004	0.000	98	225755	25.0	29.3	
12 Chloromethane	50	1.132	1.132	0.000	89	298178	25.0	30.2	
13 Vinyl chloride	62	1.217	1.217	0.000	52	195738	25.0	27.6	
151 Butadiene	54	1.223	1.223	0.000	98	277237	25.0	33.2	
14 Bromomethane	94	1.461	1.461	0.000	93	102451	25.0	22.7	
15 Chloroethane	64	1.509	1.509	0.000	97	146237	25.0	26.6	
16 Dichlorofluoromethane	67	1.692	1.692	0.000	82	318962	25.0	26.2	
17 Trichlorofluoromethane	101	1.698	1.698	0.000	55	262119	25.0	29.8	
18 Ethyl ether	59	1.917	1.917	0.000	97	181782	25.0	24.5	
20 Acrolein	56	2.081	2.081	0.000	93	102729	125.0	107.9	
22 1,1-Dichloroethene	96	2.105	2.105	0.000	86	142078	25.0	25.9	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.111	2.111	0.000	65	147626	25.0	27.2	
23 Acetone	43	2.221	2.221	0.000	97	439020	125.0	121.5	
25 Iodomethane	142	2.270	2.270	0.000	72	234833	25.0	23.0	
26 Carbon disulfide	76	2.288	2.288	0.000	99	464338	25.0	24.9	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	83	341316	25.0	26.5	
27 Methyl acetate	43	2.501	2.501	0.000	96	406117	50.0	49.0	
30 Methylene Chloride	84	2.586	2.586	0.000	92	167790	25.0	23.6	
31 2-Methyl-2-propanol	59	2.769	2.769	0.000	59	218778	250.0	226.0	
32 Methyl tert-butyl ether	73	2.787	2.787	0.000	92	551259	25.0	23.1	
34 trans-1,2-Dichloroethene	96	2.799	2.799	0.000	88	162598	25.0	23.8	
33 Acrylonitrile	53	2.860	2.860	0.000	99	1021219	250.0	247.1	
35 Hexane	57	2.981	2.981	0.000	95	291587	25.0	27.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.194	3.194	0.000	98	330560	25.0	25.0	
37 Vinyl acetate	43	3.261	3.261	0.000	97	537484	50.0	34.9	
44 2,2-Dichloropropane	77	3.693	3.693	0.000	85	157160	25.0	23.6	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	70	178671	25.0	25.0	
43 2-Butanone (MEK)	43	3.778	3.778	0.000	98	650843	125.0	124.9	
48 Chlorobromomethane	128	3.961	3.961	0.000	87	86490	25.0	23.2	
49 Tetrahydrofuran	42	3.973	3.973	0.000	90	176387	50.0	45.9	
50 Chloroform	83	4.046	4.046	0.000	82	291437	25.0	22.5	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	78	245259	25.0	25.1	
52 Cyclohexane	56	4.137	4.137	0.000	91	360442	25.0	27.4	
55 Carbon tetrachloride	117	4.265	4.265	0.000	79	211691	25.0	25.1	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	88	246876	25.0	25.7	
57 Benzene	78	4.484	4.484	0.000	96	684009	25.0	23.7	
53 Isobutyl alcohol	43	4.551	4.551	0.000	59	233524	625.0	632.1	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	82	268554	25.0	23.9	
59 n-Heptane	43	4.679	4.679	0.000	97	305544	25.0	28.3	
62 Trichloroethene	95	5.092	5.092	0.000	90	165947	25.0	23.1	
64 Methylcyclohexane	83	5.196	5.196	0.000	95	298077	25.0	25.7	
65 1,2-Dichloropropane	63	5.324	5.324	0.000	87	177495	25.0	23.8	
67 Dibromomethane	93	5.464	5.464	0.000	90	105271	25.0	23.8	
66 1,4-Dioxane	88	5.476	5.476	0.000	69	42564	500.0	458.6	
68 Dichlorobromomethane	83	5.622	5.622	0.000	91	188934	25.0	23.9	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	92	120034	25.0	25.1	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	83	241327	25.0	23.3	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.187	0.000	99	1390737	125.0	135.3	
74 Toluene	92	6.309	6.309	0.000	93	416837	25.0	23.2	
77 trans-1,3-Dichloropropene	75	6.607	6.607	0.000	93	214728	25.0	23.4	
75 Ethyl methacrylate	69	6.668	6.668	0.000	87	211990	25.0	23.5	
79 1,1,2-Trichloroethane	83	6.784	6.784	0.000	90	119662	25.0	22.9	
81 Tetrachloroethene	166	6.826	6.826	0.000	79	164429	25.0	23.6	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	97	255013	25.0	23.8	
80 2-Hexanone	43	7.027	7.027	0.000	98	969425	125.0	135.2	
83 Chlorodibromomethane	129	7.167	7.167	0.000	86	129384	25.0	24.5	
84 Ethylene Dibromide	107	7.258	7.258	0.000	96	147950	25.0	23.5	
87 Chlorobenzene	112	7.733	7.733	0.000	90	439879	25.0	23.5	
88 Ethylbenzene	91	7.836	7.836	0.000	99	794671	25.0	24.1	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	44	145720	25.0	23.9	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	298132	25.0	23.4	
91 o-Xylene	106	8.371	8.371	0.000	98	297864	25.0	23.7	
92 Styrene	104	8.408	8.408	0.000	93	468315	25.0	22.4	
95 Bromoform	173	8.645	8.645	0.000	92	75975	25.0	22.1	
94 Isopropylbenzene	105	8.761	8.761	0.000	97	724520	25.0	25.1	
101 Bromobenzene	156	9.102	9.102	0.000	95	183338	25.0	23.4	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	67	203060	25.0	24.7	
99 N-Propylbenzene	91	9.205	9.205	0.000	98	921422	25.0	25.1	
100 1,2,3-Trichloropropane	110	9.211	9.211	0.000	54	65958	25.0	23.3	
98 trans-1,4-Dichloro-2-butene	53	9.241	9.241	0.000	80	59172	25.0	19.2	
103 2-Chlorotoluene	126	9.302	9.302	0.000	95	179333	25.0	25.1	
102 1,3,5-Trimethylbenzene	105	9.400	9.400	0.000	93	656185	25.0	24.8	
105 4-Chlorotoluene	126	9.424	9.424	0.000	99	183450	25.0	24.4	
106 tert-Butylbenzene	134	9.728	9.728	0.000	88	150771	25.0	25.9	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	44	679463	25.0	24.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	9.953	9.953	0.000	94	840308	25.0	25.6	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	96	353000	25.0	23.7	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	97	734571	25.0	25.1	
113 1,4-Dichlorobenzene	146	10.178	10.178	0.000	93	357187	25.0	23.3	
115 n-Butylbenzene	91	10.507	10.507	0.000	95	655629	25.0	25.9	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	95	349947	25.0	23.9	
117 1,2-Dibromo-3-Chloropropane	75	11.292	11.292	0.000	68	35231	25.0	20.6	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	91	248437	25.0	24.1	
120 Hexachlorobutadiene	225	12.089	12.089	0.000	93	117148	25.0	24.0	
121 Naphthalene	128	12.180	12.180	0.000	98	757980	25.0	24.9	
122 1,2,3-Trichlorobenzene	180	12.387	12.387	0.000	92	242462	25.0	23.6	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00260	Amount Added:	12.50	Units: uL	
GAS CORP mix_00645	Amount Added:	12.50	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

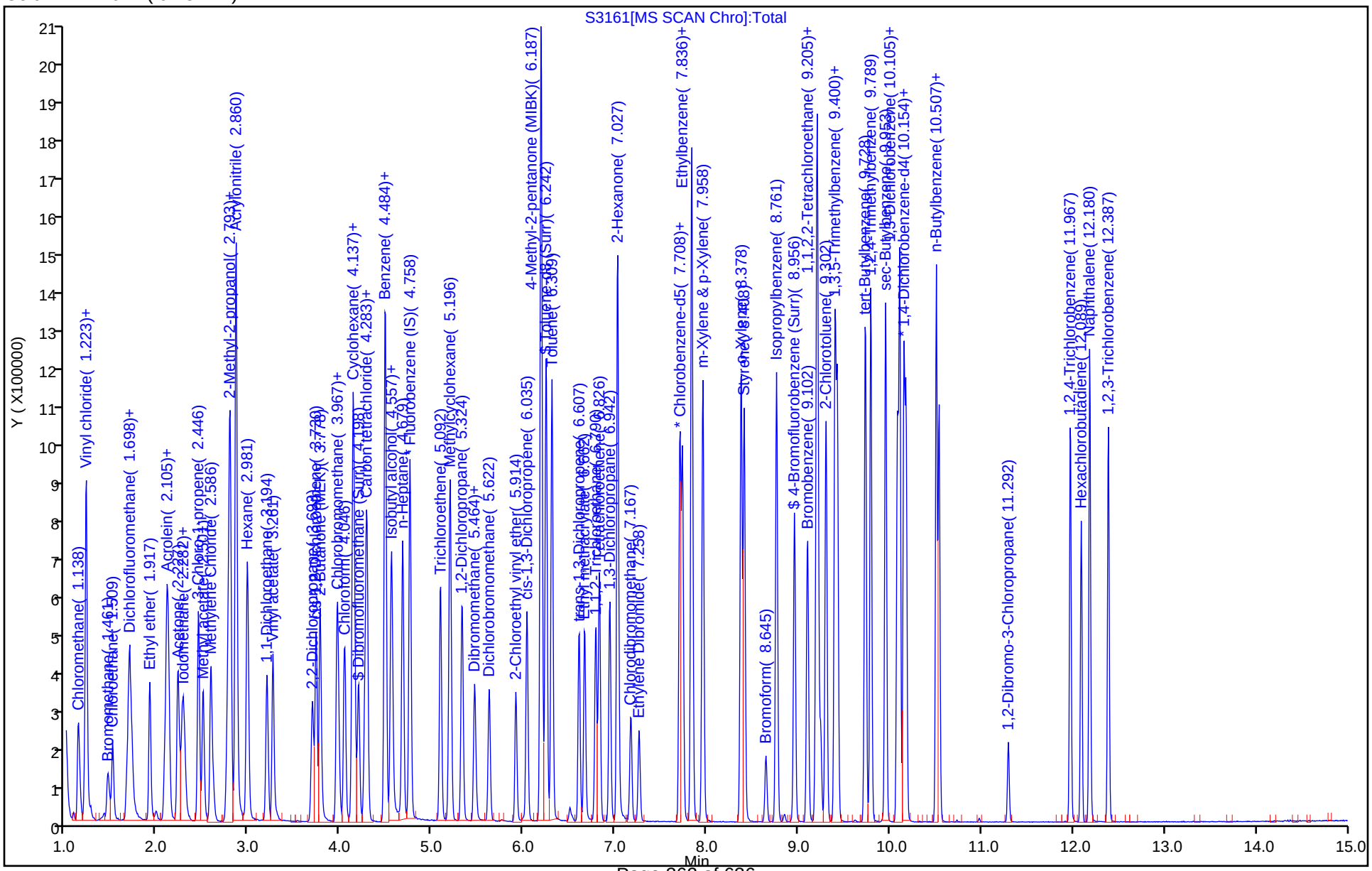
Report Date: 20-Oct-2024 07:58:23 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3161.d

Injection Date:	19-Oct-2024 23:41:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Target Compound Quantitation Report

Data File:	\\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2973.d				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	15-Oct-2024 14:57:30	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0120558-011				
Operator ID:	LH	Instrument ID:	HP5973S		
Method:	\\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	16-Oct-2024 12:26:16	Calib Date:	16-Oct-2024 11:36:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1611				

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	3.163	3.163	0.000	0	207155	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

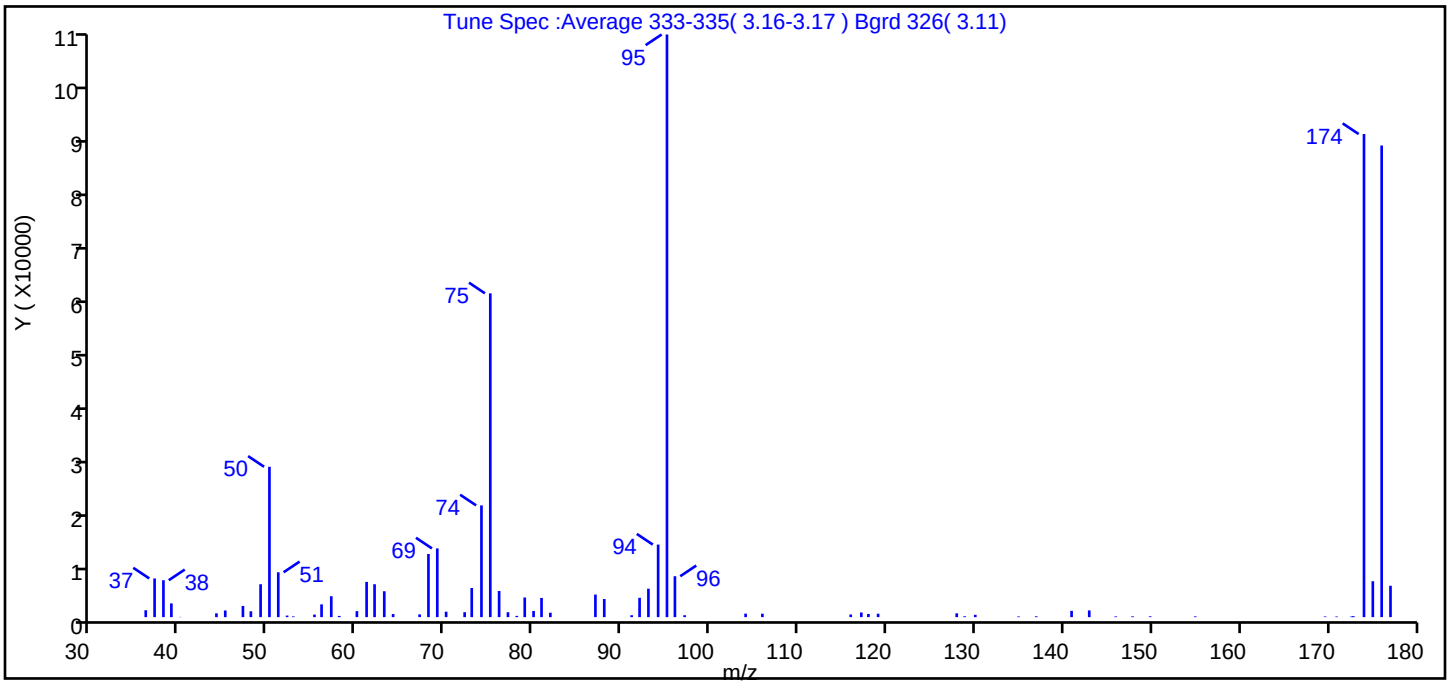
BFB_WRK_00166 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2973.d
Injection Date: 15-Oct-2024 14:57:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: LH ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	25.8
75	30 to 60% of m/z 95	55.6
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.3 (0.3)
174	50 to 120% of m/z 95	82.9
175	5 to 9% of m/z 174	6.2 (7.4)
176	Greater than 95% but less than 101% of m/z 174	80.9 (97.6)
177	5 to 9% of m/z 176	5.4 (6.7)

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2973.d\S-8260.rslt\spectra.d
Injection Date: 15-Oct-2024 14:57:30
Spectrum: Tune Spec :Average 333-335(3.16-3.17) Bgrd 326(3.11)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 72

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1249	60.00	1087	81.00	3465	129.00	156
37.00	6978	61.00	6354	82.00	798	130.00	418
38.00	6656	62.00	5939	87.00	4071	135.00	124
39.00	2479	63.00	4669	88.00	3269	137.00	153
40.00	41	64.00	560	91.00	347	141.00	1132
44.00	690	67.00	501	92.00	3485	143.00	1211
45.00	1201	68.00	11392	93.00	5129	146.00	132
47.00	2016	69.00	12395	94.00	13087	148.00	145
48.00	1055	70.00	986	95.00	105096	150.00	146
49.00	5937	72.00	890	96.00	7380	155.00	137
50.00	27120	73.00	5256	97.00	347	170.00	119
51.00	8094	74.00	20160	104.00	628	171.00	117
52.00	286	75.00	58408	106.00	620	173.00	126
53.00	131	76.00	4716	116.00	480	173.00	167
55.00	464	77.00	886	117.00	838	174.00	87136
56.00	2305	78.00	229	118.00	576	175.00	6475
57.00	3770	79.00	3545	119.00	619	176.00	85072
58.00	221	80.00	1114	128.00	690	177.00	5663

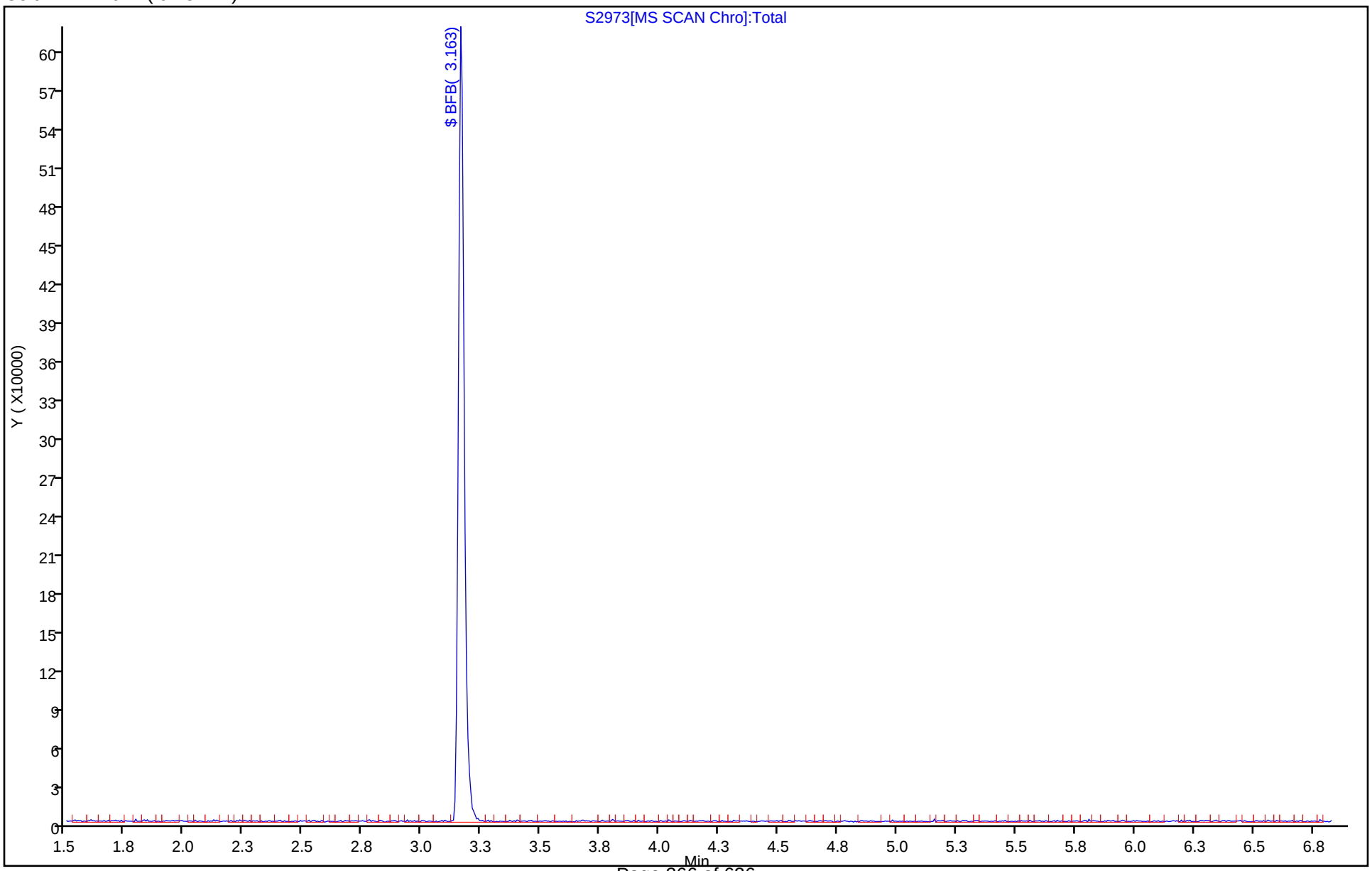
Report Date: 16-Oct-2024 12:26:17 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S2973.d

Injection Date:	15-Oct-2024 14:57:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	BFB			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Target Compound Quantitation Report

Data File:	\\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S3011.d				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	16-Oct-2024 13:05:30	ALS Bottle#:	2	Worklist Smp#:	4
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0120591-004				
Operator ID:	ZN	Instrument ID:	HP5973S		
Method:	\\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	16-Oct-2024 15:40:39	Calib Date:	16-Oct-2024 11:36:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1611				
First Level Reviewer: QR3Z		Date:	16-Oct-2024 15:40:39		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	3.157	3.157	0.000	0	115608	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

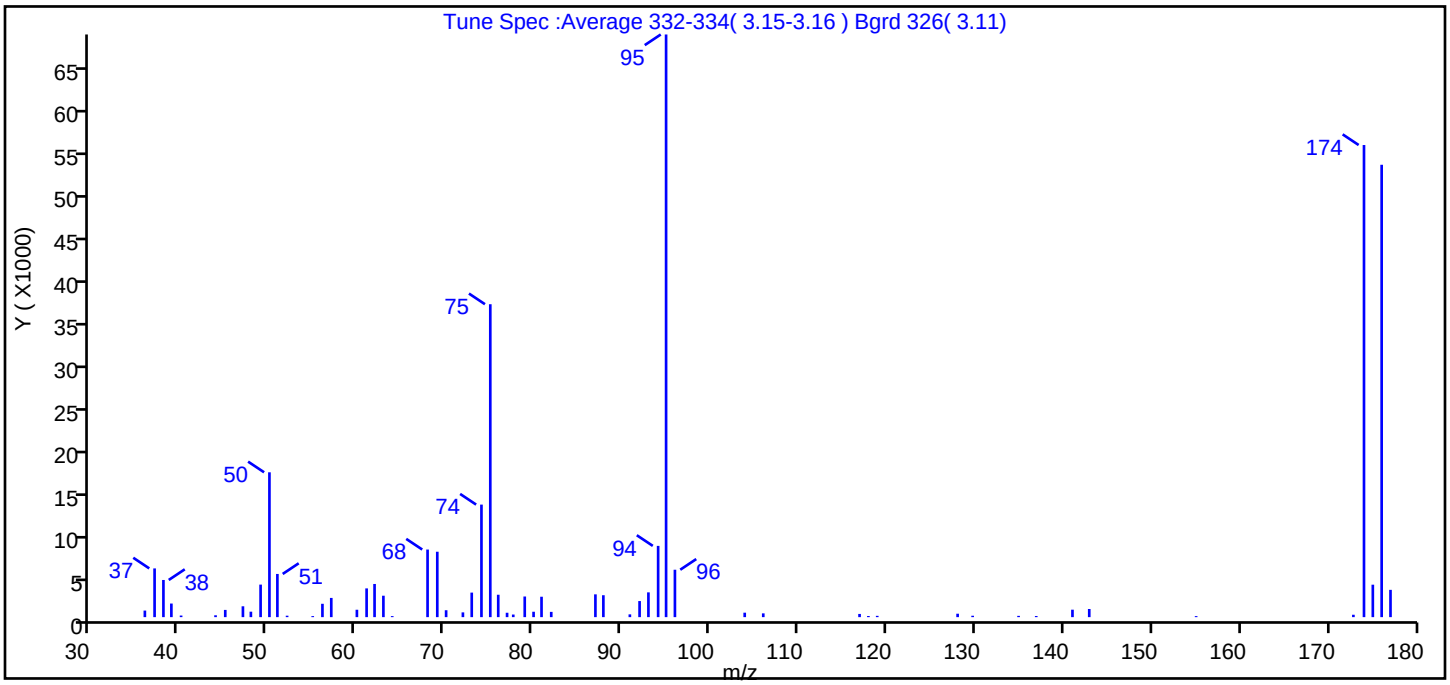
BFB_WRK_00166 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S3011.d
Injection Date: 16-Oct-2024 13:05:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: ZN ALS Bottle#: 2 Worklist Smp#: 4
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.9
75	30 to 60% of m/z 95	53.7
96	5 to 9% of m/z 95	8.1
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	81.0
175	5 to 9% of m/z 174	5.6 (6.9)
176	Greater than 95% but less than 101% of m/z 174	77.6 (95.8)
177	5 to 9% of m/z 176	4.7 (6.0)

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S3011.d\S-8260.rslt\spectra.d
Injection Date: 16-Oct-2024 13:05:30
Spectrum: Tune Spec :Average 332-334(3.15-3.16) Bgrd 326(3.11)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 60

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	769	57.00	2251	78.00	306	117.00	375
37.00	5706	60.00	866	79.00	2417	118.00	132
38.00	4352	61.00	3366	80.00	633	119.00	152
39.00	1593	62.00	3884	81.00	2390	128.00	402
40.00	187	63.00	2509	82.00	617	130.00	164
44.00	218	64.00	121	87.00	2669	135.00	151
45.00	847	68.00	7915	88.00	2567	137.00	132
47.00	1271	69.00	7658	91.00	326	141.00	873
48.00	640	70.00	810	92.00	1884	143.00	953
49.00	3810	72.00	558	93.00	2902	155.00	121
50.00	16960	73.00	2874	94.00	8343	173.00	281
51.00	5057	74.00	13178	95.00	68224	174.00	55280
52.00	169	75.00	36640	96.00	5551	175.00	3800
55.00	121	76.00	2623	104.00	522	176.00	52968
56.00	1564	77.00	514	106.00	443	177.00	3196

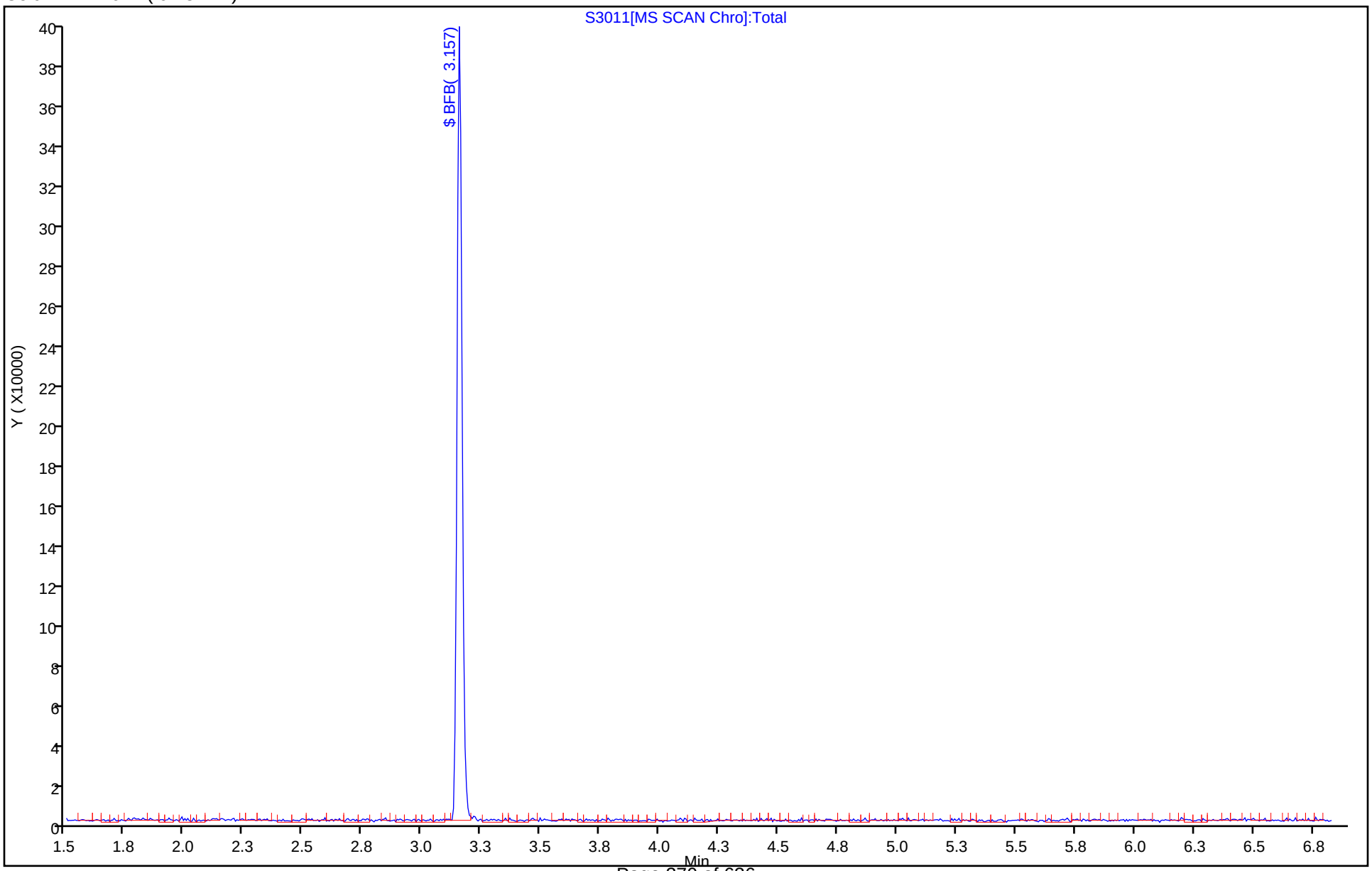
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Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241016-120591.b\S3011.d

Injection Date:	16-Oct-2024 13:05:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	BFB			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3126.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 18-Oct-2024 20:46:30 ALS Bottle#: 31 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 09:37:36 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 09:37:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	8.955	8.955	0.000	0	432080	NR	NR	a

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
a - User Assigned ID

Reagents:

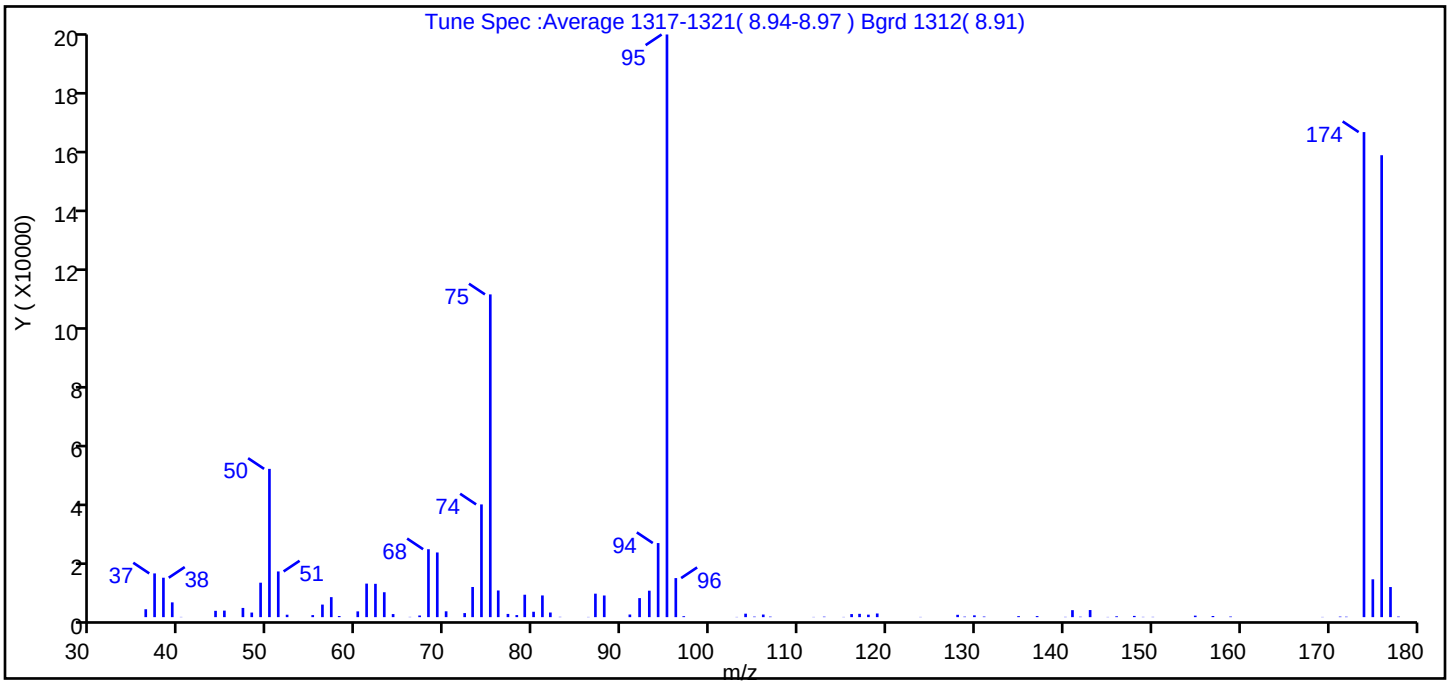
BFB_WRK_00166 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3126.d
Injection Date: 18-Oct-2024 20:46:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: ZN ALS Bottle#: 31 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	25.4
75	30 to 60% of m/z 95	55.4
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	83.2
175	5 to 9% of m/z 174	6.5 (7.8)
176	Greater than 95% but less than 101% of m/z 174	79.3 (95.2)
177	5 to 9% of m/z 176	5.2 (6.5)

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3126.d\S-8260.rslt\spectra.d
Injection Date: 18-Oct-2024 20:46:30
Spectrum: Tune Spec :Average 1317-1321(8.94-8.97) Bgrd 1312(8.91)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 88

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2667	66.00	85	93.00	8931	135.00	339
37.00	14764	67.00	555	94.00	25016	137.00	361
38.00	13313	68.00	22936	95.00	196736	140.00	95
39.00	4988	69.00	21840	96.00	13186	141.00	2360
40.00	75	70.00	1976	97.00	317	142.00	141
44.00	2135	72.00	1369	103.00	72	143.00	2396
45.00	2207	73.00	10181	104.00	1169	145.00	72
47.00	3110	74.00	38064	105.00	175	146.00	288
48.00	1549	75.00	108976	106.00	882	148.00	416
49.00	11631	76.00	9007	107.00	167	149.00	92
50.00	50064	77.00	1089	112.00	71	150.00	95
51.00	15431	78.00	696	113.00	160	155.00	505
52.00	821	79.00	7569	115.00	73	157.00	383
55.00	686	80.00	1819	116.00	1037	159.00	204
56.00	4242	81.00	7330	117.00	1115	169.00	71
57.00	6753	82.00	1565	118.00	841	171.00	182
58.00	371	83.00	99	119.00	1236	172.00	148
60.00	1950	86.00	71	124.00	75	174.00	163776
61.00	11324	87.00	7925	128.00	790	175.00	12779
62.00	11252	88.00	7309	129.00	167	176.00	155968
63.00	8411	91.00	886	130.00	608	177.00	10165
64.00	1039	92.00	6428	131.00	199	178.00	187

Manual Integration/User Assign Peak Report

Eurofins Buffalo

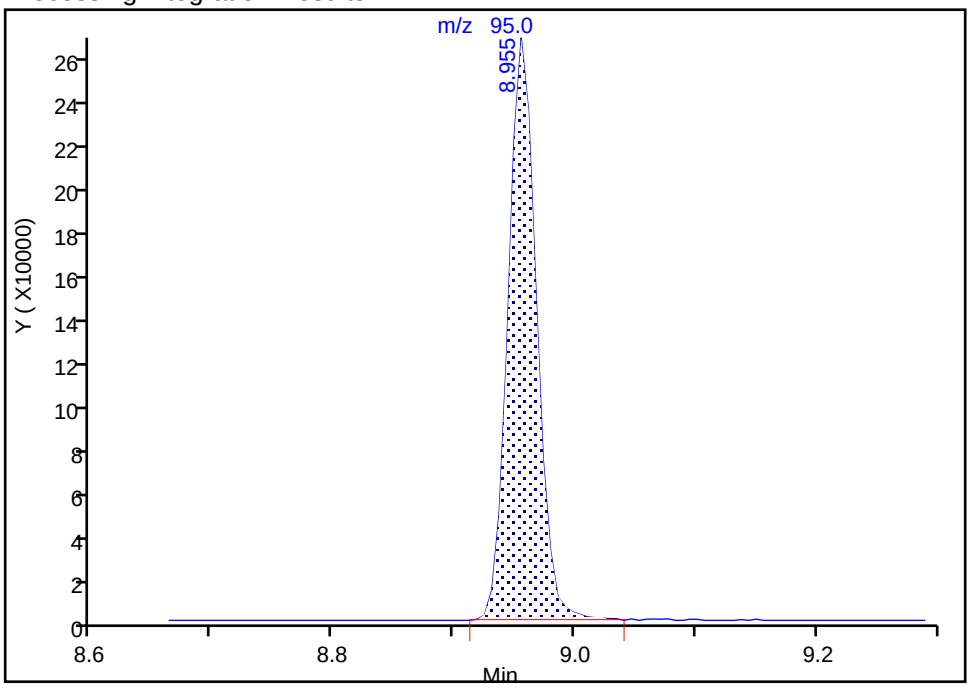
Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3126.d
Injection Date: 18-Oct-2024 20:46:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: ZN ALS Bottle#: 31 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

$ 61 BFB, CAS: 460-00-4

Signal: 1

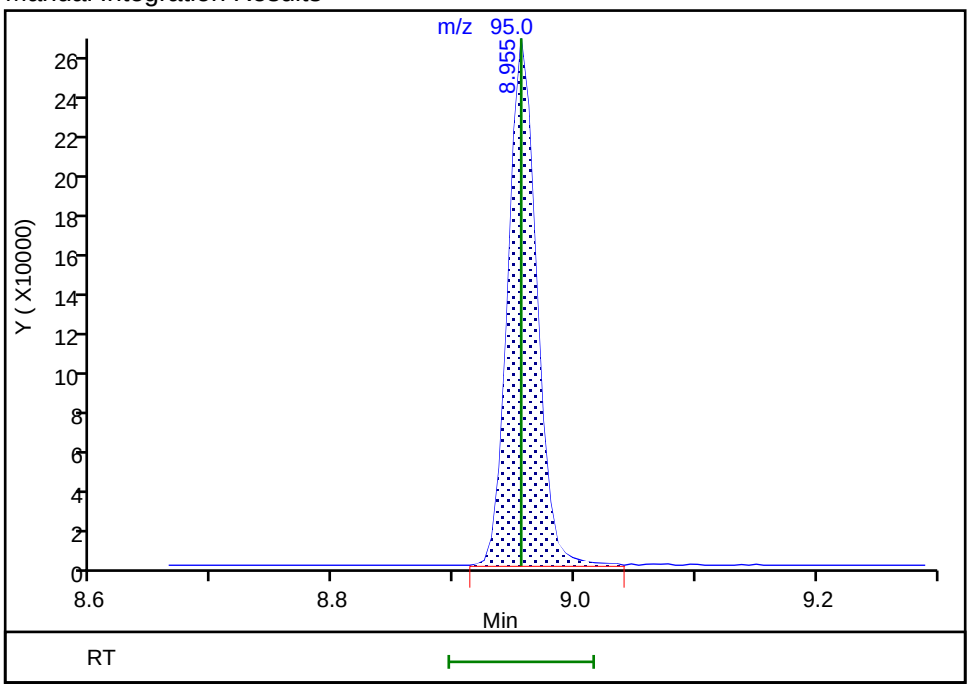
Processing Integration Results

RT: 8.96
Area: 432080
Amount: 0
Amount Units: ug/L



Manual Integration Results

RT: 8.96
Area: 432080
Amount: 0
Amount Units: ug/L



Reviewer: QR3Z, 19-Oct-2024 09:37:23 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

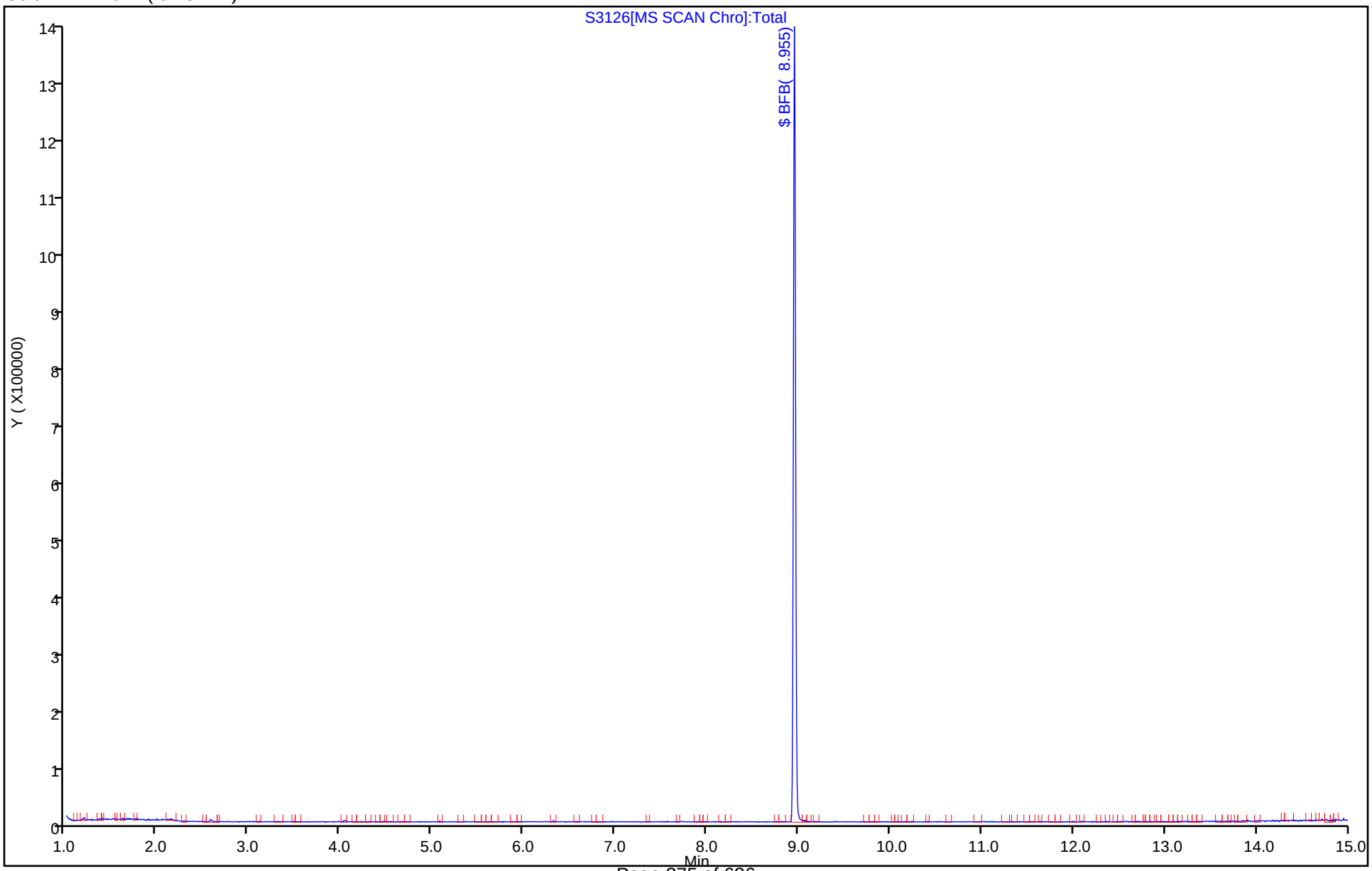
Report Date: 19-Oct-2024 09:37:37 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3126.d

Injection Date:	18-Oct-2024 20:46:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	BFB			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3160.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 19-Oct-2024 23:18:30 ALS Bottle#: 36 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 480-0120662-003
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Oct-2024 07:57:59 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: QR3Z Date: 20-Oct-2024 07:57:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	3.242	3.242	0.000	0	971336	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

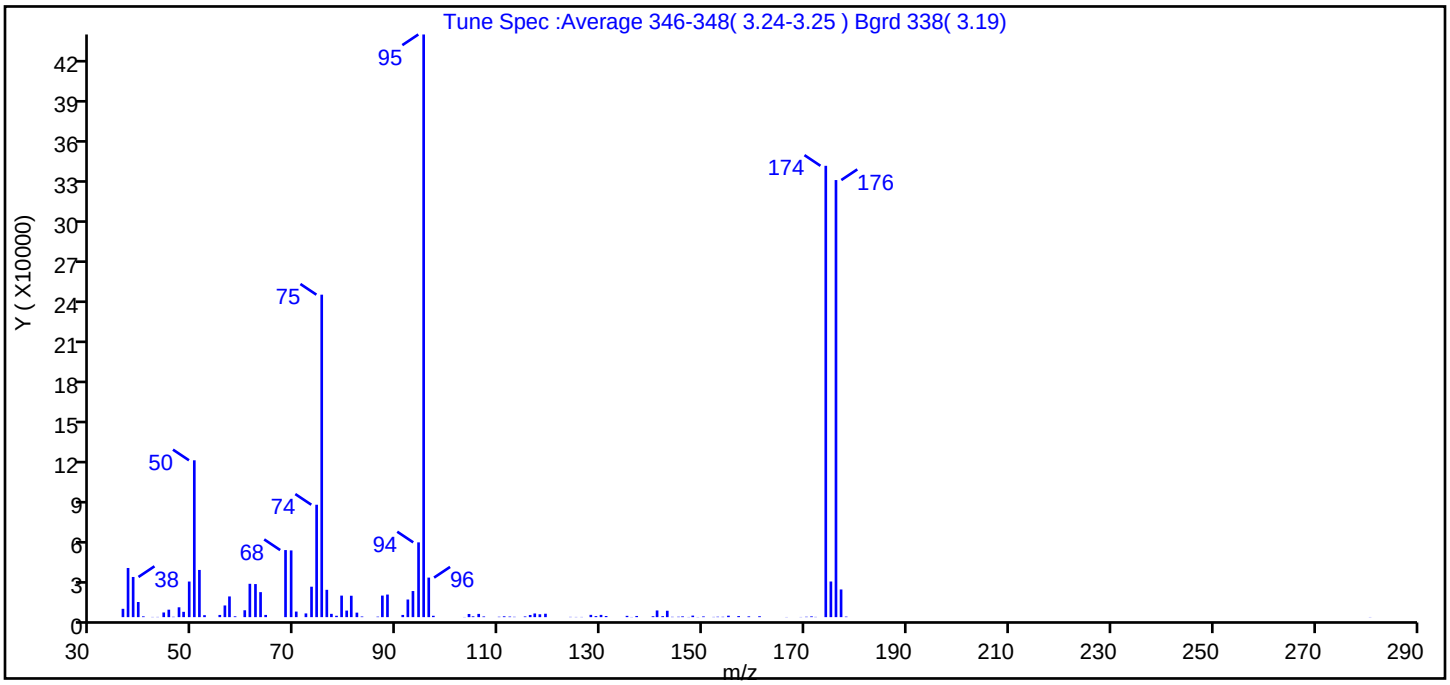
BFB_WRK_00166 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3160.d
Injection Date: 19-Oct-2024 23:18:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: ZN ALS Bottle#: 36 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	26.9
75	30 to 60% of m/z 95	55.3
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	77.5
175	5 to 9% of m/z 174	6.1 (7.9)
176	Greater than 95% but less than 101% of m/z 174	75.0 (96.8)
177	5 to 9% of m/z 176	4.8 (6.3)

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3160.d\S-8260.rslt\spectra.d
Injection Date: 19-Oct-2024 23:18:30
Spectrum: Tune Spec :Average 346-348(3.24-3.25) Bgrd 338(3.19)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6282	69.00	50336	105.00	626	144.00	248
37.00	37088	70.00	4211	106.00	2446	145.00	304
38.00	30304	72.00	2808	107.00	527	146.00	587
39.00	11415	73.00	22960	110.00	300	147.00	141
40.00	592	74.00	84800	111.00	637	148.00	1147
42.00	153	75.00	243264	112.00	445	149.00	119
43.00	173	76.00	20616	113.00	257	150.00	534
44.00	3520	77.00	2496	115.00	532	152.00	181
45.00	5630	78.00	1040	116.00	1632	153.00	321
46.00	277	79.00	16250	117.00	2763	154.00	275
47.00	7430	80.00	4949	118.00	2166	155.00	1083
48.00	4009	81.00	16143	119.00	2576	157.00	794
49.00	26864	82.00	3397	124.00	199	159.00	584
50.00	118320	83.00	486	125.00	155	161.00	675
51.00	35608	86.00	373	126.00	155	166.00	121
52.00	1478	87.00	16263	128.00	1721	169.00	133
55.00	1664	88.00	17040	129.00	787	170.00	297
56.00	8816	91.00	1665	130.00	1698	171.00	568
57.00	15627	92.00	13308	131.00	846	172.00	183
58.00	635	93.00	19688	135.00	976	174.00	340480
60.00	5187	94.00	56408	136.00	125	175.00	26888
61.00	25152	95.00	439552	137.00	886	176.00	329728
62.00	24952	96.00	29832	140.00	679	177.00	20888
63.00	18864	97.00	1027	141.00	5042	178.00	402
64.00	1676	103.00	123	142.00	745	281.00	117
68.00	50592	104.00	2390	143.00	4825		

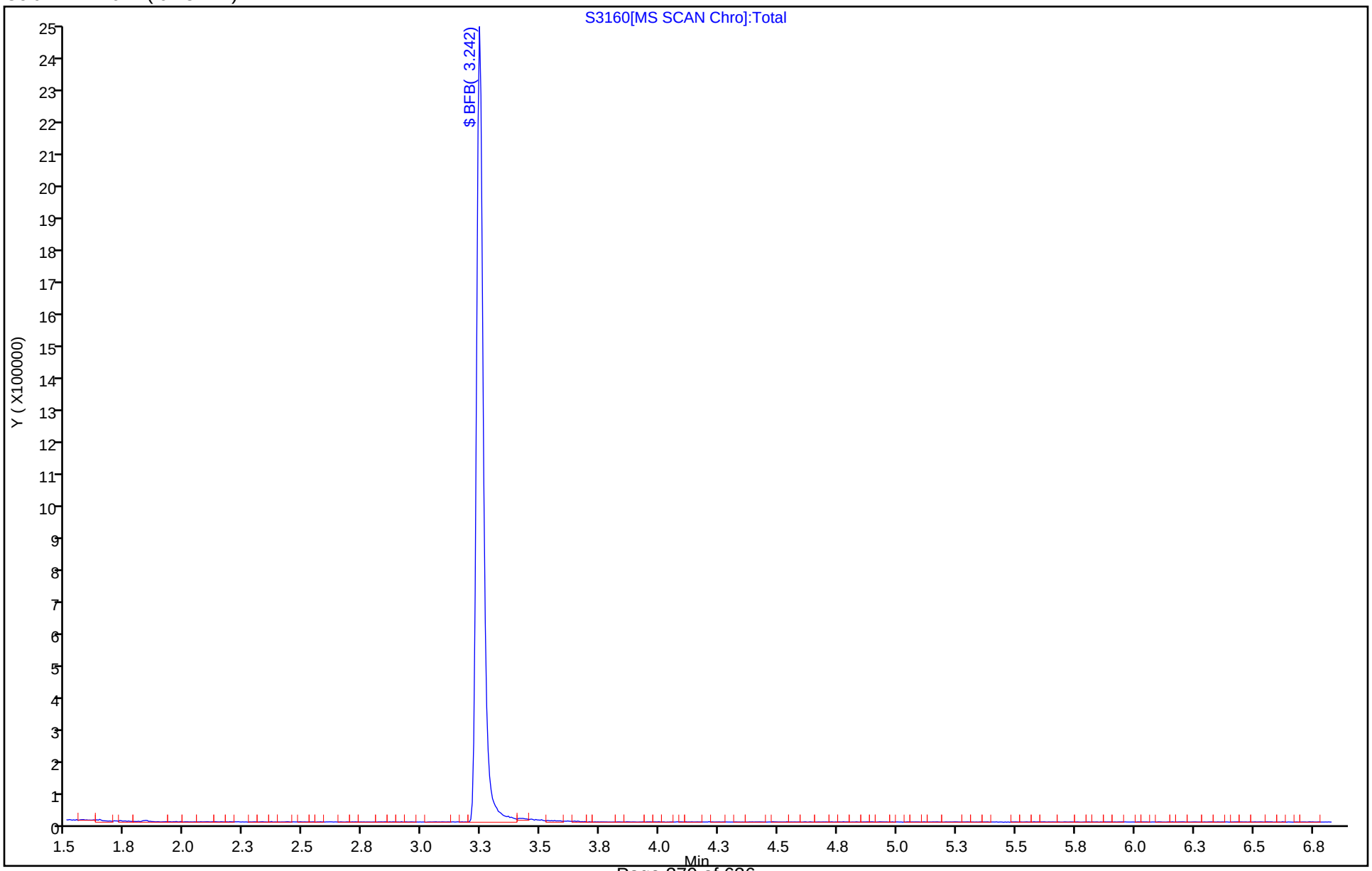
Report Date: 20-Oct-2024 07:58:00 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3160.d

Injection Date:	19-Oct-2024 23:18:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	BFB			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-728892/8

Matrix: Water | Lab File ID: S3131.d

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2024 22:42

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-728892/8

Matrix: Water | Lab File ID: S3131.d

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2024 22:42

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3131.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Oct-2024 22:42:30 ALS Bottle#: 36 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 09:57:46 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 09:57:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	125128	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.708	-0.006	90	230180	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	95	219434	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	57	160837	25.0	26.2	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	92	112764	25.0	25.9	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	85	599078	25.0	24.8	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	85	172982	25.0	23.1	
10 Dichlorodifluoromethane	85		0.998					ND	
11 Chlorodifluoromethane	51		1.016					ND	
12 Chloromethane	50		1.132					ND	
13 Vinyl chloride	62		1.205					ND	
151 Butadiene	54		1.217					ND	
14 Bromomethane	94		1.448					ND	
15 Chloroethane	64		1.503					ND	
16 Dichlorofluoromethane	67		1.686					ND	
17 Trichlorofluoromethane	101		1.698					ND	
18 Ethyl ether	59		1.917					ND	
148 Ethanol	45		1.923					ND	
19 Propene oxide	58		1.990					ND	
20 Acrolein	56		2.075					ND	
22 1,1-Dichloroethene	96		2.099					ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		2.105					ND	
23 Acetone	43		2.221					ND	
25 Iodomethane	142		2.245					ND	
26 Carbon disulfide	76		2.276					ND	
24 Isopropyl alcohol	45		2.403					ND	
28 3-Chloro-1-propene	41		2.446					ND	
27 Methyl acetate	43		2.495					ND	
29 Acetonitrile	40		2.507					ND	
30 Methylene Chloride	84		2.580					ND	
31 2-Methyl-2-propanol	59		2.756					ND	
32 Methyl tert-butyl ether	73		2.781					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
34 trans-1,2-Dichloroethene	96		2.799					ND	
33 Acrylonitrile	53		2.854					ND	
35 Hexane	57		2.981					ND	
39 1,1-Dichloroethane	63		3.194					ND	
36 Isopropyl ether	45		3.219					ND	
40 2-Chloro-1,3-butadiene	53		3.249					ND	
37 Vinyl acetate	43		3.261					ND	
38 1,1-Dimethoxyethane	75		3.286					ND	
41 Tert-butyl ethyl ether	59		3.547					ND	
44 2,2-Dichloropropane	77		3.687					ND	
45 cis-1,2-Dichloroethene	96		3.730					ND	
43 2-Butanone (MEK)	43		3.772					ND	
42 Ethyl acetate	43		3.815					ND	
139 Halothane	117		3.822					ND	
46 Propionitrile	54		3.876					ND	
48 Chlorobromomethane	128		3.961					ND	
49 Tetrahydrofuran	42		3.973					ND	
47 Methacrylonitrile	41		3.979					ND	
50 Chloroform	83		4.040					ND	
51 1,1,1-Trichloroethane	97		4.137					ND	
52 Cyclohexane	56		4.137					ND	
55 Carbon tetrachloride	117		4.271					ND	
54 1,1-Dichloropropene	75		4.289					ND	
152 Isooctane	57		4.484					ND	
57 Benzene	78		4.484					ND	
53 Isobutyl alcohol	43		4.551					ND	
58 1,2-Dichloroethane	62		4.563					ND	
56 Tert-amyl methyl ether	73		4.575					ND	
147 t-Amyl alcohol	59		4.600					ND	
59 n-Heptane	43		4.679					ND	
1 1,4-Difluorobenzene	114		4.873					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.877					ND	
62 Trichloroethene	95		5.092					ND	
60 n-Butanol	56		5.165					ND	
64 Methylcyclohexane	83		5.196					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.202					ND	
142 Ethyl acrylate	55		5.238					ND	
65 1,2-Dichloropropane	63		5.324					ND	
63 Methyl methacrylate	41		5.451					ND	
67 Dibromomethane	93		5.464					ND	
66 1,4-Dioxane	88		5.476					ND	
68 Dichlorobromomethane	83		5.622					ND	
70 2-Nitropropane	43		5.877					ND	
69 2-Chloroethyl vinyl ether	63		5.914					ND	
71 Epichlorohydrin	57		5.999					ND	
72 cis-1,3-Dichloropropene	75		6.035					ND	
73 4-Methyl-2-pentanone (MIBK)	43		6.187					ND	
74 Toluene	92		6.309					ND	
76 2-Methylthiophene	97		6.443					ND	
78 3-Methylthiophene	97		6.607					ND	
77 trans-1,3-Dichloropropene	75		6.607					ND	
75 Ethyl methacrylate	69		6.668					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
79 1,1,2-Trichloroethane	83		6.790					ND	
81 Tetrachloroethene	166		6.826					ND	
82 1,3-Dichloropropane	76		6.942					ND	
80 2-Hexanone	43		7.021					ND	
155 n-Butyl acetate	43		7.143					ND	
83 Chlorodibromomethane	129		7.167					ND	
84 Ethylene Dibromide	107		7.258					ND	
146 1-Chlorohexane	55		7.702					ND	U
85 3-Chlorobenzotrifluoride	180		7.733					ND	
87 Chlorobenzene	112		7.733					ND	
86 4-Chlorobenzotrifluoride	180		7.794					ND	
88 Ethylbenzene	91		7.836					ND	
89 1,1,1,2-Tetrachloroethane	131		7.836					ND	
90 m-Xylene & p-Xylene	106		7.958					ND	
91 o-Xylene	106		8.371					ND	
92 Styrene	104		8.408					ND	
95 Bromoform	173		8.645					ND	
93 2-Chlorobenzotrifluoride	180		8.694					ND	
94 Isopropylbenzene	105		8.761					ND	
96 Cyclohexanone	55		8.931					ND	
101 Bromobenzene	156		9.102					ND	
97 1,1,2,2-Tetrachloroethane	83		9.193					ND	
99 N-Propylbenzene	91		9.205					ND	
100 1,2,3-Trichloropropane	110		9.217					ND	
98 trans-1,4-Dichloro-2-butene	53		9.241					ND	
103 2-Chlorotoluene	126		9.302					ND	
104 3-Chlorotoluene	126		9.375					ND	
102 1,3,5-Trimethylbenzene	105		9.400					ND	
105 4-Chlorotoluene	126		9.424					ND	
106 tert-Butylbenzene	134		9.734					ND	
108 Pentachloroethane	167		9.789					ND	
107 1,2,4-Trimethylbenzene	105		9.789					ND	
109 sec-Butylbenzene	105		9.953					ND	
111 1,3-Dichlorobenzene	146		10.081					ND	
110 4-Isopropyltoluene	119		10.105					ND	
114 Dicyclopentadiene	66		10.142					ND	
113 1,4-Dichlorobenzene	146		10.172					ND	
112 1,2,3-Trimethylbenzene	105		10.209					ND	
150 Benzyl chloride	126		10.336					ND	
115 n-Butylbenzene	91		10.507					ND	
116 1,2-Dichlorobenzene	146		10.537					ND	
117 1,2-Dibromo-3-Chloropropane	75		11.292					ND	
118 1,3,5-Trichlorobenzene	180		11.419					ND	
119 1,2,4-Trichlorobenzene	180		11.973					ND	
120 Hexachlorobutadiene	225		12.089					ND	
121 Naphthalene	128		12.180					ND	
122 1,2,3-Trichlorobenzene	180		12.387					ND	
149 2-Methylnaphthalene	142		13.104					ND	
144 1-Bromopropane TIC	1		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	
134 Pentachloroethane TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
136 Nitrobenzene	77		0.000					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	
135 Hexachloroethane	117		0.000					ND	
S 125 1,2-Dichloroethene, Total	1		30.000					ND	7
S 123 Total BTEX	1		30.000					ND	7
S 126 1,3-Dichloropropene, Total	1		30.000					ND	7
S 124 Xylenes, Total	1		30.000					ND	7
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

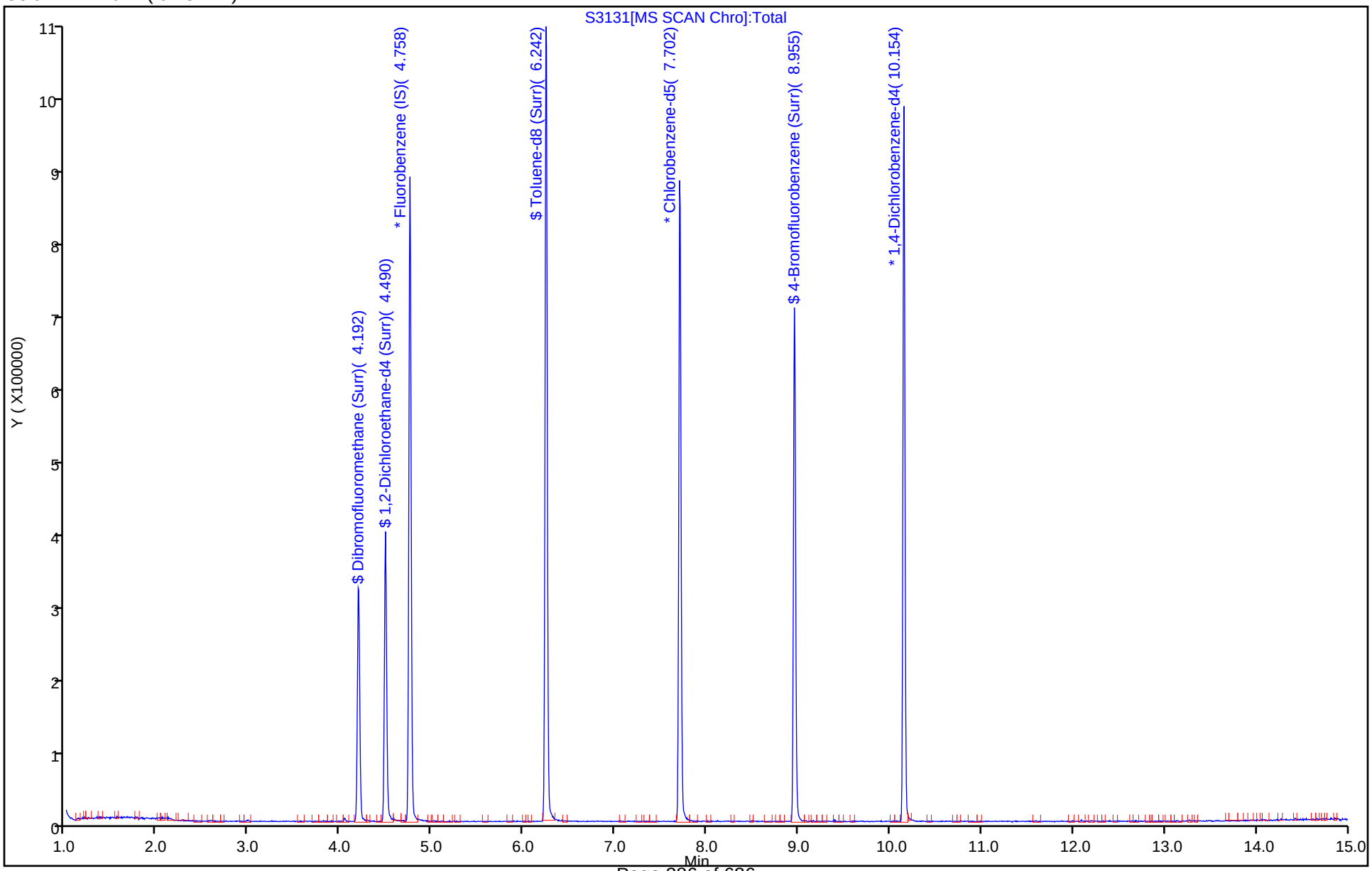
Report Date: 19-Oct-2024 09:57:46 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3131.d

Injection Date:	18-Oct-2024 22:42:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3131.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Oct-2024 22:42:30 ALS Bottle#: 36 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 09:57:46 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 09:57:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 154 Dibromofluoromethane (Surr)	25.0	26.2	104.92
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	25.9	103.44
$ 5 Toluene-d8 (Surr)	25.0	24.8	99.40
$ 6 4-Bromofluorobenzene (Surr)	25.0	23.1	92.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-728964/8

Matrix: Water | Lab File ID: S3165.d

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2024 01:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728964 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-728964/8

Matrix: Water | Lab File ID: S3165.d

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2024 01:13

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728964 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120
1868-53-7	Dibromofluoromethane (Surr)	100		75-123

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3165.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Oct-2024 01:13:30 ALS Bottle#: 41 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0120662-008
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Oct-2024 09:59:02 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: QR3Z Date: 20-Oct-2024 10:00:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	98	129779	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.708	7.702	0.006	87	233312	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	96	221293	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	55	159153	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	93	118606	25.0	26.2	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	94	615775	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.956	0.000	85	177456	25.0	23.3	
10 Dichlorodifluoromethane	85		1.004					ND	
11 Chlorodifluoromethane	51		1.016					ND	
12 Chloromethane	50		1.132					ND	
13 Vinyl chloride	62		1.217					ND	
151 Butadiene	54		1.223					ND	
14 Bromomethane	94		1.461					ND	
15 Chloroethane	64		1.509					ND	
16 Dichlorofluoromethane	67		1.692					ND	
17 Trichlorofluoromethane	101		1.698					ND	
18 Ethyl ether	59		1.917					ND	
148 Ethanol	45		1.923					ND	
19 Propene oxide	58		1.990					ND	
20 Acrolein	56		2.081					ND	
22 1,1-Dichloroethene	96		2.105					ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		2.111					ND	
23 Acetone	43		2.221					ND	
25 Iodomethane	142		2.270					ND	
26 Carbon disulfide	76		2.288					ND	
24 Isopropyl alcohol	45		2.397					ND	
28 3-Chloro-1-propene	41		2.446					ND	
27 Methyl acetate	43		2.501					ND	
29 Acetonitrile	40		2.507					ND	U
30 Methylene Chloride	84		2.586					ND	
31 2-Methyl-2-propanol	59		2.769					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
32 Methyl tert-butyl ether	73		2.787					ND	
34 trans-1,2-Dichloroethene	96		2.799					ND	
33 Acrylonitrile	53		2.860					ND	
35 Hexane	57		2.981					ND	
39 1,1-Dichloroethane	63		3.194					ND	
36 Isopropyl ether	45		3.219					ND	
40 2-Chloro-1,3-butadiene	53		3.249					ND	
37 Vinyl acetate	43		3.261					ND	
38 1,1-Dimethoxyethane	75		3.292					ND	
41 Tert-butyl ethyl ether	59		3.541					ND	
44 2,2-Dichloropropane	77		3.693					ND	
45 cis-1,2-Dichloroethene	96		3.730					ND	
43 2-Butanone (MEK)	43		3.778					ND	
42 Ethyl acetate	43		3.815					ND	
139 Halothane	117		3.822					ND	
46 Propionitrile	54		3.876					ND	
48 Chlorobromomethane	128		3.961					ND	
49 Tetrahydrofuran	42		3.973					ND	
47 Methacrylonitrile	41		3.979					ND	
50 Chloroform	83	4.052	4.046	0.006	13	2179		0.1864	
51 1,1,1-Trichloroethane	97		4.137					ND	
52 Cyclohexane	56		4.137					ND	
55 Carbon tetrachloride	117		4.265					ND	
54 1,1-Dichloropropene	75		4.289					ND	
152 Isooctane	57		4.484					ND	
57 Benzene	78		4.484					ND	
53 Isobutyl alcohol	43		4.551					ND	
58 1,2-Dichloroethane	62		4.563					ND	
56 Tert-amyl methyl ether	73		4.575					ND	
147 t-Amyl alcohol	59		4.593					ND	
59 n-Heptane	43		4.679					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.877					ND	
1 1,4-Difluorobenzene	114		4.879					ND	
62 Trichloroethene	95		5.092					ND	
60 n-Butanol	56		5.165					ND	
64 Methylcyclohexane	83		5.196					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.202					ND	
142 Ethyl acrylate	55		5.238					ND	
65 1,2-Dichloropropane	63		5.324					ND	
63 Methyl methacrylate	41		5.451					ND	
67 Dibromomethane	93		5.464					ND	
66 1,4-Dioxane	88		5.476					ND	
68 Dichlorobromomethane	83		5.622					ND	
70 2-Nitropropane	43		5.877					ND	
69 2-Chloroethyl vinyl ether	63		5.914					ND	
71 Epichlorohydrin	57		5.999					ND	
72 cis-1,3-Dichloropropene	75		6.035					ND	
73 4-Methyl-2-pentanone (MIBK)	43		6.187					ND	
74 Toluene	92		6.309					ND	
76 2-Methylthiophene	97		6.443					ND	
78 3-Methylthiophene	97		6.607					ND	
77 trans-1,3-Dichloropropene	75		6.607					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
75 Ethyl methacrylate	69		6.668					ND	
79 1,1,2-Trichloroethane	83		6.784					ND	
81 Tetrachloroethene	166		6.826					ND	
82 1,3-Dichloropropane	76		6.942					ND	
80 2-Hexanone	43		7.027					ND	
155 n-Butyl acetate	43		7.142					ND	
83 Chlorodibromomethane	129		7.167					ND	
84 Ethylene Dibromide	107		7.258					ND	
146 1-Chlorohexane	55		7.702					ND	U
85 3-Chlorobenzotrifluoride	180		7.733					ND	
87 Chlorobenzene	112		7.733					ND	
86 4-Chlorobenzotrifluoride	180		7.793					ND	
88 Ethylbenzene	91		7.836					ND	
89 1,1,1,2-Tetrachloroethane	131		7.836					ND	
90 m-Xylene & p-Xylene	106		7.958					ND	
91 o-Xylene	106		8.371					ND	
92 Styrene	104		8.408					ND	
95 Bromoform	173		8.645					ND	
93 2-Chlorobenzotrifluoride	180		8.694					ND	
94 Isopropylbenzene	105		8.761					ND	
96 Cyclohexanone	55		8.925					ND	
101 Bromobenzene	156		9.102					ND	
97 1,1,2,2-Tetrachloroethane	83		9.193					ND	
99 N-Propylbenzene	91		9.205					ND	
100 1,2,3-Trichloropropane	110		9.211					ND	
98 trans-1,4-Dichloro-2-butene	53		9.241					ND	
103 2-Chlorotoluene	126		9.302					ND	
104 3-Chlorotoluene	126		9.375					ND	
102 1,3,5-Trimethylbenzene	105		9.400					ND	
105 4-Chlorotoluene	126		9.424					ND	
106 tert-Butylbenzene	134		9.728					ND	
108 Pentachloroethane	167		9.789					ND	
107 1,2,4-Trimethylbenzene	105		9.789					ND	
109 sec-Butylbenzene	105		9.953					ND	
111 1,3-Dichlorobenzene	146		10.081					ND	
110 4-Isopropyltoluene	119		10.105					ND	
114 Dicyclopentadiene	66		10.142					ND	
113 1,4-Dichlorobenzene	146		10.178					ND	
112 1,2,3-Trimethylbenzene	105		10.215					ND	
150 Benzyl chloride	126		10.336					ND	
115 n-Butylbenzene	91		10.507					ND	
116 1,2-Dichlorobenzene	146		10.537					ND	
117 1,2-Dibromo-3-Chloropropane	75		11.292					ND	
118 1,3,5-Trichlorobenzene	180		11.425					ND	
119 1,2,4-Trichlorobenzene	180		11.973					ND	
120 Hexachlorobutadiene	225		12.089					ND	
121 Naphthalene	128		12.180					ND	
122 1,2,3-Trichlorobenzene	180		12.387					ND	
149 2-Methylnaphthalene	142		13.104					ND	
144 1-Bromopropane TIC	1		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
134 Pentachloroethane TIC	1		0.000					ND	
136 Nitrobenzene	77		0.000					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	
135 Hexachloroethane	117		0.000					ND	
S 125 1,2-Dichloroethene, Total	1		30.000					ND	7
S 123 Total BTEX	1		30.000					ND	7
S 126 1,3-Dichloropropene, Total	1		30.000					ND	7
S 124 Xylenes, Total	1		30.000					ND	7
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
U - Marked Undetected

Reagents:

S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

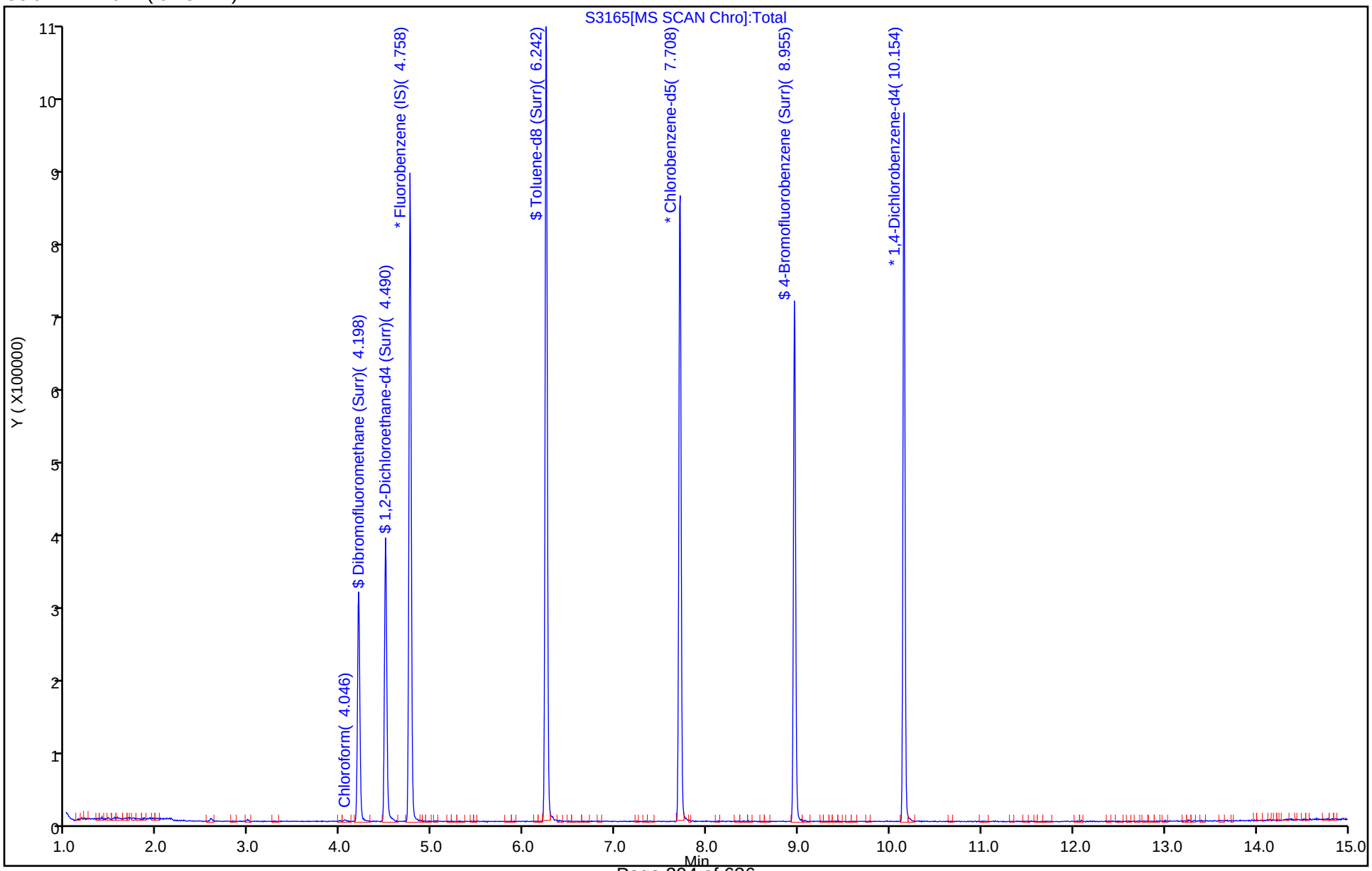
Report Date: 20-Oct-2024 10:00:28 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3165.d

Injection Date:	20-Oct-2024 01:13:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3165.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Oct-2024 01:13:30 ALS Bottle#: 41 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0120662-008
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Oct-2024 09:59:02 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: QR3Z Date: 20-Oct-2024 10:00:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 154 Dibromofluoromethane (Surr)	25.0	25.0	100.10
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	26.2	104.90
$ 5 Toluene-d8 (Surr)	25.0	25.2	100.80
$ 6 4-Bromofluorobenzene (Surr)	25.0	23.3	93.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-728892/6

Matrix: Water | Lab File ID: S3129.d

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2024 21:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	27.2		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	25.7		1.0	0.21
79-00-5	1,1,2-Trichloroethane	24.2		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	28.7		1.0	0.31
75-34-3	1,1-Dichloroethane	26.3		1.0	0.38
75-35-4	1,1-Dichloroethene	27.7		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	25.7		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	22.6		1.0	0.39
95-50-1	1,2-Dichlorobenzene	25.5		1.0	0.79
107-06-2	1,2-Dichloroethane	25.6		1.0	0.21
78-87-5	1,2-Dichloropropane	25.2		1.0	0.72
541-73-1	1,3-Dichlorobenzene	25.3		1.0	0.78
106-46-7	1,4-Dichlorobenzene	25.0		1.0	0.84
78-93-3	2-Butanone (MEK)	132		10	1.3
591-78-6	2-Hexanone	145		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	143		5.0	2.1
67-64-1	Acetone	125		10	3.0
71-43-2	Benzene	25.5		1.0	0.41
75-27-4	Bromodichloromethane	25.3		1.0	0.39
75-25-2	Bromoform	24.5		1.0	0.26
74-83-9	Bromomethane	23.3		1.0	0.69
75-15-0	Carbon disulfide	27.2		1.0	0.19
56-23-5	Carbon tetrachloride	27.6		1.0	0.27
108-90-7	Chlorobenzene	24.6		1.0	0.75
124-48-1	Dibromochloromethane	26.6		1.0	0.32
75-00-3	Chloroethane	26.0		1.0	0.32
67-66-3	Chloroform	23.9		1.0	0.34
74-87-3	Chloromethane	31.6		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	26.5		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	26.0		1.0	0.36
110-82-7	Cyclohexane	28.6		1.0	0.18
75-71-8	Dichlorodifluoromethane	30.6		1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-728892/6

Matrix: Water | Lab File ID: S3129.d

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2024 21:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	25.5		1.0	0.74
106-93-4	1,2-Dibromoethane	24.4		1.0	0.73
98-82-8	Isopropylbenzene	26.8		1.0	0.79
79-20-9	Methyl acetate	51.4		2.5	1.3
1634-04-4	Methyl tert-butyl ether	24.4		1.0	0.16
108-87-2	Methylcyclohexane	27.0		1.0	0.16
75-09-2	Methylene Chloride	24.5		1.0	0.44
100-42-5	Styrene	24.1		1.0	0.73
127-18-4	Tetrachloroethene	26.0		1.0	0.36
108-88-3	Toluene	24.7		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	25.3		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	25.6		1.0	0.37
79-01-6	Trichloroethene	25.3		1.0	0.46
75-69-4	Trichlorofluoromethane	30.6		1.0	0.88
75-01-4	Vinyl chloride	29.3		1.0	0.90
1330-20-7	Xylenes, Total	50.2		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
1868-53-7	Dibromofluoromethane (Surr)	99		75-123

Report Date: 19-Oct-2024 09:54:59 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3129.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Oct-2024 21:56:30 ALS Bottle#: 34 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 09:54:39 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 09:54:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	97	145313	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.708	7.708	0.000	87	272509	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	69	268407	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	53	176800	25.0	24.8	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	56	128813	25.0	25.4	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	51	701791	25.0	24.6	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	85	208383	25.0	23.5	
10 Dichlorodifluoromethane	85	1.004	0.998	0.006	87	238978	25.0	30.6	
12 Chloromethane	50	1.138	1.132	0.006	89	315615	25.0	31.6	
13 Vinyl chloride	62	1.211	1.205	0.006	74	210770	25.0	29.3	
151 Butadiene	54	1.223	1.217	0.006	97	274340	25.0	32.5	
14 Bromomethane	94	1.460	1.448	0.012	92	106389	25.0	23.3	
15 Chloroethane	64	1.509	1.503	0.006	97	144909	25.0	26.0	
16 Dichlorofluoromethane	67	1.692	1.686	0.006	98	334839	25.0	27.2	
17 Trichlorofluoromethane	101	1.704	1.698	0.006	51	271753	25.0	30.6	
18 Ethyl ether	59	1.917	1.917	0.000	98	193992	25.0	25.8	
20 Acrolein	56	2.081	2.075	0.006	92	106253	125.0	110.3	
22 1,1-Dichloroethene	96	2.118	2.099	0.019	86	153363	25.0	27.7	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.111	2.105	0.006	63	157567	25.0	28.7	
23 Acetone	43	2.221	2.221	0.000	98	458591	125.0	125.4	
25 Iodomethane	142	2.270	2.245	0.025	88	252605	25.0	24.5	
26 Carbon disulfide	76	2.294	2.276	0.018	99	514082	25.0	27.2	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	85	375408	25.0	28.9	
27 Methyl acetate	43	2.501	2.495	0.006	96	431422	50.0	51.4	
30 Methylene Chloride	84	2.586	2.580	0.006	91	176449	25.0	24.5	
31 2-Methyl-2-propanol	59	2.762	2.756	0.006	80	268909	250.0	274.7	
32 Methyl tert-butyl ether	73	2.787	2.781	0.006	98	590054	25.0	24.4	
34 trans-1,2-Dichloroethene	96	2.799	2.799	0.000	92	174594	25.0	25.3	
33 Acrylonitrile	53	2.860	2.854	0.006	98	1080123	250.0	258.4	
35 Hexane	57	2.981	2.981	0.000	95	308497	25.0	28.4	
39 1,1-Dichloroethane	63	3.194	3.194	0.000	86	352324	25.0	26.3	
37 Vinyl acetate	43	3.261	3.261	0.000	97	703713	50.0	44.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
44 2,2-Dichloropropane	77	3.693	3.687	0.006	88	172589	25.0	25.7	
45 cis-1,2-Dichloroethene	96	3.736	3.730	0.006	68	191336	25.0	26.5	
43 2-Butanone (MEK)	43	3.778	3.772	0.006	98	693919	125.0	131.7	
48 Chlorobromomethane	128	3.961	3.961	0.000	92	92221	25.0	24.4	
49 Tetrahydrofuran	42	3.973	3.973	0.000	93	198344	50.0	51.0	
50 Chloroform	83	4.040	4.040	0.000	97	312343	25.0	23.9	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	79	269414	25.0	27.2	
52 Cyclohexane	56	4.137	4.137	0.000	97	381340	25.0	28.6	
55 Carbon tetrachloride	117	4.271	4.271	0.000	85	235595	25.0	27.6	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	87	263654	25.0	27.2	
57 Benzene	78	4.484	4.484	0.000	96	745312	25.0	25.5	
53 Isobutyl alcohol	43	4.551	4.551	0.000	60	249188	625.0	666.9	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	81	290344	25.0	25.6	
59 n-Heptane	43	4.679	4.679	0.000	97	327909	25.0	30.1	
62 Trichloroethene	95	5.092	5.092	0.000	93	183723	25.0	25.3	
64 Methylcyclohexane	83	5.196	5.196	0.000	96	316068	25.0	27.0	
65 1,2-Dichloropropane	63	5.324	5.324	0.000	85	189923	25.0	25.2	
67 Dibromomethane	93	5.463	5.464	-0.001	87	111419	25.0	24.9	
66 1,4-Dioxane	88	5.476	5.476	0.000	65	41756	500.0	440.7	
68 Dichlorobromomethane	83	5.622	5.622	0.000	95	202334	25.0	25.3	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	91	130453	25.0	27.0	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	85	271906	25.0	26.0	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.187	0.000	99	1499031	125.0	142.8	
74 Toluene	92	6.309	6.309	0.000	88	453345	25.0	24.7	
77 trans-1,3-Dichloropropene	75	6.601	6.607	-0.006	92	240286	25.0	25.6	
75 Ethyl methacrylate	69	6.668	6.668	0.000	88	233380	25.0	25.3	
79 1,1,2-Trichloroethane	83	6.790	6.790	0.000	89	129515	25.0	24.2	
81 Tetrachloroethene	166	6.826	6.826	0.000	88	184919	25.0	26.0	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	96	280311	25.0	25.6	
80 2-Hexanone	43	7.027	7.021	0.006	98	1059207	125.0	144.7	
83 Chlorodibromomethane	129	7.173	7.167	0.006	85	143484	25.0	26.6	
84 Ethylene Dibromide	107	7.258	7.258	0.000	99	157164	25.0	24.4	
87 Chlorobenzene	112	7.733	7.733	0.000	91	469225	25.0	24.6	
88 Ethylbenzene	91	7.830	7.836	-0.006	99	858157	25.0	25.5	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	44	153899	25.0	24.8	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	97	322985	25.0	24.9	
91 o-Xylene	106	8.377	8.371	0.006	98	324669	25.0	25.3	
92 Styrene	104	8.408	8.408	0.000	93	514899	25.0	24.1	
95 Bromoform	173	8.645	8.645	0.000	92	85848	25.0	24.5	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	789402	25.0	26.8	
101 Bromobenzene	156	9.101	9.102	-0.001	96	200933	25.0	25.1	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	58	215671	25.0	25.7	
99 N-Propylbenzene	91	9.205	9.205	0.000	97	1011834	25.0	27.0	
100 1,2,3-Trichloropropane	110	9.217	9.217	0.000	62	73618	25.0	25.5	
98 trans-1,4-Dichloro-2-butene	53	9.241	9.241	0.000	81	77598	25.0	24.7	
103 2-Chlorotoluene	126	9.302	9.302	0.000	95	190391	25.0	26.1	
102 1,3,5-Trimethylbenzene	105	9.400	9.400	0.000	93	714147	25.0	26.4	
105 4-Chlorotoluene	126	9.424	9.424	0.000	99	196113	25.0	25.5	
106 tert-Butylbenzene	134	9.734	9.734	0.000	91	162475	25.0	27.4	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	57	741107	25.0	26.5	
109 sec-Butylbenzene	105	9.953	9.953	0.000	94	910421	25.0	27.2	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	97	385153	25.0	25.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
110 4-Isopropyltoluene	119	10.105	10.105	0.000	94	791978	25.0	26.6	
113 1,4-Dichlorobenzene	146	10.178	10.172	0.006	92	390311	25.0	25.0	
115 n-Butylbenzene	91	10.507	10.507	0.000	95	713763	25.0	27.7	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	95	380629	25.0	25.5	
117 1,2-Dibromo-3-Chloropropane	75	11.292	11.292	0.000	68	39546	25.0	22.6	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	93	271376	25.0	25.7	
120 Hexachlorobutadiene	225	12.088	12.089	-0.001	92	131365	25.0	26.3	
121 Naphthalene	128	12.180	12.180	0.000	98	821076	25.0	26.5	
122 1,2,3-Trichlorobenzene	180	12.387	12.387	0.000	92	267002	25.0	25.4	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00260	Amount Added:	12.50	Units: uL	
GAS CORP mix_00645	Amount Added:	12.50	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

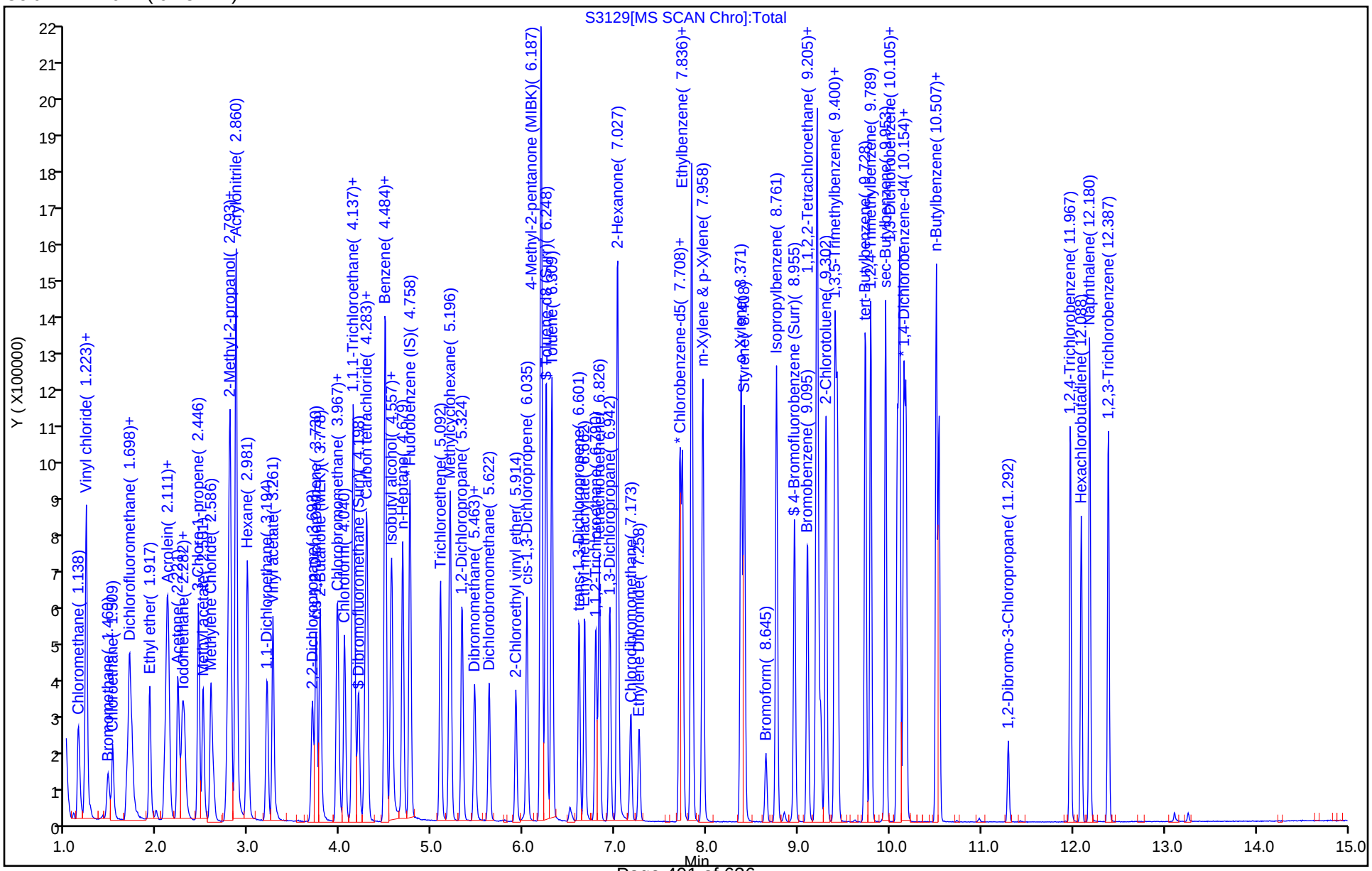
Report Date: 19-Oct-2024 09:54:59 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3129.d

Injection Date:	18-Oct-2024 21:56:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3129.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Oct-2024 21:56:30 ALS Bottle#: 34 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 09:54:39 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 09:54:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 154 Dibromofluoromethane (Surr)	25.0	24.8	99.31
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	25.4	101.75
$ 5 Toluene-d8 (Surr)	25.0	24.6	98.35
$ 6 4-Bromofluorobenzene (Surr)	25.0	23.5	93.88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-728964/6

Matrix: Water | Lab File ID: S3163.d

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2024 00:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728964 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	24.2		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	24.1		1.0	0.21
79-00-5	1,1,2-Trichloroethane	23.0		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	24.9		1.0	0.31
75-34-3	1,1-Dichloroethane	24.4		1.0	0.38
75-35-4	1,1-Dichloroethene	22.8		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	23.7		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	20.9		1.0	0.39
95-50-1	1,2-Dichlorobenzene	23.2		1.0	0.79
107-06-2	1,2-Dichloroethane	23.7		1.0	0.21
78-87-5	1,2-Dichloropropane	23.3		1.0	0.72
541-73-1	1,3-Dichlorobenzene	23.1		1.0	0.78
106-46-7	1,4-Dichlorobenzene	22.7		1.0	0.84
78-93-3	2-Butanone (MEK)	122		10	1.3
591-78-6	2-Hexanone	135		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	136		5.0	2.1
67-64-1	Acetone	119		10	3.0
71-43-2	Benzene	22.9		1.0	0.41
75-27-4	Bromodichloromethane	23.7		1.0	0.39
75-25-2	Bromoform	22.5		1.0	0.26
74-83-9	Bromomethane	22.3		1.0	0.69
75-15-0	Carbon disulfide	24.5		1.0	0.19
56-23-5	Carbon tetrachloride	24.7		1.0	0.27
108-90-7	Chlorobenzene	23.3		1.0	0.75
124-48-1	Dibromochloromethane	24.7		1.0	0.32
75-00-3	Chloroethane	25.0		1.0	0.32
67-66-3	Chloroform	22.1		1.0	0.34
74-87-3	Chloromethane	29.8		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	23.9		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	23.4		1.0	0.36
110-82-7	Cyclohexane	26.7		1.0	0.18
75-71-8	Dichlorodifluoromethane	29.0		1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-728964/6

Matrix: Water | Lab File ID: S3163.d

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2024 00:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728964 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	23.3		1.0	0.74
106-93-4	1,2-Dibromoethane	22.8		1.0	0.73
98-82-8	Isopropylbenzene	24.4		1.0	0.79
79-20-9	Methyl acetate	48.8		2.5	1.3
1634-04-4	Methyl tert-butyl ether	23.1		1.0	0.16
108-87-2	Methylcyclohexane	25.5		1.0	0.16
75-09-2	Methylene Chloride	22.7		1.0	0.44
100-42-5	Styrene	22.0		1.0	0.73
127-18-4	Tetrachloroethene	23.6		1.0	0.36
108-88-3	Toluene	22.7		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	22.9		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	23.9		1.0	0.37
79-01-6	Trichloroethene	22.7		1.0	0.46
75-69-4	Trichlorofluoromethane	28.4		1.0	0.88
75-01-4	Vinyl chloride	26.6		1.0	0.90
1330-20-7	Xylenes, Total	46.6		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	100		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		77-120
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120
1868-53-7	Dibromofluoromethane (Surr)	96		75-123

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3163.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Oct-2024 00:27:30 ALS Bottle#: 39 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0120662-006
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Oct-2024 06:31:46 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: QR3Z Date: 20-Oct-2024 09:41:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	97	145248	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	88	263361	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	68	263298	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	55	171004	25.0	24.0	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	60	126468	25.0	25.0	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	69	686965	25.0	24.9	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.956	0.000	85	198562	25.0	23.1	
10 Dichlorodifluoromethane	85	0.998	1.004	-0.006	97	226248	25.0	29.0	
12 Chloromethane	50	1.132	1.132	0.000	82	297543	25.0	29.8	
13 Vinyl chloride	62	1.205	1.217	-0.012	73	190815	25.0	26.6	
151 Butadiene	54	1.217	1.223	-0.006	98	273555	25.0	32.4	
14 Bromomethane	94	1.454	1.461	-0.007	93	101940	25.0	22.3	
15 Chloroethane	64	1.509	1.509	0.000	93	139116	25.0	25.0	
16 Dichlorofluoromethane	67	1.685	1.692	-0.007	82	315123	25.0	25.6	
17 Trichlorofluoromethane	101	1.692	1.698	-0.006	44	252553	25.0	28.4	
18 Ethyl ether	59	1.911	1.917	-0.006	96	180571	25.0	24.1	
20 Acrolein	56	2.075	2.081	-0.006	95	104564	125.0	108.6	
22 1,1-Dichloroethene	96	2.099	2.105	-0.006	84	126287	25.0	22.8	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.105	2.111	-0.006	55	136287	25.0	24.9	
23 Acetone	43	2.221	2.221	0.000	97	436128	125.0	119.4	
25 Iodomethane	142	2.245	2.270	-0.025	96	230774	25.0	22.4	
26 Carbon disulfide	76	2.276	2.288	-0.012	99	462342	25.0	24.5	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	83	340314	25.0	26.2	
27 Methyl acetate	43	2.495	2.501	-0.006	97	408971	50.0	48.8	
30 Methylene Chloride	84	2.586	2.586	0.000	91	163520	25.0	22.7	
31 2-Methyl-2-propanol	59	2.762	2.769	-0.006	77	246686	250.0	252.1	
32 Methyl tert-butyl ether	73	2.787	2.787	0.000	92	557140	25.0	23.1	
34 trans-1,2-Dichloroethene	96	2.793	2.799	-0.006	77	158042	25.0	22.9	
33 Acrylonitrile	53	2.854	2.860	-0.006	99	1016042	250.0	243.2	
35 Hexane	57	2.981	2.981	0.000	95	281532	25.0	25.9	
39 1,1-Dichloroethane	63	3.194	3.194	0.000	86	325579	25.0	24.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.261	3.261	0.000	97	555754	50.0	35.6	
44 2,2-Dichloropropane	77	3.693	3.693	0.000	85	160124	25.0	23.8	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	84	172437	25.0	23.9	
43 2-Butanone (MEK)	43	3.772	3.778	-0.006	98	644482	125.0	122.4	
48 Chlorobromomethane	128	3.961	3.961	0.000	88	84768	25.0	22.5	
49 Tetrahydrofuran	42	3.973	3.973	0.000	92	179425	50.0	46.2	
50 Chloroform	83	4.040	4.046	-0.006	83	289040	25.0	22.1	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	76	239677	25.0	24.2	
52 Cyclohexane	56	4.137	4.137	0.000	97	355957	25.0	26.7	
55 Carbon tetrachloride	117	4.265	4.265	0.000	79	210846	25.0	24.7	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	88	239202	25.0	24.7	
57 Benzene	78	4.484	4.484	0.000	96	668758	25.0	22.9	
53 Isobutyl alcohol	43	4.551	4.551	0.000	59	245491	625.0	657.3	
58 1,2-Dichloroethane	62	4.557	4.563	-0.006	81	268816	25.0	23.7	
59 n-Heptane	43	4.679	4.679	0.000	98	290811	25.0	26.7	
62 Trichloroethene	95	5.092	5.092	0.000	90	164890	25.0	22.7	
64 Methylcyclohexane	83	5.196	5.196	0.000	96	298675	25.0	25.5	
65 1,2-Dichloropropane	63	5.323	5.324	-0.001	88	175675	25.0	23.3	
67 Dibromomethane	93	5.463	5.464	-0.001	89	102076	25.0	22.8	
66 1,4-Dioxane	88	5.476	5.476	0.000	74	40662	500.0	444.1	
68 Dichlorobromomethane	83	5.622	5.622	0.000	96	189603	25.0	23.7	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	91	118677	25.0	24.6	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	81	244702	25.0	23.4	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.187	0.000	99	1377522	125.0	135.8	
74 Toluene	92	6.309	6.309	0.000	87	402332	25.0	22.7	
77 trans-1,3-Dichloropropene	75	6.607	6.607	0.000	98	216732	25.0	23.9	
75 Ethyl methacrylate	69	6.662	6.668	-0.006	90	210174	25.0	23.6	
79 1,1,2-Trichloroethane	83	6.784	6.784	0.000	95	118816	25.0	23.0	
81 Tetrachloroethene	166	6.826	6.826	0.000	83	162599	25.0	23.6	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	97	252126	25.0	23.8	
80 2-Hexanone	43	7.027	7.027	0.000	98	956405	125.0	135.2	
83 Chlorodibromomethane	129	7.167	7.167	0.000	86	128481	25.0	24.7	
84 Ethylene Dibromide	107	7.258	7.258	0.000	98	141923	25.0	22.8	
87 Chlorobenzene	112	7.733	7.733	0.000	90	428839	25.0	23.3	
88 Ethylbenzene	91	7.836	7.836	0.000	99	758483	25.0	23.3	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	44	143546	25.0	23.9	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	288806	25.0	23.0	
91 o-Xylene	106	8.371	8.371	0.000	98	292603	25.0	23.6	
92 Styrene	104	8.408	8.408	0.000	93	455262	25.0	22.0	
95 Bromoform	173	8.645	8.645	0.000	93	76210	25.0	22.5	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	705304	25.0	24.4	
101 Bromobenzene	156	9.101	9.102	-0.001	95	179934	25.0	22.9	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	60	198183	25.0	24.1	
99 N-Propylbenzene	91	9.205	9.205	0.000	98	887383	25.0	24.1	
100 1,2,3-Trichloropropane	110	9.217	9.211	0.006	59	66169	25.0	23.4	
98 trans-1,4-Dichloro-2-butene	53	9.247	9.241	0.006	78	59765	25.0	19.4	
103 2-Chlorotoluene	126	9.302	9.302	0.000	95	169465	25.0	23.7	
102 1,3,5-Trimethylbenzene	105	9.399	9.400	-0.001	94	639008	25.0	24.1	
105 4-Chlorotoluene	126	9.424	9.424	0.000	99	177290	25.0	23.5	
106 tert-Butylbenzene	134	9.728	9.728	0.000	92	143195	25.0	24.6	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	45	656921	25.0	24.0	
109 sec-Butylbenzene	105	9.953	9.953	0.000	94	807356	25.0	24.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	97	344199	25.0	23.1	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	93	703246	25.0	24.0	
113 1,4-Dichlorobenzene	146	10.178	10.178	0.000	93	347473	25.0	22.7	
115 n-Butylbenzene	91	10.507	10.507	0.000	95	626642	25.0	24.8	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	95	338904	25.0	23.2	
117 1,2-Dibromo-3-Chloropropane	75	11.291	11.292	-0.001	66	35858	25.0	20.9	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	95	245317	25.0	23.7	
120 Hexachlorobutadiene	225	12.088	12.089	-0.001	95	114605	25.0	23.4	
121 Naphthalene	128	12.180	12.180	0.000	98	752110	25.0	24.7	
122 1,2,3-Trichlorobenzene	180	12.386	12.387	-0.001	92	242656	25.0	23.5	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00260	Amount Added: 12.50	Units: uL	
GAS CORP mix_00645	Amount Added: 12.50	Units: uL	
S_8260_IS_00403	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added: 1.00	Units: uL	Run Reagent

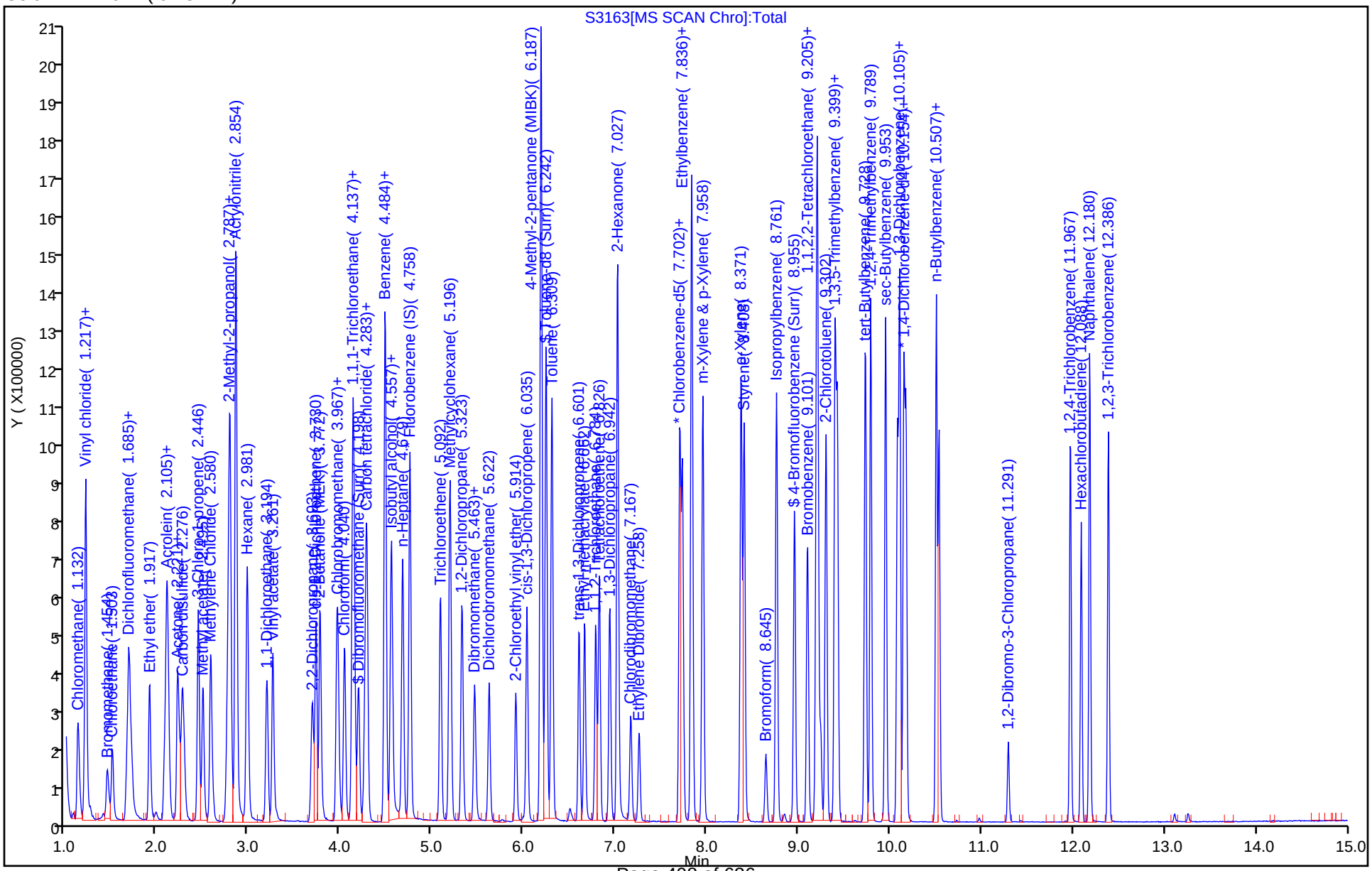
Report Date: 20-Oct-2024 09:41:28 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3163.d

Injection Date:	20-Oct-2024 00:27:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3163.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Oct-2024 00:27:30 ALS Bottle#: 39 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0120662-006
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Oct-2024 06:31:46 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: QR3Z Date: 20-Oct-2024 09:41:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 154 Dibromofluoromethane (Surr)	25.0	24.0	96.10
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	25.0	99.94
$ 5 Toluene-d8 (Surr)	25.0	24.9	99.62
$ 6 4-Bromofluorobenzene (Surr)	25.0	23.1	92.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 480-728964/46

Matrix: Water | Lab File ID: S3183.d

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2024 08:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728964 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	24.7		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	24.0		1.0	0.21
79-00-5	1,1,2-Trichloroethane	22.8		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	26.7		1.0	0.31
75-34-3	1,1-Dichloroethane	24.8		1.0	0.38
75-35-4	1,1-Dichloroethene	25.2		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	23.2		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	19.4		1.0	0.39
95-50-1	1,2-Dichlorobenzene	23.6		1.0	0.79
107-06-2	1,2-Dichloroethane	24.9		1.0	0.21
78-87-5	1,2-Dichloropropane	24.0		1.0	0.72
541-73-1	1,3-Dichlorobenzene	23.3		1.0	0.78
106-46-7	1,4-Dichlorobenzene	22.9		1.0	0.84
78-93-3	2-Butanone (MEK)	135		10	1.3
591-78-6	2-Hexanone	143		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	139		5.0	2.1
67-64-1	Acetone	129		10	3.0
71-43-2	Benzene	23.7		1.0	0.41
75-27-4	Bromodichloromethane	24.1		1.0	0.39
75-25-2	Bromoform	18.9		1.0	0.26
74-83-9	Bromomethane	22.8		1.0	0.69
75-15-0	Carbon disulfide	24.3		1.0	0.19
56-23-5	Carbon tetrachloride	24.8		1.0	0.27
108-90-7	Chlorobenzene	22.8		1.0	0.75
124-48-1	Dibromochloromethane	22.6		1.0	0.32
75-00-3	Chloroethane	25.4		1.0	0.32
67-66-3	Chloroform	22.6		1.0	0.34
74-87-3	Chloromethane	28.9		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	24.5		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	23.2		1.0	0.36
110-82-7	Cyclohexane	27.2		1.0	0.18
75-71-8	Dichlorodifluoromethane	28.1		1.0	0.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 480-728964/46

Matrix: Water | Lab File ID: S3183.d

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/20/2024 08:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728964 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	23.0		1.0	0.74
106-93-4	1,2-Dibromoethane	23.3		1.0	0.73
98-82-8	Isopropylbenzene	24.2		1.0	0.79
79-20-9	Methyl acetate	50.4		2.5	1.3
1634-04-4	Methyl tert-butyl ether	23.1		1.0	0.16
108-87-2	Methylcyclohexane	25.1		1.0	0.16
75-09-2	Methylene Chloride	23.2		1.0	0.44
100-42-5	Styrene	21.6		1.0	0.73
127-18-4	Tetrachloroethene	23.1		1.0	0.36
108-88-3	Toluene	22.3		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	23.4		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	21.7		1.0	0.37
79-01-6	Trichloroethene	23.0		1.0	0.46
75-69-4	Trichlorofluoromethane	28.3		1.0	0.88
75-01-4	Vinyl chloride	26.7		1.0	0.90
1330-20-7	Xylenes, Total	44.9		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	96		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
1868-53-7	Dibromofluoromethane (Surr)	97		75-123

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3183.d
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 20-Oct-2024 08:14:30 ALS Bottle#: 59 Worklist Smp#: 46
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 480-0120662-046
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Oct-2024 10:00:19 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: QR3Z Date: 20-Oct-2024 10:01:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	97	135689	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.702	0.000	88	260793	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	72	255333	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	57	161333	25.0	24.3	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	64	121262	25.0	25.6	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	68	653584	25.0	23.9	
$ 6 4-Bromofluorobenzene (Surr)	174	8.962	8.956	0.007	89	194951	25.0	22.9	
10 Dichlorodifluoromethane	85	1.004	1.004	0.000	87	205086	25.0	28.1	
12 Chloromethane	50	1.138	1.132	0.006	88	268855	25.0	28.9	
13 Vinyl chloride	62	1.211	1.217	-0.006	60	179158	25.0	26.7	
151 Butadiene	54	1.223	1.223	0.000	98	267169	25.0	33.9	
14 Bromomethane	94	1.461	1.461	0.000	91	97382	25.0	22.8	
15 Chloroethane	64	1.509	1.509	0.000	98	132110	25.0	25.4	
16 Dichlorofluoromethane	67	1.692	1.692	0.000	82	287640	25.0	25.0	
17 Trichlorofluoromethane	101	1.698	1.698	0.000	45	234705	25.0	28.3	
18 Ethyl ether	59	1.917	1.917	0.000	95	175517	25.0	25.0	
20 Acrolein	56	2.075	2.081	-0.006	96	89038	125.0	99.0	
22 1,1-Dichloroethene	96	2.111	2.105	0.006	87	130579	25.0	25.2	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.111	2.111	0.000	65	136728	25.0	26.7	
23 Acetone	43	2.221	2.221	0.000	97	440995	125.0	129.2	
25 Iodomethane	142	2.264	2.270	-0.006	99	216579	25.0	22.5	
26 Carbon disulfide	76	2.288	2.288	0.000	99	429039	25.0	24.3	
28 3-Chloro-1-propene	41	2.446	2.446	0.000	83	309538	25.0	25.5	
27 Methyl acetate	43	2.495	2.501	-0.006	97	394359	50.0	50.4	
30 Methylene Chloride	84	2.580	2.586	-0.006	91	156230	25.0	23.2	
31 2-Methyl-2-propanol	59	2.762	2.769	-0.006	78	233248	250.0	255.1	
32 Methyl tert-butyl ether	73	2.781	2.787	-0.006	96	521663	25.0	23.1	
34 trans-1,2-Dichloroethene	96	2.799	2.799	0.000	89	150762	25.0	23.4	
33 Acrylonitrile	53	2.860	2.860	0.000	99	983443	250.0	252.0	
35 Hexane	57	2.981	2.981	0.000	95	245687	25.0	24.2	
39 1,1-Dichloroethane	63	3.194	3.194	0.000	86	309357	25.0	24.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.261	3.261	0.000	97	399871	50.0	27.7	
44 2,2-Dichloropropane	77	3.693	3.693	0.000	85	120673	25.0	19.2	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	85	165377	25.0	24.5	
43 2-Butanone (MEK)	43	3.778	3.778	0.000	98	665828	125.0	135.3	
48 Chlorobromomethane	128	3.961	3.961	0.000	88	81457	25.0	23.1	
49 Tetrahydrofuran	42	3.973	3.973	0.000	91	179256	50.0	49.4	
50 Chloroform	83	4.046	4.046	0.000	97	275809	25.0	22.6	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	76	227885	25.0	24.7	
52 Cyclohexane	56	4.137	4.137	0.000	92	338639	25.0	27.2	
55 Carbon tetrachloride	117	4.265	4.265	0.000	82	197782	25.0	24.8	
54 1,1-Dichloropropene	75	4.289	4.289	0.000	88	229771	25.0	25.4	
57 Benzene	78	4.484	4.484	0.000	96	645621	25.0	23.7	
53 Isobutyl alcohol	43	4.551	4.551	0.000	61	218194	625.0	625.4	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	80	264053	25.0	24.9	
59 n-Heptane	43	4.679	4.679	0.000	97	251780	25.0	24.7	
62 Trichloroethene	95	5.092	5.092	0.000	90	156070	25.0	23.0	
64 Methylcyclohexane	83	5.196	5.196	0.000	94	274097	25.0	25.1	
65 1,2-Dichloropropane	63	5.324	5.324	0.000	86	168677	25.0	24.0	
67 Dibromomethane	93	5.464	5.464	0.000	88	100716	25.0	24.1	
66 1,4-Dioxane	88	5.476	5.476	0.000	67	38331	500.0	422.7	
68 Dichlorobromomethane	83	5.622	5.622	0.000	96	179589	25.0	24.1	
69 2-Chloroethyl vinyl ether	63	5.914	5.914	0.000	93	113927	25.0	25.3	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	84	226581	25.0	23.2	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.188	0.000	99	1394580	125.0	138.9	
74 Toluene	92	6.309	6.309	0.000	86	392097	25.0	22.3	
77 trans-1,3-Dichloropropene	75	6.601	6.607	-0.006	93	194730	25.0	21.7	
75 Ethyl methacrylate	69	6.662	6.668	-0.006	90	201015	25.0	22.8	
79 1,1,2-Trichloroethane	83	6.784	6.784	0.000	95	116380	25.0	22.8	
81 Tetrachloroethene	166	6.826	6.826	0.000	89	157750	25.0	23.1	
82 1,3-Dichloropropane	76	6.942	6.942	0.000	98	248911	25.0	23.8	
80 2-Hexanone	43	7.021	7.027	-0.006	98	998375	125.0	142.5	
83 Chlorodibromomethane	129	7.167	7.167	0.000	86	116416	25.0	22.6	
84 Ethylene Dibromide	107	7.258	7.258	0.000	95	143554	25.0	23.3	
87 Chlorobenzene	112	7.733	7.733	0.000	90	416066	25.0	22.8	
88 Ethylbenzene	91	7.836	7.836	0.000	99	742221	25.0	23.0	
89 1,1,1,2-Tetrachloroethane	131	7.836	7.836	0.000	42	134516	25.0	22.6	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	275919	25.0	22.2	
91 o-Xylene	106	8.371	8.372	0.000	99	278794	25.0	22.7	
92 Styrene	104	8.408	8.408	0.000	93	441660	25.0	21.6	
95 Bromoform	173	8.645	8.645	0.000	93	63297	25.0	18.9	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	678442	25.0	24.2	
101 Bromobenzene	156	9.102	9.102	0.000	95	175719	25.0	23.1	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	59	191388	25.0	24.0	
99 N-Propylbenzene	91	9.205	9.205	0.000	97	859208	25.0	24.1	
100 1,2,3-Trichloropropane	110	9.211	9.211	0.000	55	66116	25.0	24.1	
98 trans-1,4-Dichloro-2-butene	53	9.241	9.242	0.000	77	43793	25.0	14.6	
103 2-Chlorotoluene	126	9.302	9.302	0.000	94	167099	25.0	24.1	
102 1,3,5-Trimethylbenzene	105	9.400	9.400	0.000	93	613887	25.0	23.9	
105 4-Chlorotoluene	126	9.424	9.424	0.000	99	171501	25.0	23.5	
106 tert-Butylbenzene	134	9.728	9.728	0.000	92	137466	25.0	24.4	
107 1,2,4-Trimethylbenzene	105	9.789	9.789	0.000	95	636350	25.0	24.0	
109 sec-Butylbenzene	105	9.953	9.953	0.000	94	775069	25.0	24.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	96	336737	25.0	23.3	
110 4-Isopropyltoluene	119	10.105	10.105	0.000	96	671712	25.0	23.7	
113 1,4-Dichlorobenzene	146	10.178	10.178	0.000	93	340492	25.0	22.9	
115 n-Butylbenzene	91	10.507	10.507	0.000	95	606064	25.0	24.7	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	96	335199	25.0	23.6	
117 1,2-Dibromo-3-Chloropropane	75	11.292	11.292	0.000	64	32075	25.0	19.4	
119 1,2,4-Trichlorobenzene	180	11.967	11.973	-0.006	91	232778	25.0	23.2	
120 Hexachlorobutadiene	225	12.089	12.089	0.000	96	103560	25.0	21.8	
121 Naphthalene	128	12.180	12.180	0.000	98	722661	25.0	24.5	
122 1,2,3-Trichlorobenzene	180	12.387	12.387	0.000	93	227776	25.0	22.8	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00260	Amount Added: 12.50	Units: uL	
GAS CORP mix_00645	Amount Added: 12.50	Units: uL	
S_8260_IS_00403	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added: 1.00	Units: uL	Run Reagent

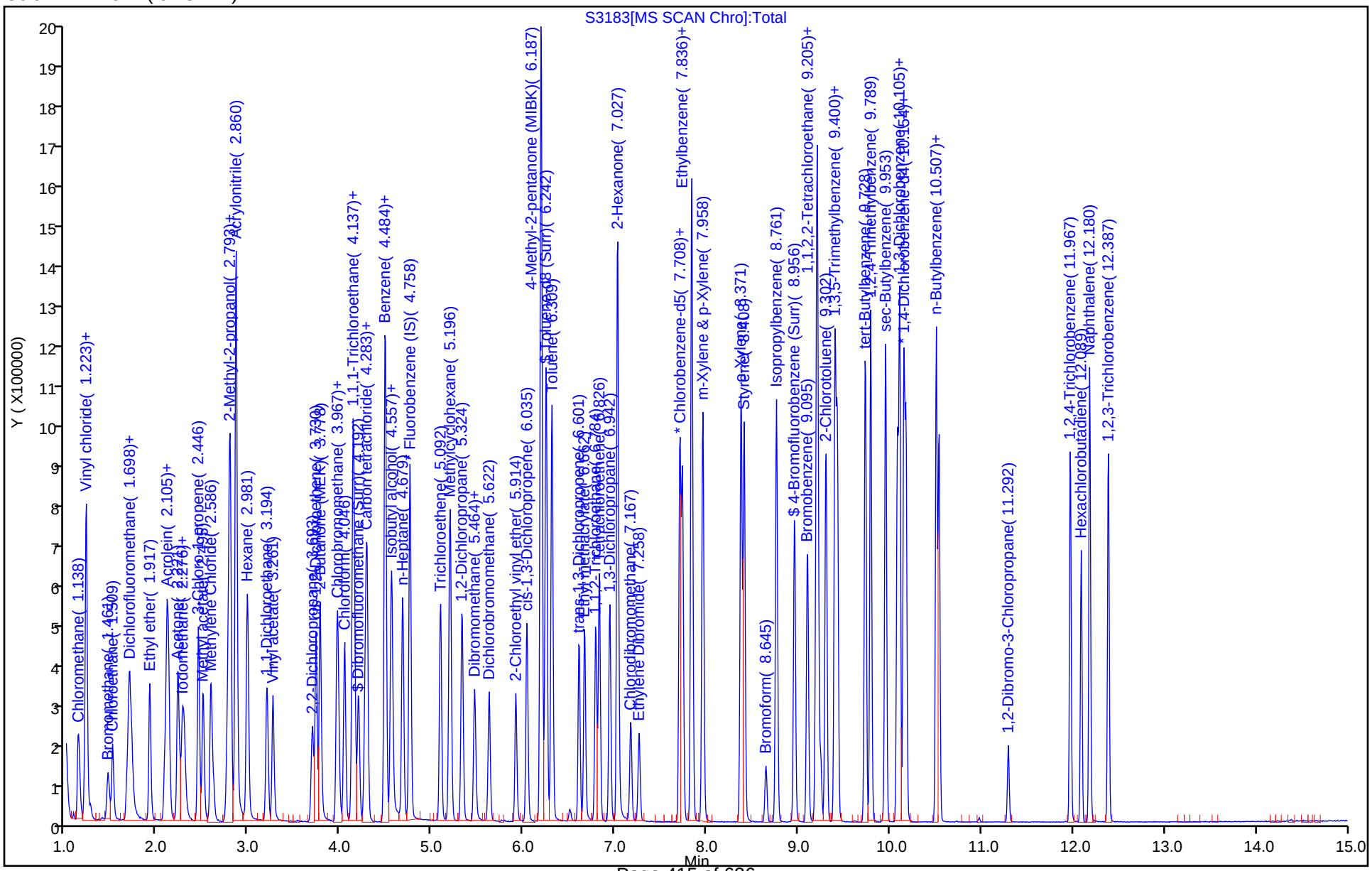
Report Date: 20-Oct-2024 10:01:02 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3183.d

Injection Date:	20-Oct-2024 08:14:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	LCSD			Worklist Smp#:	46
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	59
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S3183.d
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 20-Oct-2024 08:14:30 ALS Bottle#: 59 Worklist Smp#: 46
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 480-0120662-046
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241019-120662.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Oct-2024 10:00:19 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1633

First Level Reviewer: QR3Z Date: 20-Oct-2024 10:01:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 154 Dibromofluoromethane (Surr)	25.0	24.3	97.05
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	25.6	102.58
$ 5 Toluene-d8 (Surr)	25.0	23.9	95.71
$ 6 4-Bromofluorobenzene (Surr)	25.0	22.9	91.77

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: TREATMENT INFLUENT MS | Lab Sample ID: 480-224430-2 MS

Matrix: Water | Lab File ID: S3150.d

Analysis Method: 8260C | Date Collected: 10/15/2024 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2024 06:04

Soil Aliquot Vol: | Dilution Factor: 20

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	518		20	16
79-34-5	1,1,2,2-Tetrachloroethane	530		20	4.2
79-00-5	1,1,2-Trichloroethane	494		20	4.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	564		20	6.2
75-34-3	1,1-Dichloroethane	510		20	7.6
75-35-4	1,1-Dichloroethene	534		20	5.8
120-82-1	1,2,4-Trichlorobenzene	503		20	8.2
96-12-8	1,2-Dibromo-3-Chloropropane	440		20	7.8
95-50-1	1,2-Dichlorobenzene	499		20	16
107-06-2	1,2-Dichloroethane	504		20	4.2
78-87-5	1,2-Dichloropropane	500		20	14
541-73-1	1,3-Dichlorobenzene	491		20	16
106-46-7	1,4-Dichlorobenzene	486		20	17
78-93-3	2-Butanone (MEK)	2700		200	26
591-78-6	2-Hexanone	2910		100	25
108-10-1	4-Methyl-2-pentanone (MIBK)	2880		100	42
67-64-1	Acetone	2590		200	60
71-43-2	Benzene	497		20	8.2
75-27-4	Bromodichloromethane	501		20	7.8
75-25-2	Bromoform	473		20	5.2
74-83-9	Bromomethane	468		20	14
75-15-0	Carbon disulfide	524		20	3.8
56-23-5	Carbon tetrachloride	517		20	5.4
108-90-7	Chlorobenzene	486		20	15
124-48-1	Dibromochloromethane	496		20	6.4
75-00-3	Chloroethane	532		20	6.4
67-66-3	Chloroform	470		20	6.8
74-87-3	Chloromethane	592		20	7.0
156-59-2	cis-1,2-Dichloroethene	974		20	16
10061-01-5	cis-1,3-Dichloropropene	490		20	7.2
110-82-7	Cyclohexane	578		20	3.6
75-71-8	Dichlorodifluoromethane	599		20	14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: TREATMENT INFLUENT MS | Lab Sample ID: 480-224430-2 MS

Matrix: Water | Lab File ID: S3150.d

Analysis Method: 8260C | Date Collected: 10/15/2024 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2024 06:04

Soil Aliquot Vol: | Dilution Factor: 20

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	495		20	15
106-93-4	1,2-Dibromoethane	488		20	15
98-82-8	Isopropylbenzene	521		20	16
79-20-9	Methyl acetate	1050		50	26
1634-04-4	Methyl tert-butyl ether	488		20	3.2
108-87-2	Methylcyclohexane	545		20	3.2
75-09-2	Methylene Chloride	477		20	8.8
100-42-5	Styrene	486		20	15
127-18-4	Tetrachloroethene	508		20	7.2
108-88-3	Toluene	477		20	10
156-60-5	trans-1,2-Dichloroethene	492		20	18
10061-02-6	trans-1,3-Dichloropropene	489		20	7.4
79-01-6	Trichloroethene	480		20	9.2
75-69-4	Trichlorofluoromethane	574		20	18
75-01-4	Vinyl chloride	621		20	18
1330-20-7	Xylenes, Total	978		40	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
1868-53-7	Dibromofluoromethane (Surr)	98		75-123

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3150.d
Lims ID: 480-224430-B-2 MS
Client ID:
Sample Type: MS
Inject. Date: 19-Oct-2024 06:04:30 ALS Bottle#: 55 Worklist Smp#: 49
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 10:08:26 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 10:08:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	97	141267	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.708	-0.006	89	262394	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	71	259548	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.198	4.192	0.006	54	169169	25.0	24.4	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	57	126447	25.0	25.7	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	83	676912	25.0	24.6	
$ 6 4-Bromofluorobenzene (Surr)	174	8.955	8.955	0.000	85	197382	25.0	23.1	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	87	227043	25.0	29.9	
12 Chloromethane	50	1.132	1.132	0.000	89	287004	25.0	29.6	
13 Vinyl chloride	62	1.211	1.211	0.006	77	216849	25.0	31.1	
14 Bromomethane	94	1.454	1.448	0.006	92	103877	25.0	23.4	
15 Chloroethane	64	1.509	1.507	0.006	97	143868	25.0	26.6	
17 Trichlorofluoromethane	101	1.698	1.698	0.000	49	247767	25.0	28.7	
22 1,1-Dichloroethene	96	2.105	2.099	0.006	93	143801	25.0	26.7	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.105	2.105	0.000	69	150340	25.0	28.2	
23 Acetone	43	2.221	2.221	0.000	97	460352	125.0	129.5	
26 Carbon disulfide	76	2.282	2.276	0.006	98	481108	25.0	26.2	
27 Methyl acetate	43	2.495	2.495	0.000	97	427668	50.0	52.5	
30 Methylene Chloride	84	2.586	2.586	0.006	92	166797	25.0	23.8	
32 Methyl tert-butyl ether	73	2.787	2.781	0.006	93	572427	25.0	24.4	
34 trans-1,2-Dichloroethene	96	2.793	2.799	-0.006	70	165071	25.0	24.6	
39 1,1-Dichloroethane	63	3.194	3.194	0.000	86	331283	25.0	25.5	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	71	342202	25.0	48.7	
43 2-Butanone (MEK)	43	3.778	3.790	0.006	97	691318	125.0	135.0	
50 Chloroform	83	4.046	4.046	0.006	96	299195	25.0	23.5	
52 Cyclohexane	56	4.137	4.137	0.000	98	374513	25.0	28.9	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	75	249178	25.0	25.9	
55 Carbon tetrachloride	117	4.271	4.271	0.000	81	214255	25.0	25.8	
57 Benzene	78	4.484	4.484	0.000	96	705361	25.0	24.8	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	81	278426	25.0	25.2	
62 Trichloroethene	95	5.092	5.092	0.000	94	169648	25.0	24.0	
64 Methylcyclohexane	83	5.196	5.196	0.000	95	310241	25.0	27.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63	5.323	5.324	-0.001	86	183369	25.0	25.0	
68 Dichlorobromomethane	83	5.622	5.622	0.000	90	194749	25.0	25.1	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	83	249544	25.0	24.5	
73 4-Methyl-2-pentanone (MIBK)	43	6.187	6.187	0.000	99	1453735	125.0	143.9	
74 Toluene	92	6.309	6.309	0.000	85	421018	25.0	23.8	
77 trans-1,3-Dichloropropene	75	6.601	6.607	-0.006	97	220826	25.0	24.4	
79 1,1,2-Trichloroethane	83	6.783	6.790	-0.007	96	127087	25.0	24.7	
81 Tetrachloroethene	166	6.826	6.826	0.000	78	174321	25.0	25.4	
80 2-Hexanone	43	7.027	7.021	0.006	98	1024033	125.0	145.3	
83 Chlorodibromomethane	129	7.173	7.167	0.006	91	128538	25.0	24.8	
84 Ethylene Dibromide	107	7.258	7.258	0.000	95	151279	25.0	24.4	
87 Chlorobenzene	112	7.733	7.733	0.000	89	446085	25.0	24.3	
88 Ethylbenzene	91	7.836	7.836	0.000	99	803749	25.0	24.8	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	303691		24.3	
91 o-Xylene	106	8.377	8.371	0.006	97	303777		24.6	
92 Styrene	104	8.408	8.408	0.000	95	500337	25.0	24.3	
95 Bromoform	173	8.645	8.645	0.000	93	79854	25.0	23.6	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	741992	25.0	26.0	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	59	214863	25.0	26.5	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	96	361231	25.0	24.5	
113 1,4-Dichlorobenzene	146	10.178	10.172	0.006	92	367228	25.0	24.3	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	96	359773	25.0	24.9	
117 1,2-Dibromo-3-Chloropropane	75	11.291	11.292	-0.001	66	37152	25.0	22.0	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	93	256248	25.0	25.1	
S 124 Xylenes, Total	1				0			48.9	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00260	Amount Added:	12.50	Units: uL	
GAS CORP mix_00645	Amount Added:	12.50	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

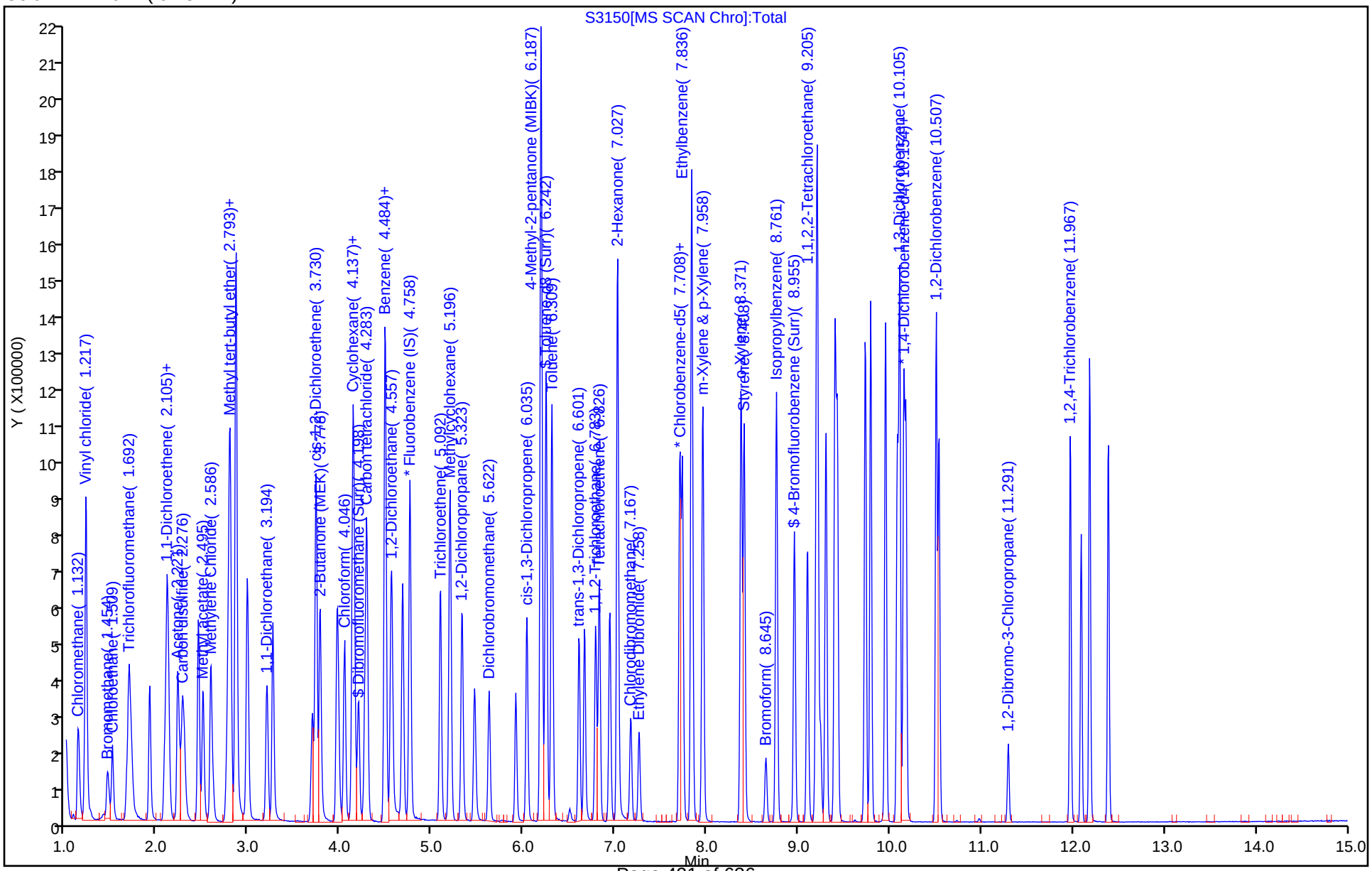
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Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3150.d

Injection Date:	19-Oct-2024 06:04:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	480-224430-B-2 MS			Worklist Smp#:	49
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	20.0000	ALS Bottle#:	55
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3150.d
Lims ID: 480-224430-B-2 MS
Client ID:
Sample Type: MS
Inject. Date: 19-Oct-2024 06:04:30 ALS Bottle#: 55 Worklist Smp#: 49
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 10:08:26 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 10:08:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 154 Dibromofluoromethane (Surr)	25.0	24.4	97.75
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	25.7	102.74
$ 5 Toluene-d8 (Surr)	25.0	24.6	98.52
$ 6 4-Bromofluorobenzene (Surr)	25.0	23.1	92.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: TREATMENT INFLUENT MSD | Lab Sample ID: 480-224430-2 MSD

Matrix: Water | Lab File ID: S3151.d

Analysis Method: 8260C | Date Collected: 10/15/2024 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2024 06:27

Soil Aliquot Vol: | Dilution Factor: 20

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	536		20	16
79-34-5	1,1,2,2-Tetrachloroethane	518		20	4.2
79-00-5	1,1,2-Trichloroethane	492		20	4.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	549		20	6.2
75-34-3	1,1-Dichloroethane	536		20	7.6
75-35-4	1,1-Dichloroethene	526		20	5.8
120-82-1	1,2,4-Trichlorobenzene	512		20	8.2
96-12-8	1,2-Dibromo-3-Chloropropane	453		20	7.8
95-50-1	1,2-Dichlorobenzene	499		20	16
107-06-2	1,2-Dichloroethane	518		20	4.2
78-87-5	1,2-Dichloropropane	507		20	14
541-73-1	1,3-Dichlorobenzene	491		20	16
106-46-7	1,4-Dichlorobenzene	497		20	17
78-93-3	2-Butanone (MEK)	2730		200	26
591-78-6	2-Hexanone	2930		100	25
108-10-1	4-Methyl-2-pentanone (MIBK)	2900		100	42
67-64-1	Acetone	2610		200	60
71-43-2	Benzene	514		20	8.2
75-27-4	Bromodichloromethane	515		20	7.8
75-25-2	Bromoform	468		20	5.2
74-83-9	Bromomethane	471		20	14
75-15-0	Carbon disulfide	557		20	3.8
56-23-5	Carbon tetrachloride	544		20	5.4
108-90-7	Chlorobenzene	497		20	15
124-48-1	Dibromochloromethane	513		20	6.4
75-00-3	Chloroethane	534		20	6.4
67-66-3	Chloroform	488		20	6.8
74-87-3	Chloromethane	631		20	7.0
156-59-2	cis-1,2-Dichloroethene	1010		20	16
10061-01-5	cis-1,3-Dichloropropene	506		20	7.2
110-82-7	Cyclohexane	596		20	3.6
75-71-8	Dichlorodifluoromethane	632		20	14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-224430-1

SDG No.:

Client Sample ID: TREATMENT INFLUENT MSD | Lab Sample ID: 480-224430-2 MSD

Matrix: Water | Lab File ID: S3151.d

Analysis Method: 8260C | Date Collected: 10/15/2024 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 10/19/2024 06:27

Soil Aliquot Vol: | Dilution Factor: 20

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 728892 | Units: ug/L

Preparation Batch No.: | Instrument ID: HP5973S

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	510		20	15
106-93-4	1,2-Dibromoethane	500		20	15
98-82-8	Isopropylbenzene	535		20	16
79-20-9	Methyl acetate	1060		50	26
1634-04-4	Methyl tert-butyl ether	495		20	3.2
108-87-2	Methylcyclohexane	557		20	3.2
75-09-2	Methylene Chloride	490		20	8.8
100-42-5	Styrene	484		20	15
127-18-4	Tetrachloroethene	508		20	7.2
108-88-3	Toluene	495		20	10
156-60-5	trans-1,2-Dichloroethene	515		20	18
10061-02-6	trans-1,3-Dichloropropene	505		20	7.4
79-01-6	Trichloroethene	512		20	9.2
75-69-4	Trichlorofluoromethane	608		20	18
75-01-4	Vinyl chloride	654		20	18
1330-20-7	Xylenes, Total	1010		40	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	100		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
1868-53-7	Dibromofluoromethane (Surr)	100		75-123

Report Date: 19-Oct-2024 10:08:54 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo
Target Compound Quantitation Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3151.d
Lims ID: 480-224430-B-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 19-Oct-2024 06:27:30 ALS Bottle#: 56 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 10:08:26 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 10:08:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.758	4.758	0.000	97	141518	25.0	25.0	
* 2 Chlorobenzene-d5	82	7.702	7.708	-0.006	87	263205	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.154	10.154	0.000	69	261707	25.0	25.0	
$ 154 Dibromofluoromethane (Surr)	113	4.192	4.192	0.000	53	173645	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Surr)	67	4.490	4.490	0.000	58	127865	25.0	25.9	
$ 5 Toluene-d8 (Surr)	98	6.242	6.242	0.000	85	686357	25.0	24.9	
$ 6 4-Bromofluorobenzene (Surr)	174	8.956	8.955	0.001	86	201167	25.0	23.5	
10 Dichlorodifluoromethane	85	0.998	0.998	0.000	87	240209	25.0	31.6	
12 Chloromethane	50	1.132	1.132	0.000	82	306501	25.0	31.5	
13 Vinyl chloride	62	1.211	1.211	0.006	73	228889	25.0	32.7	
14 Bromomethane	94	1.454	1.448	0.006	93	104747	25.0	23.5	
15 Chloroethane	64	1.509	1.507	0.006	94	144835	25.0	26.7	
17 Trichlorofluoromethane	101	1.698	1.698	0.000	59	262836	25.0	30.4	
22 1,1-Dichloroethene	96	2.105	2.099	0.006	90	141792	25.0	26.3	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	2.105	2.105	0.000	65	146618	25.0	27.4	
23 Acetone	43	2.221	2.221	0.000	97	464345	125.0	130.4	
26 Carbon disulfide	76	2.282	2.276	0.006	99	512092	25.0	27.8	
27 Methyl acetate	43	2.495	2.495	0.000	97	433613	50.0	53.1	
30 Methylene Chloride	84	2.586	2.586	0.006	89	171668	25.0	24.5	
32 Methyl tert-butyl ether	73	2.787	2.781	0.006	93	582421	25.0	24.8	
34 trans-1,2-Dichloroethene	96	2.793	2.799	-0.006	73	173157	25.0	25.7	
39 1,1-Dichloroethane	63	3.194	3.194	0.000	98	349074	25.0	26.8	
45 cis-1,2-Dichloroethene	96	3.730	3.730	0.000	71	354229	25.0	50.3	
43 2-Butanone (MEK)	43	3.778	3.790	0.006	96	700262	125.0	136.5	
50 Chloroform	83	4.046	4.046	0.006	97	311292	25.0	24.4	
52 Cyclohexane	56	4.137	4.137	0.000	91	386348	25.0	29.8	
51 1,1,1-Trichloroethane	97	4.137	4.137	0.000	76	258444	25.0	26.8	
55 Carbon tetrachloride	117	4.271	4.271	0.000	81	225723	25.0	27.2	
57 Benzene	78	4.484	4.484	0.000	96	731015	25.0	25.7	
58 1,2-Dichloroethane	62	4.563	4.563	0.000	75	286323	25.0	25.9	
62 Trichloroethene	95	5.092	5.092	0.000	91	181133	25.0	25.6	
64 Methylcyclohexane	83	5.196	5.196	0.000	95	317341	25.0	27.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63	5.324	5.324	0.000	86	186348	25.0	25.4	
68 Dichlorobromomethane	83	5.622	5.622	0.000	94	200600	25.0	25.8	
72 cis-1,3-Dichloropropene	75	6.035	6.035	0.000	86	258102	25.0	25.3	
73 4-Methyl-2-pentanone (MIBK)	43	6.188	6.187	0.001	99	1470664	125.0	145.1	
74 Toluene	92	6.309	6.309	0.000	86	438233	25.0	24.7	
77 trans-1,3-Dichloropropene	75	6.601	6.607	-0.006	94	229008	25.0	25.3	
79 1,1,2-Trichloroethane	83	6.790	6.790	0.000	89	126893	25.0	24.6	
81 Tetrachloroethene	166	6.826	6.826	0.000	81	174706	25.0	25.4	
80 2-Hexanone	43	7.027	7.021	0.006	99	1034876	125.0	146.4	
83 Chlorodibromomethane	129	7.167	7.167	0.000	89	133288	25.0	25.6	
84 Ethylene Dibromide	107	7.258	7.258	0.000	96	155275	25.0	25.0	
87 Chlorobenzene	112	7.733	7.733	0.000	90	457550	25.0	24.8	
88 Ethylbenzene	91	7.836	7.836	0.000	99	830517	25.0	25.5	
90 m-Xylene & p-Xylene	106	7.958	7.958	0.000	98	316655		25.2	
91 o-Xylene	106	8.372	8.371	0.001	98	310608		25.1	
92 Styrene	104	8.408	8.408	0.000	94	499377	25.0	24.2	
95 Bromoform	173	8.645	8.645	0.000	92	79251	25.0	23.4	
94 Isopropylbenzene	105	8.761	8.761	0.000	96	768780	25.0	26.8	
97 1,1,2,2-Tetrachloroethane	83	9.193	9.193	0.000	58	211734	25.0	25.9	
111 1,3-Dichlorobenzene	146	10.081	10.081	0.000	97	364329	25.0	24.5	
113 1,4-Dichlorobenzene	146	10.172	10.172	0.000	90	378425	25.0	24.8	
116 1,2-Dichlorobenzene	146	10.537	10.537	0.000	94	362787	25.0	24.9	
117 1,2-Dibromo-3-Chloropropane	75	11.292	11.292	0.000	68	38618	25.0	22.6	
119 1,2,4-Trichlorobenzene	180	11.973	11.973	0.000	94	263012	25.0	25.6	
S 124 Xylenes, Total	1				0			50.3	

QC Flag Legend

Processing Flags

Reagents:

8260 CORP mix_00260	Amount Added:	12.50	Units: uL	
GAS CORP mix_00645	Amount Added:	12.50	Units: uL	
S_8260_IS_00403	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00492	Amount Added:	1.00	Units: uL	Run Reagent

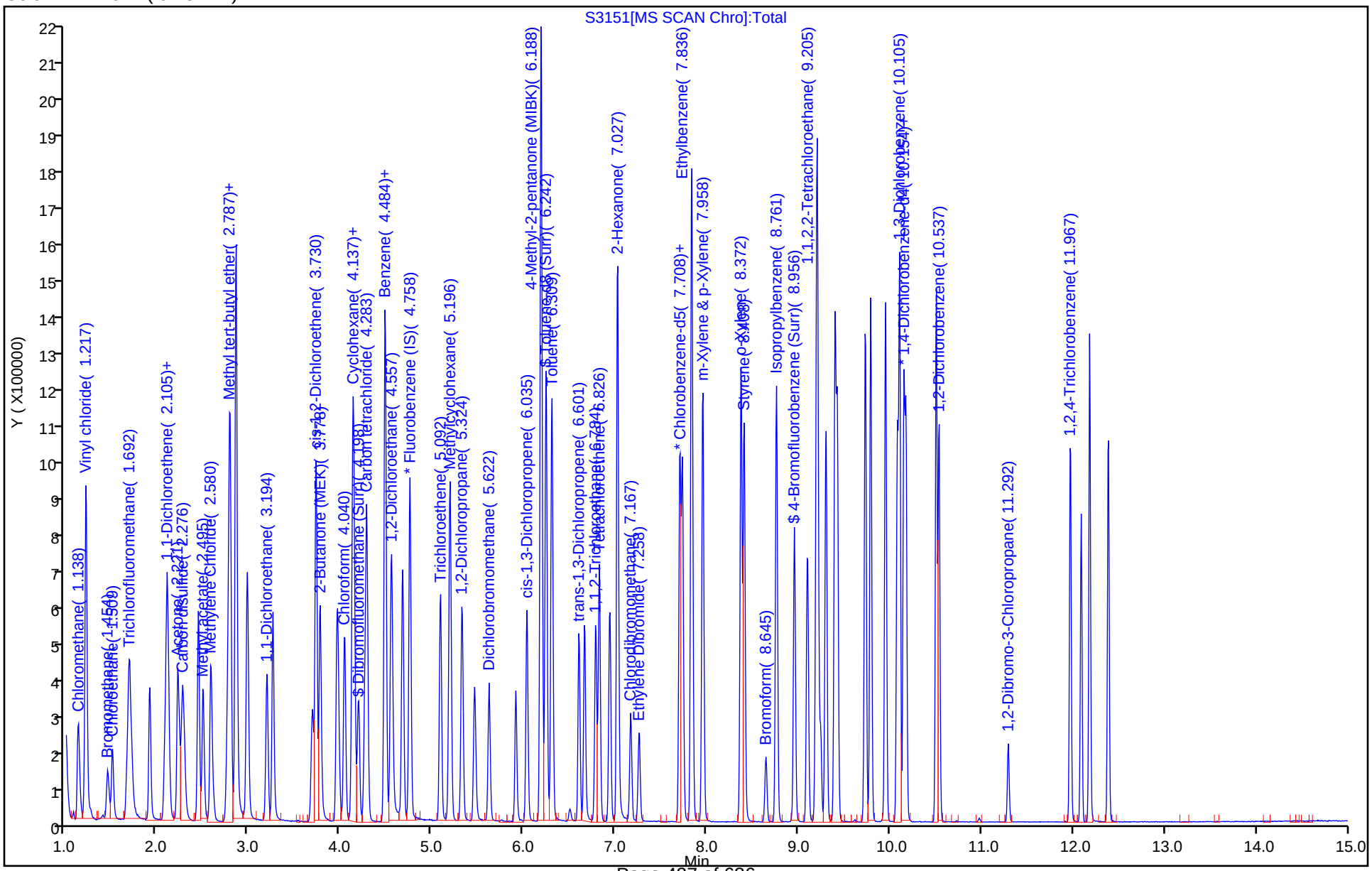
Report Date: 19-Oct-2024 10:08:54 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Buffalo

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3151.d

Injection Date:	19-Oct-2024 06:27:30	Instrument ID:	HP5973S	Operator ID:	ZN
Lims ID:	480-224430-B-2 MSD			Worklist Smp#:	50
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	20.0000	ALS Bottle#:	56
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S3151.d
Lims ID: 480-224430-B-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 19-Oct-2024 06:27:30 ALS Bottle#: 56 Worklist Smp#: 50
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info:
Operator ID: ZN Instrument ID: HP5973S

Method: \\chromfs\Buffalo\ChromData\HP5973S\20241018-120655.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2024 10:08:26 Calib Date: 16-Oct-2024 11:36:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5973S\20241015-120558.b\S3008.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1619

First Level Reviewer: QR3Z Date: 19-Oct-2024 10:08:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 154 Dibromofluoromethane (Surr)	25.0	25.0	100.16
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	25.9	103.71
$ 5 Toluene-d8 (Surr)	25.0	24.9	99.59
$ 6 4-Bromofluorobenzene (Surr)	25.0	23.5	93.83

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Instrument ID: HP5973S Start Date: 10/15/2024 14:57

Analysis Batch Number: 728322 End Date: 10/16/2024 11:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-728322/11		10/15/2024 14:57	1	S2973.d	ZB-624 (20) 0.18(mm)
IC 480-728322/13		10/15/2024 15:49	1	S2975.d	ZB-624 (20) 0.18(mm)
IC 480-728322/14		10/15/2024 16:13	1	S2976.d	ZB-624 (20) 0.18(mm)
IC 480-728322/15		10/15/2024 16:36	1	S2977.d	ZB-624 (20) 0.18(mm)
IC 480-728322/16		10/15/2024 17:00	1	S2978.d	ZB-624 (20) 0.18(mm)
IC 480-728322/17		10/15/2024 17:23	1	S2979.d	ZB-624 (20) 0.18(mm)
ICIS 480-728322/18		10/15/2024 17:47	1	S2980.d	ZB-624 (20) 0.18(mm)
IC 480-728322/19		10/15/2024 18:10	1	S2981.d	ZB-624 (20) 0.18(mm)
ZZZZZ (QC)		10/15/2024 19:21	1		ZB-624 (20) 0.18(mm)
IC 480-728322/25		10/15/2024 20:32	1		ZB-624 (20) 0.18(mm)
IC 480-728322/26		10/15/2024 20:56	1		ZB-624 (20) 0.18(mm)
IC 480-728322/27		10/15/2024 21:19	1		ZB-624 (20) 0.18(mm)
IC 480-728322/28		10/15/2024 21:42	1		ZB-624 (20) 0.18(mm)
IC 480-728322/29		10/15/2024 22:06	1		ZB-624 (20) 0.18(mm)
IC 480-728322/30		10/15/2024 22:30	1		ZB-624 (20) 0.18(mm)
IC 480-728322/31		10/15/2024 22:53	1		ZB-624 (20) 0.18(mm)
ZZZZZ (QC)		10/15/2024 23:39	1		ZB-624 (20) 0.18(mm)
IC 480-728322/46		10/16/2024 11:36	1	S3008.d	ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Instrument ID: HP5973S Start Date: 10/16/2024 13:05

Analysis Batch Number: 728511 End Date: 10/16/2024 23:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-728511/4		10/16/2024 13:05	1	S3011.d	ZB-624 (20) 0.18(mm)
ICV 480-728511/10		10/16/2024 14:09	1	S3013.d	ZB-624 (20) 0.18(mm)
ICV 480-728511/11		10/16/2024 14:45	1	S3014.d	ZB-624 (20) 0.18(mm)
CCVIS 480-728511/12		10/16/2024 15:18	1		ZB-624 (20) 0.18(mm)
CCV 480-728511/6		10/16/2024 16:01	1		ZB-624 (20) 0.18(mm)
ZZZZZ (QC)		10/16/2024 16:24	1		ZB-624 (20) 0.18(mm)
RL 480-728511/8		10/16/2024 16:48	1		ZB-624 (20) 0.18(mm)
ZZZZZ (QC)		10/16/2024 17:11	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 17:34	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 17:57	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 18:20	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 18:43	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 19:07	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 19:30	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 19:53	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 20:16	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 20:40	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 21:03	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 21:26	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 21:49	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 22:13	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 22:36	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 22:59	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/16/2024 23:23	1		ZB-624 (20) 0.18(mm)
ZZZZZ (QC)		10/16/2024 23:46	1		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Instrument ID: HP5973S Start Date: 10/18/2024 20:46

Analysis Batch Number: 728892 End Date: 10/19/2024 06:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-728892/3		10/18/2024 20:46	1	S3126.d	ZB-624 (20) 0.18(mm)
CCVIS 480-728892/4		10/18/2024 21:09	1	S3127.d	ZB-624 (20) 0.18(mm)
CCV 480-728892/5		10/18/2024 21:32	1		ZB-624 (20) 0.18(mm)
LCS 480-728892/6		10/18/2024 21:56	1	S3129.d	ZB-624 (20) 0.18(mm)
RL 480-728892/7		10/18/2024 22:19	1		ZB-624 (20) 0.18(mm)
MB 480-728892/8		10/18/2024 22:42	1	S3131.d	ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/18/2024 23:05	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/18/2024 23:28	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/18/2024 23:51	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 00:14	2		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 00:38	2		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 01:01	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 01:24	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 01:47	4		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 02:11	10		ZB-624 (20) 0.18(mm)
480-224430-2	TREATMENT INFLUENT	10/19/2024 02:34	20	S3141.d	ZB-624 (20) 0.18(mm)
480-224430-3	TRIP BLANK	10/19/2024 02:57	1	S3142.d	ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 03:20	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 03:44	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 04:07	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 04:31	4		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 04:54	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 05:17	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/19/2024 05:41	2		ZB-624 (20) 0.18(mm)
480-224430-2 MS	TREATMENT INFLUENT MS	10/19/2024 06:04	20	S3150.d	ZB-624 (20) 0.18(mm)
480-224430-2 MSD	TREATMENT INFLUENT MSD	10/19/2024 06:27	20	S3151.d	ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Instrument ID: HP5973S Start Date: 10/19/2024 23:18

Analysis Batch Number: 728964 End Date: 10/20/2024 08:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-728964/3		10/19/2024 23:18	1	S3160.d	ZB-624 (20) 0.18(mm)
CCVIS 480-728964/4		10/19/2024 23:41	1	S3161.d	ZB-624 (20) 0.18(mm)
CCV 480-728964/5		10/20/2024 00:04	1		ZB-624 (20) 0.18(mm)
LCS 480-728964/6		10/20/2024 00:27	1	S3163.d	ZB-624 (20) 0.18(mm)
RL 480-728964/7		10/20/2024 00:50	1		ZB-624 (20) 0.18(mm)
MB 480-728964/8		10/20/2024 01:13	1	S3165.d	ZB-624 (20) 0.18(mm)
480-224430-1	TREATMENT EFFLUENT	10/20/2024 01:36	1	S3166.d	ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 02:00	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 02:23	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 02:47	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 03:11	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 03:34	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 03:56	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 04:20	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 04:43	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 05:07	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 05:30	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 05:54	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 06:17	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 06:41	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 07:04	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 07:27	1		ZB-624 (20) 0.18(mm)
ZZZZZ (Client)		10/20/2024 07:50	1		ZB-624 (20) 0.18(mm)
LCSD 480-728964/46		10/20/2024 08:14	1	S3183.d	ZB-624 (20) 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Batch Number: 728322 Batch Start Date: 10/15/24 14:57 Batch Analyst: Nyhart, Zachary

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	InitialAmount	FinalAmount	8260 CORP mix 00260	BFB_WRK 00166	GAS CORP mix 00645	S_8260_IS 00403
BFB 480-728322/11		8260C			1 uL	1 uL		1 uL		
IC 480-728322/13		8260C			5 mL	5 mL	0.5 uL		0.5 uL	1 uL
IC 480-728322/14		8260C			5 mL	5 mL	1 uL		1 uL	1 uL
IC 480-728322/15		8260C			5 mL	5 mL	2 uL		2 uL	1 uL
IC 480-728322/16		8260C			5 mL	5 mL	5 uL		5 uL	1 uL
IC 480-728322/17		8260C			5 mL	5 mL	5 uL		5 uL	1 uL
ICIS 480-728322/18		8260C			5 mL	5 mL	12.5 uL		12.5 uL	1 uL
IC 480-728322/19		8260C			5 mL	5 mL	25 uL		25 uL	1 uL
IC 480-728322/46		8260C			5 mL	5 mL	50 uL		50 uL	1 uL

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	S_8260_Surr 00492					
BFB 480-728322/11		8260C								
IC 480-728322/13		8260C			1 uL					
IC 480-728322/14		8260C			1 uL					
IC 480-728322/15		8260C			1 uL					
IC 480-728322/16		8260C			1 uL					
IC 480-728322/17		8260C			1 uL					
ICIS 480-728322/18		8260C			1 uL					
IC 480-728322/19		8260C			1 uL					
IC 480-728322/46		8260C			1 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Batch Number: 728322 Batch Start Date: 10/15/24 14:57 Batch Analyst: Nyhart, Zachary

Batch Method: 8260C Batch End Date:

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Batch Number: 728511 Batch Start Date: 10/16/24 13:05 Batch Analyst: Nyhart, Zachary

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	InitialAmount	FinalAmount	BFB_WRK 00166	S_8260_IS 00403	S_8260_Surr 00492	SS 8260 CORP 00117
BFB 480-728511/4		8260C			1 uL	1 uL	1 uL			
ICV 480-728511/10		8260C			5 mL	5 mL		1 uL	1 uL	12.5 uL
ICV 480-728511/11		8260C			5 mL	5 mL		1 uL	1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	SS ADD CORP 00094	SS GAS CORP 00598				
BFB 480-728511/4		8260C								
ICV 480-728511/10		8260C				12.5 uL				
ICV 480-728511/11		8260C			12.5 uL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Batch Number: 728892 Batch Start Date: 10/18/24 20:46 Batch Analyst: Nyhart, Zachary

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00260	BFB_WRK 00166	GAS CORP mix 00645
BFB 480-728892/3		8260C			1 uL	1 uL			1 uL	
CCVIS 480-728892/4		8260C			5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-728892/6		8260C			5 mL	5 mL		12.5 uL		12.5 uL
MB 480-728892/8		8260C			5 mL	5 mL				
480-224430-B-2	TREATMENT INFLUENT	8260C	Water	T	5 mL	5 mL	<2 SU			
480-224430-B-3	TRIP BLANK	8260C	Water	T	5 mL	5 mL	<2 SU			
480-224430-B-2 MS	TREATMENT INFLUENT	8260C		T	5 mL	5 mL	<2 SU	12.5 uL		12.5 uL
480-224430-B-2 MSD	TREATMENT INFLUENT	8260C		T	5 mL	5 mL	<2 SU	12.5 uL		12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	S_8260_IS 00403	S_8260_Surr 00492	AnalysisComment			
BFB 480-728892/3		8260C								
CCVIS 480-728892/4		8260C			1 uL	1 uL				
LCS 480-728892/6		8260C			1 uL	1 uL				
MB 480-728892/8		8260C			1 uL	1 uL				
480-224430-B-2	TREATMENT INFLUENT	8260C	Water	T	1 uL	1 uL	target			
480-224430-B-3	TRIP BLANK	8260C	Water	T	1 uL	1 uL				
480-224430-B-2 MS	TREATMENT INFLUENT	8260C		T	1 uL	1 uL	target			
480-224430-B-2 MSD	TREATMENT INFLUENT	8260C		T	1 uL	1 uL	target			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Batch Number: 728964 Batch Start Date: 10/19/24 23:18 Batch Analyst: Nyhart, Zachary

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00260	BFB_WRK 00166	GAS CORP mix 00645
BFB 480-728964/3		8260C			1 uL	1 uL			1 uL	
CCVIS 480-728964/4		8260C			5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-728964/6		8260C			5 mL	5 mL		12.5 uL		12.5 uL
MB 480-728964/8		8260C			5 mL	5 mL				
480-224430-F-1	TREATMENT EFFLUENT	8260C	Water	T	5 mL	5 mL	<2 SU			
LCSD 480-728964/46		8260C			5 mL	5 mL		12.5 uL		12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	S_8260_IS 00403	S_8260_Surr 00492				
BFB 480-728964/3		8260C								
CCVIS 480-728964/4		8260C			1 uL	1 uL				
LCS 480-728964/6		8260C			1 uL	1 uL				
MB 480-728964/8		8260C			1 uL	1 uL				
480-224430-F-1	TREATMENT EFFLUENT	8260C	Water	T	1 uL	1 uL				
LCSD 480-728964/46		8260C			1 uL	1 uL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG No.:

Project: Frewsburg Site - Monthly Analysis

Client Sample ID	Lab Sample ID
TREATMENT EFFLUENT	480-224430-1

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-224430-1
Lab Name: Eurofins Buffalo
Job No.: 480-224430-1
SDG ID.:
Matrix: Water
Date Sampled: 10/15/2024 13:00
Reporting Basis: WET
Date Received: 10/16/2024 14:23
Preparation Batch Number: 728745
Instrument ID: ICAP4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20	0.088	mg/L			1	200.7 Rev 4.4
7439-89-6	Iron	5.5	0.050	0.026	mg/L			1	200.7 Rev 4.4
7440-66-6	Zinc	0.022	0.010	0.0068	mg/L			1	200.7 Rev 4.4

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

ICV Source: MEI_MSS_ICV_00173 Concentration Units: mg/L

CCV Source: MEI_MSS_STD2_00348

Analyte	ICV 480-729007/6 10/18/2024 13:01				CCV 480-729007/16 10/18/2024 13:22				CCV 480-729007/21 10/18/2024 17:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	36.89		37.5	98	48.55		50.0	97	48.74		50.0	97
Iron	37.80		37.5	101	49.50		50.0	99	50.31		50.0	101
Zinc	0.758		0.750	101	1.01		1.00	101	1.04		1.00	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

ICV Source: MEI_MSS_ICV_00173 Concentration Units: mg/L

CCV Source: MEI_MSS_STD2_00348

Analyte	CCV 480-729007/69 10/18/2024 18:49				CCV 480-729007/81 10/18/2024 19:12				CCV 480-729007/93 10/18/2024 19:35			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	48.68		50.0	97	48.53		50.0	97	48.61		50.0	97
Iron	50.04		50.0	100	50.22		50.0	100	49.87		50.0	100
Zinc	1.02		1.00	102	1.04		1.00	104	1.03		1.00	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

ICV Source: MEI_MSS_ICV_00173 Concentration Units: mg/L

CCV Source: MEI_MSS_STD2_00348

Analyte	CCV 480-729007/105 10/18/2024 19:57											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	48.52		50.0	97								
Iron	50.01		50.0	100								
Zinc	1.04		1.00	104								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

ICV Source: MEI_10_CCVL_00528 Concentration Units: mg/L

CCV Source: MEI_MSS_STD2_00348

Analyte	ICVL 480-729007/8 10/18/2024 13:07				CCV 480-729007/16 10/18/2024 13:22				CCV 480-729007/21 10/18/2024 17:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.190	J	0.200	95	48.55		50.0	97	48.74		50.0	97
Iron	0.0520		0.0500	104	49.50		50.0	99	50.31		50.0	101
Zinc	0.0113		0.0100	113	1.01		1.00	101	1.04		1.00	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

ICV Source: MEI_10_CCVL_00528 Concentration Units: mg/L

CCV Source: MEI_MSS_STD2_00348

Analyte	CCV 480-729007/69 10/18/2024 18:49				CCV 480-729007/81 10/18/2024 19:12				CCV 480-729007/93 10/18/2024 19:35			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	48.68		50.0	97	48.53		50.0	97	48.61		50.0	97
Iron	50.04		50.0	100	50.22		50.0	100	49.87		50.0	100
Zinc	1.02		1.00	102	1.04		1.00	104	1.03		1.00	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

ICV Source: MEI_10_CCVL_00528 Concentration Units: mg/L

CCV Source: MEI_MSS_STD2_00348

Analyte	CCV 480-729007/105 10/18/2024 19:57											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	48.52		50.0	97								
Iron	50.01		50.0	100								
Zinc	1.04		1.00	104								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-729007/7 10/18/2024 13:05		CCB 480-729007/17 10/18/2024 13:24		CCB 480-729007/22 10/18/2024 17:20		CCB 480-729007/70 10/18/2024 18:51	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-729007/82 10/18/2024 19:14		CCB 480-729007/94 10/18/2024 19:36		CCB 480-729007/106 10/18/2024 19:59			
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND			
Iron	0.050	ND		ND		ND			
Zinc	0.010	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-728745/1-A

Instrument Code: ICAP4 Batch No.: 729007

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			200.7
7439-89-6	Iron	ND			200.7
7440-66-6	Zinc	ND			200.7

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: ICSA 480-729007/9 Instrument ID: ICAP4

Lab File ID: I420241018D - 2.csv ICS Source: MEI_MSS_ICSA_00068

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**496**	**99**
Iron	**200**	**178**	**89**
Iron	**200**	**188**	**94**
Zinc		**0.0017**	
Antimony		*0.0085*	
Arsenic		*-0.0048*	
Barium	*0.0120*	*0.0025*	
Beryllium		*0.0001*	
Boron		*0.0015*	
Cadmium		*0.0006*	
Calcium	*500*	*473*	*95*
Chromium		*0.0013*	
Cobalt		*0.0005*	
Copper		*0.0011*	
Lead		*0.0000*	
Lithium		*0.0003*	
Magnesium	*500*	*508*	*102*
Manganese		*0.0021*	
Molybdenum		*-0.0006*	
Nickel		*0.0005*	
Potassium		*0.0000*	
Selenium		*0.0083*	
Silver		*0.0012*	
Sodium		*0.143*	
Sodium		*0.266*	
Strontium		*0.0000*	
Sulfur		*0.0000*	
Thallium		*0.0097*	
Tin		*0.0025*	
Titanium		*-0.0038*	
Vanadium		*0.0012*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Lab Sample ID: ICSAB 480-729007/10 Instrument ID: ICAP4

Lab File ID: I420241018D - 2.csv ICS Source: MEI_MSS_ICSAB_00068

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500**	**496**	**99**
Iron	**200**	**178**	**89**
Iron	**200**	**187**	**94**
Zinc	**0.501**	**0.463**	**93**
Antimony	*0.500*	*0.505*	*101*
Arsenic	*0.500*	*0.491*	*98*
Barium	*0.513*	*0.506*	*99*
Beryllium	*0.250*	*0.248*	*99*
Boron	*5.00*	*5.12*	*102*
Cadmium	*0.500*	*0.517*	*103*
Calcium	*500*	*472*	*94*
Chromium	*0.500*	*0.477*	*96*
Cobalt	*0.500*	*0.476*	*95*
Copper	*0.500*	*0.545*	*109*
Lead	*0.500*	*0.486*	*97*
Lithium		*0.0004*	
Magnesium	*500*	*507*	*101*
Manganese	*0.501*	*0.464*	*93*
Molybdenum	*0.500*	*0.491*	*98*
Nickel	*0.501*	*0.479*	*96*
Potassium	*5.00*	*5.05*	*101*
Selenium	*0.500*	*0.501*	*100*
Silver	*0.500*	*0.518*	*104*
Sodium	*5.00*	*5.31*	*106*
Sodium	*5.00*	*5.37*	*107*
Strontium	*0.500*	*0.498*	*100*
Sulfur		*0.0180*	
Thallium	*0.500*	*0.501*	*100*
Tin	*0.500*	*0.482*	*96*
Titanium	*0.500*	*0.508*	*102*
Vanadium	*0.500*	*0.488*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

7A-IN
LINEAR RANGE CHECK STANDARD
METALS

Lab ID: LRC 480-729007/19

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

Sample Matrix: LCS Source: LRC_00004

Analyte	(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	60.0	613.5		1023				200.7 Rev 4.4
Iron	600	399.4		67				200.7 Rev 4.4
Zinc	20.0	17.55		88				200.7 Rev 4.4

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 480-728745/2-A

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

Sample Matrix: Water LCS Source: Spike Mx 2_00005

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	5.10	4.89		96	85	115		200.7 Rev 4.4
Iron	5.10	5.43		107	85	115		200.7 Rev 4.4
Zinc	0.500	0.560		112	85	115		200.7 Rev 4.4

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG Number:

Matrix: Water Instrument ID: ICAP4

Method: 200.7 Rev 4.4 MDL Date: 05/31/2024 11:11

Prep Method: 200.7

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Aluminum	308.215	0.2	0.088
Iron	259.940	0.05	0.026
Zinc	206.200	0.01	0.0068

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG Number:

Matrix: Water Instrument ID: ICAP4

Method: 200.7 Rev 4.4 XMDL Date: 05/31/2024 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Aluminum	308.215	0.2	0.088
Iron	259.940	0.05	0.026
Zinc	206.200	0.01	0.0068

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG No.:

ICP-AES Instrument ID: ICAP4 Date: 08/21/2024

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li
Aluminum	308.215						-0.008176664							00146	
Antimony	206.833										-0.004449992				
Arsenic	189.042														
Barium	455.403						-0.000078338				-0.000025791				
Beryllium	313.042														
Boron	208.959						-0.001382129								
Cadmium	228.802			-0.002169575											
Calcium	317.933						-0.021380513								
Chromium	267.716														
Cobalt	228.616														
Copper	327.396														
Iron	049.95														
Iron	271.441		-0.000092518						-0.01029245	-0.065672408					
Lead	220.353		0.0000675259										-0.000038363		
Lithium	670.784														
Magnesium	279.079														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604														
Potassium	766.490		-0.001465902												
Selenium	196.090														
Silicon	288.158														
Silver	328.068														
Sodium	589.592														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG No.:

ICP-AES Instrument ID: ICAP4 Date: 08/21/2024

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li
Strontium	407.771							-0.000021909							
Sulfur	182.034		-0.000576615												
Thallium	190.856									-0.002165504					
Tin	189.989														
Titanium	334.904														
Vanadium	292.402												-0.000020611		
Zinc	206.200														

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG No.:

ICP-AES Instrument ID: ICAP4 Date: 08/21/2024

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl
Aluminum	308.215														
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042														
Boron	208.959			-0.022248107											
Cadmium	228.802														
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616													-0.001754935	
Copper	327.396														
Iron	049.95														
Iron	271.441	-0.000190944													
Lead	220.353														
Lithium	670.784														
Magnesium	279.079														
Manganese	257.610			0.020388576											
Molybdenum	202.030														
Nickel	231.604														
Potassium	766.490														
Selenium	196.090		-0.000536818												
Silicon	288.158													-0.065408222	
Silver	328.068														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG No.:

ICP-AES Instrument ID: ICAP4 Date: 08/21/2024

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl
Thallium	190.856		-0.000390962												
Tin	189.989														
Titanium	334.904														
Vanadium	292.402			0.002980494										-0.000464775	
Zinc	206.200				-0.000050626										

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG No.:

ICP-AES Instrument ID: ICAP4 Date: 08/21/2024

Analyte	Wave Length	V	Zn												
Aluminum	308.215	0.0014139582													
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042														
Boron	208.959														
Cadmium	228.802														
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616														
Copper	327.396														
Iron	049.95														
Iron	271.441														
Lead	220.353														
Lithium	670.784														
Magnesium	279.079														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604														
Potassium	766.490														
Selenium	196.090														
Silicon	288.158														
Silver	328.068														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856														
Tin	189.989														
Titanium	334.904														

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG No.:

ICP-AES Instrument ID: ICAP4 Date: 08/21/2024

Analyte	Wave Length	V	Zn												
Vanadium	292.402														
Zinc	206.200														

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Buffalo Job No: 480-224430-1

SDG No.:

Instrument ID: ICAP4 Date: 09/05/2024 12:08

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Aluminum	15	600	200.7 Rev 4.4
Iron	15	600	200.7 Rev 4.4
Zinc	15	20	200.7 Rev 4.4

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Prep Method: 200.7

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 480-728745/1-A	10/18/2024 09:09	728745		50	50
LCS 480-728745/2-A	10/18/2024 09:09	728745		50	50
480-224430-1	10/18/2024 09:09	728745		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Instrument ID: ICAP4 Method: 200.7 Rev 4.4

Start Date: 10/18/2024 12:49 End Date: 10/18/2024 20:47

Lab Sample ID	D/F	Type	Time	Analytes																				
				Al	Fe	Zn																		
RINSE 480-729007/1			12:49																					
ICIS 480-729007/2	1		12:51	X	X	X																		
IC 480-729007/3			12:53	X	X	X																		
IC 480-729007/4			12:55	X	X	X																		
IC 480-729007/5			12:57	X	X	X																		
ICV 480-729007/6	1		13:01	X	X	X																		
ICB 480-729007/7	1		13:05	X	X	X																		
ICVL 480-729007/8	1		13:07	X	X	X																		
ICSA 480-729007/9	1		13:08	X	X	X																		
ICSAB 480-729007/10	1		13:10	X	X	X																		
ZZZZZZ			13:12																					
ZZZZZZ			13:14																					
ZZZZZZ			13:16																					
ZZZZZZ			13:18																					
ZZZZZZ			13:20																					
CCV 480-729007/16	1		13:22	X	X	X																		
CCB 480-729007/17	1		13:24	X	X	X																		
CCVL 480-729007/18			13:25																					
LRC 480-729007/19	1		13:29	X	X	X																		
RINSE 480-729007/20			17:16																					
CCV 480-729007/21	1		17:18	X	X	X																		
CCB 480-729007/22	1		17:20	X	X	X																		
CCVL 480-729007/23			17:22																					
ZZZZZZ (QC)			17:24																					
ZZZZZZ (QC)			17:26																					
ZZZZZZ (Client)			17:27																					
ZZZZZZ (Client)			17:29																					
ZZZZZZ (Client)			17:31																					
ZZZZZZ (Client)			17:33																					
ZZZZZZ (Client)			17:35																					
ZZZZZZ (QC)			17:37																					
ZZZZZZ (QC)			17:39																					
CCV 480-729007/33			17:41																					
CCB 480-729007/34			17:43																					
CCVL 480-729007/35			17:44																					
ZZZZZZ (QC)			17:46																					
ZZZZZZ (QC)			17:48																					
ZZZZZZ (Client)			17:50																					
ZZZZZZ (Client)			17:52																					
ZZZZZZ (Client)			17:54																					
ZZZZZZ (Client)			17:56																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Instrument ID: ICAP4 Method: 200.7 Rev 4.4

Start Date: 10/18/2024 12:49 End Date: 10/18/2024 20:47

Lab Sample ID	D/F	Type	Time	Analytes																			
				Al	Fe	Zn																	
RINSE 480-729007/42			17:58																				
ZZZZZZ (QC)			18:00																				
ZZZZZZ (QC)			18:01																				
CCV 480-729007/45			18:03																				
CCB 480-729007/46			18:05																				
CCVL 480-729007/47			18:07																				
ZZZZZZ (Client)			18:09																				
ZZZZZZ (QC)			18:11																				
ZZZZZZ (QC)			18:13																				
ZZZZZZ (QC)			18:15																				
ZZZZZZ (QC)			18:17																				
ZZZZZZ (Client)			18:19																				
ZZZZZZ (Client)			18:20																				
ZZZZZZ (Client)			18:22																				
ZZZZZZ (Client)			18:24																				
CCV 480-729007/57			18:26																				
CCB 480-729007/58			18:28																				
CCVL 480-729007/59			18:30																				
ZZZZZZ (Client)			18:32																				
ZZZZZZ (Client)			18:34																				
ZZZZZZ (Client)			18:36																				
ZZZZZZ (Client)			18:37																				
ZZZZZZ (Client)			18:39																				
ZZZZZZ (Client)			18:41																				
ZZZZZZ (Client)			18:43																				
ZZZZZZ (Client)			18:45																				
ZZZZZZ (Client)			18:47																				
CCV 480-729007/69	1		18:49	X	X	X																	
CCB 480-729007/70	1		18:51	X	X	X																	
CCVL 480-729007/71			18:53																				
ZZZZZZ (Client)			18:55																				
ZZZZZZ (Client)			18:56																				
ZZZZZZ (Client)			18:58																				
ZZZZZZ (Client)			19:00																				
ZZZZZZ (Client)			19:02																				
RINSE 480-729007/77			19:04																				
MB 480-728745/1-A	1	T	19:06	X	X	X																	
LCS 480-728745/2-A	1	T	19:08	X	X	X																	
ZZZZZZ (Client)			19:10																				
CCV 480-729007/81	1		19:12	X	X	X																	
CCB 480-729007/82	1		19:14	X	X	X																	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Instrument ID: ICAP4 Method: 200.7 Rev 4.4

Start Date: 10/18/2024 12:49 End Date: 10/18/2024 20:47

Lab Sample ID	D/F	Type	Time	Analytes																			
				Al	Fe	Zn																	
CCVL 480-729007/83			19:15																				
ZZZZZZ (Client)			19:17																				
ZZZZZZ (QC)			19:19																				
ZZZZZZ (QC)			19:21																				
ZZZZZZ (QC)			19:23																				
ZZZZZZ (QC)			19:25																				
ZZZZZZ (Client)			19:27																				
ZZZZZZ (Client)			19:29																				
ZZZZZZ (QC)			19:31																				
ZZZZZZ (QC)			19:33																				
CCV 480-729007/93	1		19:35	X	X	X																	
CCB 480-729007/94	1		19:36	X	X	X																	
CCVL 480-729007/95			19:38																				
ZZZZZZ (Client)			19:40																				
ZZZZZZ (Client)			19:42																				
ZZZZZZ (Client)			19:44																				
ZZZZZZ (Client)			19:46																				
ZZZZZZ (Client)			19:48																				
ZZZZZZ (Client)			19:50																				
ZZZZZZ (Client)			19:52																				
ZZZZZZ (Client)			19:54																				
480-224430-1	1	T	19:55	X	X	X																	
CCV 480-729007/105	1		19:57	X	X	X																	
CCB 480-729007/106	1		19:59	X	X	X																	
CCVL 480-729007/107			20:01																				
ZZZZZZ (Client)			20:03																				
ZZZZZZ (Client)			20:05																				
ZZZZZZ (Client)			20:07																				
ZZZZZZ (QC)			20:09																				
ZZZZZZ (QC)			20:11																				
ZZZZZZ (Client)			20:13																				
ZZZZZZ (Client)			20:15																				
ZZZZZZ (QC)			20:16																				
ZZZZZZ (QC)			20:18																				
CCV 480-729007/117			20:20																				
CCB 480-729007/118			20:22																				
CCVL 480-729007/119			20:24																				
ZZZZZZ (QC)			20:26																				
ZZZZZZ (QC)			20:28																				
ZZZZZZ (Client)			20:30																				
ZZZZZZ (Client)			20:32																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Instrument ID: ICAP4 Method: 200.7 Rev 4.4

Start Date: 10/18/2024 12:49 End Date: 10/18/2024 20:47

Lab Sample ID	D / F	Type	Time	Analytes																			
				Al	Fe	Zn																	
ZZZZZZ (Client)			20:34																				
ZZZZZZ (Client)			20:36																				
ZZZZZZ (Client)			20:37																				
ZZZZZZ (Client)			20:39																				
ZZZZZZ (Client)			20:41																				
CCV 480-729007/129			20:43																				
CCB 480-729007/130			20:45																				
CCVL 480-729007/131			20:47																				

Prep Types

T = Total/NA

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.: Analysis Batch No.: 729007

ICP Instrument ID: ICAP4 Start Date: 10/18/2024 End Date: 10/18/2024

Lab Sample ID	Time	Internal Standards %RI For:									
		Element In 230.606	Q	Element Y 224.306	Q	Element Y 360.073	Q	Element Y 377.433	Q	Element	Q
ICIS 480-729007/2	12:51										
ICV 480-729007/6	13:01	101		99		102		101			
ICB 480-729007/7	13:05	99		99		99		99			
ICVL 480-729007/8	13:07	101		99		99		99			
ICSA 480-729007/9	13:08	94		95		101		101			
ICSAB 480-729007/10	13:10	94		94		100		100			
CCV 480-729007/16	13:22	101		102		104		104			
CCB 480-729007/17	13:24	100		99		99		99			
CCVL 480-729007/18	13:25	100		99		99		99			
LRC 480-729007/19	13:29	86		90		98		98			
CCV 480-729007/21	17:18	99		101		102		102			
CCB 480-729007/22	17:20	98		99		97		97			
CCVL 480-729007/23	17:22	98		99		97		97			
CCV 480-729007/69	18:49	98		101		103		102			
CCB 480-729007/70	18:51	97		97		96		96			
CCVL 480-729007/71	18:53	98		97		96		96			
MB 480-728745/1-A	19:06	98		98		97		96			
LCS 480-728745/2-A	19:08	100		98		98		98			
CCV 480-729007/81	19:12	100		101		102		102			
CCB 480-729007/82	19:14	97		98		96		96			
CCVL 480-729007/83	19:15	98		98		96		96			
CCV 480-729007/93	19:35	99		100		102		101			
CCB 480-729007/94	19:36	97		97		95		95			
CCVL 480-729007/95	19:38	98		97		96		96			
480-224430-1	19:55	98		98		98		98			
CCV 480-729007/105	19:57	98		101		102		101			
CCB 480-729007/106	19:59	97		99		97		97			
CCVL 480-729007/107	20:01	97		99		97		97			
IS Name on Instrument											

Sample List Summary

10/20/2024 8:19:47 AM

LabBook: I420241018D - 2.imexp

Summary

Index	Label	Sample Type	Amount	Final Quantity	Standard DF	Started at
1	Rinse Blank	UNKNOWN			1	10/18/2024 12:49:32 PM
2	ICIS-8089739	BLK			1	10/18/2024 12:51:33 PM
3	IC-8089740	STD			1	10/18/2024 12:53:27 PM
4	IC-8089741	STD			1	10/18/2024 12:55:20 PM
5	IC-8089742	STD			1	10/18/2024 12:57:13 PM
6	ICV-8089749	QC			1	10/18/2024 1:01:14 PM
7	ICB-8089739	QC			1	10/18/2024 1:05:06 PM
8	ICVL-8089740	QC			1	10/18/2024 1:07:03 PM
9	ICSA-8095256	QC			1	10/18/2024 1:08:56 PM
10	ICSAB-8096364	QC			1	10/18/2024 1:10:50 PM
11	ICEX1	UNKNOWN			1	10/18/2024 1:12:43 PM
12	ICEX2	UNKNOWN			1	10/18/2024 1:14:36 PM
13	ICEX3	UNKNOWN			1	10/18/2024 1:16:29 PM
14	ICEX4	UNKNOWN			1	10/18/2024 1:18:22 PM
15	ICEX5	UNKNOWN			1	10/18/2024 1:20:15 PM
16	CCV-8089741	QC			1	10/18/2024 1:22:08 PM
17	CCB-8089739	QC			1	10/18/2024 1:24:03 PM
18	CCVL-8089740	QC			1	10/18/2024 1:25:56 PM
19	LRC-8076790	QC			1	10/18/2024 1:29:51 PM
20	Rinse Blank	UNKNOWN			1	10/18/2024 5:16:25 PM
21	CCV-8089741	QC			1	10/18/2024 5:18:26 PM
22	CCB-8089739	QC			1	10/18/2024 5:20:20 PM
23	CCVL-8089740	QC			1	10/18/2024 5:22:13 PM
24	MB 480-728741/1-A	UNKNOWN			1	10/18/2024 5:24:08 PM
25	LCS 480-728741/2-A	UNKNOWN			1	10/18/2024 5:26:01 PM
26	480-224437-D-1-A	UNKNOWN			1	10/18/2024 5:27:54 PM
27	480-224437-D-2-A	UNKNOWN			1	10/18/2024 5:29:48 PM
28	480-224437-D-3-A	UNKNOWN			1	10/18/2024 5:31:41 PM
29	480-224437-D-4-A	UNKNOWN			1	10/18/2024 5:33:34 PM
30	480-224437-D-5-A	UNKNOWN			1	10/18/2024 5:35:27 PM
31	480-224437-D-5-A	UNKNOWN			1	10/18/2024 5:37:21 PM
32	480-224437-D-5-A	UNKNOWN			1	10/18/2024 5:39:14 PM
33	CCV-8089741	QC			1	10/18/2024 5:41:07 PM
34	CCB-8089739	QC			1	10/18/2024 5:43:02 PM
35	CCVL-8089740	QC			1	10/18/2024 5:44:56 PM
36	480-224437-D-5-B MS	UNKNOWN			1	10/18/2024 5:46:50 PM
37	480-224437-D-5-C MSD	UNKNOWN			1	10/18/2024 5:48:44 PM
38	480-224437-D-6-A	UNKNOWN			1	10/18/2024 5:50:37 PM
39	480-224437-D-7-A	UNKNOWN			1	10/18/2024 5:52:30 PM
40	480-224437-D-8-A	UNKNOWN			1	10/18/2024 5:54:23 PM
41	480-224437-D-9-A	UNKNOWN			1	10/18/2024 5:56:17 PM
42	rinse	UNKNOWN			1	10/18/2024 5:58:10 PM
43	MB 480-728562/1-A	UNKNOWN			1	10/18/2024 6:00:04 PM
44	LCS 480-728562/2-A	UNKNOWN			1	10/18/2024 6:01:57 PM
45	CCV-8089741	QC			1	10/18/2024 6:03:51 PM
46	CCB-8089739	QC			1	10/18/2024 6:05:46 PM
47	CCVL-8089740	QC			1	10/18/2024 6:07:39 PM
48	480-224395-E-1-A	UNKNOWN			1	10/18/2024 6:09:34 PM
49	480-224395-E-1-A	UNKNOWN			1	10/18/2024 6:11:27 PM
50	480-224395-E-1-A	UNKNOWN			1	10/18/2024 6:13:21 PM
51	480-224395-E-1-B MS	UNKNOWN			1	10/18/2024 6:15:14 PM
52	480-224395-E-1-C MSD	UNKNOWN			1	10/18/2024 6:17:08 PM
53	480-224395-E-2-A	UNKNOWN			1	10/18/2024 6:19:01 PM
54	480-224395-E-3-A	UNKNOWN			1	10/18/2024 6:20:55 PM
55	480-224395-E-4-A	UNKNOWN			1	10/18/2024 6:22:48 PM
56	480-224395-E-5-A	UNKNOWN			1	10/18/2024 6:24:41 PM
57	CCV-8089741	QC			1	10/18/2024 6:26:35 PM
58	CCB-8089739	QC			1	10/18/2024 6:28:30 PM
59	CCVL-8089740	QC			1	10/18/2024 6:30:24 PM
60	480-224395-E-6-A	UNKNOWN			1	10/18/2024 6:32:19 PM
61	480-224395-E-7-A	UNKNOWN			1	10/18/2024 6:34:12 PM
62	480-224395-E-8-A	UNKNOWN			1	10/18/2024 6:36:06 PM
63	480-224395-E-9-A	UNKNOWN			1	10/18/2024 6:37:59 PM
64	480-224395-E-10-A	UNKNOWN			1	10/18/2024 6:39:53 PM
65	480-224395-E-11-A	UNKNOWN			1	10/18/2024 6:41:47 PM
66	480-224395-E-12-A	UNKNOWN			1	10/18/2024 6:43:41 PM
67	480-224395-E-13-A	UNKNOWN			1	10/18/2024 6:45:34 PM

Sample List Summary

10/20/2024 8:19:47 AM

QTEGRA

Index	Label	Sample Type	Amount	Final Quantity	Standard DF	Started at
68	480-224395-E-14-A	UNKNOWN			1	10/18/2024 6:47:28 PM
69	CCV-8089741	QC			1	10/18/2024 6:49:22 PM
70	CCB-8089739	QC			1	10/18/2024 6:51:16 PM
71	CCVL-8089740	QC			1	10/18/2024 6:53:10 PM
72	480-224395-E-15-A	UNKNOWN			1	10/18/2024 6:55:05 PM
73	480-224395-E-16-A	UNKNOWN			1	10/18/2024 6:56:59 PM
74	480-224395-E-17-A	UNKNOWN			1	10/18/2024 6:58:53 PM
75	480-224395-E-18-A	UNKNOWN			1	10/18/2024 7:00:47 PM
76	480-224395-E-19-A	UNKNOWN			1	10/18/2024 7:02:40 PM
77	rinse	UNKNOWN			1	10/18/2024 7:04:34 PM
78	mb 480-728745/1-a	UNKNOWN			1	10/18/2024 7:06:28 PM
79	lcs 480-728745/2-a	UNKNOWN			1	10/18/2024 7:08:22 PM
80	480-224380-h-1-b	UNKNOWN			1	10/18/2024 7:10:16 PM
81	CCV-8089741	QC			1	10/18/2024 7:12:10 PM
82	CCB-8089739	QC			1	10/18/2024 7:14:05 PM
83	CCVL-8089740	QC			1	10/18/2024 7:15:59 PM
84	480-224380-H-2-D	UNKNOWN			1	10/18/2024 7:17:54 PM
85	480-224380-H-2-D	UNKNOWN			1	10/18/2024 7:19:48 PM
86	480-224380-H-2-D	UNKNOWN			1	10/18/2024 7:21:42 PM
87	480-224380-H-2-E MS	UNKNOWN			1	10/18/2024 7:23:36 PM
88	480-224380-H-2-F MSD	UNKNOWN			1	10/18/2024 7:25:30 PM
89	480-224380-H-3-B	UNKNOWN			1	10/18/2024 7:27:24 PM
90	480-224380-H-4-B	UNKNOWN			1	10/18/2024 7:29:18 PM
91	480-224380-H-4-C MS	UNKNOWN			1	10/18/2024 7:31:12 PM
92	480-224380-H-4-D MSD	UNKNOWN			1	10/18/2024 7:33:06 PM
93	CCV-8089741	QC			1	10/18/2024 7:35:00 PM
94	CCB-8089739	QC			1	10/18/2024 7:36:55 PM
95	CCVL-8089740	QC			1	10/18/2024 7:38:49 PM
96	480-224380-H-5-B	UNKNOWN			1	10/18/2024 7:40:44 PM
97	480-224380-H-6-B	UNKNOWN			1	10/18/2024 7:42:38 PM
98	480-224380-H-7-B	UNKNOWN			1	10/18/2024 7:44:32 PM
99	480-224420-A-2-A	UNKNOWN			1	10/18/2024 7:46:26 PM
100	480-224420-A-4-A	UNKNOWN			1	10/18/2024 7:48:20 PM
101	480-224417-B-1-A	UNKNOWN			1	10/18/2024 7:50:14 PM
102	480-224417-B-2-A	UNKNOWN			1	10/18/2024 7:52:08 PM
103	480-224431-A-2-A	UNKNOWN			1	10/18/2024 7:54:03 PM
104	480-224430-C-1-A	UNKNOWN			1	10/18/2024 7:55:57 PM
105	CCV-8089741	QC			1	10/18/2024 7:57:51 PM
106	CCB-8089739	QC			1	10/18/2024 7:59:46 PM
107	CCVL-8089740	QC			1	10/18/2024 8:01:41 PM
108	480-224427-A-1-A	UNKNOWN			1	10/18/2024 8:03:36 PM
109	480-224427-A-2-A	UNKNOWN			1	10/18/2024 8:05:31 PM
110	480-224434-D-1-A	UNKNOWN			1	10/18/2024 8:07:25 PM
111	MB 480-728750/1-A	UNKNOWN			1	10/18/2024 8:09:19 PM
112	LCS 480-728750/2-A	UNKNOWN			1	10/18/2024 8:11:14 PM
113	480-224410-B-1-D	UNKNOWN			1	10/18/2024 8:13:08 PM
114	480-224410-B-2-B	UNKNOWN			1	10/18/2024 8:15:03 PM
115	480-224410-B-2-B	UNKNOWN			1	10/18/2024 8:16:57 PM
116	480-224410-B-2-B	UNKNOWN			1	10/18/2024 8:18:51 PM
117	CCV-8089741	QC			1	10/18/2024 8:20:46 PM
118	CCB-8089739	QC			1	10/18/2024 8:22:41 PM
119	CCVL-8089740	QC			1	10/18/2024 8:24:36 PM
120	480-224410-B-2-C MS	UNKNOWN			1	10/18/2024 8:26:31 PM
121	480-224410-B-2-D MSD	UNKNOWN			1	10/18/2024 8:28:26 PM
122	480-224410-B-3-B	UNKNOWN			1	10/18/2024 8:30:20 PM
123	480-224410-B-4-B	UNKNOWN			1	10/18/2024 8:32:15 PM
124	480-224410-B-5-B	UNKNOWN			1	10/18/2024 8:34:09 PM
125	480-224410-B-6-B	UNKNOWN			1	10/18/2024 8:36:04 PM
126	480-224410-B-7-B	UNKNOWN			1	10/18/2024 8:37:58 PM
127	480-224411-D-1-B	UNKNOWN			1	10/18/2024 8:39:53 PM
128	480-224405-D-21-A	UNKNOWN			1	10/18/2024 8:41:47 PM
129	CCV-8089741	QC			1	10/18/2024 8:43:42 PM
130	CCB-8089739	QC			1	10/18/2024 8:45:37 PM
131	CCVL-8089740	QC			1	10/18/2024 8:47:32 PM

Basic Sample Report
10/20/2024 8:20:01 AM

LabBook: I420241018D - 2.imexp

Label: Rinse Blank #: 1
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 12:49:32 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.002 ppm	3 cps
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.005 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.996 %	461 cps
Y 224.306 (ETA AQ-Radial-iFR)	98.407 %	130 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	99.377 %	470 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-0.018 ppm	-1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.011 ppm	1 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.006 ppm	3 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.001 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	-0.002 ppm	3 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.265 %	6,605 cps
Y 360.073 (ETA AQ-Radial-iFR)	98.913 %	1,465 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.933 %	9,408 cps
Y 377.433 (ETA AQ-Radial-iFR)	98.432 %	2,069 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-8 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
Na 589.592 (ETA AQ-Radial-iFR)	-0.005 ppm	2 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
K 766.490 (ETA AQ-Radial-iFR)	-0.001 ppm	2 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.125 ppm	1 cps

Label: ICIS-8089739 #: 2
Analysis Type: BLK Analysis started at: 10/18/2024 12:51:33 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
As 189.042 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
P 213.618 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	100.000 %	466 cps
Y 224.306 (ETA AQ-Radial-iFR)	100.000 %	132 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	100.000 %	473 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.000 ppm	3 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.000 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.000 ppm	4 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Y 360.073 (ETA AQ-Axial-iFR)	100.000 %	6,654 cps
Y 360.073 (ETA AQ-Radial-iFR)	100.000 %	1,481 cps
Y 377.433 (ETA AQ-Axial-iFR)	100.000 %	9,510 cps
Y 377.433 (ETA AQ-Radial-iFR)	100.000 %	2,102 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-8 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
Na 589.592 (ETA AQ-Radial-iFR)	0.000 ppm	4 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps

Label: IC-8089740 #: 3
Analysis Type: STD Analysis started at: 10/18/2024 12:53:27 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.193 ppm	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0.017 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.009 ppm	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.010 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.022 ppm	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.010 ppm	4 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.011 ppm	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.022 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.020 ppm	8 cps
P 213.618 (ETA AQ-Axial-iFR)	N/A	-5 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Pb 220.353 (ETA AQ-Axial-iFR)	0.011 ppm	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	101.030 %	471 cps
Y 224.306 (ETA AQ-Radial-iFR)	100.138 %	132 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	4 cps
In 230.606 (ETA AQ-Axial-iFR)	99.851 %	473 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	6 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	63 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.055 ppm	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.181 ppm	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.472 ppm	45 cps
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	9 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.176 ppm	11 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	26 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.473 ppm	126 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.009 ppm	21 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.006 ppm	2 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	43 cps
Y 360.073 (ETA AQ-Axial-iFR)	100.824 %	6,708 cps
Y 360.073 (ETA AQ-Radial-iFR)	99.743 %	1,477 cps
Y 377.433 (ETA AQ-Axial-iFR)	100.908 %	9,596 cps
Y 377.433 (ETA AQ-Radial-iFR)	99.645 %	2,094 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	135 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	26 cps
Na 589.592 (ETA AQ-Radial-iFR)	0.974 ppm	517 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.029 ppm	59 cps
K 766.490 (ETA AQ-Radial-iFR)	0.482 ppm	56 cps
Na 818.326 (ETA AQ-Radial-iFR)	1.040 ppm	13 cps

Label: IC-8089741 #: 4
Analysis Type: STD Analysis started at: 10/18/2024 12:55:20 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	24.210 ppm	935 cps
As 189.042 (ETA AQ-Axial-iFR)	0.973 ppm	67 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.967 ppm	134 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.948 ppm	48 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.964 ppm	74 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.974 ppm	239 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.992 ppm	665 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.968 ppm	53 cps
B 208.959 (ETA AQ-Axial-iFR)	0.961 ppm	306 cps
P 213.618 (ETA AQ-Axial-iFR)	24.248 ppm	2,118 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.962 ppm	64 cps
Y 224.306 (ETA AQ-Axial-iFR)	102.634 %	478 cps
Y 224.306 (ETA AQ-Radial-iFR)	97.617 %	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.965 ppm	579 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.965 ppm	1,022 cps
In 230.606 (ETA AQ-Axial-iFR)	99.991 %	473 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.981 ppm	416 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.981 ppm	2,236 cps
Fe 259.940 (ETA AQ-Axial-iFR)	50.898 ppm	62,689 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Cr 267.716 (ETA AQ-Axial-iFR)	0.981 ppm	1,205 cps
Fe 271.441 (ETA AQ-Radial-iFR)	49.233 ppm	941 cps
Mg 279.079 (ETA AQ-Radial-iFR)	48.213 ppm	2,279 cps
Si 288.158 (ETA AQ-Radial-iFR)	9.886 ppm	886 cps
V 292.402 (ETA AQ-Axial-iFR)	0.980 ppm	1,795 cps
Al 308.215 (ETA AQ-Radial-iFR)	48.630 ppm	2,698 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.990 ppm	11,749 cps
Ca 317.933 (ETA AQ-Radial-iFR)	49.372 ppm	12,497 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.951 ppm	2,248 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.965 ppm	2,960 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.976 ppm	2,971 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.976 ppm	8,686 cps
Y 360.073 (ETA AQ-Axial-iFR)	106.164 %	7,064 cps
Y 360.073 (ETA AQ-Radial-iFR)	97.611 %	1,446 cps
Y 377.433 (ETA AQ-Axial-iFR)	105.151 %	10,000 cps
Y 377.433 (ETA AQ-Radial-iFR)	97.418 %	2,047 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.982 ppm	28,610 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.974 ppm	13,283 cps
Na 589.592 (ETA AQ-Radial-iFR)	48.823 ppm	25,126 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.969 ppm	1,974 cps
K 766.490 (ETA AQ-Radial-iFR)	48.792 ppm	5,326 cps
Na 818.326 (ETA AQ-Radial-iFR)	48.801 ppm	617 cps

Label: IC-8089742 #: 5
Analysis Type: STD Analysis started at: 10/18/2024 12:57:13 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	50.395 ppm	1,918 cps
As 189.042 (ETA AQ-Axial-iFR)	2.013 ppm	138 cps
Sn 189.989 (ETA AQ-Axial-iFR)	2.017 ppm	273 cps
Tl 190.856 (ETA AQ-Axial-iFR)	2.026 ppm	102 cps
Se 196.090 (ETA AQ-Axial-iFR)	2.018 ppm	151 cps
Mo 202.030 (ETA AQ-Axial-iFR)	2.013 ppm	487 cps
Zn 206.200 (ETA AQ-Axial-iFR)	2.004 ppm	1,333 cps
Sb 206.833 (ETA AQ-Axial-iFR)	2.016 ppm	108 cps
B 208.959 (ETA AQ-Axial-iFR)	2.019 ppm	631 cps
P 213.618 (ETA AQ-Axial-iFR)	50.376 ppm	4,345 cps
Pb 220.353 (ETA AQ-Axial-iFR)	2.019 ppm	132 cps
Y 224.306 (ETA AQ-Axial-iFR)	101.230 %	471 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.072 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	2.017 ppm	1,185 cps
Cd 228.802 (ETA AQ-Axial-iFR)	2.018 ppm	2,106 cps
In 230.606 (ETA AQ-Axial-iFR)	97.754 %	463 cps
Ni 231.604 (ETA AQ-Axial-iFR)	2.009 ppm	848 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2.009 ppm	4,493 cps
Fe 259.940 (ETA AQ-Axial-iFR)	99.551 ppm	120,937 cps
Cr 267.716 (ETA AQ-Axial-iFR)	2.010 ppm	2,451 cps
Fe 271.441 (ETA AQ-Radial-iFR)	100.384 ppm	1,882 cps
Mg 279.079 (ETA AQ-Radial-iFR)	100.893 ppm	4,677 cps
Si 288.158 (ETA AQ-Radial-iFR)	20.058 ppm	1,760 cps
V 292.402 (ETA AQ-Axial-iFR)	2.010 ppm	3,656 cps
Al 308.215 (ETA AQ-Radial-iFR)	100.685 ppm	5,478 cps
Be 313.042 (ETA AQ-Radial-iFR)	2.005 ppm	23,337 cps
Ca 317.933 (ETA AQ-Radial-iFR)	100.314 ppm	24,896 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2.024 ppm	4,757 cps

Basic Sample Report
10/20/2024 8:20:01 AM

QTEGRA

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ag 328.068 (ETA AQ-Axial-iFR)	2.017 ppm	6,159 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2.012 ppm	6,086 cps
Ti 334.941 (ETA AQ-Axial-iFR)	2.012 ppm	17,774 cps
Y 360.073 (ETA AQ-Axial-iFR)	105.403 %	7,013 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.528 %	1,415 cps
Y 377.433 (ETA AQ-Axial-iFR)	104.559 %	9,943 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.533 %	2,008 cps
Sr 407.771 (ETA AQ-Radial-iFR)	2.009 ppm	57,413 cps
Ba 455.403 (ETA AQ-Radial-iFR)	2.013 ppm	26,735 cps
Na 589.592 (ETA AQ-Radial-iFR)	100.589 ppm	50,759 cps
Li 670.784 (ETA AQ-Radial-iFR)	2.016 ppm	4,028 cps
K 766.490 (ETA AQ-Radial-iFR)	100.604 ppm	10,767 cps
Na 818.326 (ETA AQ-Radial-iFR)	100.599 ppm	1,247 cps

Label: ICV-8089749 #: 6
Analysis Type: QC Analysis started at: 10/18/2024 1:01:14 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	18.452 ppm	98.411 %
As 189.042 (ETA AQ-Axial-iFR)	0.757 ppm	100.976 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.735 ppm	98.024 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.711 ppm	94.796 %
Se 196.090 (ETA AQ-Axial-iFR)	0.752 ppm	100.316 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.746 ppm	99.495 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.758 ppm	101.038 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.745 ppm	99.351 %
B 208.959 (ETA AQ-Axial-iFR)	0.733 ppm	97.723 %
P 213.618 (ETA AQ-Axial-iFR)	18.430 ppm	98.295 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.728 ppm	97.001 %
Y 224.306 (ETA AQ-Axial-iFR)	99.477 %	
Y 224.306 (ETA AQ-Radial-iFR)	95.908 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.721 ppm	96.106 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.752 ppm	100.309 %
In 230.606 (ETA AQ-Axial-iFR)	100.512 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.754 ppm	100.566 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.738 ppm	98.377 %
Fe 259.940 (ETA AQ-Axial-iFR)	39.331 ppm	104.883 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.761 ppm	101.422 %
Fe 271.441 (ETA AQ-Radial-iFR)	37.804 ppm	100.811 %
Mg 279.079 (ETA AQ-Radial-iFR)	36.119 ppm	96.317 %
Si 288.158 (ETA AQ-Radial-iFR)	7.711 ppm	102.816 %
V 292.402 (ETA AQ-Axial-iFR)	0.753 ppm	100.414 %
Al 308.215 (ETA AQ-Radial-iFR)	36.889 ppm	98.371 %
Be 313.042 (ETA AQ-Radial-iFR)	0.755 ppm	100.726 %
Ca 317.933 (ETA AQ-Radial-iFR)	38.151 ppm	101.736 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.739 ppm	98.541 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.740 ppm	98.686 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.763 ppm	101.794 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.776 ppm	103.507 %
Y 360.073 (ETA AQ-Axial-iFR)	101.552 %	
Y 360.073 (ETA AQ-Radial-iFR)	95.788 %	
Y 377.433 (ETA AQ-Axial-iFR)	101.451 %	
Y 377.433 (ETA AQ-Radial-iFR)	96.069 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.756 ppm	100.774 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.737 ppm	98.214 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Na 589.592 (ETA AQ-Radial-iFR)	37.683 ppm	100.489 %
Li 670.784 (ETA AQ-Radial-iFR)	0.730 ppm	97.280 %
K 766.490 (ETA AQ-Radial-iFR)	37.136 ppm	99.029 %
Na 818.326 (ETA AQ-Radial-iFR)	37.964 ppm	101.238 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	692 cps
As 189.042 (ETA AQ-Axial-iFR)	50 cps
Sn 189.989 (ETA AQ-Axial-iFR)	102 cps
Tl 190.856 (ETA AQ-Axial-iFR)	36 cps
Se 196.090 (ETA AQ-Axial-iFR)	56 cps
Mo 202.030 (ETA AQ-Axial-iFR)	178 cps
Zn 206.200 (ETA AQ-Axial-iFR)	485 cps
Sb 206.833 (ETA AQ-Axial-iFR)	39 cps
B 208.959 (ETA AQ-Axial-iFR)	226 cps
P 213.618 (ETA AQ-Axial-iFR)	1,559 cps
Pb 220.353 (ETA AQ-Axial-iFR)	49 cps
Y 224.306 (ETA AQ-Axial-iFR)	463 cps
Y 224.306 (ETA AQ-Radial-iFR)	127 cps
Co 228.616 (ETA AQ-Axial-iFR)	434 cps
Cd 228.802 (ETA AQ-Axial-iFR)	773 cps
In 230.606 (ETA AQ-Axial-iFR)	476 cps
Ni 231.604 (ETA AQ-Axial-iFR)	308 cps
Mn 257.610 (ETA AQ-Radial-iFR)	1,658 cps
Fe 259.940 (ETA AQ-Axial-iFR)	46,958 cps
Cr 267.716 (ETA AQ-Axial-iFR)	894 cps
Fe 271.441 (ETA AQ-Radial-iFR)	712 cps
Mg 279.079 (ETA AQ-Radial-iFR)	1,684 cps
Si 288.158 (ETA AQ-Radial-iFR)	682 cps
V 292.402 (ETA AQ-Axial-iFR)	1,320 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,019 cps
Be 313.042 (ETA AQ-Radial-iFR)	8,843 cps
Ca 317.933 (ETA AQ-Radial-iFR)	9,524 cps
Cu 327.396 (ETA AQ-Axial-iFR)	1,685 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,167 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,221 cps
Ti 334.941 (ETA AQ-Axial-iFR)	6,606 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,757 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,419 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,648 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,019 cps
Sr 407.771 (ETA AQ-Radial-iFR)	21,716 cps
Ba 455.403 (ETA AQ-Radial-iFR)	9,868 cps
Na 589.592 (ETA AQ-Radial-iFR)	19,125 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,466 cps
K 766.490 (ETA AQ-Radial-iFR)	3,998 cps
Na 818.326 (ETA AQ-Radial-iFR)	473 cps

Label: ICB-8089739 #: 7
Analysis Type: QC Analysis started at: 10/18/2024 1:05:06 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.002 ppm	0.208 %
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	0.163 %
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.062 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Tl 190.856 (ETA AQ-Axial-iFR)	-0.002 ppm	-0.248 %
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	0.008 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	-0.009 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0.025 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0.248 %
B 208.959 (ETA AQ-Axial-iFR)	0.001 ppm	0.148 %
P 213.618 (ETA AQ-Axial-iFR)	-0.003 ppm	-0.278 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0.126 %
Y 224.306 (ETA AQ-Axial-iFR)	98.610 %	
Y 224.306 (ETA AQ-Radial-iFR)	97.169 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	0.008 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	0.022 %
In 230.606 (ETA AQ-Axial-iFR)	99.172 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-0.036 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0.015 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.005 ppm	0.489 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.022 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.008 ppm	0.834 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.006 ppm	0.565 %
Si 288.158 (ETA AQ-Radial-iFR)	-0.001 ppm	-0.092 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	-0.046 %
Al 308.215 (ETA AQ-Radial-iFR)	0.016 ppm	1.639 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.005 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.006 ppm	0.571 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0.040 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-0.010 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	0.032 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-0.010 %
Y 360.073 (ETA AQ-Axial-iFR)	98.669 %	
Y 360.073 (ETA AQ-Radial-iFR)	97.653 %	
Y 377.433 (ETA AQ-Axial-iFR)	98.830 %	
Y 377.433 (ETA AQ-Radial-iFR)	97.788 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.005 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.011 %
Na 589.592 (ETA AQ-Radial-iFR)	-0.016 ppm	-1.555 %
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	0.017 %
K 766.490 (ETA AQ-Radial-iFR)	0.001 ppm	0.086 %
Na 818.326 (ETA AQ-Radial-iFR)	0.045 ppm	4.494 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0 cps
B 208.959 (ETA AQ-Axial-iFR)	2 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	3 cps
In 230.606 (ETA AQ-Axial-iFR)	469 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	-1 cps

Basic Sample Report
10/20/2024 8:20:01 AM

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Analyte (Measure Mode)	Raw Intensity average
Fe 259.940 (ETA AQ-Axial-iFR)	7 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	2 cps
V 292.402 (ETA AQ-Axial-iFR)	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	3 cps
Ca 317.933 (ETA AQ-Radial-iFR)	5 cps
Cu 327.396 (ETA AQ-Axial-iFR)	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,565 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,446 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,398 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,055 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-7 cps
Ba 455.403 (ETA AQ-Radial-iFR)	-1 cps
Na 589.592 (ETA AQ-Radial-iFR)	-4 cps
Li 670.784 (ETA AQ-Radial-iFR)	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	2 cps
Na 818.326 (ETA AQ-Radial-iFR)	0 cps

Label: ICVL-8089740 #: 8
Analysis Type: QC Analysis started at: 10/18/2024 1:07:03 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.196 ppm	98.029 %
As 189.042 (ETA AQ-Axial-iFR)	0.017 ppm	113.638 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.008 ppm	83.663 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.019 ppm	95.156 %
Se 196.090 (ETA AQ-Axial-iFR)	0.024 ppm	97.555 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.009 ppm	92.799 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.011 ppm	113.195 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.021 ppm	106.958 %
B 208.959 (ETA AQ-Axial-iFR)	0.021 ppm	104.235 %
P 213.618 (ETA AQ-Axial-iFR)	-0.001 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.008 ppm	84.416 %
Y 224.306 (ETA AQ-Axial-iFR)	98.877 %	
Y 224.306 (ETA AQ-Radial-iFR)	98.098 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	98.904 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	111.935 %
In 230.606 (ETA AQ-Axial-iFR)	100.534 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	97.542 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	103.819 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.052 ppm	104.035 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	108.035 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.085 ppm	169.796 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.189 ppm	94.304 %
Si 288.158 (ETA AQ-Radial-iFR)	0.469 ppm	93.859 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	95.786 %
Al 308.215 (ETA AQ-Radial-iFR)	0.190 ppm	94.853 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	101.121 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.487 ppm	97.334 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Cu 327.396 (ETA AQ-Axial-iFR)	0.010 ppm	97.582 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.005 ppm	89.901 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	97.733 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	95.454 %
Y 360.073 (ETA AQ-Axial-iFR)	99.174 %	
Y 360.073 (ETA AQ-Radial-iFR)	98.794 %	
Y 377.433 (ETA AQ-Axial-iFR)	98.954 %	
Y 377.433 (ETA AQ-Radial-iFR)	98.508 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	97.810 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	99.467 %
Na 589.592 (ETA AQ-Radial-iFR)	0.968 ppm	96.792 %
Li 670.784 (ETA AQ-Radial-iFR)	0.030 ppm	98.868 %
K 766.490 (ETA AQ-Radial-iFR)	0.487 ppm	97.350 %
Na 818.326 (ETA AQ-Radial-iFR)	1.128 ppm	112.757 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	3 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	460 cps
Y 224.306 (ETA AQ-Radial-iFR)	130 cps
Co 228.616 (ETA AQ-Axial-iFR)	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	5 cps
In 230.606 (ETA AQ-Axial-iFR)	476 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	6 cps
Fe 259.940 (ETA AQ-Axial-iFR)	63 cps
Cr 267.716 (ETA AQ-Axial-iFR)	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	45 cps
V 292.402 (ETA AQ-Axial-iFR)	9 cps
Al 308.215 (ETA AQ-Radial-iFR)	12 cps
Be 313.042 (ETA AQ-Radial-iFR)	26 cps
Ca 317.933 (ETA AQ-Radial-iFR)	128 cps
Cu 327.396 (ETA AQ-Axial-iFR)	22 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2 cps
Ti 334.904 (ETA AQ-Axial-iFR)	8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	41 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,599 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,463 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,410 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,070 cps
Sr 407.771 (ETA AQ-Radial-iFR)	136 cps
Ba 455.403 (ETA AQ-Radial-iFR)	25 cps
Na 589.592 (ETA AQ-Radial-iFR)	508 cps
Li 670.784 (ETA AQ-Radial-iFR)	60 cps
K 766.490 (ETA AQ-Radial-iFR)	55 cps
Na 818.326 (ETA AQ-Radial-iFR)	14 cps

Label: ICSA-8095256 #: 9
Analysis Type: QC Analysis started at: 10/18/2024 1:08:56 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.010 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.008 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.002 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.009 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
P 213.618 (ETA AQ-Axial-iFR)	0.024 ppm	-2 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Y 224.306 (ETA AQ-Axial-iFR)	95.018 %	443 cps
Y 224.306 (ETA AQ-Radial-iFR)	90.508 %	120 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	94.167 %	446 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.002 ppm	3 cps
Fe 259.940 (ETA AQ-Axial-iFR)	177.543 ppm	202,444 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Fe 271.441 (ETA AQ-Radial-iFR)	187.913 ppm	3,423 cps
Mg 279.079 (ETA AQ-Radial-iFR)	507.900 ppm	22,913 cps
Si 288.158 (ETA AQ-Radial-iFR)	-0.033 ppm	-1 cps
V 292.402 (ETA AQ-Axial-iFR)	0.001 ppm	9 cps
Al 308.215 (ETA AQ-Radial-iFR)	496.422 ppm	26,265 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	3 cps
Ca 317.933 (ETA AQ-Radial-iFR)	472.645 ppm	114,095 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.001 ppm	-11 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.004 ppm	-31 cps
Y 360.073 (ETA AQ-Axial-iFR)	101.172 %	6,732 cps
Y 360.073 (ETA AQ-Radial-iFR)	92.350 %	1,368 cps
Y 377.433 (ETA AQ-Axial-iFR)	101.029 %	9,608 cps
Y 377.433 (ETA AQ-Radial-iFR)	92.937 %	1,953 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	108 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.003 ppm	30 cps
Na 589.592 (ETA AQ-Radial-iFR)	0.143 ppm	74 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	0.000 ppm	3 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.266 ppm	3 cps

Label: ICSAB-8096364 #: 10
Analysis Type: QC Analysis started at: 10/18/2024 1:10:50 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.018 ppm	4 cps
As 189.042 (ETA AQ-Axial-iFR)	0.491 ppm	31 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Sn 189.989 (ETA AQ-Axial-iFR)	0.482 ppm	62 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.501 ppm	23 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.501 ppm	36 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.491 ppm	111 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.463 ppm	291 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.505 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	5.123 ppm	1,455 cps
P 213.618 (ETA AQ-Axial-iFR)	4.982 ppm	395 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.486 ppm	30 cps
Y 224.306 (ETA AQ-Axial-iFR)	94.072 %	438 cps
Y 224.306 (ETA AQ-Radial-iFR)	89.956 %	119 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.476 ppm	267 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.517 ppm	503 cps
In 230.606 (ETA AQ-Axial-iFR)	93.794 %	444 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.479 ppm	192 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.464 ppm	1,009 cps
Fe 259.940 (ETA AQ-Axial-iFR)	177.901 ppm	200,836 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.477 ppm	552 cps
Fe 271.441 (ETA AQ-Radial-iFR)	187.453 ppm	3,416 cps
Mg 279.079 (ETA AQ-Radial-iFR)	506.926 ppm	22,871 cps
Si 288.158 (ETA AQ-Radial-iFR)	4.645 ppm	399 cps
V 292.402 (ETA AQ-Axial-iFR)	0.488 ppm	846 cps
Al 308.215 (ETA AQ-Radial-iFR)	496.016 ppm	26,247 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.248 ppm	2,806 cps
Ca 317.933 (ETA AQ-Radial-iFR)	471.502 ppm	113,841 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.545 ppm	1,221 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.518 ppm	1,487 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.504 ppm	1,437 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.508 ppm	4,254 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.806 %	6,641 cps
Y 360.073 (ETA AQ-Radial-iFR)	92.493 %	1,370 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.570 %	9,469 cps
Y 377.433 (ETA AQ-Radial-iFR)	92.948 %	1,953 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.498 ppm	13,957 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.506 ppm	6,355 cps
Na 589.592 (ETA AQ-Radial-iFR)	5.313 ppm	2,613 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	5.052 ppm	529 cps
Na 818.326 (ETA AQ-Radial-iFR)	5.375 ppm	65 cps

Label: ICEX1 #: 11
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 1:12:43 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	-0.011 ppm	2 cps
As 189.042 (ETA AQ-Axial-iFR)	>4.887	329 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.003 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	-0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.013 ppm	6 cps
P 213.618 (ETA AQ-Axial-iFR)	0.165 ppm	9 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.003 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 224.306 (ETA AQ-Axial-iFR)	98.886 %	461 cps
Y 224.306 (ETA AQ-Radial-iFR)	98.121 %	130 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	15 cps
In 230.606 (ETA AQ-Axial-iFR)	100.319 %	475 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.023 ppm	28 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	>0.051	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.012 ppm	1 cps
Si 288.158 (ETA AQ-Radial-iFR)	-0.007 ppm	2 cps
V 292.402 (ETA AQ-Axial-iFR)	>5.058	8,684 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.107 ppm	7 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	23 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.009 ppm	6 cps
Cu 327.396 (ETA AQ-Axial-iFR)	>23.677	52,867 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.003 ppm	-27 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.372 %	6,612 cps
Y 360.073 (ETA AQ-Radial-iFR)	98.440 %	1,458 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.366 %	9,450 cps
Y 377.433 (ETA AQ-Radial-iFR)	98.718 %	2,075 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-6 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
Na 589.592 (ETA AQ-Radial-iFR)	-0.025 ppm	-8 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	-0.013 ppm	0 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.155 ppm	2 cps

Label: ICEX2 #: 12
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 1:14:36 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	-0.015 ppm	2 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	>18.386	975 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.002 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	-0.005 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.004 ppm	3 cps
P 213.618 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.009 ppm	-1 cps
Y 224.306 (ETA AQ-Axial-iFR)	100.820 %	470 cps
Y 224.306 (ETA AQ-Radial-iFR)	98.369 %	130 cps
Co 228.616 (ETA AQ-Axial-iFR)	-0.002 ppm	18 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	102.414 %	485 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.005 ppm	1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Fe 271.441 (ETA AQ-Radial-iFR)	0.003 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	-0.094 ppm	-4 cps
Si 288.158 (ETA AQ-Radial-iFR)	>48.388	4,443 cps
V 292.402 (ETA AQ-Axial-iFR)	0.003 ppm	22 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.017 ppm	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	-0.002 ppm	3 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.005 ppm	12 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	19.845 ppm	57,297 cps
Ti 334.941 (ETA AQ-Axial-iFR)	20.017 ppm	168,613 cps
Y 360.073 (ETA AQ-Axial-iFR)	100.507 %	6,687 cps
Y 360.073 (ETA AQ-Radial-iFR)	97.947 %	1,451 cps
Y 377.433 (ETA AQ-Axial-iFR)	100.706 %	9,577 cps
Y 377.433 (ETA AQ-Radial-iFR)	98.044 %	2,060 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-8 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	1 cps
Na 589.592 (ETA AQ-Radial-iFR)	-0.029 ppm	-11 cps
Li 670.784 (ETA AQ-Radial-iFR)	>9.638	19,776 cps
K 766.490 (ETA AQ-Radial-iFR)	-0.003 ppm	1 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.101 ppm	1 cps

Label: ICEX3 #: 13
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 1:16:29 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	>97.841	3,714 cps
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.015 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	-0.002 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.004 ppm	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.019 ppm	-6 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.007 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	101.063 %	471 cps
Y 224.306 (ETA AQ-Radial-iFR)	99.472 %	131 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	102.011 %	483 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	>49.655	114,635 cps
Fe 259.940 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Cr 267.716 (ETA AQ-Axial-iFR)	-0.002 ppm	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.008 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	-0.009 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.022 ppm	4 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.033 ppm	3 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.005 ppm	5 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.003 ppm	-4 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ti 334.904 (ETA AQ-Axial-iFR)	0.006 ppm	10 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.006 ppm	48 cps
Y 360.073 (ETA AQ-Axial-iFR)	100.503 %	6,687 cps
Y 360.073 (ETA AQ-Radial-iFR)	98.417 %	1,458 cps
Y 377.433 (ETA AQ-Axial-iFR)	100.615 %	9,568 cps
Y 377.433 (ETA AQ-Radial-iFR)	98.612 %	2,072 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-9 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
Na 589.592 (ETA AQ-Radial-iFR)	-0.014 ppm	-3 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	1 cps
K 766.490 (ETA AQ-Radial-iFR)	-0.001 ppm	2 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.090 ppm	1 cps

Label: ICEX4 #: 14
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 1:18:22 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.086 ppm	6 cps
As 189.042 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.004 ppm	-3 cps
Sb 206.833 (ETA AQ-Axial-iFR)	-0.003 ppm	3 cps
B 208.959 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.004 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	99.608 %	464 cps
Y 224.306 (ETA AQ-Radial-iFR)	99.268 %	131 cps
Co 228.616 (ETA AQ-Axial-iFR)	>19.549	11,821 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	100.634 %	476 cps
Ni 231.604 (ETA AQ-Axial-iFR)	>10.431	4,171 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	2 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.002 ppm	4 cps
Cr 267.716 (ETA AQ-Axial-iFR)	>10.293	11,836 cps
Fe 271.441 (ETA AQ-Radial-iFR)	>0.070	26 cps
Mg 279.079 (ETA AQ-Radial-iFR)	-0.003 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	-0.008 ppm	2 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.008 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.002 ppm	4 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.005 ppm	11 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.003 ppm	26 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.381 %	6,612 cps
Y 360.073 (ETA AQ-Radial-iFR)	98.316 %	1,456 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.046 %	9,419 cps
Y 377.433 (ETA AQ-Radial-iFR)	98.529 %	2,071 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-8 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	4 cps
Na 589.592 (ETA AQ-Radial-iFR)	-0.018 ppm	-5 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
K 766.490 (ETA AQ-Radial-iFR)	-0.002 ppm	2 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.128 ppm	1 cps

Label: ICEX5 #: 15
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 1:20:15 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	-0.006 ppm	2 cps
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	>4.768	1,130 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	-0.008 ppm	31 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.003 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.004 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	99.357 %	463 cps
Y 224.306 (ETA AQ-Radial-iFR)	98.613 %	130 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	99.744 %	472 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	-0.003 ppm	-2 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-0.006 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	-0.005 ppm	-5 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.246 ppm	25 cps
V 292.402 (ETA AQ-Axial-iFR)	0.004 ppm	-18 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.041 ppm	3 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
Ca 317.933 (ETA AQ-Radial-iFR)	-0.001 ppm	4 cps
Cu 327.396 (ETA AQ-Axial-iFR)	-0.002 ppm	-3 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.001 ppm	11 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.002 %	6,587 cps
Y 360.073 (ETA AQ-Radial-iFR)	98.753 %	1,462 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.890 %	9,404 cps
Y 377.433 (ETA AQ-Radial-iFR)	99.130 %	2,083 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-7 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
Na 589.592 (ETA AQ-Radial-iFR)	-0.008 ppm	0 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
K 766.490 (ETA AQ-Radial-iFR)	0.004 ppm	2 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.088 ppm	1 cps

Label: CCV-8089741 #: 16
Analysis Type: QC Analysis started at: 10/18/2024 1:22:08 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	24.567 ppm	98.268 %
As 189.042 (ETA AQ-Axial-iFR)	0.980 ppm	98.010 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.966 ppm	96.648 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.939 ppm	93.884 %
Se 196.090 (ETA AQ-Axial-iFR)	0.983 ppm	98.289 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.977 ppm	97.729 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.007 ppm	100.746 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.974 ppm	97.390 %
B 208.959 (ETA AQ-Axial-iFR)	0.970 ppm	96.987 %
P 213.618 (ETA AQ-Axial-iFR)	24.636 ppm	98.543 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.958 ppm	95.828 %
Y 224.306 (ETA AQ-Axial-iFR)	101.599 %	
Y 224.306 (ETA AQ-Radial-iFR)	96.548 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.959 ppm	95.882 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.982 ppm	98.196 %
In 230.606 (ETA AQ-Axial-iFR)	100.952 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.977 ppm	97.693 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.982 ppm	98.204 %
Fe 259.940 (ETA AQ-Axial-iFR)	51.192 ppm	102.384 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.993 ppm	99.341 %
Fe 271.441 (ETA AQ-Radial-iFR)	49.501 ppm	99.001 %
Mg 279.079 (ETA AQ-Radial-iFR)	48.491 ppm	96.982 %
Si 288.158 (ETA AQ-Radial-iFR)	9.728 ppm	97.284 %
V 292.402 (ETA AQ-Axial-iFR)	0.986 ppm	98.582 %
Al 308.215 (ETA AQ-Radial-iFR)	48.549 ppm	97.098 %
Be 313.042 (ETA AQ-Radial-iFR)	0.990 ppm	98.988 %
Ca 317.933 (ETA AQ-Radial-iFR)	49.748 ppm	99.497 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.976 ppm	97.610 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.982 ppm	98.215 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.989 ppm	98.938 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.996 ppm	99.551 %
Y 360.073 (ETA AQ-Axial-iFR)	104.498 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.160 %	
Y 377.433 (ETA AQ-Axial-iFR)	104.263 %	
Y 377.433 (ETA AQ-Radial-iFR)	96.451 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.981 ppm	98.127 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.962 ppm	96.186 %
Na 589.592 (ETA AQ-Radial-iFR)	49.075 ppm	98.150 %
Li 670.784 (ETA AQ-Radial-iFR)	0.961 ppm	96.132 %
K 766.490 (ETA AQ-Radial-iFR)	48.588 ppm	97.176 %
Na 818.326 (ETA AQ-Radial-iFR)	49.416 ppm	98.832 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	940 cps
As 189.042 (ETA AQ-Axial-iFR)	67 cps
Sn 189.989 (ETA AQ-Axial-iFR)	135 cps
Tl 190.856 (ETA AQ-Axial-iFR)	48 cps
Se 196.090 (ETA AQ-Axial-iFR)	75 cps
Mo 202.030 (ETA AQ-Axial-iFR)	238 cps
Zn 206.200 (ETA AQ-Axial-iFR)	664 cps
Sb 206.833 (ETA AQ-Axial-iFR)	52 cps
B 208.959 (ETA AQ-Axial-iFR)	305 cps
P 213.618 (ETA AQ-Axial-iFR)	2,130 cps
Pb 220.353 (ETA AQ-Axial-iFR)	65 cps
Y 224.306 (ETA AQ-Axial-iFR)	473 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	580 cps

Analyte (Measure Mode)	Raw Intensity average
Cd 228.802 (ETA AQ-Axial-iFR)	1,030 cps
In 230.606 (ETA AQ-Axial-iFR)	478 cps
Ni 231.604 (ETA AQ-Axial-iFR)	411 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,216 cps
Fe 259.940 (ETA AQ-Axial-iFR)	62,416 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,201 cps
Fe 271.441 (ETA AQ-Radial-iFR)	937 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,269 cps
Si 288.158 (ETA AQ-Radial-iFR)	863 cps
V 292.402 (ETA AQ-Axial-iFR)	1,778 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,667 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,633 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,467 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,287 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,965 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,963 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,719 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,953 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,424 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,915 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,027 cps
Sr 407.771 (ETA AQ-Radial-iFR)	28,308 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,973 cps
Na 589.592 (ETA AQ-Radial-iFR)	25,004 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,939 cps
K 766.490 (ETA AQ-Radial-iFR)	5,251 cps
Na 818.326 (ETA AQ-Radial-iFR)	619 cps

Label: CCB-8089739 #: 17
Analysis Type: QC Analysis started at: 10/18/2024 1:24:03 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.005 ppm	0.484 %
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	0.300 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-0.033 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-0.043 %
Se 196.090 (ETA AQ-Axial-iFR)	0.001 ppm	0.107 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	0.049 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0.025 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0.175 %
B 208.959 (ETA AQ-Axial-iFR)	0.004 ppm	0.409 %
P 213.618 (ETA AQ-Axial-iFR)	-0.002 ppm	-0.234 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0.063 %
Y 224.306 (ETA AQ-Axial-iFR)	99.484 %	
Y 224.306 (ETA AQ-Radial-iFR)	98.971 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-0.038 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	0.023 %
In 230.606 (ETA AQ-Axial-iFR)	99.759 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-0.017 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0.044 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.006 ppm	0.577 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.016 %
Fe 271.441 (ETA AQ-Radial-iFR)	-0.007 ppm	-0.744 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.009 ppm	0.856 %
Si 288.158 (ETA AQ-Radial-iFR)	0.004 ppm	0.403 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	-0.002 %
Al 308.215 (ETA AQ-Radial-iFR)	0.002 ppm	0.197 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.000 %
Ca 317.933 (ETA AQ-Radial-iFR)	-0.002 ppm	-0.211 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	0.059 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-0.038 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	0.026 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	0.022 %
Y 360.073 (ETA AQ-Axial-iFR)	99.163 %	
Y 360.073 (ETA AQ-Radial-iFR)	98.324 %	
Y 377.433 (ETA AQ-Axial-iFR)	99.017 %	
Y 377.433 (ETA AQ-Radial-iFR)	98.836 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-0.003 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.010 %
Na 589.592 (ETA AQ-Radial-iFR)	-0.018 ppm	-1.779 %
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	0.022 %
K 766.490 (ETA AQ-Radial-iFR)	-0.008 ppm	-0.820 %
Na 818.326 (ETA AQ-Radial-iFR)	0.106 ppm	10.604 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0 cps
B 208.959 (ETA AQ-Axial-iFR)	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	463 cps
Y 224.306 (ETA AQ-Radial-iFR)	131 cps
Co 228.616 (ETA AQ-Axial-iFR)	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	3 cps
In 230.606 (ETA AQ-Axial-iFR)	472 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	8 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	3 cps
V 292.402 (ETA AQ-Axial-iFR)	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	3 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	3 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,598 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,456 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,416 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,077 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-9 cps
Ba 455.403 (ETA AQ-Radial-iFR)	-1 cps
Na 589.592 (ETA AQ-Radial-iFR)	-5 cps

Analyte (Measure Mode)	Raw Intensity average
Li 670.784 (ETA AQ-Radial-iFR)	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	1 cps
Na 818.326 (ETA AQ-Radial-iFR)	1 cps

Label: CCVL-8089740 #: 18
Analysis Type: QC Analysis started at: 10/18/2024 1:25:56 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.195 ppm	97.511 %
As 189.042 (ETA AQ-Axial-iFR)	0.015 ppm	102.313 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.011 ppm	108.431 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.016 ppm	77.719 %
Se 196.090 (ETA AQ-Axial-iFR)	0.022 ppm	89.811 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.009 ppm	89.685 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.011 ppm	110.144 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.022 ppm	109.039 %
B 208.959 (ETA AQ-Axial-iFR)	0.022 ppm	108.895 %
P 213.618 (ETA AQ-Axial-iFR)	-0.001 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.009 ppm	94.784 %
Y 224.306 (ETA AQ-Axial-iFR)	99.377 %	
Y 224.306 (ETA AQ-Radial-iFR)	98.513 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	91.366 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	95.923 %
In 230.606 (ETA AQ-Axial-iFR)	100.239 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	98.641 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	112.205 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.055 ppm	110.453 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	97.537 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.054 ppm	107.980 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.202 ppm	101.228 %
Si 288.158 (ETA AQ-Radial-iFR)	0.468 ppm	93.567 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	95.219 %
Al 308.215 (ETA AQ-Radial-iFR)	0.198 ppm	99.003 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	97.339 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.483 ppm	96.648 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.010 ppm	102.474 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.005 ppm	89.011 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	97.708 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	95.893 %
Y 360.073 (ETA AQ-Axial-iFR)	98.967 %	
Y 360.073 (ETA AQ-Radial-iFR)	97.715 %	
Y 377.433 (ETA AQ-Axial-iFR)	98.987 %	
Y 377.433 (ETA AQ-Radial-iFR)	97.952 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	95.871 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	103.001 %
Na 589.592 (ETA AQ-Radial-iFR)	0.962 ppm	96.234 %
Li 670.784 (ETA AQ-Radial-iFR)	0.029 ppm	95.646 %
K 766.490 (ETA AQ-Radial-iFR)	0.473 ppm	94.501 %
Na 818.326 (ETA AQ-Radial-iFR)	1.116 ppm	111.606 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0 cps

Analyte (Measure Mode)	Raw Intensity average
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	3 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	463 cps
Y 224.306 (ETA AQ-Radial-iFR)	130 cps
Co 228.616 (ETA AQ-Axial-iFR)	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	4 cps
In 230.606 (ETA AQ-Axial-iFR)	474 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	7 cps
Fe 259.940 (ETA AQ-Axial-iFR)	67 cps
Cr 267.716 (ETA AQ-Axial-iFR)	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	10 cps
Si 288.158 (ETA AQ-Radial-iFR)	44 cps
V 292.402 (ETA AQ-Axial-iFR)	9 cps
Al 308.215 (ETA AQ-Radial-iFR)	12 cps
Be 313.042 (ETA AQ-Radial-iFR)	25 cps
Ca 317.933 (ETA AQ-Radial-iFR)	127 cps
Cu 327.396 (ETA AQ-Axial-iFR)	23 cps
Ag 328.068 (ETA AQ-Axial-iFR)	1 cps
Ti 334.904 (ETA AQ-Axial-iFR)	8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	41 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,585 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,447 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,413 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,059 cps
Sr 407.771 (ETA AQ-Radial-iFR)	133 cps
Ba 455.403 (ETA AQ-Radial-iFR)	26 cps
Na 589.592 (ETA AQ-Radial-iFR)	502 cps
Li 670.784 (ETA AQ-Radial-iFR)	57 cps
K 766.490 (ETA AQ-Radial-iFR)	54 cps
Na 818.326 (ETA AQ-Radial-iFR)	14 cps

Label: LRC-8076790 #: 19
Analysis Type: QC Analysis started at: 10/18/2024 1:29:51 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	80.459 ppm	107.279 %
As 189.042 (ETA AQ-Axial-iFR)	5.024 ppm	100.475 %
Sn 189.989 (ETA AQ-Axial-iFR)	4.091 ppm	102.266 %
Tl 190.856 (ETA AQ-Axial-iFR)	20.647 ppm	103.233 %
Se 196.090 (ETA AQ-Axial-iFR)	40.923 ppm	102.307 %
Mo 202.030 (ETA AQ-Axial-iFR)	10.460 ppm	104.601 %
Zn 206.200 (ETA AQ-Axial-iFR)	17.549 ppm	87.746 %
Sb 206.833 (ETA AQ-Axial-iFR)	5.015 ppm	100.291 %
B 208.959 (ETA AQ-Axial-iFR)	26.294 ppm	105.177 %
P 213.618 (ETA AQ-Axial-iFR)	0.034 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	42.348 ppm	105.870 %
Y 224.306 (ETA AQ-Axial-iFR)	89.622 %	
Y 224.306 (ETA AQ-Radial-iFR)	82.219 %	

Basic Sample Report
10/20/2024 8:20:01 AM

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Co 228.616 (ETA AQ-Axial-iFR)	20.131 ppm	100.655 %
Cd 228.802 (ETA AQ-Axial-iFR)	5.300 ppm	106.004 %
In 230.606 (ETA AQ-Axial-iFR)	85.899 %	
Ni 231.604 (ETA AQ-Axial-iFR)	8.957 ppm	89.574 %
Mn 257.610 (ETA AQ-Radial-iFR)	37.668 ppm	94.170 %
Fe 259.940 (ETA AQ-Axial-iFR)	399.361 ppm	66.560 %
Cr 267.716 (ETA AQ-Axial-iFR)	9.206 ppm	92.063 %
Fe 271.441 (ETA AQ-Radial-iFR)	568.537 ppm	94.756 %
Mg 279.079 (ETA AQ-Radial-iFR)	399.715 ppm	99.929 %
Si 288.158 (ETA AQ-Radial-iFR)	47.458 ppm	94.916 %
V 292.402 (ETA AQ-Axial-iFR)	4.789 ppm	95.784 %
Al 308.215 (ETA AQ-Radial-iFR)	613.517 ppm	102.253 %
Be 313.042 (ETA AQ-Radial-iFR)	23.276 ppm	93.102 %
Ca 317.933 (ETA AQ-Radial-iFR)	662.012 ppm	94.573 %
Cu 327.396 (ETA AQ-Axial-iFR)	8.928 ppm	111.603 %
Ag 328.068 (ETA AQ-Axial-iFR)	1.914 ppm	63.812 %
Ti 334.904 (ETA AQ-Axial-iFR)	19.529 ppm	97.647 %
Ti 334.941 (ETA AQ-Axial-iFR)	19.548 ppm	97.741 %
Y 360.073 (ETA AQ-Axial-iFR)	98.285 %	
Y 360.073 (ETA AQ-Radial-iFR)	86.256 %	
Y 377.433 (ETA AQ-Axial-iFR)	98.185 %	
Y 377.433 (ETA AQ-Radial-iFR)	86.979 %	
Sr 407.771 (ETA AQ-Radial-iFR)	9.466 ppm	94.655 %
Ba 455.403 (ETA AQ-Radial-iFR)	20.445 ppm	102.226 %
Na 589.592 (ETA AQ-Radial-iFR)	810.521 ppm	101.315 %
Li 670.784 (ETA AQ-Radial-iFR)	41.055 ppm	102.637 %
K 766.490 (ETA AQ-Radial-iFR)	523.361 ppm	104.672 %
Na 818.326 (ETA AQ-Radial-iFR)	840.253 ppm	105.032 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	2,710 cps
As 189.042 (ETA AQ-Axial-iFR)	306 cps
Sn 189.989 (ETA AQ-Axial-iFR)	488 cps
Tl 190.856 (ETA AQ-Axial-iFR)	921 cps
Se 196.090 (ETA AQ-Axial-iFR)	2,690 cps
Mo 202.030 (ETA AQ-Axial-iFR)	2,234 cps
Zn 206.200 (ETA AQ-Axial-iFR)	10,886 cps
Sb 206.833 (ETA AQ-Axial-iFR)	238 cps
B 208.959 (ETA AQ-Axial-iFR)	7,166 cps
P 213.618 (ETA AQ-Axial-iFR)	**-2 cps**
Pb 220.353 (ETA AQ-Axial-iFR)	2,437 cps
Y 224.306 (ETA AQ-Axial-iFR)	417 cps
Y 224.306 (ETA AQ-Radial-iFR)	109 cps
Co 228.616 (ETA AQ-Axial-iFR)	10,408 cps
Cd 228.802 (ETA AQ-Axial-iFR)	4,893 cps
In 230.606 (ETA AQ-Axial-iFR)	406 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3,550 cps
Mn 257.610 (ETA AQ-Radial-iFR)	76,703 cps
Fe 259.940 (ETA AQ-Axial-iFR)	429,487 cps
Cr 267.716 (ETA AQ-Axial-iFR)	10,475 cps
Fe 271.441 (ETA AQ-Radial-iFR)	9,713 cps
Mg 279.079 (ETA AQ-Radial-iFR)	16,867 cps
Si 288.158 (ETA AQ-Radial-iFR)	3,866 cps
V 292.402 (ETA AQ-Axial-iFR)	8,115 cps
Al 308.215 (ETA AQ-Radial-iFR)	30,390 cps
Be 313.042 (ETA AQ-Radial-iFR)	246,636 cps
Ca 317.933 (ETA AQ-Radial-iFR)	149,574 cps
Cu 327.396 (ETA AQ-Axial-iFR)	19,697 cps

Analyte (Measure Mode)	Raw Intensity average
Ag 328.068 (ETA AQ-Axial-iFR)	5,437 cps
Ti 334.904 (ETA AQ-Axial-iFR)	55,137 cps
Ti 334.941 (ETA AQ-Axial-iFR)	161,011 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,540 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,277 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,337 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,828 cps
Sr 407.771 (ETA AQ-Radial-iFR)	246,353 cps
Ba 455.403 (ETA AQ-Radial-iFR)	234,851 cps
Na 589.592 (ETA AQ-Radial-iFR)	372,357 cps
Li 670.784 (ETA AQ-Radial-iFR)	74,734 cps
K 766.490 (ETA AQ-Radial-iFR)	50,991 cps
Na 818.326 (ETA AQ-Radial-iFR)	9,488 cps

Label: Rinse Blank #: 20
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:16:25 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.005 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.704 %	460 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.165 %	127 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.222 %	460 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.018 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.004 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	-0.001 ppm	2 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.010 ppm	0 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	-0.001 ppm	3 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	4 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.054 %	6,458 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.031 %	1,407 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.101 %	9,234 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.041 %	1,997 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-7 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-3 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Na 589.592 (ETA AQ-Radial-iFR)	-0.012 ppm	-2 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
K 766.490 (ETA AQ-Radial-iFR)	-0.010 ppm	1 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps

Label: CCV-8089741 #: 21
Analysis Type: QC Analysis started at: 10/18/2024 5:18:26 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	24.773 ppm	99.090 %
As 189.042 (ETA AQ-Axial-iFR)	0.958 ppm	95.812 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.987 ppm	98.730 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.923 ppm	92.290 %
Se 196.090 (ETA AQ-Axial-iFR)	0.956 ppm	95.567 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.963 ppm	96.339 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.040 ppm	103.958 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.960 ppm	95.990 %
B 208.959 (ETA AQ-Axial-iFR)	0.971 ppm	97.089 %
P 213.618 (ETA AQ-Axial-iFR)	24.918 ppm	99.670 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.983 ppm	98.302 %
Y 224.306 (ETA AQ-Axial-iFR)	100.768 %	
Y 224.306 (ETA AQ-Radial-iFR)	96.092 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.978 ppm	97.752 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.985 ppm	98.464 %
In 230.606 (ETA AQ-Axial-iFR)	98.795 %	
Ni 231.604 (ETA AQ-Axial-iFR)	1.003 ppm	100.292 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.983 ppm	98.282 %
Fe 259.940 (ETA AQ-Axial-iFR)	51.166 ppm	102.332 %
Cr 267.716 (ETA AQ-Axial-iFR)	1.011 ppm	101.075 %
Fe 271.441 (ETA AQ-Radial-iFR)	50.308 ppm	100.615 %
Mg 279.079 (ETA AQ-Radial-iFR)	49.316 ppm	98.632 %
Si 288.158 (ETA AQ-Radial-iFR)	9.940 ppm	99.403 %
V 292.402 (ETA AQ-Axial-iFR)	1.001 ppm	100.064 %
Al 308.215 (ETA AQ-Radial-iFR)	48.738 ppm	97.475 %
Be 313.042 (ETA AQ-Radial-iFR)	1.004 ppm	100.432 %
Ca 317.933 (ETA AQ-Radial-iFR)	50.341 ppm	100.682 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.979 ppm	97.895 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.995 ppm	99.497 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.998 ppm	99.806 %
Ti 334.941 (ETA AQ-Axial-iFR)	1.005 ppm	100.465 %
Y 360.073 (ETA AQ-Axial-iFR)	102.236 %	
Y 360.073 (ETA AQ-Radial-iFR)	95.063 %	
Y 377.433 (ETA AQ-Axial-iFR)	101.796 %	
Y 377.433 (ETA AQ-Radial-iFR)	94.950 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.994 ppm	99.431 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.967 ppm	96.696 %
Na 589.592 (ETA AQ-Radial-iFR)	49.417 ppm	98.833 %
Li 670.784 (ETA AQ-Radial-iFR)	0.974 ppm	97.386 %
K 766.490 (ETA AQ-Radial-iFR)	49.362 ppm	98.724 %
Na 818.326 (ETA AQ-Radial-iFR)	49.583 ppm	99.166 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	940 cps
As 189.042 (ETA AQ-Axial-iFR)	65 cps
Sn 189.989 (ETA AQ-Axial-iFR)	135 cps

Analyte (Measure Mode)	Raw Intensity average
Tl 190.856 (ETA AQ-Axial-iFR)	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	72 cps
Mo 202.030 (ETA AQ-Axial-iFR)	233 cps
Zn 206.200 (ETA AQ-Axial-iFR)	671 cps
Sb 206.833 (ETA AQ-Axial-iFR)	51 cps
B 208.959 (ETA AQ-Axial-iFR)	303 cps
P 213.618 (ETA AQ-Axial-iFR)	2,137 cps
Pb 220.353 (ETA AQ-Axial-iFR)	65 cps
Y 224.306 (ETA AQ-Axial-iFR)	469 cps
Y 224.306 (ETA AQ-Radial-iFR)	127 cps
Co 228.616 (ETA AQ-Axial-iFR)	579 cps
Cd 228.802 (ETA AQ-Axial-iFR)	1,024 cps
In 230.606 (ETA AQ-Axial-iFR)	468 cps
Ni 231.604 (ETA AQ-Axial-iFR)	412 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,184 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61,878 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,196 cps
Fe 271.441 (ETA AQ-Radial-iFR)	937 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,272 cps
Si 288.158 (ETA AQ-Radial-iFR)	868 cps
V 292.402 (ETA AQ-Axial-iFR)	1,766 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,636 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,619 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,420 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,239 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,939 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,925 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,609 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,802 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,408 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,681 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,995 cps
Sr 407.771 (ETA AQ-Radial-iFR)	28,238 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,980 cps
Na 589.592 (ETA AQ-Radial-iFR)	24,787 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,934 cps
K 766.490 (ETA AQ-Radial-iFR)	5,251 cps
Na 818.326 (ETA AQ-Radial-iFR)	611 cps

Label: CCB-8089739 #: 22
Analysis Type: QC Analysis started at: 10/18/2024 5:20:20 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.008 ppm	0.824 %
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	0.393 %
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.061 %
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-0.331 %
Se 196.090 (ETA AQ-Axial-iFR)	0.001 ppm	0.056 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	0.056 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0.056 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.007 ppm	0.696 %
B 208.959 (ETA AQ-Axial-iFR)	0.004 ppm	0.421 %
P 213.618 (ETA AQ-Axial-iFR)	0.004 ppm	0.390 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	0.046 %
Y 224.306 (ETA AQ-Axial-iFR)	98.951 %	

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Y 224.306 (ETA AQ-Radial-iFR)	97.938 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	0.016 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	0.028 %
In 230.606 (ETA AQ-Axial-iFR)	97.639 %	
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.059 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0.042 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.014 ppm	1.449 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	0.060 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.020 ppm	1.996 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.014 ppm	1.424 %
Si 288.158 (ETA AQ-Radial-iFR)	0.003 ppm	0.302 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0.006 %
Al 308.215 (ETA AQ-Radial-iFR)	0.013 ppm	1.339 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.016 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.007 ppm	0.738 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0.014 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-0.021 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	0.002 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.001 ppm	0.052 %
Y 360.073 (ETA AQ-Axial-iFR)	97.328 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.504 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.187 %	
Y 377.433 (ETA AQ-Radial-iFR)	96.396 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.016 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.023 %
Na 589.592 (ETA AQ-Radial-iFR)	0.001 ppm	0.129 %
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	0.055 %
K 766.490 (ETA AQ-Radial-iFR)	0.017 ppm	1.738 %
Na 818.326 (ETA AQ-Radial-iFR)	0.019 ppm	1.880 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	461 cps
Y 224.306 (ETA AQ-Radial-iFR)	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	3 cps
In 230.606 (ETA AQ-Axial-iFR)	462 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	18 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	1 cps
Si 288.158 (ETA AQ-Radial-iFR)	3 cps
V 292.402 (ETA AQ-Axial-iFR)	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	4 cps
Ca 317.933 (ETA AQ-Radial-iFR)	6 cps

Basic Sample Report
10/20/2024 8:20:01 AM

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Analyte (Measure Mode)	Raw Intensity average
Cu 327.396 (ETA AQ-Axial-iFR)	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	5 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,476 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,429 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,242 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,026 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-3 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1 cps
Na 589.592 (ETA AQ-Radial-iFR)	5 cps
Li 670.784 (ETA AQ-Radial-iFR)	0 cps
K 766.490 (ETA AQ-Radial-iFR)	4 cps
Na 818.326 (ETA AQ-Radial-iFR)	0 cps

Label: CCVL-8089740 #: 23
Analysis Type: QC Analysis started at: 10/18/2024 5:22:13 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.202 ppm	100.989 %
As 189.042 (ETA AQ-Axial-iFR)	0.016 ppm	109.222 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.009 ppm	88.318 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.014 ppm	68.423 %
Se 196.090 (ETA AQ-Axial-iFR)	0.021 ppm	83.310 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.010 ppm	96.345 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.012 ppm	116.423 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.020 ppm	98.253 %
B 208.959 (ETA AQ-Axial-iFR)	0.021 ppm	107.402 %
P 213.618 (ETA AQ-Axial-iFR)	-0.006 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.007 ppm	68.676 %
Y 224.306 (ETA AQ-Axial-iFR)	98.786 %	
Y 224.306 (ETA AQ-Radial-iFR)	96.610 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.003 ppm	85.751 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	102.771 %
In 230.606 (ETA AQ-Axial-iFR)	97.857 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.011 ppm	107.711 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	115.104 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	102.452 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	110.285 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.066 ppm	132.076 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.203 ppm	101.601 %
Si 288.158 (ETA AQ-Radial-iFR)	0.471 ppm	94.220 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	98.765 %
Al 308.215 (ETA AQ-Radial-iFR)	0.178 ppm	89.063 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	102.572 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.491 ppm	98.107 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.010 ppm	97.878 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.006 ppm	92.164 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.004 ppm	88.432 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	95.174 %
Y 360.073 (ETA AQ-Axial-iFR)	97.470 %	
Y 360.073 (ETA AQ-Radial-iFR)	95.095 %	
Y 377.433 (ETA AQ-Axial-iFR)	96.970 %	
Y 377.433 (ETA AQ-Radial-iFR)	94.985 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	96.554 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	98.744 %
Na 589.592 (ETA AQ-Radial-iFR)	0.963 ppm	96.274 %
Li 670.784 (ETA AQ-Radial-iFR)	0.029 ppm	97.755 %
K 766.490 (ETA AQ-Radial-iFR)	0.488 ppm	97.690 %
Na 818.326 (ETA AQ-Radial-iFR)	1.111 ppm	111.071 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	3 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	460 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	4 cps
In 230.606 (ETA AQ-Axial-iFR)	463 cps
Ni 231.604 (ETA AQ-Axial-iFR)	4 cps
Mn 257.610 (ETA AQ-Radial-iFR)	7 cps
Fe 259.940 (ETA AQ-Axial-iFR)	62 cps
Cr 267.716 (ETA AQ-Axial-iFR)	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	43 cps
V 292.402 (ETA AQ-Axial-iFR)	9 cps
Al 308.215 (ETA AQ-Radial-iFR)	11 cps
Be 313.042 (ETA AQ-Radial-iFR)	26 cps
Ca 317.933 (ETA AQ-Radial-iFR)	125 cps
Cu 327.396 (ETA AQ-Axial-iFR)	22 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2 cps
Ti 334.904 (ETA AQ-Axial-iFR)	6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	40 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,485 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,408 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,222 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,996 cps
Sr 407.771 (ETA AQ-Radial-iFR)	129 cps
Ba 455.403 (ETA AQ-Radial-iFR)	25 cps
Na 589.592 (ETA AQ-Radial-iFR)	487 cps
Li 670.784 (ETA AQ-Radial-iFR)	57 cps
K 766.490 (ETA AQ-Radial-iFR)	54 cps
Na 818.326 (ETA AQ-Radial-iFR)	14 cps

Label: MB 480-728741/1-A #: 24
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:24:08 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	-0.020 ppm	2 cps
As 189.042 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.009 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.005 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.004 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.888 %	461 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.610 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.182 %	465 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	1 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-0.016 ppm	-1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.006 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.001 ppm	2 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.008 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	3 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.001 ppm	4 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-0.001 ppm	-8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.348 %	6,477 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.381 %	1,427 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.847 %	9,305 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.307 %	2,024 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-6 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
Na 589.592 (ETA AQ-Radial-iFR)	-0.015 ppm	-3 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
K 766.490 (ETA AQ-Radial-iFR)	0.001 ppm	2 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.050 ppm	0 cps

Label: LCS 480-728741/2-A #: 25
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:26:01 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	5.010 ppm	187 cps
As 189.042 (ETA AQ-Axial-iFR)	0.974 ppm	64 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.988 ppm	137 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.900 ppm	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.958 ppm	70 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.483 ppm	114 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.543 ppm	336 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.478 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	0.479 ppm	147 cps
P 213.618 (ETA AQ-Axial-iFR)	10.020 ppm	835 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.476 ppm	32 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 224.306 (ETA AQ-Axial-iFR)	98.176 %	457 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.360 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.479 ppm	286 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.501 ppm	510 cps
In 230.606 (ETA AQ-Axial-iFR)	100.163 %	474 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.517 ppm	204 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.493 ppm	1,092 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.311 ppm	6,259 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.513 ppm	583 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.056 ppm	94 cps
Mg 279.079 (ETA AQ-Radial-iFR)	23.855 ppm	1,096 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.971 ppm	89 cps
V 292.402 (ETA AQ-Axial-iFR)	0.503 ppm	852 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.816 ppm	261 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.512 ppm	5,905 cps
Ca 317.933 (ETA AQ-Radial-iFR)	24.923 ppm	6,131 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.486 ppm	1,073 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.049 ppm	125 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.518 ppm	1,456 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.530 ppm	4,359 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.162 %	6,531 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.475 %	1,399 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.207 %	9,339 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.654 %	1,989 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.506 ppm	14,315 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.972 ppm	12,943 cps
Na 589.592 (ETA AQ-Radial-iFR)	24.376 ppm	12,191 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.482 ppm	953 cps
K 766.490 (ETA AQ-Radial-iFR)	23.939 ppm	2,540 cps
Na 818.326 (ETA AQ-Radial-iFR)	24.431 ppm	300 cps

Label: 480-224437-D-1-A #: 26
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:27:54 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	19.608 ppm	716 cps
As 189.042 (ETA AQ-Axial-iFR)	0.006 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.019 ppm	7 cps
P 213.618 (ETA AQ-Axial-iFR)	0.004 ppm	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.999 %	452 cps
Y 224.306 (ETA AQ-Radial-iFR)	93.431 %	123 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	99.022 %	469 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.030 ppm	66 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.093 ppm	109 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Fe 271.441 (ETA AQ-Radial-iFR)	0.120 ppm	2 cps
Mg 279.079 (ETA AQ-Radial-iFR)	42.978 ppm	1,959 cps
Si 288.158 (ETA AQ-Radial-iFR)	8.251 ppm	709 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.096 ppm	6 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	79.867 ppm	19,488 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.004 ppm	4 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.003 ppm	24 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.595 %	6,494 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.828 %	1,390 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.843 %	9,305 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.920 %	1,974 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.358 ppm	10,055 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.136 ppm	1,776 cps
Na 589.592 (ETA AQ-Radial-iFR)	8.080 ppm	4,012 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.009 ppm	16 cps
K 766.490 (ETA AQ-Radial-iFR)	1.556 ppm	165 cps
Na 818.326 (ETA AQ-Radial-iFR)	8.261 ppm	101 cps

Label: 480-224437-D-2-A #: 27
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:29:48 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	764.483 ppm	26,303 cps
As 189.042 (ETA AQ-Axial-iFR)	0.009 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.010 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.010 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.075 ppm	2 cps
Sb 206.833 (ETA AQ-Axial-iFR)	-0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	19.139 ppm	5,281 cps
P 213.618 (ETA AQ-Axial-iFR)	0.014 ppm	-3 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.004 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	91.648 %	427 cps
Y 224.306 (ETA AQ-Radial-iFR)	85.488 %	113 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	-0.001 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	91.312 %	432 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.051 ppm	103 cps
Fe 259.940 (ETA AQ-Axial-iFR)	1.867 ppm	2,054 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1.726 ppm	30 cps
Mg 279.079 (ETA AQ-Radial-iFR)	164.165 ppm	6,905 cps
Si 288.158 (ETA AQ-Radial-iFR)	4.123 ppm	328 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.365 ppm	19 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	630.442 ppm	141,914 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.002 ppm	4 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-13 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ti 334.904 (ETA AQ-Axial-iFR)	0.014 ppm	31 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.006 ppm	48 cps
Y 360.073 (ETA AQ-Axial-iFR)	95.361 %	6,345 cps
Y 360.073 (ETA AQ-Radial-iFR)	86.227 %	1,277 cps
Y 377.433 (ETA AQ-Axial-iFR)	95.955 %	9,125 cps
Y 377.433 (ETA AQ-Radial-iFR)	86.658 %	1,821 cps
Sr 407.771 (ETA AQ-Radial-iFR)	12.311 ppm	319,166 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.009 ppm	108 cps
Na 589.592 (ETA AQ-Radial-iFR)	1,558.297 ppm	713,204 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.679 ppm	1,231 cps
K 766.490 (ETA AQ-Radial-iFR)	62.285 ppm	6,047 cps
Na 818.326 (ETA AQ-Radial-iFR)	1,693.052 ppm	19,046 cps

Label: 480-224437-D-3-A #: 28
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:31:41 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	23.147 ppm	848 cps
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.005 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.005 ppm	3 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.079 ppm	25 cps
P 213.618 (ETA AQ-Axial-iFR)	0.082 ppm	2 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.004 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.361 %	453 cps
Y 224.306 (ETA AQ-Radial-iFR)	93.263 %	123 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	99.281 %	470 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.056 ppm	121 cps
Fe 259.940 (ETA AQ-Axial-iFR)	1.391 ppm	1,626 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1.292 ppm	24 cps
Mg 279.079 (ETA AQ-Radial-iFR)	37.864 ppm	1,723 cps
Si 288.158 (ETA AQ-Radial-iFR)	6.441 ppm	553 cps
V 292.402 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.543 ppm	30 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	63.731 ppm	15,523 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.026 ppm	66 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.025 ppm	205 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.869 %	6,512 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.926 %	1,391 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.158 %	9,335 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.754 %	1,970 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.795 ppm	22,310 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.060 ppm	784 cps
Na 589.592 (ETA AQ-Radial-iFR)	14.918 ppm	7,391 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Li 670.784 (ETA AQ-Radial-iFR)	0.007 ppm	12 cps
K 766.490 (ETA AQ-Radial-iFR)	1.731 ppm	183 cps
Na 818.326 (ETA AQ-Radial-iFR)	15.068 ppm	183 cps

Label: 480-224437-D-4-A #: 29
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:33:34 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	980.823 ppm	34,012 cps
As 189.042 (ETA AQ-Axial-iFR)	0.010 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.007 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.006 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.016 ppm	5 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.156 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	-0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	6.338 ppm	1,764 cps
P 213.618 (ETA AQ-Axial-iFR)	0.013 ppm	-3 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	92.370 %	430 cps
Y 224.306 (ETA AQ-Radial-iFR)	85.026 %	112 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.001 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	-0.001 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	87.180 %	413 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	2 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.011 ppm	13 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-0.013 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	23.816 ppm	986 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.677 ppm	55 cps
V 292.402 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.019 ppm	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	476.242 ppm	105,534 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-12 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.004 ppm	-32 cps
Y 360.073 (ETA AQ-Axial-iFR)	95.202 %	6,334 cps
Y 360.073 (ETA AQ-Radial-iFR)	85.022 %	1,259 cps
Y 377.433 (ETA AQ-Axial-iFR)	95.716 %	9,102 cps
Y 377.433 (ETA AQ-Radial-iFR)	85.306 %	1,793 cps
Sr 407.771 (ETA AQ-Radial-iFR)	12.551 ppm	320,287 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.023 ppm	273 cps
Na 589.592 (ETA AQ-Radial-iFR)	3,097.547 ppm	1,395,658 cps
Li 670.784 (ETA AQ-Radial-iFR)	1.477 ppm	2,636 cps
K 766.490 (ETA AQ-Radial-iFR)	62.476 ppm	5,971 cps
Na 818.326 (ETA AQ-Radial-iFR)	3,899.675 ppm	43,188 cps

Label: 480-224437-D-5-A #: 30
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:35:27 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	457.028 ppm	16,200 cps
As 189.042 (ETA AQ-Axial-iFR)	0.008 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.002 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.013 ppm	12 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.949 ppm	271 cps
P 213.618 (ETA AQ-Axial-iFR)	0.008 ppm	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	94.415 %	440 cps
Y 224.306 (ETA AQ-Radial-iFR)	89.341 %	118 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.863 %	463 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.021 ppm	44 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.415 ppm	471 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.409 ppm	7 cps
Mg 279.079 (ETA AQ-Radial-iFR)	43.086 ppm	1,912 cps
Si 288.158 (ETA AQ-Radial-iFR)	5.832 ppm	488 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.106 ppm	6 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	586.141 ppm	139,165 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.004 ppm	6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.003 ppm	-22 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.371 %	6,479 cps
Y 360.073 (ETA AQ-Radial-iFR)	90.997 %	1,348 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.936 %	9,313 cps
Y 377.433 (ETA AQ-Radial-iFR)	91.400 %	1,921 cps
Sr 407.771 (ETA AQ-Radial-iFR)	18.038 ppm	493,170 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.007 ppm	82 cps
Na 589.592 (ETA AQ-Radial-iFR)	140.303 ppm	67,736 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.053 ppm	100 cps
K 766.490 (ETA AQ-Radial-iFR)	6.735 ppm	691 cps
Na 818.326 (ETA AQ-Radial-iFR)	140.095 ppm	1,662 cps

Label: 480-224437-D-5-A #: 31
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:37:21 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	95.940 ppm	3,498 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.016 ppm	11 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
B 208.959 (ETA AQ-Axial-iFR)	0.192 ppm	58 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.003 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.060 %	452 cps
Y 224.306 (ETA AQ-Radial-iFR)	93.851 %	124 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	100.348 %	475 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.005 ppm	9 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.082 ppm	97 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.086 ppm	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	8.617 ppm	393 cps
Si 288.158 (ETA AQ-Radial-iFR)	1.135 ppm	99 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.026 ppm	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	121.271 ppm	29,570 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-6 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.733 %	6,503 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.670 %	1,387 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.070 %	9,326 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.858 %	1,973 cps
Sr 407.771 (ETA AQ-Radial-iFR)	3.789 ppm	106,371 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.001 ppm	16 cps
Na 589.592 (ETA AQ-Radial-iFR)	27.500 ppm	13,637 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.011 ppm	20 cps
K 766.490 (ETA AQ-Radial-iFR)	1.339 ppm	142 cps
Na 818.326 (ETA AQ-Radial-iFR)	27.468 ppm	335 cps

Label: 480-224437-D-5-A #: 32
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:39:14 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	451.760 ppm	16,070 cps
As 189.042 (ETA AQ-Axial-iFR)	0.931 ppm	59 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.924 ppm	124 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.892 ppm	44 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.948 ppm	67 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.446 ppm	102 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.461 ppm	289 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.447 ppm	23 cps
B 208.959 (ETA AQ-Axial-iFR)	1.386 ppm	400 cps
P 213.618 (ETA AQ-Axial-iFR)	10.162 ppm	817 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.459 ppm	30 cps
Y 224.306 (ETA AQ-Axial-iFR)	94.744 %	441 cps
Y 224.306 (ETA AQ-Radial-iFR)	89.209 %	118 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.444 ppm	258 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.487 ppm	478 cps
In 230.606 (ETA AQ-Axial-iFR)	97.249 %	460 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.463 ppm	184 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Mn 257.610 (ETA AQ-Radial-iFR)	0.470 ppm	998 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.509 ppm	6,265 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.462 ppm	523 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.098 ppm	91 cps
Mg 279.079 (ETA AQ-Radial-iFR)	66.068 ppm	2,911 cps
Si 288.158 (ETA AQ-Radial-iFR)	6.679 ppm	558 cps
V 292.402 (ETA AQ-Axial-iFR)	0.461 ppm	778 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.857 ppm	252 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.470 ppm	5,204 cps
Ca 317.933 (ETA AQ-Radial-iFR)	599.626 ppm	141,406 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.494 ppm	1,094 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.044 ppm	110 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.481 ppm	1,346 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.487 ppm	3,995 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.913 %	6,515 cps
Y 360.073 (ETA AQ-Radial-iFR)	90.560 %	1,341 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.480 %	9,365 cps
Y 377.433 (ETA AQ-Radial-iFR)	90.783 %	1,908 cps
Sr 407.771 (ETA AQ-Radial-iFR)	18.259 ppm	495,860 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.943 ppm	11,752 cps
Na 589.592 (ETA AQ-Radial-iFR)	162.333 ppm	77,841 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.528 ppm	1,002 cps
K 766.490 (ETA AQ-Radial-iFR)	31.006 ppm	3,155 cps
Na 818.326 (ETA AQ-Radial-iFR)	163.235 ppm	1,924 cps

Label: CCV-8089741 #: 33
Analysis Type: QC Analysis started at: 10/18/2024 5:41:07 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	24.518 ppm	98.073 %
As 189.042 (ETA AQ-Axial-iFR)	0.949 ppm	94.946 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.967 ppm	96.678 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.922 ppm	92.223 %
Se 196.090 (ETA AQ-Axial-iFR)	0.948 ppm	94.778 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.949 ppm	94.882 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.016 ppm	101.616 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.953 ppm	95.282 %
B 208.959 (ETA AQ-Axial-iFR)	0.969 ppm	96.896 %
P 213.618 (ETA AQ-Axial-iFR)	24.843 ppm	99.370 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.969 ppm	96.869 %
Y 224.306 (ETA AQ-Axial-iFR)	101.687 %	
Y 224.306 (ETA AQ-Radial-iFR)	95.612 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.968 ppm	96.786 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.967 ppm	96.725 %
In 230.606 (ETA AQ-Axial-iFR)	98.671 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.992 ppm	99.182 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.969 ppm	96.864 %
Fe 259.940 (ETA AQ-Axial-iFR)	50.522 ppm	101.044 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.996 ppm	99.614 %
Fe 271.441 (ETA AQ-Radial-iFR)	49.429 ppm	98.857 %
Mg 279.079 (ETA AQ-Radial-iFR)	48.769 ppm	97.538 %
Si 288.158 (ETA AQ-Radial-iFR)	9.776 ppm	97.763 %
V 292.402 (ETA AQ-Axial-iFR)	0.988 ppm	98.799 %
Al 308.215 (ETA AQ-Radial-iFR)	48.156 ppm	96.312 %
Be 313.042 (ETA AQ-Radial-iFR)	0.989 ppm	98.880 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Ca 317.933 (ETA AQ-Radial-iFR)	49.683 ppm	99.366 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.953 ppm	95.292 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.976 ppm	97.628 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.982 ppm	98.236 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.981 ppm	98.075 %
Y 360.073 (ETA AQ-Axial-iFR)	103.252 %	
Y 360.073 (ETA AQ-Radial-iFR)	94.362 %	
Y 377.433 (ETA AQ-Axial-iFR)	102.651 %	
Y 377.433 (ETA AQ-Radial-iFR)	94.541 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.973 ppm	97.329 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.954 ppm	95.411 %
Na 589.592 (ETA AQ-Radial-iFR)	48.881 ppm	97.763 %
Li 670.784 (ETA AQ-Radial-iFR)	0.959 ppm	95.924 %
K 766.490 (ETA AQ-Radial-iFR)	48.776 ppm	97.552 %
Na 818.326 (ETA AQ-Radial-iFR)	48.575 ppm	97.149 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	939 cps
As 189.042 (ETA AQ-Axial-iFR)	65 cps
Sn 189.989 (ETA AQ-Axial-iFR)	132 cps
Tl 190.856 (ETA AQ-Axial-iFR)	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	72 cps
Mo 202.030 (ETA AQ-Axial-iFR)	231 cps
Zn 206.200 (ETA AQ-Axial-iFR)	662 cps
Sb 206.833 (ETA AQ-Axial-iFR)	51 cps
B 208.959 (ETA AQ-Axial-iFR)	305 cps
P 213.618 (ETA AQ-Axial-iFR)	2,150 cps
Pb 220.353 (ETA AQ-Axial-iFR)	64 cps
Y 224.306 (ETA AQ-Axial-iFR)	474 cps
Y 224.306 (ETA AQ-Radial-iFR)	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	573 cps
Cd 228.802 (ETA AQ-Axial-iFR)	1,015 cps
In 230.606 (ETA AQ-Axial-iFR)	467 cps
Ni 231.604 (ETA AQ-Axial-iFR)	411 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,143 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61,654 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,190 cps
Fe 271.441 (ETA AQ-Radial-iFR)	917 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,237 cps
Si 288.158 (ETA AQ-Radial-iFR)	850 cps
V 292.402 (ETA AQ-Axial-iFR)	1,761 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,593 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,390 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,204 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,198 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,912 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,908 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,488 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,870 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,397 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,762 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,987 cps
Sr 407.771 (ETA AQ-Radial-iFR)	27,522 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,743 cps
Na 589.592 (ETA AQ-Radial-iFR)	24,412 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,897 cps
K 766.490 (ETA AQ-Radial-iFR)	5,167 cps
Na 818.326 (ETA AQ-Radial-iFR)	596 cps

Basic Sample Report
10/20/2024 8:20:01 AM

QTEGRA

Label: CCB-8089739 #: 34
Analysis Type: QC Analysis started at: 10/18/2024 5:43:02 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.039 ppm	3.942 %
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	0.199 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	0.029 %
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-0.314 %
Se 196.090 (ETA AQ-Axial-iFR)	-0.002 ppm	-0.240 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	0.063 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0.063 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0.345 %
B 208.959 (ETA AQ-Axial-iFR)	0.008 ppm	0.821 %
P 213.618 (ETA AQ-Axial-iFR)	0.000 ppm	0.049 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	0.022 %
Y 224.306 (ETA AQ-Axial-iFR)	98.967 %	
Y 224.306 (ETA AQ-Radial-iFR)	96.773 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-0.034 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	0.018 %
In 230.606 (ETA AQ-Axial-iFR)	97.398 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0.037 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0.039 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.015 ppm	1.466 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.041 %
Fe 271.441 (ETA AQ-Radial-iFR)	-0.011 ppm	-1.081 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.014 ppm	1.360 %
Si 288.158 (ETA AQ-Radial-iFR)	0.001 ppm	0.129 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0.014 %
Al 308.215 (ETA AQ-Radial-iFR)	-0.002 ppm	-0.190 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.020 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.009 ppm	0.873 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0.021 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-0.008 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	0.043 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	0.049 %
Y 360.073 (ETA AQ-Axial-iFR)	97.248 %	
Y 360.073 (ETA AQ-Radial-iFR)	95.311 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.307 %	
Y 377.433 (ETA AQ-Radial-iFR)	95.506 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.017 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.027 %
Na 589.592 (ETA AQ-Radial-iFR)	0.025 ppm	2.504 %
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	0.108 %
K 766.490 (ETA AQ-Radial-iFR)	0.041 ppm	4.126 %
Na 818.326 (ETA AQ-Radial-iFR)	0.159 ppm	15.925 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	4 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0 cps

Analyte (Measure Mode)	Raw Intensity average
B 208.959 (ETA AQ-Axial-iFR)	4 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	461 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	3 cps
In 230.606 (ETA AQ-Axial-iFR)	461 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	19 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	1 cps
Si 288.158 (ETA AQ-Radial-iFR)	3 cps
V 292.402 (ETA AQ-Axial-iFR)	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	4 cps
Ca 317.933 (ETA AQ-Radial-iFR)	6 cps
Cu 327.396 (ETA AQ-Axial-iFR)	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	5 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,471 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,412 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,254 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,007 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-3 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1 cps
Na 589.592 (ETA AQ-Radial-iFR)	17 cps
Li 670.784 (ETA AQ-Radial-iFR)	1 cps
K 766.490 (ETA AQ-Radial-iFR)	6 cps
Na 818.326 (ETA AQ-Radial-iFR)	2 cps

Label: CCVL-8089740 #: 35
Analysis Type: QC Analysis started at: 10/18/2024 5:44:56 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.225 ppm	112.685 %
As 189.042 (ETA AQ-Axial-iFR)	0.018 ppm	118.232 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.007 ppm	73.694 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.012 ppm	60.206 %
Se 196.090 (ETA AQ-Axial-iFR)	0.018 ppm	73.862 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.010 ppm	100.633 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.012 ppm	118.768 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.022 ppm	109.421 %
B 208.959 (ETA AQ-Axial-iFR)	0.024 ppm	118.728 %
P 213.618 (ETA AQ-Axial-iFR)	-0.003 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.010 ppm	101.484 %
Y 224.306 (ETA AQ-Axial-iFR)	99.197 %	
Y 224.306 (ETA AQ-Radial-iFR)	97.590 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	93.812 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	106.566 %
In 230.606 (ETA AQ-Axial-iFR)	97.653 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	99.830 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	114.297 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	102.512 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	98.591 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.054 ppm	108.371 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.206 ppm	102.997 %
Si 288.158 (ETA AQ-Radial-iFR)	0.468 ppm	93.609 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	93.893 %
Al 308.215 (ETA AQ-Radial-iFR)	0.188 ppm	93.893 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	100.333 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.478 ppm	95.637 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.009 ppm	92.747 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.006 ppm	92.804 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	96.329 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	98.567 %
Y 360.073 (ETA AQ-Axial-iFR)	97.705 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.466 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.637 %	
Y 377.433 (ETA AQ-Radial-iFR)	96.699 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	96.332 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	97.108 %
Na 589.592 (ETA AQ-Radial-iFR)	0.987 ppm	98.746 %
Li 670.784 (ETA AQ-Radial-iFR)	0.029 ppm	97.464 %
K 766.490 (ETA AQ-Radial-iFR)	0.504 ppm	100.761 %
Na 818.326 (ETA AQ-Radial-iFR)	0.989 ppm	98.943 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	11 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	4 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	9 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	462 cps
Y 224.306 (ETA AQ-Radial-iFR)	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	5 cps
In 230.606 (ETA AQ-Axial-iFR)	462 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	7 cps
Fe 259.940 (ETA AQ-Axial-iFR)	62 cps
Cr 267.716 (ETA AQ-Axial-iFR)	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	10 cps
Si 288.158 (ETA AQ-Radial-iFR)	44 cps
V 292.402 (ETA AQ-Axial-iFR)	8 cps
Al 308.215 (ETA AQ-Radial-iFR)	11 cps
Be 313.042 (ETA AQ-Radial-iFR)	26 cps
Ca 317.933 (ETA AQ-Radial-iFR)	124 cps
Cu 327.396 (ETA AQ-Axial-iFR)	21 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2 cps
Ti 334.904 (ETA AQ-Axial-iFR)	7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	42 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,501 cps

Analyte (Measure Mode)	Raw Intensity average
Y 360.073 (ETA AQ-Radial-iFR)	1,429 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,285 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,032 cps
Sr 407.771 (ETA AQ-Radial-iFR)	131 cps
Ba 455.403 (ETA AQ-Radial-iFR)	24 cps
Na 589.592 (ETA AQ-Radial-iFR)	509 cps
Li 670.784 (ETA AQ-Radial-iFR)	58 cps
K 766.490 (ETA AQ-Radial-iFR)	56 cps
Na 818.326 (ETA AQ-Radial-iFR)	12 cps

Label: 480-224437-D-5-B MS #: 36
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:46:50 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	453.688 ppm	16,368 cps
As 189.042 (ETA AQ-Axial-iFR)	1.002 ppm	65 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1.004 ppm	135 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.959 ppm	47 cps
Se 196.090 (ETA AQ-Axial-iFR)	1.018 ppm	73 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.479 ppm	111 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.516 ppm	326 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.493 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	1.398 ppm	409 cps
P 213.618 (ETA AQ-Axial-iFR)	10.328 ppm	842 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.498 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.094 %	448 cps
Y 224.306 (ETA AQ-Radial-iFR)	90.500 %	120 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.482 ppm	279 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.519 ppm	517 cps
In 230.606 (ETA AQ-Axial-iFR)	97.049 %	459 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.496 ppm	199 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.509 ppm	1,098 cps
Fe 259.940 (ETA AQ-Axial-iFR)	6.115 ppm	7,053 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.495 ppm	566 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.682 ppm	103 cps
Mg 279.079 (ETA AQ-Radial-iFR)	68.378 ppm	3,061 cps
Si 288.158 (ETA AQ-Radial-iFR)	7.873 ppm	667 cps
V 292.402 (ETA AQ-Axial-iFR)	0.497 ppm	846 cps
Al 308.215 (ETA AQ-Radial-iFR)	5.577 ppm	294 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.501 ppm	5,626 cps
Ca 317.933 (ETA AQ-Radial-iFR)	599.758 ppm	143,695 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.527 ppm	1,177 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.052 ppm	134 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.530 ppm	1,498 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.536 ppm	4,437 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.805 %	6,574 cps
Y 360.073 (ETA AQ-Radial-iFR)	91.614 %	1,357 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.483 %	9,461 cps
Y 377.433 (ETA AQ-Radial-iFR)	92.233 %	1,938 cps
Sr 407.771 (ETA AQ-Radial-iFR)	18.377 ppm	507,024 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.014 ppm	12,823 cps
Na 589.592 (ETA AQ-Radial-iFR)	157.132 ppm	76,552 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.558 ppm	1,076 cps
K 766.490 (ETA AQ-Radial-iFR)	32.089 ppm	3,317 cps
Na 818.326 (ETA AQ-Radial-iFR)	156.724 ppm	1,876 cps

Label: 480-224437-D-5-C MSD #: 37
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:48:44 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	456.814 ppm	16,392 cps
As 189.042 (ETA AQ-Axial-iFR)	0.989 ppm	64 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.996 ppm	133 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.949 ppm	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	1.011 ppm	72 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.472 ppm	109 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.542 ppm	341 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.491 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	1.434 ppm	417 cps
P 213.618 (ETA AQ-Axial-iFR)	10.284 ppm	834 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.488 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	95.575 %	445 cps
Y 224.306 (ETA AQ-Radial-iFR)	90.844 %	120 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.475 ppm	274 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.515 ppm	510 cps
In 230.606 (ETA AQ-Axial-iFR)	96.767 %	458 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.490 ppm	195 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.510 ppm	1,097 cps
Fe 259.940 (ETA AQ-Axial-iFR)	6.369 ppm	7,306 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.488 ppm	556 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.990 ppm	109 cps
Mg 279.079 (ETA AQ-Radial-iFR)	68.559 ppm	3,061 cps
Si 288.158 (ETA AQ-Radial-iFR)	8.449 ppm	714 cps
V 292.402 (ETA AQ-Axial-iFR)	0.490 ppm	831 cps
Al 308.215 (ETA AQ-Radial-iFR)	5.806 ppm	305 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.494 ppm	5,543 cps
Ca 317.933 (ETA AQ-Radial-iFR)	600.648 ppm	143,545 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.523 ppm	1,160 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.052 ppm	132 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.529 ppm	1,487 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.536 ppm	4,417 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.314 %	6,541 cps
Y 360.073 (ETA AQ-Radial-iFR)	91.525 %	1,355 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.679 %	9,384 cps
Y 377.433 (ETA AQ-Radial-iFR)	92.000 %	1,933 cps
Sr 407.771 (ETA AQ-Radial-iFR)	18.391 ppm	506,132 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.001 ppm	12,698 cps
Na 589.592 (ETA AQ-Radial-iFR)	165.455 ppm	80,401 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.555 ppm	1,067 cps
K 766.490 (ETA AQ-Radial-iFR)	32.156 ppm	3,315 cps
Na 818.326 (ETA AQ-Radial-iFR)	165.039 ppm	1,971 cps

Label: 480-224437-D-6-A #: 38
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:50:37 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	41.845 ppm	1,551 cps
As 189.042 (ETA AQ-Axial-iFR)	0.013 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.002 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.004 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.093 ppm	29 cps
P 213.618 (ETA AQ-Axial-iFR)	0.004 ppm	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.591 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.784 %	127 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	99.010 %	469 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.125 ppm	279 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.129 ppm	154 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.155 ppm	3 cps
Mg 279.079 (ETA AQ-Radial-iFR)	60.367 ppm	2,806 cps
Si 288.158 (ETA AQ-Radial-iFR)	8.340 ppm	730 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.092 ppm	6 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	107.497 ppm	26,746 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.001 ppm	11 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.094 %	6,593 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.395 %	1,413 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.273 %	9,441 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.771 %	2,013 cps
Sr 407.771 (ETA AQ-Radial-iFR)	7.467 ppm	213,884 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.081 ppm	1,088 cps
Na 589.592 (ETA AQ-Radial-iFR)	17.554 ppm	8,884 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.020 ppm	39 cps
K 766.490 (ETA AQ-Radial-iFR)	2.450 ppm	265 cps
Na 818.326 (ETA AQ-Radial-iFR)	17.444 ppm	217 cps

Label: 480-224437-D-7-A #: 39
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:52:30 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	82.802 ppm	3,067 cps
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.006 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.003 ppm	3 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.197 ppm	60 cps
P 213.618 (ETA AQ-Axial-iFR)	0.040 ppm	-1 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 224.306 (ETA AQ-Axial-iFR)	98.581 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.305 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	99.531 %	471 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.092 ppm	202 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.247 ppm	294 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.232 ppm	4 cps
Mg 279.079 (ETA AQ-Radial-iFR)	39.523 ppm	1,816 cps
Si 288.158 (ETA AQ-Radial-iFR)	7.765 ppm	672 cps
V 292.402 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.090 ppm	6 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	166.495 ppm	40,945 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.010 ppm	23 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.003 ppm	28 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.591 %	6,626 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.540 %	1,400 cps
Y 377.433 (ETA AQ-Axial-iFR)	100.030 %	9,513 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.673 %	1,990 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.891 ppm	53,579 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.144 ppm	1,900 cps
Na 589.592 (ETA AQ-Radial-iFR)	47.331 ppm	23,671 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.004 ppm	7 cps
K 766.490 (ETA AQ-Radial-iFR)	27.259 ppm	2,892 cps
Na 818.326 (ETA AQ-Radial-iFR)	47.152 ppm	579 cps

Label: 480-224437-D-8-A #: 40
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:54:23 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	412.831 ppm	14,914 cps
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.566 ppm	165 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.002 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.224 %	448 cps
Y 224.306 (ETA AQ-Radial-iFR)	91.541 %	121 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.897 %	463 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.024 ppm	51 cps
Fe 259.940 (ETA AQ-Axial-iFR)	1.087 ppm	1,257 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Fe 271.441 (ETA AQ-Radial-iFR)	1.038 ppm	19 cps
Mg 279.079 (ETA AQ-Radial-iFR)	44.153 ppm	1,994 cps
Si 288.158 (ETA AQ-Radial-iFR)	4.627 ppm	395 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.065 ppm	4 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	3 cps
Ca 317.933 (ETA AQ-Radial-iFR)	492.060 ppm	118,947 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.003 ppm	-28 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.341 %	6,543 cps
Y 360.073 (ETA AQ-Radial-iFR)	92.537 %	1,370 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.955 %	9,410 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.058 %	1,956 cps
Sr 407.771 (ETA AQ-Radial-iFR)	14.187 ppm	394,929 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.008 ppm	101 cps
Na 589.592 (ETA AQ-Radial-iFR)	41.108 ppm	20,209 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.035 ppm	67 cps
K 766.490 (ETA AQ-Radial-iFR)	7.817 ppm	816 cps
Na 818.326 (ETA AQ-Radial-iFR)	40.353 ppm	487 cps

Label: 480-224437-D-9-A #: 41
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:56:17 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	77.418 ppm	2,866 cps
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.005 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.004 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.183 ppm	56 cps
P 213.618 (ETA AQ-Axial-iFR)	0.035 ppm	-2 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.524 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.611 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	99.737 %	472 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.098 ppm	218 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.211 ppm	250 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.203 ppm	4 cps
Mg 279.079 (ETA AQ-Radial-iFR)	37.849 ppm	1,748 cps
Si 288.158 (ETA AQ-Radial-iFR)	7.255 ppm	631 cps
V 292.402 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.052 ppm	4 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	157.756 ppm	38,983 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.009 ppm	20 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ti 334.904 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.001 ppm	8 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.663 %	6,631 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.845 %	1,405 cps
Y 377.433 (ETA AQ-Axial-iFR)	100.094 %	9,519 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.124 %	1,999 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.751 ppm	49,841 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.136 ppm	1,791 cps
Na 589.592 (ETA AQ-Radial-iFR)	44.004 ppm	22,112 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.005 ppm	8 cps
K 766.490 (ETA AQ-Radial-iFR)	24.923 ppm	2,657 cps
Na 818.326 (ETA AQ-Radial-iFR)	43.673 ppm	539 cps

Label: rinse #: 42
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 5:58:10 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.050 ppm	4 cps
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.005 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.003 ppm	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.003 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.737 %	460 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.703 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	96.902 %	459 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.011 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.007 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.003 ppm	3 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.003 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	1 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.004 ppm	5 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.137 %	6,463 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.652 %	1,417 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.107 %	9,235 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.434 %	2,006 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-6 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
Na 589.592 (ETA AQ-Radial-iFR)	0.016 ppm	12 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
K 766.490 (ETA AQ-Radial-iFR)	0.025 ppm	4 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.010 ppm	0 cps

Label: MB 480-728562/1-A #: 43
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:00:04 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.015 ppm	3 cps
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.003 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.006 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.003 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.004 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	99.354 %	463 cps
Y 224.306 (ETA AQ-Radial-iFR)	97.982 %	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	-0.001 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.346 %	461 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.017 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.004 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	-0.007 ppm	2 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.008 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.003 ppm	5 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.740 %	6,503 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.654 %	1,431 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.762 %	9,297 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.861 %	2,036 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-8 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
Na 589.592 (ETA AQ-Radial-iFR)	0.005 ppm	7 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
K 766.490 (ETA AQ-Radial-iFR)	0.027 ppm	5 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.160 ppm	2 cps

Label: LCS 480-728562/2-A #: 44
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:01:57 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	4.981 ppm	188 cps
As 189.042 (ETA AQ-Axial-iFR)	0.966 ppm	64 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.990 ppm	137 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.897 ppm	45 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.956 ppm	71 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.472 ppm	113 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.546 ppm	341 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.476 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	0.484 ppm	150 cps
P 213.618 (ETA AQ-Axial-iFR)	9.971 ppm	840 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.482 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	99.330 %	463 cps
Y 224.306 (ETA AQ-Radial-iFR)	97.064 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.481 ppm	286 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.497 ppm	512 cps
In 230.606 (ETA AQ-Axial-iFR)	99.746 %	472 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.513 ppm	205 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.488 ppm	1,091 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.407 ppm	6,447 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.511 ppm	586 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.126 ppm	96 cps
Mg 279.079 (ETA AQ-Radial-iFR)	24.239 ppm	1,124 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.957 ppm	89 cps
V 292.402 (ETA AQ-Axial-iFR)	0.497 ppm	849 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.852 ppm	265 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.504 ppm	5,869 cps
Ca 317.933 (ETA AQ-Radial-iFR)	25.176 ppm	6,252 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.477 ppm	1,063 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.049 ppm	126 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.516 ppm	1,462 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.525 ppm	4,358 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.020 %	6,588 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.621 %	1,416 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.135 %	9,428 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.541 %	2,008 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.501 ppm	14,300 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.956 ppm	12,958 cps
Na 589.592 (ETA AQ-Radial-iFR)	24.611 ppm	12,424 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.479 ppm	957 cps
K 766.490 (ETA AQ-Radial-iFR)	24.273 ppm	2,599 cps
Na 818.326 (ETA AQ-Radial-iFR)	24.595 ppm	305 cps

Label: CCV-8089741 #: 45
Analysis Type: QC Analysis started at: 10/18/2024 6:03:51 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	24.581 ppm	98.326 %
As 189.042 (ETA AQ-Axial-iFR)	0.948 ppm	94.764 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.969 ppm	96.905 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.930 ppm	92.975 %
Se 196.090 (ETA AQ-Axial-iFR)	0.947 ppm	94.691 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.961 ppm	96.072 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.017 ppm	101.673 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.963 ppm	96.255 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
B 208.959 (ETA AQ-Axial-iFR)	0.970 ppm	97.037 %
P 213.618 (ETA AQ-Axial-iFR)	25.048 ppm	100.191 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.974 ppm	97.374 %
Y 224.306 (ETA AQ-Axial-iFR)	101.366 %	
Y 224.306 (ETA AQ-Radial-iFR)	95.315 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.976 ppm	97.558 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.978 ppm	97.844 %
In 230.606 (ETA AQ-Axial-iFR)	98.206 %	
Ni 231.604 (ETA AQ-Axial-iFR)	1.002 ppm	100.190 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.979 ppm	97.908 %
Fe 259.940 (ETA AQ-Axial-iFR)	51.026 ppm	102.051 %
Cr 267.716 (ETA AQ-Axial-iFR)	1.003 ppm	100.278 %
Fe 271.441 (ETA AQ-Radial-iFR)	50.122 ppm	100.244 %
Mg 279.079 (ETA AQ-Radial-iFR)	49.227 ppm	98.454 %
Si 288.158 (ETA AQ-Radial-iFR)	9.837 ppm	98.366 %
V 292.402 (ETA AQ-Axial-iFR)	0.995 ppm	99.482 %
Al 308.215 (ETA AQ-Radial-iFR)	48.586 ppm	97.172 %
Be 313.042 (ETA AQ-Radial-iFR)	0.994 ppm	99.414 %
Ca 317.933 (ETA AQ-Radial-iFR)	50.188 ppm	100.376 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.960 ppm	96.010 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.983 ppm	98.292 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.991 ppm	99.137 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.988 ppm	98.808 %
Y 360.073 (ETA AQ-Axial-iFR)	103.532 %	
Y 360.073 (ETA AQ-Radial-iFR)	94.232 %	
Y 377.433 (ETA AQ-Axial-iFR)	102.599 %	
Y 377.433 (ETA AQ-Radial-iFR)	94.117 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.989 ppm	98.909 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.965 ppm	96.474 %
Na 589.592 (ETA AQ-Radial-iFR)	49.353 ppm	98.705 %
Li 670.784 (ETA AQ-Radial-iFR)	0.975 ppm	97.492 %
K 766.490 (ETA AQ-Radial-iFR)	49.163 ppm	98.326 %
Na 818.326 (ETA AQ-Radial-iFR)	49.205 ppm	98.410 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	938 cps
As 189.042 (ETA AQ-Axial-iFR)	64 cps
Sn 189.989 (ETA AQ-Axial-iFR)	132 cps
Tl 190.856 (ETA AQ-Axial-iFR)	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	72 cps
Mo 202.030 (ETA AQ-Axial-iFR)	233 cps
Zn 206.200 (ETA AQ-Axial-iFR)	664 cps
Sb 206.833 (ETA AQ-Axial-iFR)	52 cps
B 208.959 (ETA AQ-Axial-iFR)	305 cps
P 213.618 (ETA AQ-Axial-iFR)	2,161 cps
Pb 220.353 (ETA AQ-Axial-iFR)	64 cps
Y 224.306 (ETA AQ-Axial-iFR)	472 cps
Y 224.306 (ETA AQ-Radial-iFR)	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	574 cps
Cd 228.802 (ETA AQ-Axial-iFR)	1,024 cps
In 230.606 (ETA AQ-Axial-iFR)	465 cps
Ni 231.604 (ETA AQ-Axial-iFR)	414 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,156 cps
Fe 259.940 (ETA AQ-Axial-iFR)	62,069 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,202 cps
Fe 271.441 (ETA AQ-Radial-iFR)	925 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,248 cps
Si 288.158 (ETA AQ-Radial-iFR)	852 cps

Basic Sample Report
10/20/2024 8:20:01 AM

Analyte (Measure Mode)	Raw Intensity average
V 292.402 (ETA AQ-Axial-iFR)	1,778 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,605 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,401 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,273 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,214 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,940 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,942 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,575 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,889 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,396 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,757 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,978 cps
Sr 407.771 (ETA AQ-Radial-iFR)	27,844 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,844 cps
Na 589.592 (ETA AQ-Radial-iFR)	24,538 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,919 cps
K 766.490 (ETA AQ-Radial-iFR)	5,185 cps
Na 818.326 (ETA AQ-Radial-iFR)	601 cps

Label: CCB-8089739 #: 46
Analysis Type: QC Analysis started at: 10/18/2024 6:05:46 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.028 ppm	2.758 %
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	0.212 %
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.070 %
Tl 190.856 (ETA AQ-Axial-iFR)	-0.005 ppm	-0.531 %
Se 196.090 (ETA AQ-Axial-iFR)	-0.004 ppm	-0.363 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	0.095 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0.077 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0.234 %
B 208.959 (ETA AQ-Axial-iFR)	0.005 ppm	0.524 %
P 213.618 (ETA AQ-Axial-iFR)	0.002 ppm	0.212 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.005 ppm	0.477 %
Y 224.306 (ETA AQ-Axial-iFR)	98.960 %	
Y 224.306 (ETA AQ-Radial-iFR)	97.831 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-0.009 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	0.027 %
In 230.606 (ETA AQ-Axial-iFR)	97.374 %	
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.069 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0.030 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.009 ppm	0.901 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.037 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.012 ppm	1.214 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.013 ppm	1.301 %
Si 288.158 (ETA AQ-Radial-iFR)	0.008 ppm	0.820 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0.050 %
Al 308.215 (ETA AQ-Radial-iFR)	-0.004 ppm	-0.356 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.002 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.003 ppm	0.327 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0.016 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-0.038 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	0.027 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	0.045 %
Y 360.073 (ETA AQ-Axial-iFR)	97.526 %	

Basic Sample Report
10/20/2024 8:20:01 AM

QTEGRA

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Y 360.073 (ETA AQ-Radial-iFR)	96.859 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.329 %	
Y 377.433 (ETA AQ-Radial-iFR)	96.660 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.011 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.009 %
Na 589.592 (ETA AQ-Radial-iFR)	0.012 ppm	1.227 %
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	0.008 %
K 766.490 (ETA AQ-Radial-iFR)	0.019 ppm	1.885 %
Na 818.326 (ETA AQ-Radial-iFR)	0.180 ppm	18.040 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	4 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0 cps
B 208.959 (ETA AQ-Axial-iFR)	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	461 cps
Y 224.306 (ETA AQ-Radial-iFR)	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	3 cps
In 230.606 (ETA AQ-Axial-iFR)	461 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	12 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	1 cps
Si 288.158 (ETA AQ-Radial-iFR)	3 cps
V 292.402 (ETA AQ-Axial-iFR)	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	5 cps
Cu 327.396 (ETA AQ-Axial-iFR)	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	5 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,489 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,434 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,256 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,031 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-5 cps
Ba 455.403 (ETA AQ-Radial-iFR)	-1 cps
Na 589.592 (ETA AQ-Radial-iFR)	11 cps
Li 670.784 (ETA AQ-Radial-iFR)	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	4 cps
Na 818.326 (ETA AQ-Radial-iFR)	2 cps

Label: CCVL-8089740 #: 47
Analysis Type: QC Analysis started at: 10/18/2024 6:07:39 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.221 ppm	110.532 %
As 189.042 (ETA AQ-Axial-iFR)	0.012 ppm	79.344 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.009 ppm	91.288 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.013 ppm	65.313 %
Se 196.090 (ETA AQ-Axial-iFR)	0.024 ppm	96.637 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.010 ppm	99.509 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.012 ppm	115.645 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.018 ppm	92.268 %
B 208.959 (ETA AQ-Axial-iFR)	0.021 ppm	106.352 %
P 213.618 (ETA AQ-Axial-iFR)	-0.004 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.011 ppm	107.066 %
Y 224.306 (ETA AQ-Axial-iFR)	99.041 %	
Y 224.306 (ETA AQ-Radial-iFR)	97.449 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	107.545 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	94.962 %
In 230.606 (ETA AQ-Axial-iFR)	97.306 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	97.890 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	106.294 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	101.382 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	104.896 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.049 ppm	98.440 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.191 ppm	95.478 %
Si 288.158 (ETA AQ-Radial-iFR)	0.474 ppm	94.726 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	95.558 %
Al 308.215 (ETA AQ-Radial-iFR)	0.181 ppm	90.708 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	98.373 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.486 ppm	97.171 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.009 ppm	91.091 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.005 ppm	91.064 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	100.802 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	98.992 %
Y 360.073 (ETA AQ-Axial-iFR)	97.583 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.336 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.511 %	
Y 377.433 (ETA AQ-Radial-iFR)	95.857 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	96.591 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	97.248 %
Na 589.592 (ETA AQ-Radial-iFR)	0.987 ppm	98.702 %
Li 670.784 (ETA AQ-Radial-iFR)	0.030 ppm	99.034 %
K 766.490 (ETA AQ-Radial-iFR)	0.505 ppm	100.988 %
Na 818.326 (ETA AQ-Radial-iFR)	0.955 ppm	95.484 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	11 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	4 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	461 cps
Y 224.306 (ETA AQ-Radial-iFR)	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	0 cps

Analyte (Measure Mode)	Raw Intensity average
Cd 228.802 (ETA AQ-Axial-iFR)	4 cps
In 230.606 (ETA AQ-Axial-iFR)	460 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	6 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61 cps
Cr 267.716 (ETA AQ-Axial-iFR)	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	44 cps
V 292.402 (ETA AQ-Axial-iFR)	8 cps
Al 308.215 (ETA AQ-Radial-iFR)	11 cps
Be 313.042 (ETA AQ-Radial-iFR)	25 cps
Ca 317.933 (ETA AQ-Radial-iFR)	125 cps
Cu 327.396 (ETA AQ-Axial-iFR)	20 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2 cps
Ti 334.904 (ETA AQ-Axial-iFR)	8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	42 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,493 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,427 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,273 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,015 cps
Sr 407.771 (ETA AQ-Radial-iFR)	131 cps
Ba 455.403 (ETA AQ-Radial-iFR)	24 cps
Na 589.592 (ETA AQ-Radial-iFR)	504 cps
Li 670.784 (ETA AQ-Radial-iFR)	58 cps
K 766.490 (ETA AQ-Radial-iFR)	56 cps
Na 818.326 (ETA AQ-Radial-iFR)	12 cps

Label: 480-224395-E-1-A #: 48
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:09:34 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	6.843 ppm	256 cps
As 189.042 (ETA AQ-Axial-iFR)	0.022 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.004 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.004 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.004 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.038 ppm	13 cps
P 213.618 (ETA AQ-Axial-iFR)	0.037 ppm	-2 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.576 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.628 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	-0.001 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.790 %	467 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.050 ppm	111 cps
Fe 259.940 (ETA AQ-Axial-iFR)	1.580 ppm	1,870 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1.466 ppm	27 cps
Mg 279.079 (ETA AQ-Radial-iFR)	31.517 ppm	1,457 cps
Si 288.158 (ETA AQ-Radial-iFR)	7.090 ppm	618 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.011 ppm	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	72.346 ppm	17,906 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-6 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.918 %	6,582 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.212 %	1,410 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.905 %	9,406 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.264 %	2,002 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.280 ppm	7,992 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.040 ppm	526 cps
Na 589.592 (ETA AQ-Radial-iFR)	6.846 ppm	3,449 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.002 ppm	4 cps
K 766.490 (ETA AQ-Radial-iFR)	1.097 ppm	119 cps
Na 818.326 (ETA AQ-Radial-iFR)	6.725 ppm	83 cps

Label: 480-224395-E-1-A #: 49
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:11:27 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	1.372 ppm	53 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.006 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.002 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.014 ppm	8 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.010 ppm	5 cps
P 213.618 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.004 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.465 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.883 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.115 %	464 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.010 ppm	22 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.312 ppm	370 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.303 ppm	5 cps
Mg 279.079 (ETA AQ-Radial-iFR)	6.254 ppm	291 cps
Si 288.158 (ETA AQ-Radial-iFR)	1.411 ppm	126 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.007 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	14.613 ppm	3,640 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-3 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.732 %	6,503 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 360.073 (ETA AQ-Radial-iFR)	96.044 %	1,422 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.656 %	9,287 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.812 %	2,014 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.056 ppm	1,595 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.008 ppm	104 cps
Na 589.592 (ETA AQ-Radial-iFR)	1.343 ppm	684 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	0.223 ppm	26 cps
Na 818.326 (ETA AQ-Radial-iFR)	1.483 ppm	18 cps

Label: 480-224395-E-1-A #: 50
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:13:21 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	11.996 ppm	442 cps
As 189.042 (ETA AQ-Axial-iFR)	0.950 ppm	62 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.947 ppm	129 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.875 ppm	43 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.921 ppm	67 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.456 ppm	107 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.489 ppm	304 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.441 ppm	23 cps
B 208.959 (ETA AQ-Axial-iFR)	0.493 ppm	150 cps
P 213.618 (ETA AQ-Axial-iFR)	10.179 ppm	843 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.464 ppm	31 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.611 %	455 cps
Y 224.306 (ETA AQ-Radial-iFR)	93.959 %	124 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.455 ppm	267 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.481 ppm	488 cps
In 230.606 (ETA AQ-Axial-iFR)	98.443 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.484 ppm	192 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.510 ppm	1,119 cps
Fe 259.940 (ETA AQ-Axial-iFR)	6.683 ppm	7,829 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.482 ppm	550 cps
Fe 271.441 (ETA AQ-Radial-iFR)	6.318 ppm	117 cps
Mg 279.079 (ETA AQ-Radial-iFR)	54.735 ppm	2,492 cps
Si 288.158 (ETA AQ-Radial-iFR)	7.922 ppm	682 cps
V 292.402 (ETA AQ-Axial-iFR)	0.472 ppm	803 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.693 ppm	252 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.484 ppm	5,537 cps
Ca 317.933 (ETA AQ-Radial-iFR)	95.086 ppm	23,170 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.467 ppm	1,032 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.045 ppm	112 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.490 ppm	1,380 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.498 ppm	4,117 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.541 %	6,557 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.714 %	1,388 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.358 %	9,354 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.793 %	1,971 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.756 ppm	21,210 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.972 ppm	12,762 cps
Na 589.592 (ETA AQ-Radial-iFR)	30.728 ppm	15,227 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.472 ppm	926 cps
K 766.490 (ETA AQ-Radial-iFR)	24.810 ppm	2,608 cps
Na 818.326 (ETA AQ-Radial-iFR)	30.523 ppm	371 cps

Label: 480-224395-E-1-B MS #: 51
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:15:14 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	12.121 ppm	450 cps
As 189.042 (ETA AQ-Axial-iFR)	1.000 ppm	66 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1.005 ppm	138 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.930 ppm	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.971 ppm	71 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.483 ppm	114 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.536 ppm	335 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.487 ppm	26 cps
B 208.959 (ETA AQ-Axial-iFR)	0.534 ppm	163 cps
P 213.618 (ETA AQ-Axial-iFR)	10.151 ppm	847 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.489 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.306 %	458 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.391 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.483 ppm	285 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.510 ppm	520 cps
In 230.606 (ETA AQ-Axial-iFR)	98.914 %	468 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.510 ppm	204 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.541 ppm	1,195 cps
Fe 259.940 (ETA AQ-Axial-iFR)	6.959 ppm	8,211 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.511 ppm	585 cps
Fe 271.441 (ETA AQ-Radial-iFR)	6.631 ppm	123 cps
Mg 279.079 (ETA AQ-Radial-iFR)	57.288 ppm	2,627 cps
Si 288.158 (ETA AQ-Radial-iFR)	8.261 ppm	717 cps
V 292.402 (ETA AQ-Axial-iFR)	0.503 ppm	859 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.914 ppm	265 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.513 ppm	5,904 cps
Ca 317.933 (ETA AQ-Radial-iFR)	98.755 ppm	24,237 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.497 ppm	1,108 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.051 ppm	131 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.521 ppm	1,475 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.531 ppm	4,404 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.022 %	6,589 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.432 %	1,399 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.234 %	9,437 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.469 %	1,985 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.794 ppm	22,439 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.037 ppm	13,679 cps
Na 589.592 (ETA AQ-Radial-iFR)	32.264 ppm	16,103 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.499 ppm	985 cps
K 766.490 (ETA AQ-Radial-iFR)	26.002 ppm	2,753 cps
Na 818.326 (ETA AQ-Radial-iFR)	31.934 ppm	391 cps

Label: 480-224395-E-1-C MSD #: 52
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:17:08 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	12.178 ppm	450 cps
As 189.042 (ETA AQ-Axial-iFR)	1.005 ppm	66 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Sn 189.989 (ETA AQ-Axial-iFR)	1.008 ppm	137 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.922 ppm	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.978 ppm	72 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.484 ppm	114 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.696 ppm	434 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.485 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	0.532 ppm	162 cps
P 213.618 (ETA AQ-Axial-iFR)	10.244 ppm	850 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.487 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.840 %	456 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.363 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.483 ppm	284 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.510 ppm	518 cps
In 230.606 (ETA AQ-Axial-iFR)	98.529 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.511 ppm	203 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.539 ppm	1,194 cps
Fe 259.940 (ETA AQ-Axial-iFR)	7.017 ppm	8,240 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.509 ppm	583 cps
Fe 271.441 (ETA AQ-Radial-iFR)	6.615 ppm	123 cps
Mg 279.079 (ETA AQ-Radial-iFR)	56.876 ppm	2,616 cps
Si 288.158 (ETA AQ-Radial-iFR)	8.154 ppm	710 cps
V 292.402 (ETA AQ-Axial-iFR)	0.500 ppm	853 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.945 ppm	268 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.512 ppm	5,914 cps
Ca 317.933 (ETA AQ-Radial-iFR)	97.766 ppm	24,071 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.497 ppm	1,102 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.050 ppm	129 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.519 ppm	1,467 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.529 ppm	4,382 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.874 %	6,579 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.673 %	1,402 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.678 %	9,384 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.768 %	1,992 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.788 ppm	22,355 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.043 ppm	13,754 cps
Na 589.592 (ETA AQ-Radial-iFR)	32.229 ppm	16,136 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.499 ppm	989 cps
K 766.490 (ETA AQ-Radial-iFR)	26.084 ppm	2,771 cps
Na 818.326 (ETA AQ-Radial-iFR)	31.914 ppm	392 cps

Label: 480-224395-E-2-A #: 53
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:19:01 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	1.439 ppm	56 cps
As 189.042 (ETA AQ-Axial-iFR)	0.007 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.005 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.004 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.199 ppm	61 cps
P 213.618 (ETA AQ-Axial-iFR)	0.056 ppm	0 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 224.306 (ETA AQ-Axial-iFR)	98.319 %	458 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.341 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	99.257 %	470 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.017 ppm	36 cps
Fe 259.940 (ETA AQ-Axial-iFR)	1.228 ppm	1,451 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1.162 ppm	21 cps
Mg 279.079 (ETA AQ-Radial-iFR)	36.297 ppm	1,678 cps
Si 288.158 (ETA AQ-Radial-iFR)	7.507 ppm	654 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.006 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	51.653 ppm	12,780 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-3 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.787 %	6,573 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.285 %	1,411 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.730 %	9,389 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.225 %	2,001 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.732 ppm	49,334 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.118 ppm	1,565 cps
Na 589.592 (ETA AQ-Radial-iFR)	27.350 ppm	13,760 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.006 ppm	10 cps
K 766.490 (ETA AQ-Radial-iFR)	1.618 ppm	174 cps
Na 818.326 (ETA AQ-Radial-iFR)	27.118 ppm	335 cps

Label: 480-224395-E-3-A #: 54
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:20:55 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.039 ppm	4 cps
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.006 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.005 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.097 ppm	30 cps
P 213.618 (ETA AQ-Axial-iFR)	0.075 ppm	2 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.989 %	456 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.830 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.741 %	467 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.059 ppm	130 cps
Fe 259.940 (ETA AQ-Axial-iFR)	1.365 ppm	1,606 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Fe 271.441 (ETA AQ-Radial-iFR)	1.261 ppm	23 cps
Mg 279.079 (ETA AQ-Radial-iFR)	36.418 ppm	1,678 cps
Si 288.158 (ETA AQ-Radial-iFR)	8.596 ppm	746 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.007 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	66.638 ppm	16,438 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-6 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.291 %	6,540 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.163 %	1,409 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.405 %	9,358 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.942 %	1,995 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.087 ppm	30,863 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.087 ppm	1,155 cps
Na 589.592 (ETA AQ-Radial-iFR)	15.092 ppm	7,572 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.005 ppm	8 cps
K 766.490 (ETA AQ-Radial-iFR)	1.202 ppm	130 cps
Na 818.326 (ETA AQ-Radial-iFR)	15.152 ppm	187 cps

Label: 480-224395-E-4-A #: 55
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:22:48 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.134 ppm	7 cps
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.118 ppm	37 cps
P 213.618 (ETA AQ-Axial-iFR)	0.220 ppm	14 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.431 %	458 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.694 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	99.026 %	469 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.061 ppm	135 cps
Fe 259.940 (ETA AQ-Axial-iFR)	2.711 ppm	3,204 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	2.567 ppm	47 cps
Mg 279.079 (ETA AQ-Radial-iFR)	35.219 ppm	1,619 cps
Si 288.158 (ETA AQ-Radial-iFR)	9.486 ppm	821 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.012 ppm	0 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	69.049 ppm	16,991 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.623 %	6,562 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.888 %	1,405 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.877 %	9,403 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.714 %	1,991 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.004 ppm	28,456 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.092 ppm	1,217 cps
Na 589.592 (ETA AQ-Radial-iFR)	17.071 ppm	8,544 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.002 ppm	2 cps
K 766.490 (ETA AQ-Radial-iFR)	1.331 ppm	143 cps
Na 818.326 (ETA AQ-Radial-iFR)	17.175 ppm	211 cps

Label: 480-224395-E-5-A #: 56
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:24:41 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.109 ppm	7 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.126 ppm	39 cps
P 213.618 (ETA AQ-Axial-iFR)	0.133 ppm	7 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.092 %	457 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.896 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.861 %	468 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.057 ppm	126 cps
Fe 259.940 (ETA AQ-Axial-iFR)	2.157 ppm	2,540 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	2.008 ppm	37 cps
Mg 279.079 (ETA AQ-Radial-iFR)	35.887 ppm	1,653 cps
Si 288.158 (ETA AQ-Radial-iFR)	10.276 ppm	891 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.009 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	66.931 ppm	16,501 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.731 %	6,569 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.137 %	1,409 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.619 %	9,378 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.888 %	1,994 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.194 ppm	33,899 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.088 ppm	1,170 cps
Na 589.592 (ETA AQ-Radial-iFR)	17.247 ppm	8,648 cps

Basic Sample Report
10/20/2024 8:20:01 AM

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Analyte (Measure Mode)	Concentration average	Raw Intensity average
Li 670.784 (ETA AQ-Radial-iFR)	0.002 ppm	3 cps
K 766.490 (ETA AQ-Radial-iFR)	1.267 ppm	136 cps
Na 818.326 (ETA AQ-Radial-iFR)	17.161 ppm	211 cps

Label: CCV-8089741 #: 57
Analysis Type: QC Analysis started at: 10/18/2024 6:26:35 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	25.044 ppm	100.177 %
As 189.042 (ETA AQ-Axial-iFR)	0.958 ppm	95.815 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.979 ppm	97.856 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.916 ppm	91.568 %
Se 196.090 (ETA AQ-Axial-iFR)	0.967 ppm	96.652 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.952 ppm	95.199 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.036 ppm	103.609 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.963 ppm	96.278 %
B 208.959 (ETA AQ-Axial-iFR)	0.974 ppm	97.374 %
P 213.618 (ETA AQ-Axial-iFR)	25.248 ppm	100.991 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.968 ppm	96.773 %
Y 224.306 (ETA AQ-Axial-iFR)	99.970 %	
Y 224.306 (ETA AQ-Radial-iFR)	95.081 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.967 ppm	96.729 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.993 ppm	99.310 %
In 230.606 (ETA AQ-Axial-iFR)	98.580 %	
Ni 231.604 (ETA AQ-Axial-iFR)	1.003 ppm	100.301 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.979 ppm	97.882 %
Fe 259.940 (ETA AQ-Axial-iFR)	50.831 ppm	101.663 %
Cr 267.716 (ETA AQ-Axial-iFR)	1.007 ppm	100.667 %
Fe 271.441 (ETA AQ-Radial-iFR)	49.982 ppm	99.963 %
Mg 279.079 (ETA AQ-Radial-iFR)	49.116 ppm	98.232 %
Si 288.158 (ETA AQ-Radial-iFR)	9.884 ppm	98.844 %
V 292.402 (ETA AQ-Axial-iFR)	0.995 ppm	99.487 %
Al 308.215 (ETA AQ-Radial-iFR)	48.646 ppm	97.293 %
Be 313.042 (ETA AQ-Radial-iFR)	0.997 ppm	99.661 %
Ca 317.933 (ETA AQ-Radial-iFR)	50.093 ppm	100.187 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.979 ppm	97.892 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.993 ppm	99.333 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.993 ppm	99.289 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.997 ppm	99.717 %
Y 360.073 (ETA AQ-Axial-iFR)	101.848 %	
Y 360.073 (ETA AQ-Radial-iFR)	94.529 %	
Y 377.433 (ETA AQ-Axial-iFR)	100.919 %	
Y 377.433 (ETA AQ-Radial-iFR)	94.314 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.988 ppm	98.839 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.975 ppm	97.546 %
Na 589.592 (ETA AQ-Radial-iFR)	49.490 ppm	98.980 %
Li 670.784 (ETA AQ-Radial-iFR)	0.978 ppm	97.764 %
K 766.490 (ETA AQ-Radial-iFR)	49.434 ppm	98.868 %
Na 818.326 (ETA AQ-Radial-iFR)	49.253 ppm	98.507 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	942 cps
As 189.042 (ETA AQ-Axial-iFR)	64 cps
Sn 189.989 (ETA AQ-Axial-iFR)	133 cps
Tl 190.856 (ETA AQ-Axial-iFR)	46 cps

Analyte (Measure Mode)	Raw Intensity average
Se 196.090 (ETA AQ-Axial-iFR)	72 cps
Mo 202.030 (ETA AQ-Axial-iFR)	228 cps
Zn 206.200 (ETA AQ-Axial-iFR)	666 cps
Sb 206.833 (ETA AQ-Axial-iFR)	51 cps
B 208.959 (ETA AQ-Axial-iFR)	301 cps
P 213.618 (ETA AQ-Axial-iFR)	2,148 cps
Pb 220.353 (ETA AQ-Axial-iFR)	64 cps
Y 224.306 (ETA AQ-Axial-iFR)	466 cps
Y 224.306 (ETA AQ-Radial-iFR)	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	572 cps
Cd 228.802 (ETA AQ-Axial-iFR)	1,025 cps
In 230.606 (ETA AQ-Axial-iFR)	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	408 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,160 cps
Fe 259.940 (ETA AQ-Axial-iFR)	60,989 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,186 cps
Fe 271.441 (ETA AQ-Radial-iFR)	925 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,248 cps
Si 288.158 (ETA AQ-Radial-iFR)	858 cps
V 292.402 (ETA AQ-Axial-iFR)	1,749 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,613 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,453 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,276 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,220 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,922 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,899 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,510 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,777 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,400 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,597 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,982 cps
Sr 407.771 (ETA AQ-Radial-iFR)	27,882 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,954 cps
Na 589.592 (ETA AQ-Radial-iFR)	24,657 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,928 cps
K 766.490 (ETA AQ-Radial-iFR)	5,224 cps
Na 818.326 (ETA AQ-Radial-iFR)	603 cps

Label: CCB-8089739 #: 58
Analysis Type: QC Analysis started at: 10/18/2024 6:28:30 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.014 ppm	1.370 %
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	0.175 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	0.014 %
Tl 190.856 (ETA AQ-Axial-iFR)	-0.002 ppm	-0.169 %
Se 196.090 (ETA AQ-Axial-iFR)	0.002 ppm	0.162 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	0.049 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0.078 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0.181 %
B 208.959 (ETA AQ-Axial-iFR)	0.005 ppm	0.455 %
P 213.618 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.077 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.004 ppm	0.357 %
Y 224.306 (ETA AQ-Axial-iFR)	98.805 %	
Y 224.306 (ETA AQ-Radial-iFR)	97.163 %	

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-0.008 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	0.040 %
In 230.606 (ETA AQ-Axial-iFR)	97.444 %	
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.059 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	0.059 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.010 ppm	0.997 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.017 %
Fe 271.441 (ETA AQ-Radial-iFR)	-0.022 ppm	-2.228 %
Mg 279.079 (ETA AQ-Radial-iFR)	-0.013 ppm	-1.318 %
Si 288.158 (ETA AQ-Radial-iFR)	0.003 ppm	0.298 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	-0.013 %
Al 308.215 (ETA AQ-Radial-iFR)	0.018 ppm	1.804 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.006 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.005 ppm	0.470 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0.003 %
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.052 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	0.019 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	0.034 %
Y 360.073 (ETA AQ-Axial-iFR)	97.571 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.506 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.388 %	
Y 377.433 (ETA AQ-Radial-iFR)	96.301 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.010 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.007 %
Na 589.592 (ETA AQ-Radial-iFR)	0.007 ppm	0.692 %
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	0.022 %
K 766.490 (ETA AQ-Radial-iFR)	0.016 ppm	1.633 %
Na 818.326 (ETA AQ-Radial-iFR)	0.170 ppm	17.004 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0 cps
B 208.959 (ETA AQ-Axial-iFR)	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	460 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	3 cps
In 230.606 (ETA AQ-Axial-iFR)	461 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	13 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	-1 cps
Si 288.158 (ETA AQ-Radial-iFR)	3 cps
V 292.402 (ETA AQ-Axial-iFR)	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	3 cps
Ca 317.933 (ETA AQ-Radial-iFR)	5 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0 cps

Basic Sample Report
10/20/2024 8:20:01 AM

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Analyte (Measure Mode)	Raw Intensity average
Ag 328.068 (ETA AQ-Axial-iFR)	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	4 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,492 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,429 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,261 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,024 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-5 cps
Ba 455.403 (ETA AQ-Radial-iFR)	-1 cps
Na 589.592 (ETA AQ-Radial-iFR)	8 cps
Li 670.784 (ETA AQ-Radial-iFR)	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	4 cps
Na 818.326 (ETA AQ-Radial-iFR)	2 cps

Label: CCVL-8089740 #: 59
Analysis Type: QC Analysis started at: 10/18/2024 6:30:24 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.209 ppm	104.441 %
As 189.042 (ETA AQ-Axial-iFR)	0.018 ppm	121.534 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.010 ppm	103.892 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.013 ppm	64.391 %
Se 196.090 (ETA AQ-Axial-iFR)	0.020 ppm	78.096 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.011 ppm	107.664 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.012 ppm	117.365 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.021 ppm	105.668 %
B 208.959 (ETA AQ-Axial-iFR)	0.021 ppm	106.957 %
P 213.618 (ETA AQ-Axial-iFR)	-0.005 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.011 ppm	114.094 %
Y 224.306 (ETA AQ-Axial-iFR)	98.933 %	
Y 224.306 (ETA AQ-Radial-iFR)	98.032 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	95.066 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	90.644 %
In 230.606 (ETA AQ-Axial-iFR)	97.859 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	100.342 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	107.143 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	102.011 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	107.767 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.027 ppm	54.771 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.184 ppm	91.807 %
Si 288.158 (ETA AQ-Radial-iFR)	0.464 ppm	92.808 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	98.263 %
Al 308.215 (ETA AQ-Radial-iFR)	0.187 ppm	93.681 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	96.610 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.483 ppm	96.524 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.009 ppm	92.461 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.005 ppm	87.839 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	102.243 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	96.841 %
Y 360.073 (ETA AQ-Axial-iFR)	97.997 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.627 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.789 %	
Y 377.433 (ETA AQ-Radial-iFR)	96.715 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	96.261 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	97.828 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Na 589.592 (ETA AQ-Radial-iFR)	0.980 ppm	98.002 %
Li 670.784 (ETA AQ-Radial-iFR)	0.028 ppm	94.855 %
K 766.490 (ETA AQ-Radial-iFR)	0.492 ppm	98.433 %
Na 818.326 (ETA AQ-Radial-iFR)	1.086 ppm	108.586 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	4 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	461 cps
Y 224.306 (ETA AQ-Radial-iFR)	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	4 cps
In 230.606 (ETA AQ-Axial-iFR)	463 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	6 cps
Fe 259.940 (ETA AQ-Axial-iFR)	62 cps
Cr 267.716 (ETA AQ-Axial-iFR)	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	43 cps
V 292.402 (ETA AQ-Axial-iFR)	9 cps
Al 308.215 (ETA AQ-Radial-iFR)	11 cps
Be 313.042 (ETA AQ-Radial-iFR)	25 cps
Ca 317.933 (ETA AQ-Radial-iFR)	125 cps
Cu 327.396 (ETA AQ-Axial-iFR)	21 cps
Ag 328.068 (ETA AQ-Axial-iFR)	1 cps
Ti 334.904 (ETA AQ-Axial-iFR)	8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	41 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,520 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,431 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,300 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,033 cps
Sr 407.771 (ETA AQ-Radial-iFR)	131 cps
Ba 455.403 (ETA AQ-Radial-iFR)	25 cps
Na 589.592 (ETA AQ-Radial-iFR)	505 cps
Li 670.784 (ETA AQ-Radial-iFR)	56 cps
K 766.490 (ETA AQ-Radial-iFR)	55 cps
Na 818.326 (ETA AQ-Radial-iFR)	13 cps

Label: 480-224395-E-6-A #: 60
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:32:19 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.394 ppm	17 cps
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Tl 190.856 (ETA AQ-Axial-iFR)	-0.004 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.139 ppm	43 cps
P 213.618 (ETA AQ-Axial-iFR)	0.164 ppm	9 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.919 %	456 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.346 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.343 %	465 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.039 ppm	86 cps
Fe 259.940 (ETA AQ-Axial-iFR)	2.806 ppm	3,298 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	2.634 ppm	49 cps
Mg 279.079 (ETA AQ-Radial-iFR)	30.703 ppm	1,424 cps
Si 288.158 (ETA AQ-Radial-iFR)	10.569 ppm	923 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.005 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	66.541 ppm	16,519 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-4 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.085 %	6,526 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.613 %	1,416 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.182 %	9,337 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.550 %	2,008 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.081 ppm	30,897 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.121 ppm	1,603 cps
Na 589.592 (ETA AQ-Radial-iFR)	18.416 ppm	9,298 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.005 ppm	8 cps
K 766.490 (ETA AQ-Radial-iFR)	1.547 ppm	167 cps
Na 818.326 (ETA AQ-Radial-iFR)	18.206 ppm	226 cps

Label: 480-224395-E-7-A #: 61
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:34:12 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.359 ppm	16 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.136 ppm	42 cps
P 213.618 (ETA AQ-Axial-iFR)	0.193 ppm	12 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.359 %	458 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 224.306 (ETA AQ-Radial-iFR)	95.420 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.788 %	467 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.056 ppm	125 cps
Fe 259.940 (ETA AQ-Axial-iFR)	2.974 ppm	3,511 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	2.780 ppm	52 cps
Mg 279.079 (ETA AQ-Radial-iFR)	30.463 ppm	1,411 cps
Si 288.158 (ETA AQ-Radial-iFR)	8.832 ppm	771 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.004 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	68.771 ppm	17,051 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-4 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.011 %	6,588 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.295 %	1,411 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.195 %	9,433 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.432 %	2,006 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.086 ppm	30,991 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.112 ppm	1,487 cps
Na 589.592 (ETA AQ-Radial-iFR)	17.375 ppm	8,762 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.003 ppm	5 cps
K 766.490 (ETA AQ-Radial-iFR)	1.509 ppm	163 cps
Na 818.326 (ETA AQ-Radial-iFR)	17.281 ppm	214 cps

Label: 480-224395-E-8-A #: 62
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:36:06 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.574 ppm	24 cps
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.002 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.119 ppm	37 cps
P 213.618 (ETA AQ-Axial-iFR)	0.157 ppm	9 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.710 %	455 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.472 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.734 %	467 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.036 ppm	79 cps
Fe 259.940 (ETA AQ-Axial-iFR)	2.784 ppm	3,265 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	2.627 ppm	49 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Mg 279.079 (ETA AQ-Radial-iFR)	29.927 ppm	1,386 cps
Si 288.158 (ETA AQ-Radial-iFR)	9.292 ppm	811 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.001 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	71.341 ppm	17,690 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-5 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.185 %	6,533 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.367 %	1,412 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.481 %	9,365 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.439 %	2,006 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.825 ppm	23,568 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.122 ppm	1,629 cps
Na 589.592 (ETA AQ-Radial-iFR)	16.078 ppm	8,109 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.005 ppm	9 cps
K 766.490 (ETA AQ-Radial-iFR)	1.548 ppm	167 cps
Na 818.326 (ETA AQ-Radial-iFR)	15.986 ppm	198 cps

Label: 480-224395-E-9-A #: 63
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:37:59 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	1.803 ppm	69 cps
As 189.042 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.006 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.100 ppm	31 cps
P 213.618 (ETA AQ-Axial-iFR)	0.150 ppm	8 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.293 %	458 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.284 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.432 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.046 ppm	103 cps
Fe 259.940 (ETA AQ-Axial-iFR)	2.631 ppm	3,104 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	2.490 ppm	46 cps
Mg 279.079 (ETA AQ-Radial-iFR)	29.907 ppm	1,387 cps
Si 288.158 (ETA AQ-Radial-iFR)	9.172 ppm	801 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.045 ppm	3 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	1 cps
Ca 317.933 (ETA AQ-Radial-iFR)	70.457 ppm	17,491 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-5 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.506 %	6,554 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.536 %	1,415 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.761 %	9,392 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.552 %	2,008 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.901 ppm	25,743 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.126 ppm	1,674 cps
Na 589.592 (ETA AQ-Radial-iFR)	14.813 ppm	7,480 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.004 ppm	7 cps
K 766.490 (ETA AQ-Radial-iFR)	1.624 ppm	176 cps
Na 818.326 (ETA AQ-Radial-iFR)	14.745 ppm	183 cps

Label: 480-224395-E-10-A #: 64
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:39:53 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.205 ppm	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.008 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.091 ppm	29 cps
P 213.618 (ETA AQ-Axial-iFR)	0.302 ppm	21 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.491 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.439 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.857 %	468 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.064 ppm	142 cps
Fe 259.940 (ETA AQ-Axial-iFR)	4.171 ppm	4,931 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	3.916 ppm	73 cps
Mg 279.079 (ETA AQ-Radial-iFR)	29.600 ppm	1,375 cps
Si 288.158 (ETA AQ-Radial-iFR)	8.738 ppm	764 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.010 ppm	0 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	72.273 ppm	17,967 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-5 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.123 %	6,595 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.537 %	1,415 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.356 %	9,449 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.686 %	2,011 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.995 ppm	28,492 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.112 ppm	1,497 cps
Na 589.592 (ETA AQ-Radial-iFR)	12.436 ppm	6,289 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	2 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
K 766.490 (ETA AQ-Radial-iFR)	1.564 ppm	169 cps
Na 818.326 (ETA AQ-Radial-iFR)	12.458 ppm	155 cps

Label: 480-224395-E-11-A #: 65
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:41:47 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	35.009 ppm	1,278 cps
As 189.042 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.033 ppm	11 cps
P 213.618 (ETA AQ-Axial-iFR)	0.068 ppm	1 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.089 %	452 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.617 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	98.012 %	464 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.103 ppm	229 cps
Fe 259.940 (ETA AQ-Axial-iFR)	3.586 ppm	4,179 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	3.327 ppm	62 cps
Mg 279.079 (ETA AQ-Radial-iFR)	55.323 ppm	2,561 cps
Si 288.158 (ETA AQ-Radial-iFR)	9.709 ppm	846 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.005 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	130.648 ppm	32,361 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-11 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.186 %	6,533 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.990 %	1,407 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.382 %	9,356 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.349 %	2,004 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.514 ppm	14,678 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.252 ppm	3,334 cps
Na 589.592 (ETA AQ-Radial-iFR)	20.573 ppm	10,365 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.008 ppm	14 cps
K 766.490 (ETA AQ-Radial-iFR)	1.702 ppm	184 cps
Na 818.326 (ETA AQ-Radial-iFR)	20.322 ppm	251 cps

Label: 480-224395-E-12-A #: 66
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:43:41 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	15.641 ppm	573 cps
As 189.042 (ETA AQ-Axial-iFR)	0.007 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.002 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.007 ppm	5 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.005 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.035 ppm	12 cps
P 213.618 (ETA AQ-Axial-iFR)	0.110 ppm	5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.210 %	453 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.164 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	-0.001 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.093 %	464 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.096 ppm	213 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.343 ppm	6,234 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	4.965 ppm	92 cps
Mg 279.079 (ETA AQ-Radial-iFR)	46.098 ppm	2,128 cps
Si 288.158 (ETA AQ-Radial-iFR)	10.900 ppm	947 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.000 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	112.881 ppm	27,893 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-8 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.155 %	6,531 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.890 %	1,405 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.372 %	9,355 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.119 %	1,999 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.319 ppm	9,107 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.169 ppm	2,247 cps
Na 589.592 (ETA AQ-Radial-iFR)	20.654 ppm	10,380 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.007 ppm	12 cps
K 766.490 (ETA AQ-Radial-iFR)	1.670 ppm	180 cps
Na 818.326 (ETA AQ-Radial-iFR)	20.579 ppm	254 cps

Label: 480-224395-E-13-A #: 67
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:45:34 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	1.532 ppm	59 cps
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.005 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.004 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.004 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.056 ppm	18 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
P 213.618 (ETA AQ-Axial-iFR)	0.092 ppm	3 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.542 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.065 %	127 cps
Co 228.616 (ETA AQ-Axial-iFR)	-0.001 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	98.453 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.097 ppm	217 cps
Fe 259.940 (ETA AQ-Axial-iFR)	3.474 ppm	4,109 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	3.272 ppm	62 cps
Mg 279.079 (ETA AQ-Radial-iFR)	34.750 ppm	1,627 cps
Si 288.158 (ETA AQ-Radial-iFR)	7.492 ppm	661 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.012 ppm	0 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	68.997 ppm	17,288 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-5 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.554 %	6,557 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.820 %	1,419 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.924 %	9,407 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.438 %	2,027 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.314 ppm	9,052 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.097 ppm	1,297 cps
Na 589.592 (ETA AQ-Radial-iFR)	12.134 ppm	6,185 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.009 ppm	17 cps
K 766.490 (ETA AQ-Radial-iFR)	2.824 ppm	307 cps
Na 818.326 (ETA AQ-Radial-iFR)	12.027 ppm	150 cps

Label: 480-224395-E-14-A #: 68
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:47:28 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	51.188 ppm	1,881 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.004 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.004 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.028 ppm	10 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.004 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.780 %	455 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.291 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.133 %	464 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.303 ppm	675 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Fe 259.940 (ETA AQ-Axial-iFR)	1.900 ppm	2,230 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1.778 ppm	33 cps
Mg 279.079 (ETA AQ-Radial-iFR)	51.313 ppm	2,369 cps
Si 288.158 (ETA AQ-Radial-iFR)	3.893 ppm	340 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.008 ppm	0 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	138.537 ppm	34,224 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.002 ppm	-11 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.485 %	6,553 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.077 %	1,408 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.990 %	9,414 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.094 %	1,998 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.206 ppm	5,873 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.082 ppm	1,095 cps
Na 589.592 (ETA AQ-Radial-iFR)	7.552 ppm	3,797 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.007 ppm	12 cps
K 766.490 (ETA AQ-Radial-iFR)	1.463 ppm	158 cps
Na 818.326 (ETA AQ-Radial-iFR)	7.609 ppm	94 cps

Label: CCV-8089741 #: 69
Analysis Type: QC Analysis started at: 10/18/2024 6:49:22 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	24.791 ppm	99.164 %
As 189.042 (ETA AQ-Axial-iFR)	0.959 ppm	95.909 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.979 ppm	97.865 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.933 ppm	93.324 %
Se 196.090 (ETA AQ-Axial-iFR)	0.962 ppm	96.222 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.957 ppm	95.678 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.018 ppm	101.834 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.967 ppm	96.731 %
B 208.959 (ETA AQ-Axial-iFR)	0.977 ppm	97.738 %
P 213.618 (ETA AQ-Axial-iFR)	25.433 ppm	101.731 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.981 ppm	98.055 %
Y 224.306 (ETA AQ-Axial-iFR)	100.913 %	
Y 224.306 (ETA AQ-Radial-iFR)	94.265 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.982 ppm	98.235 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.978 ppm	97.760 %
In 230.606 (ETA AQ-Axial-iFR)	97.592 %	
Ni 231.604 (ETA AQ-Axial-iFR)	1.001 ppm	100.094 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.975 ppm	97.497 %
Fe 259.940 (ETA AQ-Axial-iFR)	51.320 ppm	102.640 %
Cr 267.716 (ETA AQ-Axial-iFR)	1.008 ppm	100.781 %
Fe 271.441 (ETA AQ-Radial-iFR)	50.041 ppm	100.083 %
Mg 279.079 (ETA AQ-Radial-iFR)	49.091 ppm	98.183 %
Si 288.158 (ETA AQ-Radial-iFR)	9.855 ppm	98.551 %
V 292.402 (ETA AQ-Axial-iFR)	0.999 ppm	99.933 %
Al 308.215 (ETA AQ-Radial-iFR)	48.677 ppm	97.354 %
Be 313.042 (ETA AQ-Radial-iFR)	1.002 ppm	100.163 %
Ca 317.933 (ETA AQ-Radial-iFR)	50.234 ppm	100.468 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Cu 327.396 (ETA AQ-Axial-iFR)	0.965 ppm	96.494 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.989 ppm	98.863 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.995 ppm	99.495 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.992 ppm	99.189 %
Y 360.073 (ETA AQ-Axial-iFR)	102.945 %	
Y 360.073 (ETA AQ-Radial-iFR)	93.982 %	
Y 377.433 (ETA AQ-Axial-iFR)	102.491 %	
Y 377.433 (ETA AQ-Radial-iFR)	94.139 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.988 ppm	98.838 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.983 ppm	98.297 %
Na 589.592 (ETA AQ-Radial-iFR)	49.689 ppm	99.378 %
Li 670.784 (ETA AQ-Radial-iFR)	0.971 ppm	97.101 %
K 766.490 (ETA AQ-Radial-iFR)	49.334 ppm	98.669 %
Na 818.326 (ETA AQ-Radial-iFR)	49.530 ppm	99.061 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	942 cps
As 189.042 (ETA AQ-Axial-iFR)	65 cps
Sn 189.989 (ETA AQ-Axial-iFR)	132 cps
Tl 190.856 (ETA AQ-Axial-iFR)	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	73 cps
Mo 202.030 (ETA AQ-Axial-iFR)	231 cps
Zn 206.200 (ETA AQ-Axial-iFR)	662 cps
Sb 206.833 (ETA AQ-Axial-iFR)	52 cps
B 208.959 (ETA AQ-Axial-iFR)	305 cps
P 213.618 (ETA AQ-Axial-iFR)	2,185 cps
Pb 220.353 (ETA AQ-Axial-iFR)	64 cps
Y 224.306 (ETA AQ-Axial-iFR)	470 cps
Y 224.306 (ETA AQ-Radial-iFR)	124 cps
Co 228.616 (ETA AQ-Axial-iFR)	575 cps
Cd 228.802 (ETA AQ-Axial-iFR)	1,018 cps
In 230.606 (ETA AQ-Axial-iFR)	462 cps
Ni 231.604 (ETA AQ-Axial-iFR)	414 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,148 cps
Fe 259.940 (ETA AQ-Axial-iFR)	62,149 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,201 cps
Fe 271.441 (ETA AQ-Radial-iFR)	924 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,242 cps
Si 288.158 (ETA AQ-Radial-iFR)	854 cps
V 292.402 (ETA AQ-Axial-iFR)	1,776 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,610 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,489 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,287 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,223 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,940 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,936 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,559 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,850 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,392 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,747 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,978 cps
Sr 407.771 (ETA AQ-Radial-iFR)	27,830 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,944 cps
Na 589.592 (ETA AQ-Radial-iFR)	24,711 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,912 cps
K 766.490 (ETA AQ-Radial-iFR)	5,204 cps
Na 818.326 (ETA AQ-Radial-iFR)	605 cps

Basic Sample Report
10/20/2024 8:20:01 AM

Label: CCB-8089739 #: 70
Analysis Type: QC Analysis started at: 10/18/2024 6:51:16 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.014 ppm	1.445 %
As 189.042 (ETA AQ-Axial-iFR)	0.000 ppm	-0.006 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	0.021 %
Tl 190.856 (ETA AQ-Axial-iFR)	-0.007 ppm	-0.746 %
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.089 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	0.011 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0.077 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.007 ppm	0.661 %
B 208.959 (ETA AQ-Axial-iFR)	0.004 ppm	0.352 %
P 213.618 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.082 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	-0.041 %
Y 224.306 (ETA AQ-Axial-iFR)	97.278 %	
Y 224.306 (ETA AQ-Radial-iFR)	96.564 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-0.019 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	0.044 %
In 230.606 (ETA AQ-Axial-iFR)	96.887 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-0.043 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0.039 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.012 ppm	1.232 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.039 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.013 ppm	1.345 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.016 ppm	1.587 %
Si 288.158 (ETA AQ-Radial-iFR)	0.004 ppm	0.360 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0.010 %
Al 308.215 (ETA AQ-Radial-iFR)	0.008 ppm	0.796 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.017 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.007 ppm	0.656 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	0.086 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-0.038 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	0.011 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	0.026 %
Y 360.073 (ETA AQ-Axial-iFR)	96.157 %	
Y 360.073 (ETA AQ-Radial-iFR)	95.487 %	
Y 377.433 (ETA AQ-Axial-iFR)	96.169 %	
Y 377.433 (ETA AQ-Radial-iFR)	95.670 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.012 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.019 %
Na 589.592 (ETA AQ-Radial-iFR)	-0.009 ppm	-0.902 %
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-0.001 %
K 766.490 (ETA AQ-Radial-iFR)	0.013 ppm	1.292 %
Na 818.326 (ETA AQ-Radial-iFR)	0.036 ppm	3.568 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps

Analyte (Measure Mode)	Raw Intensity average
B 208.959 (ETA AQ-Axial-iFR)	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	453 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	3 cps
In 230.606 (ETA AQ-Axial-iFR)	458 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	16 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	1 cps
Si 288.158 (ETA AQ-Radial-iFR)	3 cps
V 292.402 (ETA AQ-Axial-iFR)	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	4 cps
Ca 317.933 (ETA AQ-Radial-iFR)	5 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	3 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,398 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,414 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,145 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,011 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-4 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0 cps
Na 589.592 (ETA AQ-Radial-iFR)	0 cps
Li 670.784 (ETA AQ-Radial-iFR)	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	3 cps
Na 818.326 (ETA AQ-Radial-iFR)	0 cps

Label: CCVL-8089740 #: 71
Analysis Type: QC Analysis started at: 10/18/2024 6:53:10 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.202 ppm	100.768 %
As 189.042 (ETA AQ-Axial-iFR)	0.017 ppm	112.002 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.009 ppm	94.634 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.014 ppm	68.424 %
Se 196.090 (ETA AQ-Axial-iFR)	0.023 ppm	91.371 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.009 ppm	89.759 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.011 ppm	113.203 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.020 ppm	101.422 %
B 208.959 (ETA AQ-Axial-iFR)	0.021 ppm	104.978 %
P 213.618 (ETA AQ-Axial-iFR)	-0.006 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.008 ppm	83.569 %
Y 224.306 (ETA AQ-Axial-iFR)	96.982 %	
Y 224.306 (ETA AQ-Radial-iFR)	95.750 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.003 ppm	81.007 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	99.321 %
In 230.606 (ETA AQ-Axial-iFR)	97.737 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	96.893 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	104.533 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.052 ppm	103.012 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	94.612 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.053 ppm	106.570 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.201 ppm	100.334 %
Si 288.158 (ETA AQ-Radial-iFR)	0.477 ppm	95.468 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	95.455 %
Al 308.215 (ETA AQ-Radial-iFR)	0.177 ppm	88.612 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	98.631 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.479 ppm	95.704 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.010 ppm	96.539 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.005 ppm	88.449 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	95.742 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	94.543 %
Y 360.073 (ETA AQ-Axial-iFR)	96.072 %	
Y 360.073 (ETA AQ-Radial-iFR)	95.135 %	
Y 377.433 (ETA AQ-Axial-iFR)	95.883 %	
Y 377.433 (ETA AQ-Radial-iFR)	95.105 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	96.024 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	102.366 %
Na 589.592 (ETA AQ-Radial-iFR)	0.969 ppm	96.852 %
Li 670.784 (ETA AQ-Radial-iFR)	0.029 ppm	97.202 %
K 766.490 (ETA AQ-Radial-iFR)	0.471 ppm	94.278 %
Na 818.326 (ETA AQ-Radial-iFR)	1.045 ppm	104.504 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	3 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	452 cps
Y 224.306 (ETA AQ-Radial-iFR)	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	4 cps
In 230.606 (ETA AQ-Axial-iFR)	463 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	6 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61 cps
Cr 267.716 (ETA AQ-Axial-iFR)	4 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	44 cps
V 292.402 (ETA AQ-Axial-iFR)	8 cps
Al 308.215 (ETA AQ-Radial-iFR)	11 cps
Be 313.042 (ETA AQ-Radial-iFR)	25 cps
Ca 317.933 (ETA AQ-Radial-iFR)	122 cps
Cu 327.396 (ETA AQ-Axial-iFR)	21 cps
Ag 328.068 (ETA AQ-Axial-iFR)	1 cps
Ti 334.904 (ETA AQ-Axial-iFR)	7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	39 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,392 cps

Analyte (Measure Mode)	Raw Intensity average
Y 360.073 (ETA AQ-Radial-iFR)	1,409 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,118 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,999 cps
Sr 407.771 (ETA AQ-Radial-iFR)	129 cps
Ba 455.403 (ETA AQ-Radial-iFR)	25 cps
Na 589.592 (ETA AQ-Radial-iFR)	491 cps
Li 670.784 (ETA AQ-Radial-iFR)	57 cps
K 766.490 (ETA AQ-Radial-iFR)	52 cps
Na 818.326 (ETA AQ-Radial-iFR)	13 cps

Label: 480-224395-E-15-A #: 72
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:55:05 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	309.248 ppm	10,891 cps
As 189.042 (ETA AQ-Axial-iFR)	0.006 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.031 ppm	10 cps
P 213.618 (ETA AQ-Axial-iFR)	0.009 ppm	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	93.798 %	437 cps
Y 224.306 (ETA AQ-Radial-iFR)	91.354 %	121 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.864 %	463 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.624 ppm	1,355 cps
Fe 259.940 (ETA AQ-Axial-iFR)	4.955 ppm	5,578 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	4.579 ppm	83 cps
Mg 279.079 (ETA AQ-Radial-iFR)	134.309 ppm	6,048 cps
Si 288.158 (ETA AQ-Radial-iFR)	5.391 ppm	458 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.003 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	327.651 ppm	78,958 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.003 ppm	-24 cps
Y 360.073 (ETA AQ-Axial-iFR)	96.740 %	6,437 cps
Y 360.073 (ETA AQ-Radial-iFR)	92.501 %	1,370 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.075 %	9,232 cps
Y 377.433 (ETA AQ-Radial-iFR)	92.775 %	1,950 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.371 ppm	10,372 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.030 ppm	382 cps
Na 589.592 (ETA AQ-Radial-iFR)	10.733 ppm	5,263 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.019 ppm	35 cps
K 766.490 (ETA AQ-Radial-iFR)	3.007 ppm	314 cps
Na 818.326 (ETA AQ-Radial-iFR)	10.618 ppm	128 cps

Label: 480-224395-E-16-A #: 73
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:56:59 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	21.779 ppm	790 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.026 ppm	9 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.005 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.340 %	449 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.104 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.001 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.793 %	467 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.473 ppm	1,055 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.331 ppm	384 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.331 ppm	6 cps
Mg 279.079 (ETA AQ-Radial-iFR)	40.136 ppm	1,861 cps
Si 288.158 (ETA AQ-Radial-iFR)	5.867 ppm	513 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.001 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	84.860 ppm	21,057 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-8 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.452 %	6,484 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.436 %	1,413 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.541 %	9,276 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.512 %	2,007 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.124 ppm	3,545 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.046 ppm	605 cps
Na 589.592 (ETA AQ-Radial-iFR)	10.501 ppm	5,302 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.005 ppm	9 cps
K 766.490 (ETA AQ-Radial-iFR)	0.697 ppm	76 cps
Na 818.326 (ETA AQ-Radial-iFR)	10.470 ppm	130 cps

Label: 480-224395-E-17-A #: 74
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 6:58:53 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	86.518 ppm	3,107 cps
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.004 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.023 ppm	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.004 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	95.592 %	445 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.549 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.464 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.006 ppm	2 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.063 ppm	140 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.011 ppm	13 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.036 ppm	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	64.445 ppm	2,981 cps
Si 288.158 (ETA AQ-Radial-iFR)	5.999 ppm	523 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.005 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	145.683 ppm	36,067 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.002 ppm	-13 cps
Y 360.073 (ETA AQ-Axial-iFR)	96.899 %	6,447 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.554 %	1,400 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.236 %	9,247 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.301 %	2,003 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.175 ppm	5,005 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.031 ppm	409 cps
Na 589.592 (ETA AQ-Radial-iFR)	11.642 ppm	5,864 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.012 ppm	22 cps
K 766.490 (ETA AQ-Radial-iFR)	1.447 ppm	156 cps
Na 818.326 (ETA AQ-Radial-iFR)	11.608 ppm	143 cps

Label: 480-224395-E-18-A #: 75
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:00:47 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	48.531 ppm	1,759 cps
As 189.042 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.068 ppm	21 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.005 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 224.306 (ETA AQ-Axial-iFR)	96.404 %	449 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.245 %	124 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.819 %	468 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.087 ppm	191 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.162 ppm	188 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.183 ppm	3 cps
Mg 279.079 (ETA AQ-Radial-iFR)	53.293 ppm	2,448 cps
Si 288.158 (ETA AQ-Radial-iFR)	7.227 ppm	626 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.391 ppm	22 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	117.433 ppm	28,865 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-11 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.775 %	6,506 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.186 %	1,395 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.923 %	9,312 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.615 %	1,988 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.603 ppm	17,073 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.025 ppm	329 cps
Na 589.592 (ETA AQ-Radial-iFR)	35.956 ppm	17,972 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.010 ppm	18 cps
K 766.490 (ETA AQ-Radial-iFR)	2.079 ppm	222 cps
Na 818.326 (ETA AQ-Radial-iFR)	35.636 ppm	438 cps

Label: 480-224395-E-19-A #: 76
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:02:40 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	45.634 ppm	1,649 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.006 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.027 ppm	9 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.006 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.129 %	448 cps
Y 224.306 (ETA AQ-Radial-iFR)	92.800 %	123 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	99.116 %	469 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.158 ppm	345 cps
Fe 259.940 (ETA AQ-Axial-iFR)	1.067 ppm	1,232 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Fe 271.441 (ETA AQ-Radial-iFR)	1.028 ppm	19 cps
Mg 279.079 (ETA AQ-Radial-iFR)	55.707 ppm	2,536 cps
Si 288.158 (ETA AQ-Radial-iFR)	5.313 ppm	456 cps
V 292.402 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.005 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	1 cps
Ca 317.933 (ETA AQ-Radial-iFR)	121.309 ppm	29,556 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.002 ppm	-12 cps
Y 360.073 (ETA AQ-Axial-iFR)	96.761 %	6,438 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.738 %	1,388 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.399 %	9,262 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.786 %	1,971 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.171 ppm	4,810 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.086 ppm	1,112 cps
Na 589.592 (ETA AQ-Radial-iFR)	40.808 ppm	20,218 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.007 ppm	13 cps
K 766.490 (ETA AQ-Radial-iFR)	2.054 ppm	217 cps
Na 818.326 (ETA AQ-Radial-iFR)	40.654 ppm	495 cps

Label: rinse #: 77
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:04:34 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.018 ppm	3 cps
As 189.042 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.006 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.038 %	452 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.698 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	-0.001 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.155 %	460 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.034 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.007 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	-0.002 ppm	2 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.014 ppm	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	-0.001 ppm	3 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-15 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Y 360.073 (ETA AQ-Axial-iFR)	95.394 %	6,347 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.329 %	1,412 cps
Y 377.433 (ETA AQ-Axial-iFR)	95.444 %	9,076 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.143 %	2,000 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-8 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
Na 589.592 (ETA AQ-Radial-iFR)	-0.010 ppm	-1 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
K 766.490 (ETA AQ-Radial-iFR)	0.009 ppm	3 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.084 ppm	1 cps

Label: mb 480-728745/1-a #: 78
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:06:28 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.007 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.893 %	456 cps
Y 224.306 (ETA AQ-Radial-iFR)	97.280 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.715 %	462 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.004 ppm	5 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.029 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	-0.007 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.002 ppm	3 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.003 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.012 ppm	7 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-4 cps
Y 360.073 (ETA AQ-Axial-iFR)	96.632 %	6,430 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.689 %	1,417 cps
Y 377.433 (ETA AQ-Axial-iFR)	96.475 %	9,175 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.871 %	2,015 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-6 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Na 589.592 (ETA AQ-Radial-iFR)	0.016 ppm	12 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
K 766.490 (ETA AQ-Radial-iFR)	-0.003 ppm	1 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.223 ppm	3 cps

Label: lcs 480-728745/2-a #: 79
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:08:22 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	5.090 ppm	191 cps
As 189.042 (ETA AQ-Axial-iFR)	0.975 ppm	65 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.991 ppm	138 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.905 ppm	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.972 ppm	72 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.479 ppm	114 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.560 ppm	346 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.490 ppm	26 cps
B 208.959 (ETA AQ-Axial-iFR)	0.497 ppm	152 cps
P 213.618 (ETA AQ-Axial-iFR)	10.220 ppm	854 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.476 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.467 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.626 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.482 ppm	289 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.504 ppm	515 cps
In 230.606 (ETA AQ-Axial-iFR)	100.359 %	475 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.524 ppm	207 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.495 ppm	1,103 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.432 ppm	6,420 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.518 ppm	587 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.181 ppm	97 cps
Mg 279.079 (ETA AQ-Radial-iFR)	24.326 ppm	1,124 cps
Si 288.158 (ETA AQ-Radial-iFR)	1.002 ppm	92 cps
V 292.402 (ETA AQ-Axial-iFR)	0.505 ppm	853 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.886 ppm	266 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.512 ppm	5,944 cps
Ca 317.933 (ETA AQ-Radial-iFR)	25.576 ppm	6,331 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.495 ppm	1,091 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.050 ppm	127 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.523 ppm	1,465 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.535 ppm	4,393 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.880 %	6,513 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.420 %	1,413 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.043 %	9,324 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.234 %	2,001 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.513 ppm	14,601 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.968 ppm	13,061 cps
Na 589.592 (ETA AQ-Radial-iFR)	25.096 ppm	12,628 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.483 ppm	961 cps
K 766.490 (ETA AQ-Radial-iFR)	24.473 ppm	2,612 cps
Na 818.326 (ETA AQ-Radial-iFR)	25.112 ppm	310 cps

Label: 480-224380-h-1-b #: 80
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:10:16 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	14.664 ppm	532 cps
As 189.042 (ETA AQ-Axial-iFR)	0.025 ppm	1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.012 ppm	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.008 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.067 ppm	6 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	11.795 ppm	3,419 cps
P 213.618 (ETA AQ-Axial-iFR)	1.707 ppm	136 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.269 %	448 cps
Y 224.306 (ETA AQ-Radial-iFR)	89.510 %	118 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.022 ppm	10 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	93.865 %	444 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.120 ppm	47 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.053 ppm	109 cps
Fe 259.940 (ETA AQ-Axial-iFR)	4.423 ppm	5,111 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.050 ppm	57 cps
Fe 271.441 (ETA AQ-Radial-iFR)	4.239 ppm	74 cps
Mg 279.079 (ETA AQ-Radial-iFR)	113.241 ppm	4,897 cps
Si 288.158 (ETA AQ-Radial-iFR)	21.952 ppm	1,785 cps
V 292.402 (ETA AQ-Axial-iFR)	0.015 ppm	27 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.037 ppm	3 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	91.924 ppm	21,273 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	4 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-13 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.055 ppm	150 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.055 ppm	457 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.317 %	6,542 cps
Y 360.073 (ETA AQ-Radial-iFR)	89.356 %	1,323 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.803 %	9,396 cps
Y 377.433 (ETA AQ-Radial-iFR)	89.077 %	1,872 cps
Sr 407.771 (ETA AQ-Radial-iFR)	3.685 ppm	98,163 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.076 ppm	13,453 cps
Na 589.592 (ETA AQ-Radial-iFR)	1,515.742 ppm	713,136 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.301 ppm	561 cps
K 766.490 (ETA AQ-Radial-iFR)	437.536 ppm	43,654 cps
Na 818.326 (ETA AQ-Radial-iFR)	1,675.137 ppm	19,370 cps

Label: CCV-8089741 #: 81
Analysis Type: QC Analysis started at: 10/18/2024 7:12:10 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	25.127 ppm	100.508 %
As 189.042 (ETA AQ-Axial-iFR)	0.962 ppm	96.207 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.972 ppm	97.186 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.926 ppm	92.626 %
Se 196.090 (ETA AQ-Axial-iFR)	0.962 ppm	96.245 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.955 ppm	95.454 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.036 ppm	103.577 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.965 ppm	96.474 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
B 208.959 (ETA AQ-Axial-iFR)	1.008 ppm	100.772 %
P 213.618 (ETA AQ-Axial-iFR)	25.356 ppm	101.423 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.961 ppm	96.097 %
Y 224.306 (ETA AQ-Axial-iFR)	100.627 %	
Y 224.306 (ETA AQ-Radial-iFR)	95.943 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.964 ppm	96.431 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.989 ppm	98.886 %
In 230.606 (ETA AQ-Axial-iFR)	99.821 %	
Ni 231.604 (ETA AQ-Axial-iFR)	1.004 ppm	100.445 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.977 ppm	97.692 %
Fe 259.940 (ETA AQ-Axial-iFR)	51.162 ppm	102.323 %
Cr 267.716 (ETA AQ-Axial-iFR)	1.009 ppm	100.925 %
Fe 271.441 (ETA AQ-Radial-iFR)	50.223 ppm	100.446 %
Mg 279.079 (ETA AQ-Radial-iFR)	49.001 ppm	98.002 %
Si 288.158 (ETA AQ-Radial-iFR)	10.423 ppm	104.229 %
V 292.402 (ETA AQ-Axial-iFR)	0.997 ppm	99.685 %
Al 308.215 (ETA AQ-Radial-iFR)	48.528 ppm	97.056 %
Be 313.042 (ETA AQ-Radial-iFR)	0.994 ppm	99.409 %
Ca 317.933 (ETA AQ-Radial-iFR)	50.574 ppm	101.149 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.994 ppm	99.425 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.995 ppm	99.480 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.999 ppm	99.904 %
Ti 334.941 (ETA AQ-Axial-iFR)	1.006 ppm	100.648 %
Y 360.073 (ETA AQ-Axial-iFR)	101.978 %	
Y 360.073 (ETA AQ-Radial-iFR)	94.581 %	
Y 377.433 (ETA AQ-Axial-iFR)	101.504 %	
Y 377.433 (ETA AQ-Radial-iFR)	94.826 %	
Sr 407.771 (ETA AQ-Radial-iFR)	1.002 ppm	100.170 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.957 ppm	95.734 %
Na 589.592 (ETA AQ-Radial-iFR)	50.064 ppm	100.128 %
Li 670.784 (ETA AQ-Radial-iFR)	0.966 ppm	96.586 %
K 766.490 (ETA AQ-Radial-iFR)	49.242 ppm	98.484 %
Na 818.326 (ETA AQ-Radial-iFR)	49.938 ppm	99.876 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	952 cps
As 189.042 (ETA AQ-Axial-iFR)	65 cps
Sn 189.989 (ETA AQ-Axial-iFR)	134 cps
Tl 190.856 (ETA AQ-Axial-iFR)	47 cps
Se 196.090 (ETA AQ-Axial-iFR)	73 cps
Mo 202.030 (ETA AQ-Axial-iFR)	230 cps
Zn 206.200 (ETA AQ-Axial-iFR)	667 cps
Sb 206.833 (ETA AQ-Axial-iFR)	51 cps
B 208.959 (ETA AQ-Axial-iFR)	314 cps
P 213.618 (ETA AQ-Axial-iFR)	2,172 cps
Pb 220.353 (ETA AQ-Axial-iFR)	64 cps
Y 224.306 (ETA AQ-Axial-iFR)	469 cps
Y 224.306 (ETA AQ-Radial-iFR)	127 cps
Co 228.616 (ETA AQ-Axial-iFR)	577 cps
Cd 228.802 (ETA AQ-Axial-iFR)	1,027 cps
In 230.606 (ETA AQ-Axial-iFR)	472 cps
Ni 231.604 (ETA AQ-Axial-iFR)	411 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,168 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61,784 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,191 cps
Fe 271.441 (ETA AQ-Radial-iFR)	934 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,255 cps
Si 288.158 (ETA AQ-Radial-iFR)	909 cps

Analyte (Measure Mode)	Raw Intensity average
V 292.402 (ETA AQ-Axial-iFR)	1,755 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,621 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,486 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,461 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,268 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,931 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,921 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,603 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,785 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,401 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,653 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,993 cps
Sr 407.771 (ETA AQ-Radial-iFR)	28,411 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,828 cps
Na 589.592 (ETA AQ-Radial-iFR)	25,079 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,915 cps
K 766.490 (ETA AQ-Radial-iFR)	5,232 cps
Na 818.326 (ETA AQ-Radial-iFR)	615 cps

Label: CCB-8089739 #: 82
Analysis Type: QC Analysis started at: 10/18/2024 7:14:05 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.013 ppm	1.281 %
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	0.168 %
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.123 %
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.101 %
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.116 %
Mo 202.030 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.088 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0.074 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.004 ppm	0.450 %
B 208.959 (ETA AQ-Axial-iFR)	0.013 ppm	1.279 %
P 213.618 (ETA AQ-Axial-iFR)	0.001 ppm	0.076 %
Pb 220.353 (ETA AQ-Axial-iFR)	-0.002 ppm	-0.195 %
Y 224.306 (ETA AQ-Axial-iFR)	97.903 %	
Y 224.306 (ETA AQ-Radial-iFR)	96.855 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-0.049 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	0.014 %
In 230.606 (ETA AQ-Axial-iFR)	97.165 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0.042 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0.038 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.013 ppm	1.260 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.026 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.021 ppm	2.124 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.019 ppm	1.931 %
Si 288.158 (ETA AQ-Radial-iFR)	0.028 ppm	2.797 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0.013 %
Al 308.215 (ETA AQ-Radial-iFR)	0.011 ppm	1.079 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.014 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.007 ppm	0.728 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	0.078 %
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.066 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-0.003 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	0.022 %
Y 360.073 (ETA AQ-Axial-iFR)	95.649 %	

Basic Sample Report
10/20/2024 8:20:01 AM

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Y 360.073 (ETA AQ-Radial-iFR)	94.685 %	
Y 377.433 (ETA AQ-Axial-iFR)	95.601 %	
Y 377.433 (ETA AQ-Radial-iFR)	94.677 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.010 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.008 %
Na 589.592 (ETA AQ-Radial-iFR)	0.020 ppm	2.049 %
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	0.041 %
K 766.490 (ETA AQ-Radial-iFR)	0.043 ppm	4.291 %
Na 818.326 (ETA AQ-Radial-iFR)	0.113 ppm	11.316 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	5 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	456 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	2 cps
In 230.606 (ETA AQ-Axial-iFR)	460 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	16 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	1 cps
Si 288.158 (ETA AQ-Radial-iFR)	5 cps
V 292.402 (ETA AQ-Axial-iFR)	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	4 cps
Ca 317.933 (ETA AQ-Radial-iFR)	5 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	3 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,364 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,402 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,091 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,990 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-5 cps
Ba 455.403 (ETA AQ-Radial-iFR)	-1 cps
Na 589.592 (ETA AQ-Radial-iFR)	14 cps
Li 670.784 (ETA AQ-Radial-iFR)	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	6 cps
Na 818.326 (ETA AQ-Radial-iFR)	1 cps

Label: CCVL-8089740 #: 83
Analysis Type: QC Analysis started at: 10/18/2024 7:15:59 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.204 ppm	102.202 %
As 189.042 (ETA AQ-Axial-iFR)	0.018 ppm	118.465 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.009 ppm	87.854 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.013 ppm	64.769 %
Se 196.090 (ETA AQ-Axial-iFR)	0.024 ppm	94.539 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.010 ppm	99.232 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.012 ppm	115.359 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.023 ppm	116.878 %
B 208.959 (ETA AQ-Axial-iFR)	0.026 ppm	129.484 %
P 213.618 (ETA AQ-Axial-iFR)	-0.005 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.012 ppm	119.700 %
Y 224.306 (ETA AQ-Axial-iFR)	98.065 %	
Y 224.306 (ETA AQ-Radial-iFR)	97.524 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.003 ppm	74.741 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	99.089 %
In 230.606 (ETA AQ-Axial-iFR)	97.546 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.009 ppm	94.780 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	113.664 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	102.432 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	104.696 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.036 ppm	72.360 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.201 ppm	100.495 %
Si 288.158 (ETA AQ-Radial-iFR)	0.492 ppm	98.439 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	100.595 %
Al 308.215 (ETA AQ-Radial-iFR)	0.182 ppm	90.953 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	98.703 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.485 ppm	97.081 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.010 ppm	99.153 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.005 ppm	85.365 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.004 ppm	89.869 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	95.151 %
Y 360.073 (ETA AQ-Axial-iFR)	95.899 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.120 %	
Y 377.433 (ETA AQ-Axial-iFR)	95.833 %	
Y 377.433 (ETA AQ-Radial-iFR)	96.030 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	97.018 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	100.844 %
Na 589.592 (ETA AQ-Radial-iFR)	0.986 ppm	98.616 %
Li 670.784 (ETA AQ-Radial-iFR)	0.030 ppm	98.818 %
K 766.490 (ETA AQ-Radial-iFR)	0.502 ppm	100.474 %
Na 818.326 (ETA AQ-Radial-iFR)	1.145 ppm	114.463 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	4 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	2 cps
B 208.959 (ETA AQ-Axial-iFR)	9 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	457 cps
Y 224.306 (ETA AQ-Radial-iFR)	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	-1 cps

Analyte (Measure Mode)	Raw Intensity average
Cd 228.802 (ETA AQ-Axial-iFR)	4 cps
In 230.606 (ETA AQ-Axial-iFR)	462 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	7 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61 cps
Cr 267.716 (ETA AQ-Axial-iFR)	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	46 cps
V 292.402 (ETA AQ-Axial-iFR)	9 cps
Al 308.215 (ETA AQ-Radial-iFR)	11 cps
Be 313.042 (ETA AQ-Radial-iFR)	25 cps
Ca 317.933 (ETA AQ-Radial-iFR)	125 cps
Cu 327.396 (ETA AQ-Axial-iFR)	22 cps
Ag 328.068 (ETA AQ-Axial-iFR)	1 cps
Ti 334.904 (ETA AQ-Axial-iFR)	6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	39 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,381 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,423 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,114 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,018 cps
Sr 407.771 (ETA AQ-Radial-iFR)	132 cps
Ba 455.403 (ETA AQ-Radial-iFR)	25 cps
Na 589.592 (ETA AQ-Radial-iFR)	505 cps
Li 670.784 (ETA AQ-Radial-iFR)	58 cps
K 766.490 (ETA AQ-Radial-iFR)	56 cps
Na 818.326 (ETA AQ-Radial-iFR)	14 cps

Label: 480-224380-H-2-D #: 84
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:17:54 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	17.618 ppm	639 cps
As 189.042 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.010 ppm	8 cps
Sb 206.833 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.097 ppm	30 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.004 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.302 %	449 cps
Y 224.306 (ETA AQ-Radial-iFR)	93.193 %	123 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	98.989 %	468 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.711 ppm	1,551 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.016 ppm	20 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.068 ppm	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	60.486 ppm	2,738 cps
Si 288.158 (ETA AQ-Radial-iFR)	10.656 ppm	908 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.004 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	3 cps
Ca 317.933 (ETA AQ-Radial-iFR)	164.780 ppm	39,920 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.005 ppm	11 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.002 ppm	-13 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.208 %	6,468 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.026 %	1,378 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.268 %	9,250 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.258 %	1,960 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.510 ppm	42,146 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.286 ppm	3,724 cps
Na 589.592 (ETA AQ-Radial-iFR)	80.895 ppm	39,850 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.005 ppm	9 cps
K 766.490 (ETA AQ-Radial-iFR)	2.731 ppm	287 cps
Na 818.326 (ETA AQ-Radial-iFR)	80.962 ppm	980 cps

Label: 480-224380-H-2-D #: 85
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:19:48 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3.507 ppm	130 cps
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.016 ppm	10 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.022 ppm	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.008 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.238 %	453 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.029 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	99.265 %	470 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.146 ppm	320 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.002 ppm	3 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.049 ppm	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	12.046 ppm	548 cps
Si 288.158 (ETA AQ-Radial-iFR)	2.143 ppm	186 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.000 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	34.068 ppm	8,300 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-6 cps
Y 360.073 (ETA AQ-Axial-iFR)	96.444 %	6,417 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 360.073 (ETA AQ-Radial-iFR)	93.785 %	1,389 cps
Y 377.433 (ETA AQ-Axial-iFR)	96.381 %	9,166 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.758 %	1,970 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.308 ppm	8,639 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.057 ppm	750 cps
Na 589.592 (ETA AQ-Radial-iFR)	16.223 ppm	8,038 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.002 ppm	2 cps
K 766.490 (ETA AQ-Radial-iFR)	0.553 ppm	60 cps
Na 818.326 (ETA AQ-Radial-iFR)	16.233 ppm	197 cps

Label: 480-224380-H-2-D #: 86
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:21:42 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	22.538 ppm	819 cps
As 189.042 (ETA AQ-Axial-iFR)	0.907 ppm	59 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.920 ppm	126 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.871 ppm	43 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.917 ppm	66 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.442 ppm	103 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.485 ppm	300 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.445 ppm	23 cps
B 208.959 (ETA AQ-Axial-iFR)	0.553 ppm	165 cps
P 213.618 (ETA AQ-Axial-iFR)	10.188 ppm	834 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.447 ppm	30 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.464 %	449 cps
Y 224.306 (ETA AQ-Radial-iFR)	93.812 %	124 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.441 ppm	260 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.477 ppm	477 cps
In 230.606 (ETA AQ-Axial-iFR)	98.627 %	467 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.472 ppm	185 cps
Mn 257.610 (ETA AQ-Radial-iFR)	1.146 ppm	2,516 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.104 ppm	5,909 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.467 ppm	526 cps
Fe 271.441 (ETA AQ-Radial-iFR)	4.799 ppm	89 cps
Mg 279.079 (ETA AQ-Radial-iFR)	83.024 ppm	3,781 cps
Si 288.158 (ETA AQ-Radial-iFR)	11.563 ppm	994 cps
V 292.402 (ETA AQ-Axial-iFR)	0.462 ppm	775 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.682 ppm	251 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.471 ppm	5,389 cps
Ca 317.933 (ETA AQ-Radial-iFR)	183.472 ppm	44,725 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.485 ppm	1,062 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.045 ppm	113 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.480 ppm	1,334 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.491 ppm	4,003 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.275 %	6,472 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.359 %	1,383 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.449 %	9,267 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.838 %	1,972 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.940 ppm	54,475 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.172 ppm	15,359 cps
Na 589.592 (ETA AQ-Radial-iFR)	102.795 ppm	50,952 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.458 ppm	899 cps
K 766.490 (ETA AQ-Radial-iFR)	26.101 ppm	2,745 cps
Na 818.326 (ETA AQ-Radial-iFR)	102.250 ppm	1,246 cps

Label: 480-224380-H-2-E MS #: 87
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:23:36 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	25.108 ppm	911 cps
As 189.042 (ETA AQ-Axial-iFR)	0.969 ppm	63 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.982 ppm	134 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.921 ppm	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.973 ppm	70 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.473 ppm	110 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.570 ppm	354 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.486 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	0.596 ppm	178 cps
P 213.618 (ETA AQ-Axial-iFR)	10.136 ppm	829 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.475 ppm	31 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.397 %	449 cps
Y 224.306 (ETA AQ-Radial-iFR)	92.761 %	123 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.468 ppm	277 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.508 ppm	507 cps
In 230.606 (ETA AQ-Axial-iFR)	98.938 %	468 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.499 ppm	197 cps
Mn 257.610 (ETA AQ-Radial-iFR)	1.126 ppm	2,457 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.317 ppm	6,151 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.496 ppm	561 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.010 ppm	92 cps
Mg 279.079 (ETA AQ-Radial-iFR)	83.794 ppm	3,790 cps
Si 288.158 (ETA AQ-Radial-iFR)	11.280 ppm	963 cps
V 292.402 (ETA AQ-Axial-iFR)	0.492 ppm	830 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.907 ppm	261 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.502 ppm	5,704 cps
Ca 317.933 (ETA AQ-Radial-iFR)	183.979 ppm	44,542 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.515 ppm	1,133 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.050 ppm	127 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.511 ppm	1,428 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.523 ppm	4,282 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.722 %	6,502 cps
Y 360.073 (ETA AQ-Radial-iFR)	92.997 %	1,377 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.983 %	9,318 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.196 %	1,959 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.961 ppm	54,693 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.242 ppm	16,090 cps
Na 589.592 (ETA AQ-Radial-iFR)	108.741 ppm	53,531 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.490 ppm	955 cps
K 766.490 (ETA AQ-Radial-iFR)	27.154 ppm	2,836 cps
Na 818.326 (ETA AQ-Radial-iFR)	108.175 ppm	1,309 cps

Label: 480-224380-H-2-F MSD #: 88
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:25:30 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	20.462 ppm	743 cps
As 189.042 (ETA AQ-Axial-iFR)	0.981 ppm	64 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Sn 189.989 (ETA AQ-Axial-iFR)	0.992 ppm	136 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.937 ppm	47 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.989 ppm	71 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.483 ppm	112 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.520 ppm	324 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.492 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	0.596 ppm	178 cps
P 213.618 (ETA AQ-Axial-iFR)	10.239 ppm	838 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.485 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.455 %	449 cps
Y 224.306 (ETA AQ-Radial-iFR)	92.332 %	122 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.477 ppm	282 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.517 ppm	517 cps
In 230.606 (ETA AQ-Axial-iFR)	99.193 %	469 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.508 ppm	201 cps
Mn 257.610 (ETA AQ-Radial-iFR)	1.192 ppm	2,588 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.390 ppm	6,240 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.504 ppm	573 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.021 ppm	92 cps
Mg 279.079 (ETA AQ-Radial-iFR)	85.151 ppm	3,833 cps
Si 288.158 (ETA AQ-Radial-iFR)	11.448 ppm	973 cps
V 292.402 (ETA AQ-Axial-iFR)	0.501 ppm	848 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.929 ppm	261 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.513 ppm	5,797 cps
Ca 317.933 (ETA AQ-Radial-iFR)	187.485 ppm	45,174 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.524 ppm	1,159 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.051 ppm	130 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.520 ppm	1,462 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.532 ppm	4,380 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.217 %	6,535 cps
Y 360.073 (ETA AQ-Radial-iFR)	92.507 %	1,370 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.393 %	9,357 cps
Y 377.433 (ETA AQ-Radial-iFR)	92.751 %	1,949 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.997 ppm	55,417 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.272 ppm	16,401 cps
Na 589.592 (ETA AQ-Radial-iFR)	101.133 ppm	49,548 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.504 ppm	977 cps
K 766.490 (ETA AQ-Radial-iFR)	27.652 ppm	2,874 cps
Na 818.326 (ETA AQ-Radial-iFR)	100.831 ppm	1,214 cps

Label: 480-224380-H-3-B #: 89
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:27:24 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	22.327 ppm	795 cps
As 189.042 (ETA AQ-Axial-iFR)	0.106 ppm	6 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.017 ppm	2 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.006 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.005 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.004 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.090 ppm	9 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.007 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	25.663 ppm	7,303 cps
P 213.618 (ETA AQ-Axial-iFR)	2.989 ppm	237 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 224.306 (ETA AQ-Axial-iFR)	94.527 %	440 cps
Y 224.306 (ETA AQ-Radial-iFR)	88.182 %	116 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.020 ppm	9 cps
Cd 228.802 (ETA AQ-Axial-iFR)	-0.001 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	91.220 %	432 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.080 ppm	31 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.108 ppm	219 cps
Fe 259.940 (ETA AQ-Axial-iFR)	3.079 ppm	3,494 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.080 ppm	90 cps
Fe 271.441 (ETA AQ-Radial-iFR)	3.013 ppm	51 cps
Mg 279.079 (ETA AQ-Radial-iFR)	68.351 ppm	2,884 cps
Si 288.158 (ETA AQ-Radial-iFR)	21.704 ppm	1,722 cps
V 292.402 (ETA AQ-Axial-iFR)	0.026 ppm	45 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.061 ppm	4 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	3 cps
Ca 317.933 (ETA AQ-Radial-iFR)	69.577 ppm	15,716 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-13 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.089 ppm	241 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.090 ppm	727 cps
Y 360.073 (ETA AQ-Axial-iFR)	96.474 %	6,419 cps
Y 360.073 (ETA AQ-Radial-iFR)	86.857 %	1,286 cps
Y 377.433 (ETA AQ-Axial-iFR)	96.439 %	9,171 cps
Y 377.433 (ETA AQ-Radial-iFR)	86.940 %	1,827 cps
Sr 407.771 (ETA AQ-Radial-iFR)	2.739 ppm	71,222 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.934 ppm	11,503 cps
Na 589.592 (ETA AQ-Radial-iFR)	2,062.966 ppm	947,295 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.469 ppm	852 cps
K 766.490 (ETA AQ-Radial-iFR)	477.121 ppm	46,463 cps
Na 818.326 (ETA AQ-Radial-iFR)	2,401.983 ppm	27,111 cps

Label: 480-224380-H-4-B #: 90
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:29:18 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	32.897 ppm	1,163 cps
As 189.042 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.007 ppm	4 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.122 ppm	36 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.001 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	94.021 %	438 cps
Y 224.306 (ETA AQ-Radial-iFR)	92.675 %	122 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.487 %	461 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	6 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.024 ppm	28 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Fe 271.441 (ETA AQ-Radial-iFR)	0.051 ppm	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	34.831 ppm	1,589 cps
Si 288.158 (ETA AQ-Radial-iFR)	6.074 ppm	523 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.026 ppm	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	181.391 ppm	44,295 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.004 ppm	9 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.002 ppm	-14 cps
Y 360.073 (ETA AQ-Axial-iFR)	95.004 %	6,321 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.653 %	1,387 cps
Y 377.433 (ETA AQ-Axial-iFR)	95.348 %	9,067 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.001 %	1,976 cps
Sr 407.771 (ETA AQ-Radial-iFR)	4.309 ppm	121,156 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.173 ppm	2,242 cps
Na 589.592 (ETA AQ-Radial-iFR)	10.677 ppm	5,305 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.006 ppm	10 cps
K 766.490 (ETA AQ-Radial-iFR)	5.066 ppm	535 cps
Na 818.326 (ETA AQ-Radial-iFR)	10.599 ppm	129 cps

Label: 480-224380-H-4-C MS #: 91
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:31:12 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	37.381 ppm	1,349 cps
As 189.042 (ETA AQ-Axial-iFR)	0.978 ppm	63 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.991 ppm	135 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.914 ppm	45 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.981 ppm	71 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.481 ppm	111 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.533 ppm	328 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.496 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	0.573 ppm	170 cps
P 213.618 (ETA AQ-Axial-iFR)	10.222 ppm	832 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.480 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	95.976 %	447 cps
Y 224.306 (ETA AQ-Radial-iFR)	93.144 %	123 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.473 ppm	278 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.511 ppm	509 cps
In 230.606 (ETA AQ-Axial-iFR)	98.523 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.506 ppm	199 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.486 ppm	1,068 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.429 ppm	6,254 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.503 ppm	567 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.036 ppm	93 cps
Mg 279.079 (ETA AQ-Radial-iFR)	58.972 ppm	2,691 cps
Si 288.158 (ETA AQ-Radial-iFR)	6.914 ppm	598 cps
V 292.402 (ETA AQ-Axial-iFR)	0.498 ppm	837 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.950 ppm	266 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.505 ppm	5,780 cps
Ca 317.933 (ETA AQ-Radial-iFR)	201.847 ppm	49,292 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.514 ppm	1,127 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.051 ppm	128 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ti 334.904 (ETA AQ-Axial-iFR)	0.517 ppm	1,439 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.527 ppm	4,305 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.351 %	6,477 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.651 %	1,387 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.601 %	9,282 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.005 %	1,976 cps
Sr 407.771 (ETA AQ-Radial-iFR)	4.680 ppm	131,611 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.151 ppm	14,974 cps
Na 589.592 (ETA AQ-Radial-iFR)	35.872 ppm	17,815 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.493 ppm	969 cps
K 766.490 (ETA AQ-Radial-iFR)	29.922 ppm	3,152 cps
Na 818.326 (ETA AQ-Radial-iFR)	35.361 ppm	431 cps

Label: 480-224380-H-4-D MSD #: 92
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:33:06 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	38.087 ppm	1,362 cps
As 189.042 (ETA AQ-Axial-iFR)	0.989 ppm	63 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.994 ppm	135 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.922 ppm	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.992 ppm	71 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.486 ppm	111 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.535 ppm	327 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.501 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	0.574 ppm	169 cps
P 213.618 (ETA AQ-Axial-iFR)	10.324 ppm	833 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.484 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	95.114 %	443 cps
Y 224.306 (ETA AQ-Radial-iFR)	92.262 %	122 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.476 ppm	279 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.519 ppm	512 cps
In 230.606 (ETA AQ-Axial-iFR)	98.175 %	465 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.510 ppm	199 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.490 ppm	1,072 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.548 ppm	6,333 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.510 ppm	571 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.156 ppm	95 cps
Mg 279.079 (ETA AQ-Radial-iFR)	59.952 ppm	2,724 cps
Si 288.158 (ETA AQ-Radial-iFR)	6.984 ppm	601 cps
V 292.402 (ETA AQ-Axial-iFR)	0.504 ppm	840 cps
Al 308.215 (ETA AQ-Radial-iFR)	5.031 ppm	269 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.510 ppm	5,817 cps
Ca 317.933 (ETA AQ-Radial-iFR)	205.044 ppm	49,864 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.520 ppm	1,134 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.052 ppm	130 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.521 ppm	1,440 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.532 ppm	4,307 cps
Y 360.073 (ETA AQ-Axial-iFR)	96.664 %	6,432 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.309 %	1,382 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.008 %	9,225 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.614 %	1,967 cps
Sr 407.771 (ETA AQ-Radial-iFR)	4.738 ppm	132,682 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.170 ppm	15,084 cps
Na 589.592 (ETA AQ-Radial-iFR)	36.519 ppm	18,061 cps

Basic Sample Report
10/20/2024 8:20:01 AM

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Li 670.784 (ETA AQ-Radial-iFR)	0.503 ppm	983 cps
K 766.490 (ETA AQ-Radial-iFR)	30.600 ppm	3,210 cps
Na 818.326 (ETA AQ-Radial-iFR)	36.219 ppm	440 cps

Label: CCV-8089741 #: 93
Analysis Type: QC Analysis started at: 10/18/2024 7:35:00 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	25.034 ppm	100.138 %
As 189.042 (ETA AQ-Axial-iFR)	0.953 ppm	95.265 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.966 ppm	96.563 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.905 ppm	90.543 %
Se 196.090 (ETA AQ-Axial-iFR)	0.966 ppm	96.564 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.957 ppm	95.739 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.026 ppm	102.554 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.965 ppm	96.518 %
B 208.959 (ETA AQ-Axial-iFR)	0.981 ppm	98.130 %
P 213.618 (ETA AQ-Axial-iFR)	25.486 ppm	101.943 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.964 ppm	96.371 %
Y 224.306 (ETA AQ-Axial-iFR)	99.504 %	
Y 224.306 (ETA AQ-Radial-iFR)	93.478 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.961 ppm	96.134 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.989 ppm	98.855 %
In 230.606 (ETA AQ-Axial-iFR)	98.827 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.995 ppm	99.479 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.973 ppm	97.305 %
Fe 259.940 (ETA AQ-Axial-iFR)	51.127 ppm	102.254 %
Cr 267.716 (ETA AQ-Axial-iFR)	1.006 ppm	100.551 %
Fe 271.441 (ETA AQ-Radial-iFR)	49.867 ppm	99.734 %
Mg 279.079 (ETA AQ-Radial-iFR)	48.921 ppm	97.842 %
Si 288.158 (ETA AQ-Radial-iFR)	9.909 ppm	99.095 %
V 292.402 (ETA AQ-Axial-iFR)	0.996 ppm	99.634 %
Al 308.215 (ETA AQ-Radial-iFR)	48.607 ppm	97.214 %
Be 313.042 (ETA AQ-Radial-iFR)	0.997 ppm	99.660 %
Ca 317.933 (ETA AQ-Radial-iFR)	50.242 ppm	100.485 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.979 ppm	97.865 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.992 ppm	99.229 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.993 ppm	99.336 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.995 ppm	99.532 %
Y 360.073 (ETA AQ-Axial-iFR)	101.592 %	
Y 360.073 (ETA AQ-Radial-iFR)	93.491 %	
Y 377.433 (ETA AQ-Axial-iFR)	101.170 %	
Y 377.433 (ETA AQ-Radial-iFR)	93.573 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.987 ppm	98.693 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.977 ppm	97.742 %
Na 589.592 (ETA AQ-Radial-iFR)	49.747 ppm	99.494 %
Li 670.784 (ETA AQ-Radial-iFR)	0.963 ppm	96.272 %
K 766.490 (ETA AQ-Radial-iFR)	49.262 ppm	98.524 %
Na 818.326 (ETA AQ-Radial-iFR)	49.681 ppm	99.361 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	938 cps
As 189.042 (ETA AQ-Axial-iFR)	64 cps
Sn 189.989 (ETA AQ-Axial-iFR)	132 cps
Tl 190.856 (ETA AQ-Axial-iFR)	45 cps

Analyte (Measure Mode)	Raw Intensity average
Se 196.090 (ETA AQ-Axial-iFR)	72 cps
Mo 202.030 (ETA AQ-Axial-iFR)	228 cps
Zn 206.200 (ETA AQ-Axial-iFR)	658 cps
Sb 206.833 (ETA AQ-Axial-iFR)	51 cps
B 208.959 (ETA AQ-Axial-iFR)	302 cps
P 213.618 (ETA AQ-Axial-iFR)	2,159 cps
Pb 220.353 (ETA AQ-Axial-iFR)	64 cps
Y 224.306 (ETA AQ-Axial-iFR)	463 cps
Y 224.306 (ETA AQ-Radial-iFR)	123 cps
Co 228.616 (ETA AQ-Axial-iFR)	570 cps
Cd 228.802 (ETA AQ-Axial-iFR)	1,015 cps
In 230.606 (ETA AQ-Axial-iFR)	468 cps
Ni 231.604 (ETA AQ-Axial-iFR)	406 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,130 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61,052 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,182 cps
Fe 271.441 (ETA AQ-Radial-iFR)	915 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,221 cps
Si 288.158 (ETA AQ-Radial-iFR)	853 cps
V 292.402 (ETA AQ-Axial-iFR)	1,747 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,591 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,363 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,216 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,225 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,913 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,893 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,475 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,760 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,385 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,621 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,967 cps
Sr 407.771 (ETA AQ-Radial-iFR)	27,622 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,763 cps
Na 589.592 (ETA AQ-Radial-iFR)	24,591 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,884 cps
K 766.490 (ETA AQ-Radial-iFR)	5,165 cps
Na 818.326 (ETA AQ-Radial-iFR)	603 cps

Label: CCB-8089739 #: 94
Analysis Type: QC Analysis started at: 10/18/2024 7:36:55 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.010 ppm	1.018 %
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	0.344 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.001 ppm	0.054 %
Tl 190.856 (ETA AQ-Axial-iFR)	-0.006 ppm	-0.579 %
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.107 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	0.017 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.000 ppm	0.034 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0.232 %
B 208.959 (ETA AQ-Axial-iFR)	0.009 ppm	0.945 %
P 213.618 (ETA AQ-Axial-iFR)	0.000 ppm	-0.011 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0.099 %
Y 224.306 (ETA AQ-Axial-iFR)	96.738 %	
Y 224.306 (ETA AQ-Radial-iFR)	95.875 %	

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-0.035 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	0.034 %
In 230.606 (ETA AQ-Axial-iFR)	97.242 %	
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.061 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0.036 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.015 ppm	1.491 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.016 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.007 ppm	0.686 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.017 ppm	1.705 %
Si 288.158 (ETA AQ-Radial-iFR)	0.015 ppm	1.493 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0.024 %
Al 308.215 (ETA AQ-Radial-iFR)	0.028 ppm	2.828 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.021 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.009 ppm	0.879 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	0.086 %
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.077 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	0.017 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	0.028 %
Y 360.073 (ETA AQ-Axial-iFR)	95.322 %	
Y 360.073 (ETA AQ-Radial-iFR)	95.305 %	
Y 377.433 (ETA AQ-Axial-iFR)	95.409 %	
Y 377.433 (ETA AQ-Radial-iFR)	95.416 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.021 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.021 %
Na 589.592 (ETA AQ-Radial-iFR)	0.004 ppm	0.440 %
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	0.046 %
K 766.490 (ETA AQ-Radial-iFR)	0.052 ppm	5.233 %
Na 818.326 (ETA AQ-Radial-iFR)	0.096 ppm	9.630 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0 cps
B 208.959 (ETA AQ-Axial-iFR)	4 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	451 cps
Y 224.306 (ETA AQ-Radial-iFR)	127 cps
Co 228.616 (ETA AQ-Axial-iFR)	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	3 cps
In 230.606 (ETA AQ-Axial-iFR)	460 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	18 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	1 cps
Si 288.158 (ETA AQ-Radial-iFR)	4 cps
V 292.402 (ETA AQ-Axial-iFR)	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	4 cps
Ca 317.933 (ETA AQ-Radial-iFR)	6 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2 cps

Basic Sample Report
10/20/2024 8:20:01 AM

QTEGRA

Analyte (Measure Mode)	Raw Intensity average
Ag 328.068 (ETA AQ-Axial-iFR)	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	3 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,342 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,411 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,073 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,005 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-2 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1 cps
Na 589.592 (ETA AQ-Radial-iFR)	7 cps
Li 670.784 (ETA AQ-Radial-iFR)	0 cps
K 766.490 (ETA AQ-Radial-iFR)	7 cps
Na 818.326 (ETA AQ-Radial-iFR)	1 cps

Label: CCVL-8089740 #: 95
Analysis Type: QC Analysis started at: 10/18/2024 7:38:49 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.202 ppm	100.872 %
As 189.042 (ETA AQ-Axial-iFR)	0.017 ppm	114.214 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.008 ppm	81.684 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.017 ppm	83.670 %
Se 196.090 (ETA AQ-Axial-iFR)	0.022 ppm	89.257 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.009 ppm	87.686 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.011 ppm	111.865 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.019 ppm	97.265 %
B 208.959 (ETA AQ-Axial-iFR)	0.025 ppm	125.416 %
P 213.618 (ETA AQ-Axial-iFR)	-0.005 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.013 ppm	130.172 %
Y 224.306 (ETA AQ-Axial-iFR)	97.420 %	
Y 224.306 (ETA AQ-Radial-iFR)	96.616 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	95.666 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	95.584 %
In 230.606 (ETA AQ-Axial-iFR)	97.711 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	98.427 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	97.450 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	102.628 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	96.780 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.060 ppm	119.701 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.190 ppm	95.176 %
Si 288.158 (ETA AQ-Radial-iFR)	0.475 ppm	94.960 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	94.596 %
Al 308.215 (ETA AQ-Radial-iFR)	0.188 ppm	94.207 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	99.177 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.479 ppm	95.889 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.010 ppm	98.201 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.005 ppm	89.267 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	93.463 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	96.796 %
Y 360.073 (ETA AQ-Axial-iFR)	96.203 %	
Y 360.073 (ETA AQ-Radial-iFR)	95.591 %	
Y 377.433 (ETA AQ-Axial-iFR)	96.314 %	
Y 377.433 (ETA AQ-Radial-iFR)	95.758 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	95.620 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	98.811 %

Basic Sample Report
10/20/2024 8:20:01 AM

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Na 589.592 (ETA AQ-Radial-iFR)	0.976 ppm	97.567 %
Li 670.784 (ETA AQ-Radial-iFR)	0.029 ppm	95.582 %
K 766.490 (ETA AQ-Radial-iFR)	0.515 ppm	102.926 %
Na 818.326 (ETA AQ-Radial-iFR)	1.112 ppm	111.216 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	3 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	9 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	454 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	4 cps
In 230.606 (ETA AQ-Axial-iFR)	462 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	5 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61 cps
Cr 267.716 (ETA AQ-Axial-iFR)	4 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	44 cps
V 292.402 (ETA AQ-Axial-iFR)	8 cps
Al 308.215 (ETA AQ-Radial-iFR)	11 cps
Be 313.042 (ETA AQ-Radial-iFR)	25 cps
Ca 317.933 (ETA AQ-Radial-iFR)	123 cps
Cu 327.396 (ETA AQ-Axial-iFR)	22 cps
Ag 328.068 (ETA AQ-Axial-iFR)	1 cps
Ti 334.904 (ETA AQ-Axial-iFR)	7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	40 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,401 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,416 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,159 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,012 cps
Sr 407.771 (ETA AQ-Radial-iFR)	129 cps
Ba 455.403 (ETA AQ-Radial-iFR)	25 cps
Na 589.592 (ETA AQ-Radial-iFR)	498 cps
Li 670.784 (ETA AQ-Radial-iFR)	56 cps
K 766.490 (ETA AQ-Radial-iFR)	57 cps
Na 818.326 (ETA AQ-Radial-iFR)	14 cps

Label: 480-224380-H-5-B #: 96
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:40:44 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	12.535 ppm	453 cps
As 189.042 (ETA AQ-Axial-iFR)	0.017 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.004 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Tl 190.856 (ETA AQ-Axial-iFR)	0.003 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.003 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.016 ppm	13 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	6.389 ppm	1,845 cps
P 213.618 (ETA AQ-Axial-iFR)	0.792 ppm	60 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	95.831 %	446 cps
Y 224.306 (ETA AQ-Radial-iFR)	90.603 %	120 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.010 ppm	3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.476 %	461 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.045 ppm	18 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.169 ppm	358 cps
Fe 259.940 (ETA AQ-Axial-iFR)	4.125 ppm	4,745 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.023 ppm	26 cps
Fe 271.441 (ETA AQ-Radial-iFR)	3.904 ppm	69 cps
Mg 279.079 (ETA AQ-Radial-iFR)	64.649 ppm	2,848 cps
Si 288.158 (ETA AQ-Radial-iFR)	12.780 ppm	1,060 cps
V 292.402 (ETA AQ-Axial-iFR)	0.007 ppm	12 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.010 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	135.459 ppm	31,936 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-13 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.034 ppm	89 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.032 ppm	267 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.346 %	6,544 cps
Y 360.073 (ETA AQ-Radial-iFR)	90.360 %	1,338 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.729 %	9,389 cps
Y 377.433 (ETA AQ-Radial-iFR)	90.756 %	1,907 cps
Sr 407.771 (ETA AQ-Radial-iFR)	4.425 ppm	120,128 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.893 ppm	11,301 cps
Na 589.592 (ETA AQ-Radial-iFR)	714.712 ppm	342,596 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.054 ppm	102 cps
K 766.490 (ETA AQ-Radial-iFR)	183.393 ppm	18,643 cps
Na 818.326 (ETA AQ-Radial-iFR)	744.955 ppm	8,776 cps

Label: 480-224380-H-6-B #: 97
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:42:38 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	157.535 ppm	5,706 cps
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.002 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.007 ppm	5 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.328 ppm	97 cps
P 213.618 (ETA AQ-Axial-iFR)	0.000 ppm	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.452 %	449 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 224.306 (ETA AQ-Radial-iFR)	92.414 %	122 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	99.723 %	472 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.009 ppm	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.022 ppm	48 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.121 ppm	142 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.139 ppm	2 cps
Mg 279.079 (ETA AQ-Radial-iFR)	67.506 ppm	3,062 cps
Si 288.158 (ETA AQ-Radial-iFR)	9.072 ppm	775 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.008 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	172.123 ppm	41,788 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.018 ppm	41 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.001 ppm	-4 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.002 ppm	-12 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.023 %	6,589 cps
Y 360.073 (ETA AQ-Radial-iFR)	93.091 %	1,379 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.381 %	9,451 cps
Y 377.433 (ETA AQ-Radial-iFR)	93.456 %	1,964 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.819 ppm	50,873 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.027 ppm	342 cps
Na 589.592 (ETA AQ-Radial-iFR)	300.970 ppm	148,564 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.008 ppm	14 cps
K 766.490 (ETA AQ-Radial-iFR)	3.665 ppm	385 cps
Na 818.326 (ETA AQ-Radial-iFR)	306.096 ppm	3,714 cps

Label: 480-224380-H-7-B #: 98
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:44:32 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	24.081 ppm	872 cps
As 189.042 (ETA AQ-Axial-iFR)	0.093 ppm	5 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.011 ppm	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.007 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.004 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	-0.093 ppm	5 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	29.934 ppm	8,668 cps
P 213.618 (ETA AQ-Axial-iFR)	2.941 ppm	237 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.179 %	448 cps
Y 224.306 (ETA AQ-Radial-iFR)	90.311 %	119 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.023 ppm	10 cps
Cd 228.802 (ETA AQ-Axial-iFR)	-0.001 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	91.455 %	433 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.129 ppm	51 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.042 ppm	88 cps
Fe 259.940 (ETA AQ-Axial-iFR)	3.299 ppm	3,809 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.069 ppm	78 cps
Fe 271.441 (ETA AQ-Radial-iFR)	3.190 ppm	56 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Mg 279.079 (ETA AQ-Radial-iFR)	78.846 ppm	3,448 cps
Si 288.158 (ETA AQ-Radial-iFR)	22.224 ppm	1,827 cps
V 292.402 (ETA AQ-Axial-iFR)	0.030 ppm	52 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.063 ppm	4 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	71.247 ppm	16,674 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.003 ppm	6 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.001 ppm	-12 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.080 ppm	221 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.081 ppm	670 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.319 %	6,542 cps
Y 360.073 (ETA AQ-Radial-iFR)	89.617 %	1,327 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.622 %	9,379 cps
Y 377.433 (ETA AQ-Radial-iFR)	90.078 %	1,893 cps
Sr 407.771 (ETA AQ-Radial-iFR)	5.227 ppm	140,825 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.883 ppm	23,752 cps
Na 589.592 (ETA AQ-Radial-iFR)	2,005.309 ppm	954,065 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.250 ppm	469 cps
K 766.490 (ETA AQ-Radial-iFR)	563.834 ppm	56,888 cps
Na 818.326 (ETA AQ-Radial-iFR)	2,333.561 ppm	27,288 cps

Label: 480-224420-A-2-A #: 99
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:46:26 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	6.676 ppm	256 cps
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.002 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.005 ppm	10 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.094 ppm	30 cps
P 213.618 (ETA AQ-Axial-iFR)	0.368 ppm	27 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	101.042 %	471 cps
Y 224.306 (ETA AQ-Radial-iFR)	97.148 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	102.485 %	485 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	3.322 ppm	7,527 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.129 ppm	158 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.015 ppm	19 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.149 ppm	2 cps
Mg 279.079 (ETA AQ-Radial-iFR)	7.877 ppm	370 cps
Si 288.158 (ETA AQ-Radial-iFR)	3.238 ppm	289 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.141 ppm	9 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	16.490 ppm	4,150 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.019 ppm	43 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.085 ppm	243 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ti 334.941 (ETA AQ-Axial-iFR)	0.086 ppm	737 cps
Y 360.073 (ETA AQ-Axial-iFR)	101.692 %	6,766 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.564 %	1,430 cps
Y 377.433 (ETA AQ-Axial-iFR)	102.147 %	9,714 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.806 %	2,034 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.108 ppm	3,127 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.551 ppm	7,469 cps
Na 589.592 (ETA AQ-Radial-iFR)	196.759 ppm	100,608 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.005 ppm	8 cps
K 766.490 (ETA AQ-Radial-iFR)	37.749 ppm	4,095 cps
Na 818.326 (ETA AQ-Radial-iFR)	199.417 ppm	2,506 cps

Label: 480-224420-A-4-A #: 100
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:48:20 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	6.433 ppm	245 cps
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.004 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.012 ppm	13 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.042 ppm	14 cps
P 213.618 (ETA AQ-Axial-iFR)	0.031 ppm	-2 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	100.448 %	468 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.647 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	-0.001 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	102.343 %	484 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2.972 ppm	6,725 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.132 ppm	161 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.015 ppm	18 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.142 ppm	2 cps
Mg 279.079 (ETA AQ-Radial-iFR)	8.689 ppm	408 cps
Si 288.158 (ETA AQ-Radial-iFR)	3.001 ppm	267 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.124 ppm	8 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	18.246 ppm	4,586 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.027 ppm	61 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-14 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.050 ppm	138 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.050 ppm	427 cps
Y 360.073 (ETA AQ-Axial-iFR)	101.269 %	6,738 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.646 %	1,431 cps
Y 377.433 (ETA AQ-Axial-iFR)	101.714 %	9,673 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.675 %	2,032 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.140 ppm	4,032 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.638 ppm	22,113 cps
Na 589.592 (ETA AQ-Radial-iFR)	171.966 ppm	87,813 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.005 ppm	8 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
K 766.490 (ETA AQ-Radial-iFR)	33.006 ppm	3,576 cps
Na 818.326 (ETA AQ-Radial-iFR)	173.883 ppm	2,182 cps

Label: 480-224417-B-1-A #: 101
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:50:14 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	5.128 ppm	195 cps
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.004 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.003 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.048 ppm	34 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.093 ppm	30 cps
P 213.618 (ETA AQ-Axial-iFR)	0.035 ppm	-2 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	100.131 %	466 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.788 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	101.147 %	479 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	1.321 ppm	2,958 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.908 ppm	1,092 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.912 ppm	17 cps
Mg 279.079 (ETA AQ-Radial-iFR)	3.362 ppm	156 cps
Si 288.158 (ETA AQ-Radial-iFR)	4.793 ppm	420 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.030 ppm	3 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	29.165 ppm	7,254 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.008 ppm	19 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Y 360.073 (ETA AQ-Axial-iFR)	99.853 %	6,644 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.494 %	1,414 cps
Y 377.433 (ETA AQ-Axial-iFR)	100.198 %	9,529 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.706 %	2,011 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.284 ppm	8,120 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.336 ppm	4,535 cps
Na 589.592 (ETA AQ-Radial-iFR)	120.932 ppm	61,135 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.034 ppm	67 cps
K 766.490 (ETA AQ-Radial-iFR)	1.102 ppm	120 cps
Na 818.326 (ETA AQ-Radial-iFR)	121.728 ppm	1,512 cps

Label: 480-224417-B-2-A #: 102
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:52:08 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	4.541 ppm	172 cps
As 189.042 (ETA AQ-Axial-iFR)	0.007 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.007 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.003 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.012 ppm	8 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.090 ppm	28 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.003 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	99.206 %	462 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.124 %	127 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	100.094 %	474 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	1.000 ppm	2,260 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.812 ppm	968 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.788 ppm	15 cps
Mg 279.079 (ETA AQ-Radial-iFR)	7.836 ppm	367 cps
Si 288.158 (ETA AQ-Radial-iFR)	5.471 ppm	484 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.005 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	53.821 ppm	13,509 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-0.001 ppm	-8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-5 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.955 %	6,584 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.482 %	1,429 cps
Y 377.433 (ETA AQ-Axial-iFR)	99.251 %	9,439 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.602 %	2,030 cps
Sr 407.771 (ETA AQ-Radial-iFR)	1.235 ppm	35,683 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.307 ppm	4,119 cps
Na 589.592 (ETA AQ-Radial-iFR)	30.518 ppm	15,576 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.014 ppm	26 cps
K 766.490 (ETA AQ-Radial-iFR)	0.912 ppm	100 cps
Na 818.326 (ETA AQ-Radial-iFR)	30.917 ppm	388 cps

Label: 480-224431-A-2-A #: 103
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:54:03 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	15.347 ppm	577 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.008 ppm	3 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.134 ppm	88 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.007 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.066 ppm	21 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
P 213.618 (ETA AQ-Axial-iFR)	0.177 ppm	10 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.012 ppm	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	99.715 %	464 cps
Y 224.306 (ETA AQ-Radial-iFR)	97.264 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.001 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	101.118 %	479 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.003 ppm	1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.047 ppm	106 cps
Fe 259.940 (ETA AQ-Axial-iFR)	1.703 ppm	2,039 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.023 ppm	26 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1.591 ppm	30 cps
Mg 279.079 (ETA AQ-Radial-iFR)	10.680 ppm	503 cps
Si 288.158 (ETA AQ-Radial-iFR)	2.565 ppm	230 cps
V 292.402 (ETA AQ-Axial-iFR)	0.003 ppm	6 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.337 ppm	20 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	54.822 ppm	13,832 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.016 ppm	37 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.015 ppm	37 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.015 ppm	126 cps
Y 360.073 (ETA AQ-Axial-iFR)	100.035 %	6,656 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.581 %	1,430 cps
Y 377.433 (ETA AQ-Axial-iFR)	100.273 %	9,536 cps
Y 377.433 (ETA AQ-Radial-iFR)	97.105 %	2,041 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.275 ppm	7,995 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.042 ppm	574 cps
Na 589.592 (ETA AQ-Radial-iFR)	107.129 ppm	54,950 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.017 ppm	34 cps
K 766.490 (ETA AQ-Radial-iFR)	8.002 ppm	872 cps
Na 818.326 (ETA AQ-Radial-iFR)	107.232 ppm	1,352 cps

Label: 480-224430-C-1-A #: 104
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 7:55:57 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	4.888 ppm	182 cps
As 189.042 (ETA AQ-Axial-iFR)	0.026 ppm	1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.004 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.069 ppm	17 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.022 ppm	14 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.164 ppm	50 cps
P 213.618 (ETA AQ-Axial-iFR)	0.031 ppm	-2 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.001 %	456 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.281 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.444 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.016 ppm	6 cps
Mn 257.610 (ETA AQ-Radial-iFR)	1.741 ppm	3,864 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Fe 259.940 (ETA AQ-Axial-iFR)	5.479 ppm	6,444 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.005 ppm	6 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.164 ppm	96 cps
Mg 279.079 (ETA AQ-Radial-iFR)	13.030 ppm	600 cps
Si 288.158 (ETA AQ-Radial-iFR)	5.948 ppm	516 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.009 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	91.453 ppm	22,528 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.015 ppm	33 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-6 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.307 %	6,541 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.701 %	1,402 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.409 %	9,358 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.817 %	1,993 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.156 ppm	4,436 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.444 ppm	5,910 cps
Na 589.592 (ETA AQ-Radial-iFR)	12.242 ppm	6,135 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.002 ppm	3 cps
K 766.490 (ETA AQ-Radial-iFR)	7.281 ppm	775 cps
Na 818.326 (ETA AQ-Radial-iFR)	12.178 ppm	150 cps

Label: CCV-8089741 #: 105
Analysis Type: QC Analysis started at: 10/18/2024 7:57:51 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	25.038 ppm	100.153 %
As 189.042 (ETA AQ-Axial-iFR)	0.952 ppm	95.179 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.979 ppm	97.887 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.916 ppm	91.553 %
Se 196.090 (ETA AQ-Axial-iFR)	0.957 ppm	95.729 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.943 ppm	94.328 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.038 ppm	103.827 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.954 ppm	95.425 %
B 208.959 (ETA AQ-Axial-iFR)	0.978 ppm	97.793 %
P 213.618 (ETA AQ-Axial-iFR)	25.375 ppm	101.501 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.969 ppm	96.925 %
Y 224.306 (ETA AQ-Axial-iFR)	100.719 %	
Y 224.306 (ETA AQ-Radial-iFR)	94.630 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.973 ppm	97.286 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.985 ppm	98.547 %
In 230.606 (ETA AQ-Axial-iFR)	98.316 %	
Ni 231.604 (ETA AQ-Axial-iFR)	1.001 ppm	100.076 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.970 ppm	96.982 %
Fe 259.940 (ETA AQ-Axial-iFR)	50.562 ppm	101.124 %
Cr 267.716 (ETA AQ-Axial-iFR)	1.009 ppm	100.854 %
Fe 271.441 (ETA AQ-Radial-iFR)	50.014 ppm	100.029 %
Mg 279.079 (ETA AQ-Radial-iFR)	49.167 ppm	98.334 %
Si 288.158 (ETA AQ-Radial-iFR)	9.870 ppm	98.701 %
V 292.402 (ETA AQ-Axial-iFR)	0.997 ppm	99.670 %
Al 308.215 (ETA AQ-Radial-iFR)	48.523 ppm	97.045 %
Be 313.042 (ETA AQ-Radial-iFR)	0.993 ppm	99.335 %
Ca 317.933 (ETA AQ-Radial-iFR)	50.009 ppm	100.018 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Cu 327.396 (ETA AQ-Axial-iFR)	0.974 ppm	97.377 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.996 ppm	99.630 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.994 ppm	99.370 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.996 ppm	99.582 %
Y 360.073 (ETA AQ-Axial-iFR)	101.816 %	
Y 360.073 (ETA AQ-Radial-iFR)	94.015 %	
Y 377.433 (ETA AQ-Axial-iFR)	101.333 %	
Y 377.433 (ETA AQ-Radial-iFR)	94.300 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.988 ppm	98.755 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.972 ppm	97.228 %
Na 589.592 (ETA AQ-Radial-iFR)	49.546 ppm	99.091 %
Li 670.784 (ETA AQ-Radial-iFR)	0.971 ppm	97.124 %
K 766.490 (ETA AQ-Radial-iFR)	49.214 ppm	98.429 %
Na 818.326 (ETA AQ-Radial-iFR)	49.301 ppm	98.603 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	949 cps
As 189.042 (ETA AQ-Axial-iFR)	64 cps
Sn 189.989 (ETA AQ-Axial-iFR)	133 cps
Tl 190.856 (ETA AQ-Axial-iFR)	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	72 cps
Mo 202.030 (ETA AQ-Axial-iFR)	228 cps
Zn 206.200 (ETA AQ-Axial-iFR)	667 cps
Sb 206.833 (ETA AQ-Axial-iFR)	51 cps
B 208.959 (ETA AQ-Axial-iFR)	305 cps
P 213.618 (ETA AQ-Axial-iFR)	2,175 cps
Pb 220.353 (ETA AQ-Axial-iFR)	64 cps
Y 224.306 (ETA AQ-Axial-iFR)	469 cps
Y 224.306 (ETA AQ-Radial-iFR)	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	573 cps
Cd 228.802 (ETA AQ-Axial-iFR)	1,024 cps
In 230.606 (ETA AQ-Axial-iFR)	465 cps
Ni 231.604 (ETA AQ-Axial-iFR)	409 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,140 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61,121 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,188 cps
Fe 271.441 (ETA AQ-Radial-iFR)	925 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,250 cps
Si 288.158 (ETA AQ-Radial-iFR)	856 cps
V 292.402 (ETA AQ-Axial-iFR)	1,752 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,606 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,414 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,254 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,217 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,930 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,900 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,496 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,774 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,392 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,637 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,982 cps
Sr 407.771 (ETA AQ-Radial-iFR)	27,854 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,852 cps
Na 589.592 (ETA AQ-Radial-iFR)	24,682 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,916 cps
K 766.490 (ETA AQ-Radial-iFR)	5,200 cps
Na 818.326 (ETA AQ-Radial-iFR)	603 cps

Basic Sample Report
10/20/2024 8:20:01 AM

Label: CCB-8089739 #: 106
Analysis Type: QC Analysis started at: 10/18/2024 7:59:46 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.012 ppm	1.177 %
As 189.042 (ETA AQ-Axial-iFR)	0.004 ppm	0.355 %
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.139 %
Tl 190.856 (ETA AQ-Axial-iFR)	-0.006 ppm	-0.588 %
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.053 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	0.068 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0.089 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0.170 %
B 208.959 (ETA AQ-Axial-iFR)	0.008 ppm	0.776 %
P 213.618 (ETA AQ-Axial-iFR)	0.002 ppm	0.160 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0.063 %
Y 224.306 (ETA AQ-Axial-iFR)	99.470 %	
Y 224.306 (ETA AQ-Radial-iFR)	98.235 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-0.024 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.001 ppm	0.067 %
In 230.606 (ETA AQ-Axial-iFR)	97.195 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-0.022 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0.049 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.016 ppm	1.626 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.034 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.017 ppm	1.733 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.020 ppm	1.998 %
Si 288.158 (ETA AQ-Radial-iFR)	0.010 ppm	1.044 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0.022 %
Al 308.215 (ETA AQ-Radial-iFR)	0.005 ppm	0.467 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.023 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.010 ppm	1.046 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0.029 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-0.048 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	0.044 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.001 ppm	0.055 %
Y 360.073 (ETA AQ-Axial-iFR)	97.325 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.639 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.496 %	
Y 377.433 (ETA AQ-Radial-iFR)	96.958 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.022 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.024 %
Na 589.592 (ETA AQ-Radial-iFR)	0.036 ppm	3.644 %
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	0.061 %
K 766.490 (ETA AQ-Radial-iFR)	0.058 ppm	5.793 %
Na 818.326 (ETA AQ-Radial-iFR)	0.069 ppm	6.930 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0 cps

Analyte (Measure Mode)	Raw Intensity average
B 208.959 (ETA AQ-Axial-iFR)	4 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	463 cps
Y 224.306 (ETA AQ-Radial-iFR)	130 cps
Co 228.616 (ETA AQ-Axial-iFR)	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	3 cps
In 230.606 (ETA AQ-Axial-iFR)	460 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	21 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	1 cps
Si 288.158 (ETA AQ-Radial-iFR)	3 cps
V 292.402 (ETA AQ-Axial-iFR)	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	5 cps
Ca 317.933 (ETA AQ-Radial-iFR)	6 cps
Cu 327.396 (ETA AQ-Axial-iFR)	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	6 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,476 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,431 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,272 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,038 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-2 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1 cps
Na 589.592 (ETA AQ-Radial-iFR)	23 cps
Li 670.784 (ETA AQ-Radial-iFR)	0 cps
K 766.490 (ETA AQ-Radial-iFR)	8 cps
Na 818.326 (ETA AQ-Radial-iFR)	1 cps

Label: CCVL-8089740 #: 107
Analysis Type: QC Analysis started at: 10/18/2024 8:01:41 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.197 ppm	98.510 %
As 189.042 (ETA AQ-Axial-iFR)	0.015 ppm	97.354 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.009 ppm	93.186 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.012 ppm	60.679 %
Se 196.090 (ETA AQ-Axial-iFR)	0.020 ppm	81.802 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.009 ppm	85.573 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.012 ppm	119.737 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.022 ppm	111.822 %
B 208.959 (ETA AQ-Axial-iFR)	0.025 ppm	122.877 %
P 213.618 (ETA AQ-Axial-iFR)	-0.004 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.010 ppm	102.774 %
Y 224.306 (ETA AQ-Axial-iFR)	99.040 %	
Y 224.306 (ETA AQ-Radial-iFR)	98.303 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	88.666 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	110.468 %
In 230.606 (ETA AQ-Axial-iFR)	97.459 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	99.888 %

Basic Sample Report
10/20/2024 8:20:01 AM

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	104.580 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	101.277 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	112.123 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.042 ppm	83.612 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.189 ppm	94.643 %
Si 288.158 (ETA AQ-Radial-iFR)	0.478 ppm	95.528 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	95.186 %
Al 308.215 (ETA AQ-Radial-iFR)	0.178 ppm	89.063 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	96.971 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.479 ppm	95.764 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.009 ppm	90.021 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.006 ppm	91.870 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	98.627 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	98.629 %
Y 360.073 (ETA AQ-Axial-iFR)	97.300 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.975 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.227 %	
Y 377.433 (ETA AQ-Radial-iFR)	97.037 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	95.277 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	95.779 %
Na 589.592 (ETA AQ-Radial-iFR)	0.993 ppm	99.316 %
Li 670.784 (ETA AQ-Radial-iFR)	0.029 ppm	97.968 %
K 766.490 (ETA AQ-Radial-iFR)	0.515 ppm	102.913 %
Na 818.326 (ETA AQ-Radial-iFR)	1.037 ppm	103.668 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	3 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	1 cps
B 208.959 (ETA AQ-Axial-iFR)	9 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	461 cps
Y 224.306 (ETA AQ-Radial-iFR)	130 cps
Co 228.616 (ETA AQ-Axial-iFR)	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	5 cps
In 230.606 (ETA AQ-Axial-iFR)	461 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	6 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61 cps
Cr 267.716 (ETA AQ-Axial-iFR)	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	45 cps
V 292.402 (ETA AQ-Axial-iFR)	8 cps
Al 308.215 (ETA AQ-Radial-iFR)	11 cps
Be 313.042 (ETA AQ-Radial-iFR)	25 cps
Ca 317.933 (ETA AQ-Radial-iFR)	124 cps
Cu 327.396 (ETA AQ-Axial-iFR)	20 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2 cps
Ti 334.904 (ETA AQ-Axial-iFR)	8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	41 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,474 cps

Analyte (Measure Mode)	Raw Intensity average
Y 360.073 (ETA AQ-Radial-iFR)	1,436 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,246 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,039 cps
Sr 407.771 (ETA AQ-Radial-iFR)	130 cps
Ba 455.403 (ETA AQ-Radial-iFR)	24 cps
Na 589.592 (ETA AQ-Radial-iFR)	513 cps
Li 670.784 (ETA AQ-Radial-iFR)	58 cps
K 766.490 (ETA AQ-Radial-iFR)	58 cps
Na 818.326 (ETA AQ-Radial-iFR)	13 cps

Label: 480-224427-A-1-A #: 108
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:03:36 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	90.881 ppm	3,335 cps
As 189.042 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.005 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.011 ppm	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.004 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	3.824 ppm	1,126 cps
P 213.618 (ETA AQ-Axial-iFR)	0.009 ppm	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.005 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.687 %	455 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.483 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.395 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.019 ppm	40 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.039 ppm	47 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.003 ppm	3 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.030 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	19.385 ppm	894 cps
Si 288.158 (ETA AQ-Radial-iFR)	5.586 ppm	486 cps
V 292.402 (ETA AQ-Axial-iFR)	0.002 ppm	5 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.036 ppm	3 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	160.277 ppm	39,537 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.002 ppm	6 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-10 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.494 %	6,553 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.928 %	1,406 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.720 %	9,388 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.957 %	1,996 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.652 ppm	18,558 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.028 ppm	362 cps
Na 589.592 (ETA AQ-Radial-iFR)	10.849 ppm	5,446 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.036 ppm	70 cps
K 766.490 (ETA AQ-Radial-iFR)	6.879 ppm	733 cps
Na 818.326 (ETA AQ-Radial-iFR)	10.884 ppm	134 cps

Label: 480-224427-A-2-A #: 109
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:05:31 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	40.186 ppm	1,490 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.005 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.004 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.015 ppm	9 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.006 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	1.268 ppm	378 cps
P 213.618 (ETA AQ-Axial-iFR)	0.014 ppm	-3 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.599 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.947 %	127 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.001 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	98.685 %	467 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.005 ppm	1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.027 ppm	60 cps
Fe 259.940 (ETA AQ-Axial-iFR)	1.818 ppm	2,152 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	4 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1.703 ppm	32 cps
Mg 279.079 (ETA AQ-Radial-iFR)	10.545 ppm	490 cps
Si 288.158 (ETA AQ-Radial-iFR)	6.880 ppm	603 cps
V 292.402 (ETA AQ-Axial-iFR)	0.004 ppm	8 cps
Al 308.215 (ETA AQ-Radial-iFR)	1.952 ppm	107 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	3 cps
Ca 317.933 (ETA AQ-Radial-iFR)	69.569 ppm	17,305 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.003 ppm	7 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.013 ppm	31 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.013 ppm	107 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.147 %	6,530 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.574 %	1,415 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.527 %	9,370 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.741 %	2,012 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.679 ppm	19,446 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.022 ppm	287 cps
Na 589.592 (ETA AQ-Radial-iFR)	7.798 ppm	3,947 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.029 ppm	56 cps
K 766.490 (ETA AQ-Radial-iFR)	4.959 ppm	533 cps
Na 818.326 (ETA AQ-Radial-iFR)	7.841 ppm	97 cps

Label: 480-224434-D-1-A #: 110
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:07:25 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.962 ppm	38 cps
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.005 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.022 ppm	6 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.007 ppm	4 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.027 ppm	10 cps
P 213.618 (ETA AQ-Axial-iFR)	0.007 ppm	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.717 %	460 cps
Y 224.306 (ETA AQ-Radial-iFR)	97.063 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.001 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.260 %	465 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.014 ppm	5 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.027 ppm	60 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.197 ppm	234 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.212 ppm	4 cps
Mg 279.079 (ETA AQ-Radial-iFR)	1.024 ppm	48 cps
Si 288.158 (ETA AQ-Radial-iFR)	2.000 ppm	179 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.007 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	19.622 ppm	4,936 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.007 ppm	15 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.030 %	6,523 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.977 %	1,436 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.981 %	9,318 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.775 %	2,034 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.032 ppm	916 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.018 ppm	239 cps
Na 589.592 (ETA AQ-Radial-iFR)	1.012 ppm	521 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	1 cps
K 766.490 (ETA AQ-Radial-iFR)	1.407 ppm	154 cps
Na 818.326 (ETA AQ-Radial-iFR)	1.031 ppm	13 cps

Label: MB 480-728750/1-A #: 111
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:09:19 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	-0.016 ppm	2 cps
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.002 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.006 ppm	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.006 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 224.306 (ETA AQ-Axial-iFR)	98.433 %	458 cps
Y 224.306 (ETA AQ-Radial-iFR)	97.753 %	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	96.989 %	459 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-0.008 ppm	-1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.001 ppm	3 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.007 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.004 ppm	5 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.368 %	6,479 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.664 %	1,432 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.031 %	9,227 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.469 %	2,027 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-8 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
Na 589.592 (ETA AQ-Radial-iFR)	0.008 ppm	8 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	0.040 ppm	6 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.021 ppm	0 cps

Label: LCS 480-728750/2-A #: 112
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:11:14 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	5.123 ppm	192 cps
As 189.042 (ETA AQ-Axial-iFR)	0.977 ppm	65 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1.002 ppm	138 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.905 ppm	45 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.965 ppm	71 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.476 ppm	113 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.554 ppm	344 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.486 ppm	26 cps
B 208.959 (ETA AQ-Axial-iFR)	0.497 ppm	153 cps
P 213.618 (ETA AQ-Axial-iFR)	10.287 ppm	861 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.482 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.588 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	97.073 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.488 ppm	289 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.507 ppm	518 cps
In 230.606 (ETA AQ-Axial-iFR)	99.366 %	470 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.519 ppm	206 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.492 ppm	1,106 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.396 ppm	6,385 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.517 ppm	590 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Fe 271.441 (ETA AQ-Radial-iFR)	5.155 ppm	97 cps
Mg 279.079 (ETA AQ-Radial-iFR)	24.196 ppm	1,128 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.996 ppm	93 cps
V 292.402 (ETA AQ-Axial-iFR)	0.504 ppm	857 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.862 ppm	267 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.510 ppm	5,970 cps
Ca 317.933 (ETA AQ-Radial-iFR)	25.016 ppm	6,247 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.486 ppm	1,076 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.050 ppm	128 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.521 ppm	1,467 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.531 ppm	4,383 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.528 %	6,556 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.181 %	1,424 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.490 %	9,366 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.083 %	2,019 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.507 ppm	14,562 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.982 ppm	13,317 cps
Na 589.592 (ETA AQ-Radial-iFR)	24.718 ppm	12,549 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.488 ppm	979 cps
K 766.490 (ETA AQ-Radial-iFR)	24.385 ppm	2,626 cps
Na 818.326 (ETA AQ-Radial-iFR)	24.474 ppm	305 cps

Label: 480-224410-B-1-D #: 113
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:13:08 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	1.135 ppm	44 cps
As 189.042 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.004 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.005 ppm	2 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.015 ppm	9 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.010 ppm	5 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.003 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.346 %	458 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.771 %	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	98.373 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.004 ppm	6 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-0.017 ppm	-1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	8.473 ppm	397 cps
Si 288.158 (ETA AQ-Radial-iFR)	4.134 ppm	367 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.009 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	37.092 ppm	9,314 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-3 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.089 %	6,526 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.632 %	1,431 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.977 %	9,317 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.632 %	2,031 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.038 ppm	1,090 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.019 ppm	254 cps
Na 589.592 (ETA AQ-Radial-iFR)	1.048 ppm	539 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.002 ppm	2 cps
K 766.490 (ETA AQ-Radial-iFR)	1.154 ppm	127 cps
Na 818.326 (ETA AQ-Radial-iFR)	1.091 ppm	13 cps

Label: 480-224410-B-2-B #: 114
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:15:03 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	1.072 ppm	42 cps
As 189.042 (ETA AQ-Axial-iFR)	0.003 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.245 ppm	152 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.012 ppm	5 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.006 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.104 %	457 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.550 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.494 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.011 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9.627 ppm	443 cps
Si 288.158 (ETA AQ-Radial-iFR)	3.197 ppm	278 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.007 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	71.661 ppm	17,636 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-6 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.131 %	6,529 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.861 %	1,405 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.996 %	9,319 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.726 %	1,991 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.057 ppm	1,622 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.023 ppm	300 cps
Na 589.592 (ETA AQ-Radial-iFR)	0.922 ppm	466 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
K 766.490 (ETA AQ-Radial-iFR)	1.018 ppm	110 cps
Na 818.326 (ETA AQ-Radial-iFR)	1.011 ppm	12 cps

Label: 480-224410-B-2-B #: 115
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:16:57 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.191 ppm	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.007 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.004 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.064 ppm	39 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.005 ppm	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.008 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.742 %	460 cps
Y 224.306 (ETA AQ-Radial-iFR)	96.108 %	127 cps
Co 228.616 (ETA AQ-Axial-iFR)	-0.001 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.894 %	463 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	-0.001 ppm	0 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-0.003 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	1.919 ppm	90 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.628 ppm	57 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.041 ppm	3 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	14.132 ppm	3,532 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.427 %	6,482 cps
Y 360.073 (ETA AQ-Radial-iFR)	96.191 %	1,425 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.480 %	9,270 cps
Y 377.433 (ETA AQ-Radial-iFR)	96.116 %	2,020 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.011 ppm	315 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.004 ppm	57 cps
Na 589.592 (ETA AQ-Radial-iFR)	0.173 ppm	92 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	0.208 ppm	24 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.102 ppm	1 cps

Label: 480-224410-B-2-B #: 116
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:18:51 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	6.171 ppm	229 cps
As 189.042 (ETA AQ-Axial-iFR)	0.915 ppm	60 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.939 ppm	128 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.857 ppm	43 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.912 ppm	67 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.446 ppm	105 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.724 ppm	448 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.433 ppm	23 cps
B 208.959 (ETA AQ-Axial-iFR)	0.460 ppm	140 cps
P 213.618 (ETA AQ-Axial-iFR)	10.132 ppm	839 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.459 ppm	30 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.563 %	454 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.601 %	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.456 ppm	268 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.482 ppm	488 cps
In 230.606 (ETA AQ-Axial-iFR)	98.518 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.487 ppm	193 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.462 ppm	1,029 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.126 ppm	6,003 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.484 ppm	550 cps
Fe 271.441 (ETA AQ-Radial-iFR)	4.834 ppm	91 cps
Mg 279.079 (ETA AQ-Radial-iFR)	32.641 ppm	1,507 cps
Si 288.158 (ETA AQ-Radial-iFR)	4.098 ppm	360 cps
V 292.402 (ETA AQ-Axial-iFR)	0.472 ppm	799 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.678 ppm	254 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.483 ppm	5,604 cps
Ca 317.933 (ETA AQ-Radial-iFR)	93.391 ppm	23,077 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.467 ppm	1,032 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.044 ppm	110 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.487 ppm	1,367 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.496 ppm	4,082 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.227 %	6,536 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.273 %	1,411 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.354 %	9,353 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.118 %	1,999 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.535 ppm	15,240 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.950 ppm	12,686 cps
Na 589.592 (ETA AQ-Radial-iFR)	24.682 ppm	12,404 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.469 ppm	932 cps
K 766.490 (ETA AQ-Radial-iFR)	24.508 ppm	2,613 cps
Na 818.326 (ETA AQ-Radial-iFR)	24.441 ppm	302 cps

Label: CCV-8089741 #: 117
Analysis Type: QC Analysis started at: 10/18/2024 8:20:46 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	24.718 ppm	98.874 %
As 189.042 (ETA AQ-Axial-iFR)	0.946 ppm	94.605 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.960 ppm	96.036 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.912 ppm	91.206 %
Se 196.090 (ETA AQ-Axial-iFR)	0.948 ppm	94.832 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.952 ppm	95.222 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.007 ppm	100.730 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.956 ppm	95.617 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
B 208.959 (ETA AQ-Axial-iFR)	0.972 ppm	97.243 %
P 213.618 (ETA AQ-Axial-iFR)	25.242 ppm	100.967 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.969 ppm	96.850 %
Y 224.306 (ETA AQ-Axial-iFR)	100.754 %	
Y 224.306 (ETA AQ-Radial-iFR)	94.406 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.970 ppm	97.006 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.979 ppm	97.878 %
In 230.606 (ETA AQ-Axial-iFR)	98.261 %	
Ni 231.604 (ETA AQ-Axial-iFR)	1.000 ppm	100.012 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.976 ppm	97.579 %
Fe 259.940 (ETA AQ-Axial-iFR)	51.043 ppm	102.087 %
Cr 267.716 (ETA AQ-Axial-iFR)	1.000 ppm	100.004 %
Fe 271.441 (ETA AQ-Radial-iFR)	50.175 ppm	100.351 %
Mg 279.079 (ETA AQ-Radial-iFR)	49.145 ppm	98.291 %
Si 288.158 (ETA AQ-Radial-iFR)	9.819 ppm	98.190 %
V 292.402 (ETA AQ-Axial-iFR)	0.994 ppm	99.397 %
Al 308.215 (ETA AQ-Radial-iFR)	48.527 ppm	97.054 %
Be 313.042 (ETA AQ-Radial-iFR)	0.994 ppm	99.388 %
Ca 317.933 (ETA AQ-Radial-iFR)	50.329 ppm	100.657 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.963 ppm	96.343 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.982 ppm	98.165 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.988 ppm	98.788 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.984 ppm	98.424 %
Y 360.073 (ETA AQ-Axial-iFR)	103.310 %	
Y 360.073 (ETA AQ-Radial-iFR)	94.023 %	
Y 377.433 (ETA AQ-Axial-iFR)	102.396 %	
Y 377.433 (ETA AQ-Radial-iFR)	93.793 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.997 ppm	99.722 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.979 ppm	97.930 %
Na 589.592 (ETA AQ-Radial-iFR)	49.933 ppm	99.867 %
Li 670.784 (ETA AQ-Radial-iFR)	0.981 ppm	98.085 %
K 766.490 (ETA AQ-Radial-iFR)	49.529 ppm	99.057 %
Na 818.326 (ETA AQ-Radial-iFR)	49.871 ppm	99.741 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	938 cps
As 189.042 (ETA AQ-Axial-iFR)	64 cps
Sn 189.989 (ETA AQ-Axial-iFR)	131 cps
Tl 190.856 (ETA AQ-Axial-iFR)	45 cps
Se 196.090 (ETA AQ-Axial-iFR)	72 cps
Mo 202.030 (ETA AQ-Axial-iFR)	230 cps
Zn 206.200 (ETA AQ-Axial-iFR)	657 cps
Sb 206.833 (ETA AQ-Axial-iFR)	51 cps
B 208.959 (ETA AQ-Axial-iFR)	303 cps
P 213.618 (ETA AQ-Axial-iFR)	2,165 cps
Pb 220.353 (ETA AQ-Axial-iFR)	64 cps
Y 224.306 (ETA AQ-Axial-iFR)	469 cps
Y 224.306 (ETA AQ-Radial-iFR)	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	571 cps
Cd 228.802 (ETA AQ-Axial-iFR)	1,018 cps
In 230.606 (ETA AQ-Axial-iFR)	465 cps
Ni 231.604 (ETA AQ-Axial-iFR)	413 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,142 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61,718 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,196 cps
Fe 271.441 (ETA AQ-Radial-iFR)	923 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,237 cps
Si 288.158 (ETA AQ-Radial-iFR)	847 cps

Analyte (Measure Mode)	Raw Intensity average
V 292.402 (ETA AQ-Axial-iFR)	1,772 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,592 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,358 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,265 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,217 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,930 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,926 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,523 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,874 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,392 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,738 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,971 cps
Sr 407.771 (ETA AQ-Radial-iFR)	27,976 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,914 cps
Na 589.592 (ETA AQ-Radial-iFR)	24,741 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,924 cps
K 766.490 (ETA AQ-Radial-iFR)	5,205 cps
Na 818.326 (ETA AQ-Radial-iFR)	607 cps

Label: CCB-8089739 #: 118
Analysis Type: QC Analysis started at: 10/18/2024 8:22:41 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.011 ppm	1.125 %
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	0.159 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.000 ppm	-0.011 %
Tl 190.856 (ETA AQ-Axial-iFR)	-0.005 ppm	-0.506 %
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	-0.010 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	0.091 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0.090 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0.305 %
B 208.959 (ETA AQ-Axial-iFR)	0.006 ppm	0.603 %
P 213.618 (ETA AQ-Axial-iFR)	0.005 ppm	0.464 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0.324 %
Y 224.306 (ETA AQ-Axial-iFR)	97.520 %	
Y 224.306 (ETA AQ-Radial-iFR)	96.854 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	0.001 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.001 ppm	0.057 %
In 230.606 (ETA AQ-Axial-iFR)	96.970 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	-0.022 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	0.056 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.016 ppm	1.643 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.040 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.006 ppm	0.639 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.009 ppm	0.855 %
Si 288.158 (ETA AQ-Radial-iFR)	0.005 ppm	0.506 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0.035 %
Al 308.215 (ETA AQ-Radial-iFR)	0.014 ppm	1.355 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.009 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.011 ppm	1.105 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0.037 %
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.060 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	0.041 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	0.050 %
Y 360.073 (ETA AQ-Axial-iFR)	96.110 %	

Basic Sample Report
10/20/2024 8:20:01 AM

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Y 360.073 (ETA AQ-Radial-iFR)	96.099 %	
Y 377.433 (ETA AQ-Axial-iFR)	96.101 %	
Y 377.433 (ETA AQ-Radial-iFR)	95.889 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.023 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.027 %
Na 589.592 (ETA AQ-Radial-iFR)	0.017 ppm	1.710 %
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-0.020 %
K 766.490 (ETA AQ-Radial-iFR)	0.035 ppm	3.541 %
Na 818.326 (ETA AQ-Radial-iFR)	0.095 ppm	9.451 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0 cps
B 208.959 (ETA AQ-Axial-iFR)	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	454 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	3 cps
In 230.606 (ETA AQ-Axial-iFR)	459 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	20 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	3 cps
V 292.402 (ETA AQ-Axial-iFR)	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	3 cps
Ca 317.933 (ETA AQ-Radial-iFR)	6 cps
Cu 327.396 (ETA AQ-Axial-iFR)	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	5 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,395 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,423 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,139 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,015 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-1 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1 cps
Na 589.592 (ETA AQ-Radial-iFR)	13 cps
Li 670.784 (ETA AQ-Radial-iFR)	-2 cps
K 766.490 (ETA AQ-Radial-iFR)	6 cps
Na 818.326 (ETA AQ-Radial-iFR)	1 cps

Label: CCVL-8089740 #: 119
Analysis Type: QC Analysis started at: 10/18/2024 8:24:36 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.199 ppm	99.399 %
As 189.042 (ETA AQ-Axial-iFR)	0.015 ppm	102.249 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.009 ppm	91.063 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.013 ppm	63.767 %
Se 196.090 (ETA AQ-Axial-iFR)	0.022 ppm	88.132 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.010 ppm	102.547 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.011 ppm	113.481 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.023 ppm	116.926 %
B 208.959 (ETA AQ-Axial-iFR)	0.022 ppm	110.740 %
P 213.618 (ETA AQ-Axial-iFR)	-0.003 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.010 ppm	103.650 %
Y 224.306 (ETA AQ-Axial-iFR)	98.603 %	
Y 224.306 (ETA AQ-Radial-iFR)	97.106 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.003 ppm	79.477 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	95.431 %
In 230.606 (ETA AQ-Axial-iFR)	97.650 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	100.571 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	101.009 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	102.190 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	104.809 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.065 ppm	129.852 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.193 ppm	96.259 %
Si 288.158 (ETA AQ-Radial-iFR)	0.465 ppm	93.020 %
V 292.402 (ETA AQ-Axial-iFR)	0.004 ppm	89.905 %
Al 308.215 (ETA AQ-Radial-iFR)	0.179 ppm	89.440 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	98.073 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.481 ppm	96.156 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.009 ppm	91.778 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.005 ppm	89.756 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	98.115 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	96.186 %
Y 360.073 (ETA AQ-Axial-iFR)	97.640 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.074 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.466 %	
Y 377.433 (ETA AQ-Radial-iFR)	95.821 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	95.786 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	95.723 %
Na 589.592 (ETA AQ-Radial-iFR)	0.984 ppm	98.447 %
Li 670.784 (ETA AQ-Radial-iFR)	0.028 ppm	94.962 %
K 766.490 (ETA AQ-Radial-iFR)	0.499 ppm	99.869 %
Na 818.326 (ETA AQ-Radial-iFR)	0.975 ppm	97.478 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	4 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	2 cps
B 208.959 (ETA AQ-Axial-iFR)	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	-1 cps

Analyte (Measure Mode)	Raw Intensity average
Cd 228.802 (ETA AQ-Axial-iFR)	4 cps
In 230.606 (ETA AQ-Axial-iFR)	462 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	6 cps
Fe 259.940 (ETA AQ-Axial-iFR)	62 cps
Cr 267.716 (ETA AQ-Axial-iFR)	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	43 cps
V 292.402 (ETA AQ-Axial-iFR)	8 cps
Al 308.215 (ETA AQ-Radial-iFR)	11 cps
Be 313.042 (ETA AQ-Radial-iFR)	25 cps
Ca 317.933 (ETA AQ-Radial-iFR)	123 cps
Cu 327.396 (ETA AQ-Axial-iFR)	20 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2 cps
Ti 334.904 (ETA AQ-Axial-iFR)	8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	41 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,497 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,423 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,269 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,014 cps
Sr 407.771 (ETA AQ-Radial-iFR)	129 cps
Ba 455.403 (ETA AQ-Radial-iFR)	24 cps
Na 589.592 (ETA AQ-Radial-iFR)	503 cps
Li 670.784 (ETA AQ-Radial-iFR)	56 cps
K 766.490 (ETA AQ-Radial-iFR)	55 cps
Na 818.326 (ETA AQ-Radial-iFR)	12 cps

Label: 480-224410-B-2-C MS #: 120
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:26:31 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	6.056 ppm	226 cps
As 189.042 (ETA AQ-Axial-iFR)	0.960 ppm	64 cps
Sn 189.989 (ETA AQ-Axial-iFR)	0.989 ppm	136 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.893 ppm	45 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.944 ppm	70 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.470 ppm	111 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.775 ppm	483 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.473 ppm	25 cps
B 208.959 (ETA AQ-Axial-iFR)	0.496 ppm	152 cps
P 213.618 (ETA AQ-Axial-iFR)	9.950 ppm	831 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.481 ppm	32 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.498 %	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	93.992 %	124 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.476 ppm	282 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.501 ppm	512 cps
In 230.606 (ETA AQ-Axial-iFR)	99.139 %	469 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.507 ppm	202 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.482 ppm	1,063 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.302 ppm	6,268 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.506 ppm	579 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.032 ppm	93 cps
Mg 279.079 (ETA AQ-Radial-iFR)	33.668 ppm	1,540 cps
Si 288.158 (ETA AQ-Radial-iFR)	4.152 ppm	362 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
V 292.402 (ETA AQ-Axial-iFR)	0.496 ppm	846 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.877 ppm	263 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.506 ppm	5,814 cps
Ca 317.933 (ETA AQ-Radial-iFR)	95.599 ppm	23,405 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.489 ppm	1,086 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.049 ppm	125 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.514 ppm	1,453 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.523 ppm	4,333 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.891 %	6,580 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.477 %	1,399 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.881 %	9,403 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.237 %	1,980 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.561 ppm	15,833 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.012 ppm	13,289 cps
Na 589.592 (ETA AQ-Radial-iFR)	25.837 ppm	12,864 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.493 ppm	971 cps
K 766.490 (ETA AQ-Radial-iFR)	25.633 ppm	2,707 cps
Na 818.326 (ETA AQ-Radial-iFR)	25.813 ppm	316 cps

Label: 480-224410-B-2-D MSD #: 121
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:28:26 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	6.312 ppm	234 cps
As 189.042 (ETA AQ-Axial-iFR)	0.984 ppm	65 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1.010 ppm	138 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.910 ppm	46 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.970 ppm	71 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.481 ppm	113 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.795 ppm	494 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.497 ppm	26 cps
B 208.959 (ETA AQ-Axial-iFR)	0.518 ppm	157 cps
P 213.618 (ETA AQ-Axial-iFR)	10.373 ppm	860 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.491 ppm	33 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.741 %	455 cps
Y 224.306 (ETA AQ-Radial-iFR)	95.015 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.487 ppm	288 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.517 ppm	524 cps
In 230.606 (ETA AQ-Axial-iFR)	99.106 %	469 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.519 ppm	206 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.494 ppm	1,102 cps
Fe 259.940 (ETA AQ-Axial-iFR)	5.385 ppm	6,318 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.518 ppm	591 cps
Fe 271.441 (ETA AQ-Radial-iFR)	5.055 ppm	95 cps
Mg 279.079 (ETA AQ-Radial-iFR)	34.030 ppm	1,576 cps
Si 288.158 (ETA AQ-Radial-iFR)	4.243 ppm	374 cps
V 292.402 (ETA AQ-Axial-iFR)	0.508 ppm	863 cps
Al 308.215 (ETA AQ-Radial-iFR)	4.904 ppm	268 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.516 ppm	6,000 cps
Ca 317.933 (ETA AQ-Radial-iFR)	96.623 ppm	23,952 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.503 ppm	1,114 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.051 ppm	129 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.527 ppm	1,487 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.536 ppm	4,431 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.581 %	6,559 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 360.073 (ETA AQ-Radial-iFR)	95.734 %	1,418 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.469 %	9,364 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.421 %	2,005 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.573 ppm	16,359 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1.029 ppm	13,662 cps
Na 589.592 (ETA AQ-Radial-iFR)	26.039 ppm	13,128 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.501 ppm	999 cps
K 766.490 (ETA AQ-Radial-iFR)	25.790 ppm	2,758 cps
Na 818.326 (ETA AQ-Radial-iFR)	25.830 ppm	320 cps

Label: 480-224410-B-3-B #: 122
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:30:20 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	2.573 ppm	96 cps
As 189.042 (ETA AQ-Axial-iFR)	0.009 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.006 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.123 ppm	76 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.022 ppm	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.006 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.218 %	453 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.073 %	124 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.330 %	465 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.208 ppm	458 cps
Fe 259.940 (ETA AQ-Axial-iFR)	2.873 ppm	3,353 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	2.730 ppm	50 cps
Mg 279.079 (ETA AQ-Radial-iFR)	17.076 ppm	783 cps
Si 288.158 (ETA AQ-Radial-iFR)	3.396 ppm	295 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.019 ppm	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	155.605 ppm	38,178 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-10 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.825 %	6,509 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.513 %	1,400 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.991 %	9,319 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.447 %	1,985 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.112 ppm	3,196 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.053 ppm	699 cps
Na 589.592 (ETA AQ-Radial-iFR)	1.160 ppm	583 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	1.217 ppm	130 cps
Na 818.326 (ETA AQ-Radial-iFR)	1.252 ppm	15 cps

Label: 480-224410-B-4-B #: 123
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:32:15 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.368 ppm	16 cps
As 189.042 (ETA AQ-Axial-iFR)	0.008 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.000 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.002 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	2.824 ppm	1,751 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.005 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.231 ppm	69 cps
P 213.618 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.006 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.079 %	452 cps
Y 224.306 (ETA AQ-Radial-iFR)	93.144 %	123 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	98.565 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.410 ppm	904 cps
Fe 259.940 (ETA AQ-Axial-iFR)	17.937 ppm	20,898 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	16.973 ppm	314 cps
Mg 279.079 (ETA AQ-Radial-iFR)	24.400 ppm	1,118 cps
Si 288.158 (ETA AQ-Radial-iFR)	5.353 ppm	463 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.002 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	217.737 ppm	53,387 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.002 ppm	-14 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.446 %	6,550 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.372 %	1,398 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.438 %	9,361 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.386 %	1,984 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.167 ppm	4,765 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.071 ppm	924 cps
Na 589.592 (ETA AQ-Radial-iFR)	24.738 ppm	12,337 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.002 ppm	2 cps
K 766.490 (ETA AQ-Radial-iFR)	2.046 ppm	218 cps
Na 818.326 (ETA AQ-Radial-iFR)	24.368 ppm	298 cps

Label: 480-224410-B-5-B #: 124
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:34:09 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	1.011 ppm	39 cps
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	-1 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.005 ppm	-2 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.001 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.002 ppm	1 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.014 ppm	6 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.002 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.333 %	453 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.760 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	98.518 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.015 ppm	33 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.002 ppm	4 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	-0.038 ppm	-1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	11.179 ppm	515 cps
Si 288.158 (ETA AQ-Radial-iFR)	4.051 ppm	353 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.005 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	101.695 ppm	25,059 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-8 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.737 %	6,503 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.146 %	1,409 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.602 %	9,282 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.850 %	1,993 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.078 ppm	2,232 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.035 ppm	466 cps
Na 589.592 (ETA AQ-Radial-iFR)	1.488 ppm	750 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	0 cps
K 766.490 (ETA AQ-Radial-iFR)	1.838 ppm	197 cps
Na 818.326 (ETA AQ-Radial-iFR)	1.472 ppm	18 cps

Label: 480-224410-B-6-B #: 125
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:36:04 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.768 ppm	30 cps
As 189.042 (ETA AQ-Axial-iFR)	0.007 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	-0.002 ppm	1 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.660 ppm	408 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.005 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.078 ppm	24 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.004 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.004 ppm	0 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Y 224.306 (ETA AQ-Axial-iFR)	96.798 %	451 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.053 %	124 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.005 ppm	1 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	98.543 %	466 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.004 ppm	1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.137 ppm	302 cps
Fe 259.940 (ETA AQ-Axial-iFR)	11.815 ppm	13,726 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	11.142 ppm	206 cps
Mg 279.079 (ETA AQ-Radial-iFR)	19.667 ppm	904 cps
Si 288.158 (ETA AQ-Radial-iFR)	6.866 ppm	595 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.002 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	165.442 ppm	40,690 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.002 ppm	-12 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.058 %	6,524 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.580 %	1,401 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.960 %	9,316 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.676 %	1,990 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.167 ppm	4,750 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.125 ppm	1,641 cps
Na 589.592 (ETA AQ-Radial-iFR)	14.395 ppm	7,202 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.002 ppm	3 cps
K 766.490 (ETA AQ-Radial-iFR)	5.384 ppm	573 cps
Na 818.326 (ETA AQ-Radial-iFR)	14.090 ppm	173 cps

Label: 480-224410-B-7-B #: 126
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:37:58 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	0.890 ppm	35 cps
As 189.042 (ETA AQ-Axial-iFR)	0.017 ppm	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.032 ppm	20 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.074 ppm	23 cps
P 213.618 (ETA AQ-Axial-iFR)	0.004 ppm	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	96.571 %	450 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.049 %	124 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.008 ppm	2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	98.741 %	467 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.007 ppm	2 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.131 ppm	289 cps
Fe 259.940 (ETA AQ-Axial-iFR)	14.392 ppm	16,680 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Fe 271.441 (ETA AQ-Radial-iFR)	13.601 ppm	252 cps
Mg 279.079 (ETA AQ-Radial-iFR)	18.174 ppm	836 cps
Si 288.158 (ETA AQ-Radial-iFR)	7.760 ppm	673 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.003 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	192.899 ppm	47,499 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.002 ppm	-13 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.731 %	6,503 cps
Y 360.073 (ETA AQ-Radial-iFR)	94.713 %	1,403 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.913 %	9,311 cps
Y 377.433 (ETA AQ-Radial-iFR)	94.788 %	1,992 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.201 ppm	5,747 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.125 ppm	1,638 cps
Na 589.592 (ETA AQ-Radial-iFR)	12.733 ppm	6,379 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	2 cps
K 766.490 (ETA AQ-Radial-iFR)	6.970 ppm	742 cps
Na 818.326 (ETA AQ-Radial-iFR)	12.560 ppm	154 cps

Label: 480-224411-D-1-B #: 127
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:39:53 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	1.937 ppm	73 cps
As 189.042 (ETA AQ-Axial-iFR)	0.005 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.003 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.002 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.021 ppm	13 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.004 ppm	1 cps
B 208.959 (ETA AQ-Axial-iFR)	0.067 ppm	21 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.006 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	97.562 %	454 cps
Y 224.306 (ETA AQ-Radial-iFR)	94.777 %	125 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-3 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	3 cps
In 230.606 (ETA AQ-Axial-iFR)	99.018 %	469 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.012 ppm	25 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.064 ppm	77 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.062 ppm	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	17.329 ppm	800 cps
Si 288.158 (ETA AQ-Radial-iFR)	5.513 ppm	480 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	0.013 ppm	2 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	128.179 ppm	31,671 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.001 ppm	2 cps
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-15 cps

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-6 cps
Ti 334.941 (ETA AQ-Axial-iFR)	-0.001 ppm	-10 cps
Y 360.073 (ETA AQ-Axial-iFR)	98.566 %	6,558 cps
Y 360.073 (ETA AQ-Radial-iFR)	95.218 %	1,410 cps
Y 377.433 (ETA AQ-Axial-iFR)	98.605 %	9,377 cps
Y 377.433 (ETA AQ-Radial-iFR)	95.111 %	1,999 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.110 ppm	3,141 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.067 ppm	890 cps
Na 589.592 (ETA AQ-Radial-iFR)	10.892 ppm	5,476 cps
Li 670.784 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
K 766.490 (ETA AQ-Radial-iFR)	3.462 ppm	371 cps
Na 818.326 (ETA AQ-Radial-iFR)	10.794 ppm	133 cps

Label: 480-224405-D-21-A #: 128
Analysis Type: UNKNOWN Analysis started at: 10/18/2024 8:41:47 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	-0.015 ppm	2 cps
As 189.042 (ETA AQ-Axial-iFR)	0.001 ppm	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-0.005 ppm	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0.002 ppm	0 cps
B 208.959 (ETA AQ-Axial-iFR)	0.003 ppm	2 cps
P 213.618 (ETA AQ-Axial-iFR)	-0.005 ppm	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0.003 ppm	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	98.433 %	458 cps
Y 224.306 (ETA AQ-Radial-iFR)	97.758 %	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	2 cps
In 230.606 (ETA AQ-Axial-iFR)	97.535 %	462 cps
Ni 231.604 (ETA AQ-Axial-iFR)	-0.001 ppm	-1 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0.001 ppm	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	0.001 ppm	3 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	1 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0.022 ppm	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0.002 ppm	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	0.005 ppm	3 cps
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Al 308.215 (ETA AQ-Radial-iFR)	-0.005 ppm	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	2 cps
Ca 317.933 (ETA AQ-Radial-iFR)	0.061 ppm	19 cps
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0 cps
Ag 328.068 (ETA AQ-Axial-iFR)	-0.001 ppm	-16 cps
Ti 334.904 (ETA AQ-Axial-iFR)	0.000 ppm	-7 cps
Ti 334.941 (ETA AQ-Axial-iFR)	0.000 ppm	-2 cps
Y 360.073 (ETA AQ-Axial-iFR)	97.651 %	6,497 cps
Y 360.073 (ETA AQ-Radial-iFR)	97.652 %	1,446 cps
Y 377.433 (ETA AQ-Axial-iFR)	97.559 %	9,278 cps
Y 377.433 (ETA AQ-Radial-iFR)	97.441 %	2,048 cps
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	-7 cps
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	-1 cps
Na 589.592 (ETA AQ-Radial-iFR)	0.035 ppm	22 cps

Basic Sample Report
10/20/2024 8:20:01 AM

Analyte (Measure Mode)	Concentration average	Raw Intensity average
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	-2 cps
K 766.490 (ETA AQ-Radial-iFR)	0.045 ppm	7 cps
Na 818.326 (ETA AQ-Radial-iFR)	0.043 ppm	0 cps

Label: CCV-8089741 #: 129
Analysis Type: QC Analysis started at: 10/18/2024 8:43:42 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	24.892 ppm	99.570 %
As 189.042 (ETA AQ-Axial-iFR)	0.941 ppm	94.109 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.959 ppm	95.900 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.912 ppm	91.232 %
Se 196.090 (ETA AQ-Axial-iFR)	0.944 ppm	94.366 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.954 ppm	95.369 %
Zn 206.200 (ETA AQ-Axial-iFR)	1.010 ppm	101.020 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.956 ppm	95.585 %
B 208.959 (ETA AQ-Axial-iFR)	0.973 ppm	97.281 %
P 213.618 (ETA AQ-Axial-iFR)	25.330 ppm	101.321 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.960 ppm	95.992 %
Y 224.306 (ETA AQ-Axial-iFR)	100.149 %	
Y 224.306 (ETA AQ-Radial-iFR)	95.249 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.967 ppm	96.725 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.982 ppm	98.235 %
In 230.606 (ETA AQ-Axial-iFR)	98.311 %	
Ni 231.604 (ETA AQ-Axial-iFR)	1.001 ppm	100.122 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.972 ppm	97.197 %
Fe 259.940 (ETA AQ-Axial-iFR)	51.021 ppm	102.042 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.999 ppm	99.881 %
Fe 271.441 (ETA AQ-Radial-iFR)	49.945 ppm	99.890 %
Mg 279.079 (ETA AQ-Radial-iFR)	48.958 ppm	97.916 %
Si 288.158 (ETA AQ-Radial-iFR)	9.804 ppm	98.043 %
V 292.402 (ETA AQ-Axial-iFR)	0.991 ppm	99.075 %
Al 308.215 (ETA AQ-Radial-iFR)	48.373 ppm	96.746 %
Be 313.042 (ETA AQ-Radial-iFR)	0.992 ppm	99.177 %
Ca 317.933 (ETA AQ-Radial-iFR)	49.937 ppm	99.875 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.963 ppm	96.263 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.980 ppm	97.972 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.987 ppm	98.709 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.984 ppm	98.380 %
Y 360.073 (ETA AQ-Axial-iFR)	102.923 %	
Y 360.073 (ETA AQ-Radial-iFR)	94.666 %	
Y 377.433 (ETA AQ-Axial-iFR)	101.682 %	
Y 377.433 (ETA AQ-Radial-iFR)	94.461 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.990 ppm	98.988 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.970 ppm	97.024 %
Na 589.592 (ETA AQ-Radial-iFR)	49.565 ppm	99.129 %
Li 670.784 (ETA AQ-Radial-iFR)	0.972 ppm	97.165 %
K 766.490 (ETA AQ-Radial-iFR)	49.351 ppm	98.701 %
Na 818.326 (ETA AQ-Radial-iFR)	49.304 ppm	98.607 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	938 cps
As 189.042 (ETA AQ-Axial-iFR)	63 cps
Sn 189.989 (ETA AQ-Axial-iFR)	130 cps
Tl 190.856 (ETA AQ-Axial-iFR)	45 cps

Analyte (Measure Mode)	Raw Intensity average
Se 196.090 (ETA AQ-Axial-iFR)	71 cps
Mo 202.030 (ETA AQ-Axial-iFR)	229 cps
Zn 206.200 (ETA AQ-Axial-iFR)	656 cps
Sb 206.833 (ETA AQ-Axial-iFR)	51 cps
B 208.959 (ETA AQ-Axial-iFR)	302 cps
P 213.618 (ETA AQ-Axial-iFR)	2,159 cps
Pb 220.353 (ETA AQ-Axial-iFR)	63 cps
Y 224.306 (ETA AQ-Axial-iFR)	466 cps
Y 224.306 (ETA AQ-Radial-iFR)	126 cps
Co 228.616 (ETA AQ-Axial-iFR)	570 cps
Cd 228.802 (ETA AQ-Axial-iFR)	1,016 cps
In 230.606 (ETA AQ-Axial-iFR)	465 cps
Ni 231.604 (ETA AQ-Axial-iFR)	411 cps
Mn 257.610 (ETA AQ-Radial-iFR)	2,148 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61,320 cps
Cr 267.716 (ETA AQ-Axial-iFR)	1,190 cps
Fe 271.441 (ETA AQ-Radial-iFR)	925 cps
Mg 279.079 (ETA AQ-Radial-iFR)	2,244 cps
Si 288.158 (ETA AQ-Radial-iFR)	852 cps
V 292.402 (ETA AQ-Axial-iFR)	1,760 cps
Al 308.215 (ETA AQ-Radial-iFR)	2,603 cps
Be 313.042 (ETA AQ-Radial-iFR)	11,415 cps
Ca 317.933 (ETA AQ-Radial-iFR)	12,257 cps
Cu 327.396 (ETA AQ-Axial-iFR)	2,200 cps
Ag 328.068 (ETA AQ-Axial-iFR)	2,913 cps
Ti 334.904 (ETA AQ-Axial-iFR)	2,912 cps
Ti 334.941 (ETA AQ-Axial-iFR)	8,487 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,848 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,402 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,670 cps
Y 377.433 (ETA AQ-Radial-iFR)	1,985 cps
Sr 407.771 (ETA AQ-Radial-iFR)	27,968 cps
Ba 455.403 (ETA AQ-Radial-iFR)	12,908 cps
Na 589.592 (ETA AQ-Radial-iFR)	24,733 cps
Li 670.784 (ETA AQ-Radial-iFR)	1,920 cps
K 766.490 (ETA AQ-Radial-iFR)	5,223 cps
Na 818.326 (ETA AQ-Radial-iFR)	604 cps

Label: CCB-8089739 #: 130
Analysis Type: QC Analysis started at: 10/18/2024 8:45:37 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.003 ppm	0.332 %
As 189.042 (ETA AQ-Axial-iFR)	0.002 ppm	0.151 %
Sn 189.989 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.121 %
Tl 190.856 (ETA AQ-Axial-iFR)	-0.001 ppm	-0.112 %
Se 196.090 (ETA AQ-Axial-iFR)	0.000 ppm	0.000 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.001 ppm	0.089 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.001 ppm	0.060 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.003 ppm	0.330 %
B 208.959 (ETA AQ-Axial-iFR)	0.005 ppm	0.455 %
P 213.618 (ETA AQ-Axial-iFR)	0.002 ppm	0.153 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.002 ppm	0.164 %
Y 224.306 (ETA AQ-Axial-iFR)	98.493 %	
Y 224.306 (ETA AQ-Radial-iFR)	97.716 %	

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Co 228.616 (ETA AQ-Axial-iFR)	0.000 ppm	0.029 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.000 ppm	0.000 %
In 230.606 (ETA AQ-Axial-iFR)	97.252 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.000 ppm	0.044 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.000 ppm	0.032 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.016 ppm	1.594 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.000 ppm	0.023 %
Fe 271.441 (ETA AQ-Radial-iFR)	-0.007 ppm	-0.661 %
Mg 279.079 (ETA AQ-Radial-iFR)	-0.002 ppm	-0.240 %
Si 288.158 (ETA AQ-Radial-iFR)	0.005 ppm	0.460 %
V 292.402 (ETA AQ-Axial-iFR)	0.000 ppm	0.037 %
Al 308.215 (ETA AQ-Radial-iFR)	0.007 ppm	0.705 %
Be 313.042 (ETA AQ-Radial-iFR)	0.000 ppm	0.023 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.011 ppm	1.128 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.000 ppm	0.012 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.000 ppm	-0.046 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.001 ppm	0.055 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.001 ppm	0.056 %
Y 360.073 (ETA AQ-Axial-iFR)	97.102 %	
Y 360.073 (ETA AQ-Radial-iFR)	96.449 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.065 %	
Y 377.433 (ETA AQ-Radial-iFR)	96.374 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.000 ppm	0.023 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.000 ppm	0.021 %
Na 589.592 (ETA AQ-Radial-iFR)	0.012 ppm	1.214 %
Li 670.784 (ETA AQ-Radial-iFR)	0.000 ppm	0.006 %
K 766.490 (ETA AQ-Radial-iFR)	0.029 ppm	2.857 %
Na 818.326 (ETA AQ-Radial-iFR)	-0.026 ppm	-2.557 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	3 cps
As 189.042 (ETA AQ-Axial-iFR)	-1 cps
Sn 189.989 (ETA AQ-Axial-iFR)	-1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	2 cps
Mo 202.030 (ETA AQ-Axial-iFR)	1 cps
Zn 206.200 (ETA AQ-Axial-iFR)	0 cps
Sb 206.833 (ETA AQ-Axial-iFR)	0 cps
B 208.959 (ETA AQ-Axial-iFR)	3 cps
P 213.618 (ETA AQ-Axial-iFR)	-4 cps
Pb 220.353 (ETA AQ-Axial-iFR)	0 cps
Y 224.306 (ETA AQ-Axial-iFR)	459 cps
Y 224.306 (ETA AQ-Radial-iFR)	129 cps
Co 228.616 (ETA AQ-Axial-iFR)	-2 cps
Cd 228.802 (ETA AQ-Axial-iFR)	2 cps
In 230.606 (ETA AQ-Axial-iFR)	460 cps
Ni 231.604 (ETA AQ-Axial-iFR)	0 cps
Mn 257.610 (ETA AQ-Radial-iFR)	0 cps
Fe 259.940 (ETA AQ-Axial-iFR)	20 cps
Cr 267.716 (ETA AQ-Axial-iFR)	0 cps
Fe 271.441 (ETA AQ-Radial-iFR)	0 cps
Mg 279.079 (ETA AQ-Radial-iFR)	0 cps
Si 288.158 (ETA AQ-Radial-iFR)	3 cps
V 292.402 (ETA AQ-Axial-iFR)	1 cps
Al 308.215 (ETA AQ-Radial-iFR)	1 cps
Be 313.042 (ETA AQ-Radial-iFR)	5 cps
Ca 317.933 (ETA AQ-Radial-iFR)	6 cps
Cu 327.396 (ETA AQ-Axial-iFR)	1 cps

Basic Sample Report
10/20/2024 8:20:01 AM

Analyte (Measure Mode)	Raw Intensity average
Ag 328.068 (ETA AQ-Axial-iFR)	-15 cps
Ti 334.904 (ETA AQ-Axial-iFR)	-5 cps
Ti 334.941 (ETA AQ-Axial-iFR)	6 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,461 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,428 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,231 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,025 cps
Sr 407.771 (ETA AQ-Radial-iFR)	-1 cps
Ba 455.403 (ETA AQ-Radial-iFR)	1 cps
Na 589.592 (ETA AQ-Radial-iFR)	11 cps
Li 670.784 (ETA AQ-Radial-iFR)	-1 cps
K 766.490 (ETA AQ-Radial-iFR)	5 cps
Na 818.326 (ETA AQ-Radial-iFR)	-1 cps

Label: CCVL-8089740 #: 131
Analysis Type: QC Analysis started at: 10/18/2024 8:47:32 PM

Amount: Final Quantity: Standard DF: 1

Analyte (Measure Mode)	Concentration average	Recovery Percentage
S 182.034 (ETA AQ-Axial-iFR)	0.195 ppm	97.590 %
As 189.042 (ETA AQ-Axial-iFR)	0.017 ppm	110.329 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.010 ppm	102.749 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.012 ppm	58.788 %
Se 196.090 (ETA AQ-Axial-iFR)	0.018 ppm	71.567 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.010 ppm	96.190 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.011 ppm	110.359 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.024 ppm	120.811 %
B 208.959 (ETA AQ-Axial-iFR)	0.021 ppm	105.261 %
P 213.618 (ETA AQ-Axial-iFR)	-0.005 ppm	0.000 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.014 ppm	140.160 %
Y 224.306 (ETA AQ-Axial-iFR)	98.759 %	
Y 224.306 (ETA AQ-Radial-iFR)	96.784 %	
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	106.954 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	98.469 %
In 230.606 (ETA AQ-Axial-iFR)	97.694 %	
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	98.860 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	101.267 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	101.200 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	107.654 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.071 ppm	141.826 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.194 ppm	96.892 %
Si 288.158 (ETA AQ-Radial-iFR)	0.467 ppm	93.316 %
V 292.402 (ETA AQ-Axial-iFR)	0.004 ppm	89.682 %
Al 308.215 (ETA AQ-Radial-iFR)	0.196 ppm	98.087 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	99.315 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.487 ppm	97.391 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.009 ppm	90.524 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.005 ppm	88.793 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	101.980 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	98.119 %
Y 360.073 (ETA AQ-Axial-iFR)	97.391 %	
Y 360.073 (ETA AQ-Radial-iFR)	95.917 %	
Y 377.433 (ETA AQ-Axial-iFR)	97.021 %	
Y 377.433 (ETA AQ-Radial-iFR)	95.552 %	
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	96.819 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	96.511 %

Analyte (Measure Mode)	Concentration average	Recovery Percentage
Na 589.592 (ETA AQ-Radial-iFR)	0.979 ppm	97.860 %
Li 670.784 (ETA AQ-Radial-iFR)	0.028 ppm	94.968 %
K 766.490 (ETA AQ-Radial-iFR)	0.499 ppm	99.774 %
Na 818.326 (ETA AQ-Radial-iFR)	1.085 ppm	108.514 %

Analyte (Measure Mode)	Raw Intensity average
S 182.034 (ETA AQ-Axial-iFR)	10 cps
As 189.042 (ETA AQ-Axial-iFR)	0 cps
Sn 189.989 (ETA AQ-Axial-iFR)	1 cps
Tl 190.856 (ETA AQ-Axial-iFR)	-1 cps
Se 196.090 (ETA AQ-Axial-iFR)	3 cps
Mo 202.030 (ETA AQ-Axial-iFR)	3 cps
Zn 206.200 (ETA AQ-Axial-iFR)	7 cps
Sb 206.833 (ETA AQ-Axial-iFR)	2 cps
B 208.959 (ETA AQ-Axial-iFR)	8 cps
P 213.618 (ETA AQ-Axial-iFR)	-5 cps
Pb 220.353 (ETA AQ-Axial-iFR)	1 cps
Y 224.306 (ETA AQ-Axial-iFR)	460 cps
Y 224.306 (ETA AQ-Radial-iFR)	128 cps
Co 228.616 (ETA AQ-Axial-iFR)	0 cps
Cd 228.802 (ETA AQ-Axial-iFR)	4 cps
In 230.606 (ETA AQ-Axial-iFR)	462 cps
Ni 231.604 (ETA AQ-Axial-iFR)	3 cps
Mn 257.610 (ETA AQ-Radial-iFR)	6 cps
Fe 259.940 (ETA AQ-Axial-iFR)	61 cps
Cr 267.716 (ETA AQ-Axial-iFR)	5 cps
Fe 271.441 (ETA AQ-Radial-iFR)	1 cps
Mg 279.079 (ETA AQ-Radial-iFR)	9 cps
Si 288.158 (ETA AQ-Radial-iFR)	43 cps
V 292.402 (ETA AQ-Axial-iFR)	8 cps
Al 308.215 (ETA AQ-Radial-iFR)	12 cps
Be 313.042 (ETA AQ-Radial-iFR)	25 cps
Ca 317.933 (ETA AQ-Radial-iFR)	125 cps
Cu 327.396 (ETA AQ-Axial-iFR)	20 cps
Ag 328.068 (ETA AQ-Axial-iFR)	1 cps
Ti 334.904 (ETA AQ-Axial-iFR)	8 cps
Ti 334.941 (ETA AQ-Axial-iFR)	41 cps
Y 360.073 (ETA AQ-Axial-iFR)	6,480 cps
Y 360.073 (ETA AQ-Radial-iFR)	1,420 cps
Y 377.433 (ETA AQ-Axial-iFR)	9,226 cps
Y 377.433 (ETA AQ-Radial-iFR)	2,008 cps
Sr 407.771 (ETA AQ-Radial-iFR)	131 cps
Ba 455.403 (ETA AQ-Radial-iFR)	24 cps
Na 589.592 (ETA AQ-Radial-iFR)	498 cps
Li 670.784 (ETA AQ-Radial-iFR)	56 cps
K 766.490 (ETA AQ-Radial-iFR)	55 cps
Na 818.326 (ETA AQ-Radial-iFR)	13 cps

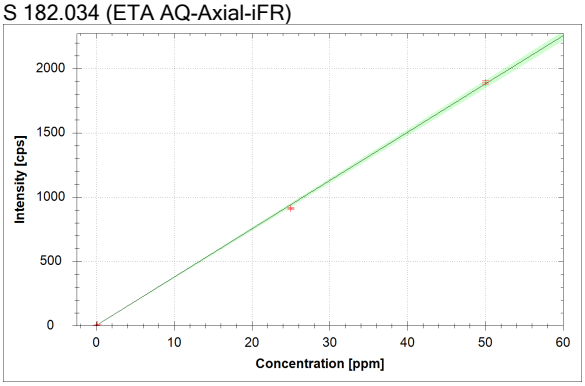
Calibration Summary

10/18/2024 4:07:26 PM

LabBook: I420241018D.imexp

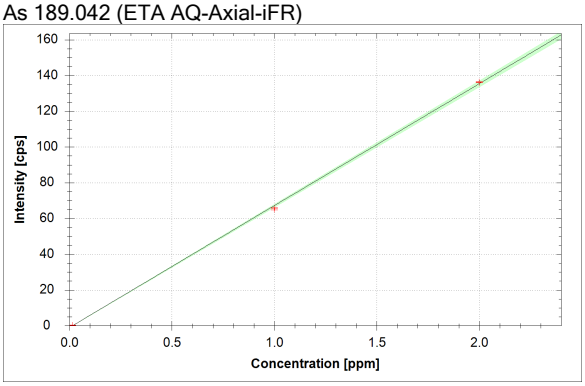
Calibration Graphs

S 182.034 (ETA AQ-Axial-iFR)



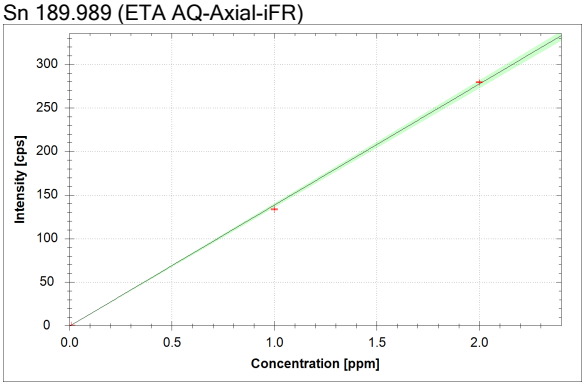
f(x) = 37.5390*x + 2.5499
R² = 0.9995
BEC = 0.068 ppm
LoD = 0.0076 ppm

As 189.042 (ETA AQ-Axial-iFR)



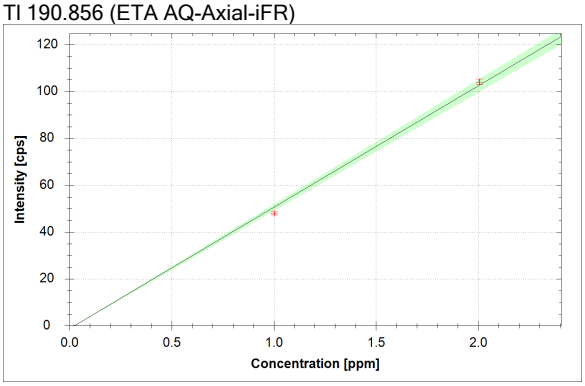
f(x) = 68.1821*x + -0.9800
R² = 0.9997
BEC = -0.014 ppm
LoD = 0.0148 ppm

Sn 189.989 (ETA AQ-Axial-iFR)



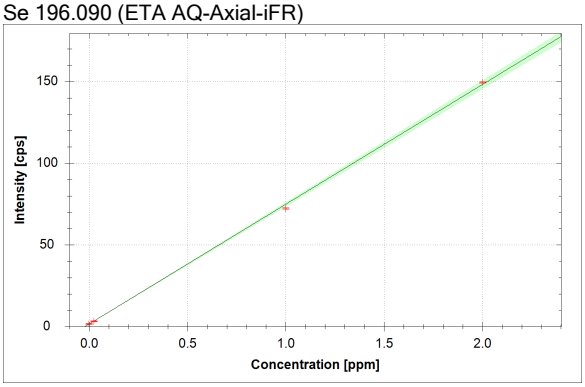
f(x) = 138.9247*x + -0.5530
R² = 0.9995
BEC = -0.004 ppm
LoD = 0.0050 ppm

Tl 190.856 (ETA AQ-Axial-iFR)



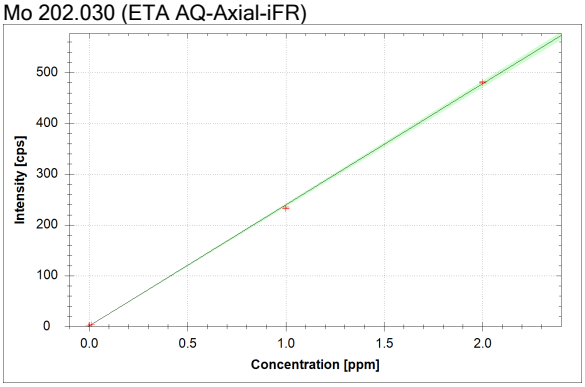
f(x) = 51.8280*x + -1.2698
R² = 0.9987
BEC = -0.025 ppm
LoD = 0.0179 ppm

Se 196.090 (ETA AQ-Axial-iFR)



f(x) = 73.2721*x + 1.5667
R² = 0.9994
BEC = 0.021 ppm
LoD = 0.0110 ppm

Mo 202.030 (ETA AQ-Axial-iFR)



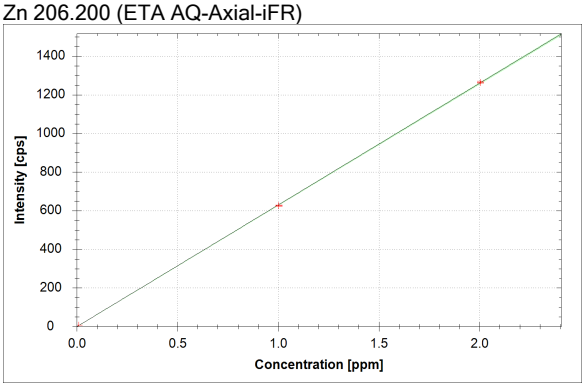
f(x) = 238.2380*x + 1.2173
R² = 0.9997
BEC = 0.005 ppm
LoD = 0.0005 ppm

Calibration Summary

10/18/2024 4:07:26 PM

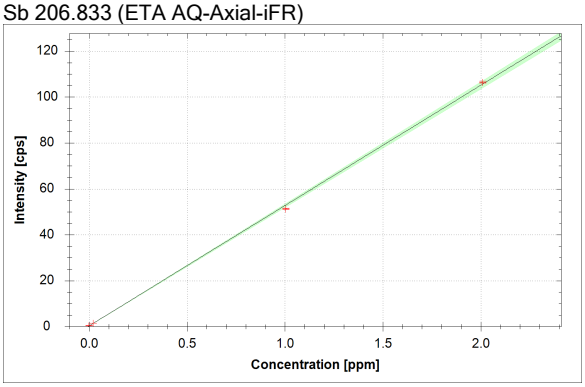
QTEGRA

Zn 206.200 (ETA AQ-Axial-iFR)



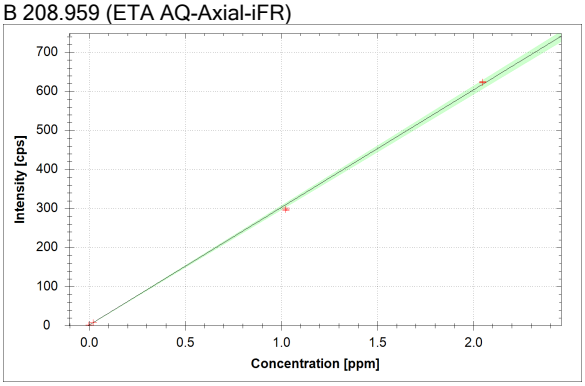
f(x) = 629.6812*x + -0.1179
R² = 1.0000
BEC = 0.000 ppm
LoD = 0.0012 ppm

Sb 206.833 (ETA AQ-Axial-iFR)



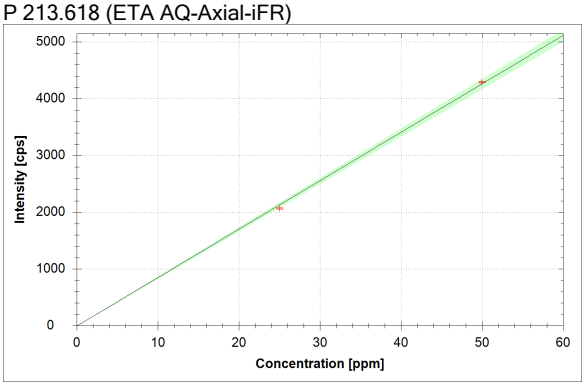
f(x) = 52.4117*x + 0.3174
R² = 0.9995
BEC = 0.006 ppm
LoD = 0.0059 ppm

B 208.959 (ETA AQ-Axial-iFR)



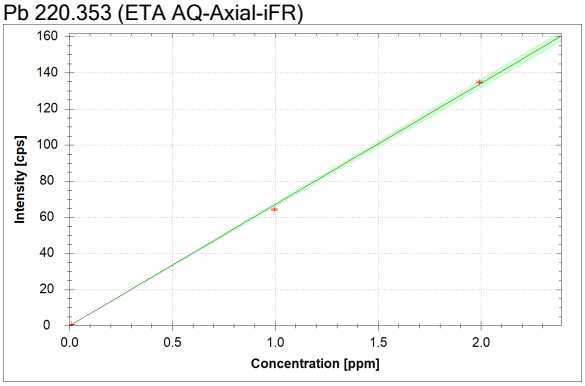
f(x) = 301.0087*x + 1.6533
R² = 0.9993
BEC = 0.005 ppm
LoD = 0.0002 ppm

P 213.618 (ETA AQ-Axial-iFR)



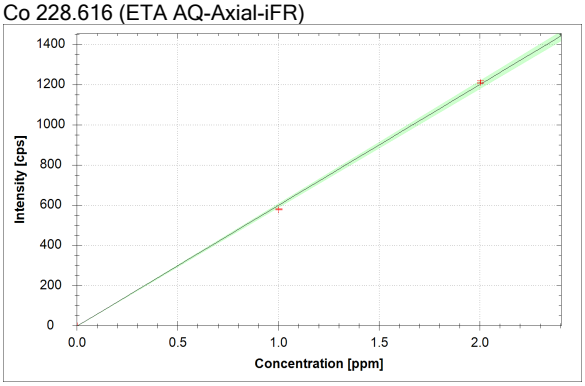
f(x) = 85.3032*x + -4.6690
R² = 0.9994
BEC = -0.055 ppm
LoD = 0.0039 ppm

Pb 220.353 (ETA AQ-Axial-iFR)



f(x) = 67.0562*x + -0.0175
R² = 0.9993
BEC = 0.000 ppm
LoD = 0.0046 ppm

Co 228.616 (ETA AQ-Axial-iFR)



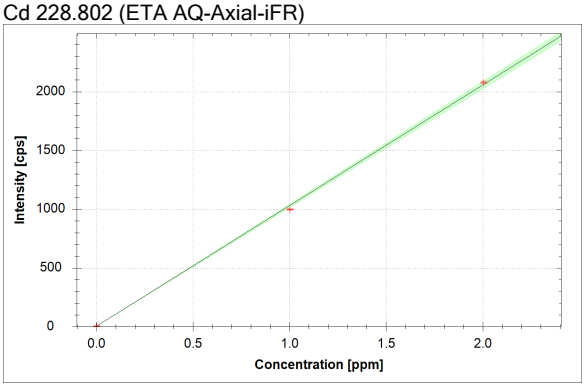
f(x) = 600.9955*x + -2.4540
R² = 0.9995
BEC = -0.004 ppm
LoD = 0.0009 ppm

Calibration Summary

10/18/2024 4:07:26 PM

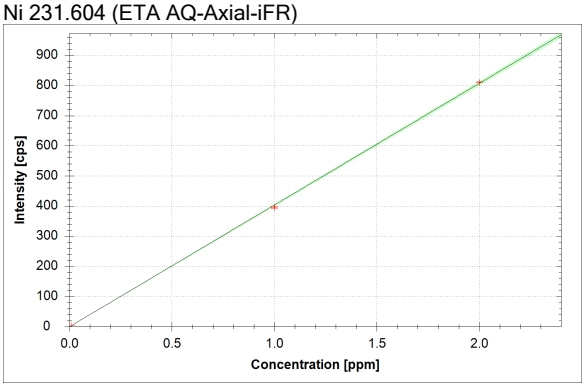
QTEGRA

Cd 228.802 (ETA AQ-Axial-iFR)



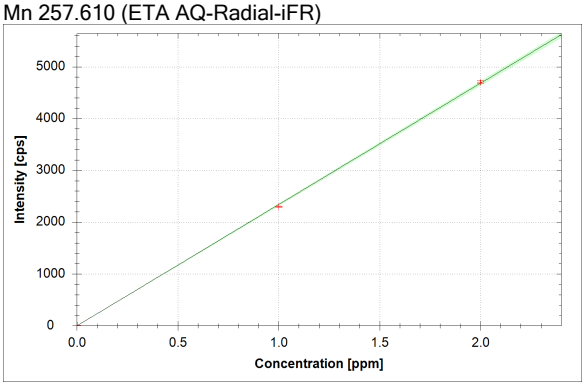
f(x) = 1027.2450*x + 2.3386
R² = 0.9994
BEC = 0.002 ppm
LoD = 0.0001 ppm

Ni 231.604 (ETA AQ-Axial-iFR)



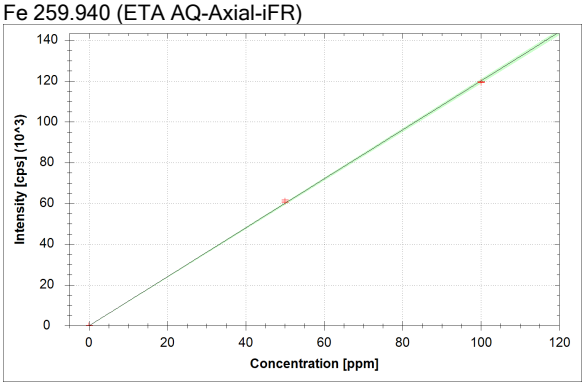
f(x) = 403.7317*x + -0.5058
R² = 0.9998
BEC = -0.001 ppm
LoD = 0.0016 ppm

Mn 257.610 (ETA AQ-Radial-iFR)



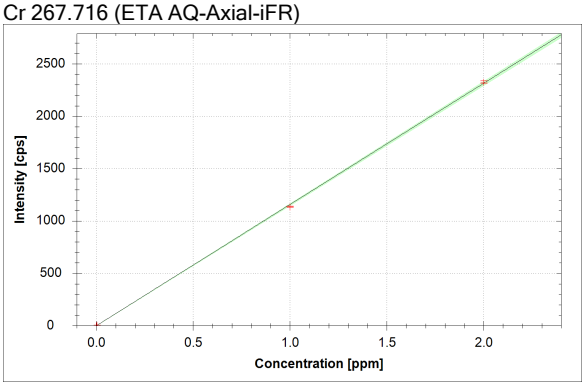
f(x) = 2341.1527*x + -1.1983
R² = 0.9998
BEC = -0.001 ppm
LoD = 0.0012 ppm

Fe 259.940 (ETA AQ-Axial-iFR)



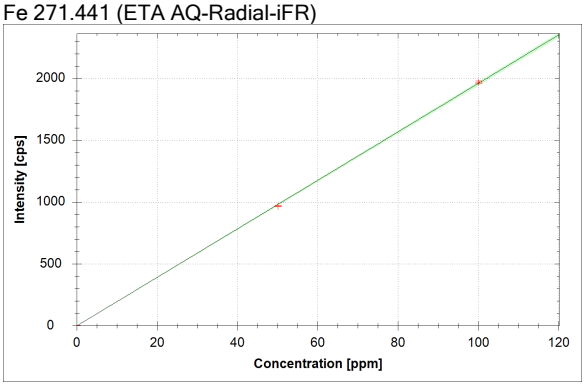
f(x) = 1200.0528*x + 1.1658
R² = 0.9999
BEC = 0.001 ppm
LoD = 0.0006 ppm

Cr 267.716 (ETA AQ-Axial-iFR)



f(x) = 1157.0842*x + 0.1956
R² = 0.9998
BEC = 0.000 ppm
LoD = 0.0004 ppm

Fe 271.441 (ETA AQ-Radial-iFR)



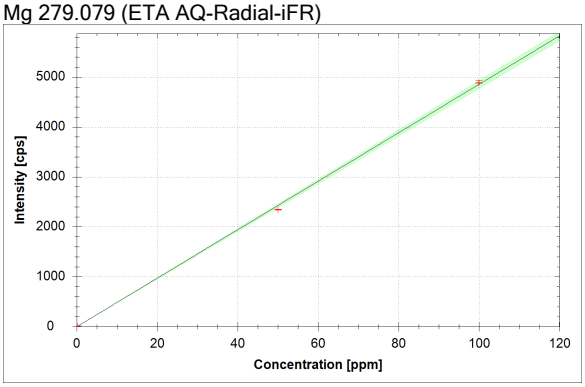
f(x) = 19.5897*x + -0.3743
R² = 0.9999
BEC = -0.019 ppm
LoD = 0.0536 ppm

Calibration Summary

10/18/2024 4:07:26 PM

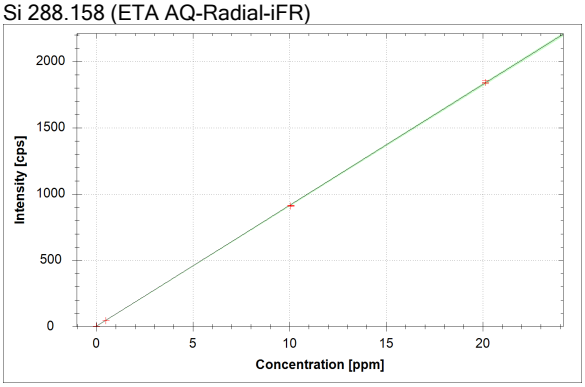
QTEGRA

Mg 279.079 (ETA AQ-Radial-iFR)



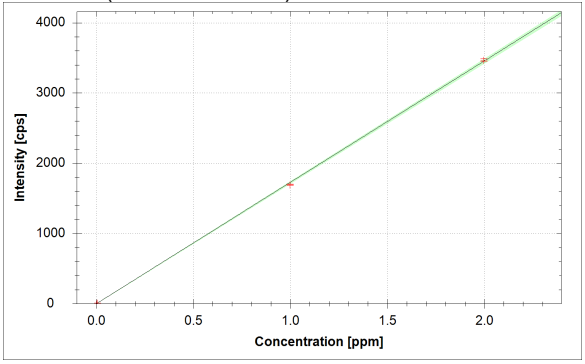
f(x) = 48.5413*x + -0.0006
R² = 0.9994
BEC = 0.000 ppm
LoD = 0.0083 ppm

Si 288.158 (ETA AQ-Radial-iFR)



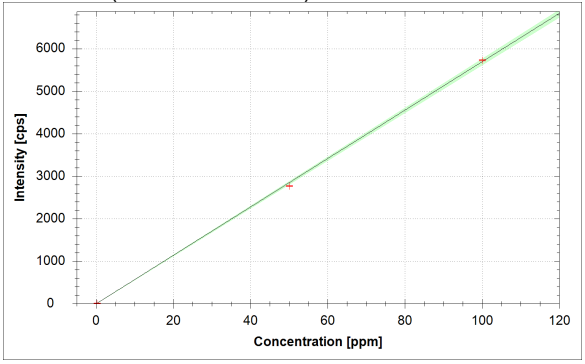
f(x) = 91.1438*x + 2.5210
R² = 0.9999
BEC = 0.028 ppm
LoD = 0.0018 ppm

V 292.402 (ETA AQ-Axial-iFR)



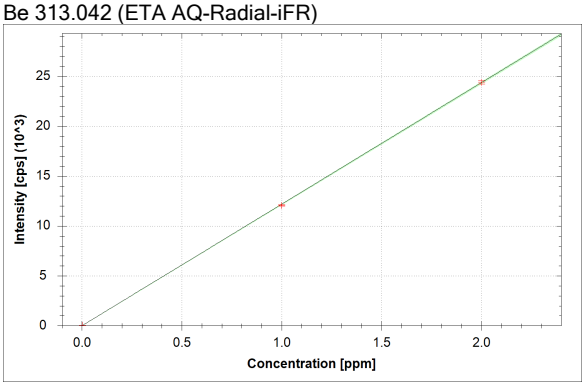
f(x) = 1727.8178*x + 0.4385
R² = 0.9998
BEC = 0.000 ppm
LoD = 0.0002 ppm

Al 308.215 (ETA AQ-Radial-iFR)



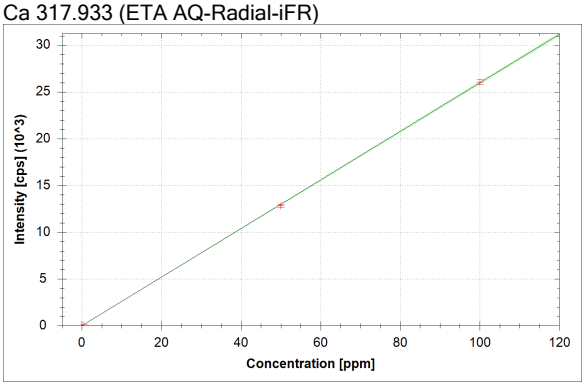
f(x) = 56.9294*x + 0.9562
R² = 0.9997
BEC = 0.017 ppm
LoD = 0.0318 ppm

Be 313.042 (ETA AQ-Radial-iFR)



f(x) = 12182.6422*x + 2.0541
R² = 1.0000
BEC = 0.000 ppm
LoD = 0.0002 ppm

Ca 317.933 (ETA AQ-Radial-iFR)



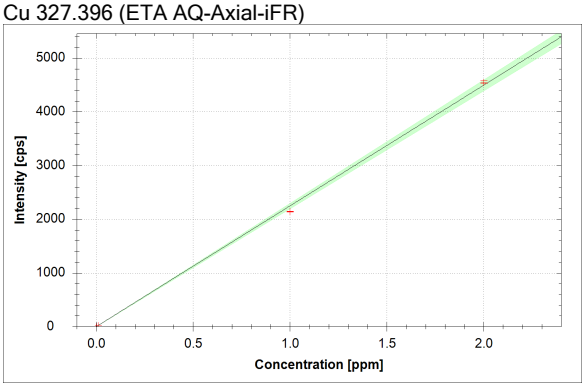
f(x) = 259.7605*x + 3.8120
R² = 0.9999
BEC = 0.015 ppm
LoD = 0.0045 ppm

Calibration Summary

10/18/2024 4:07:26 PM

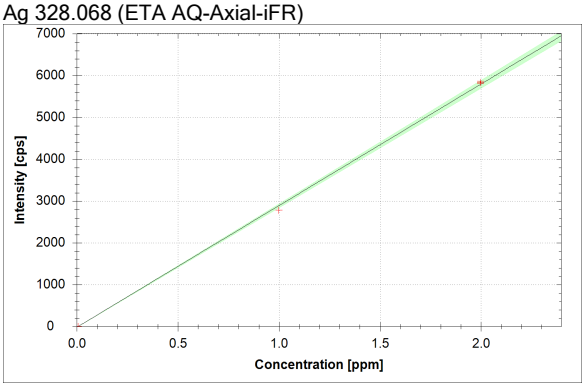
QTEGRA

Cu 327.396 (ETA AQ-Axial-iFR)



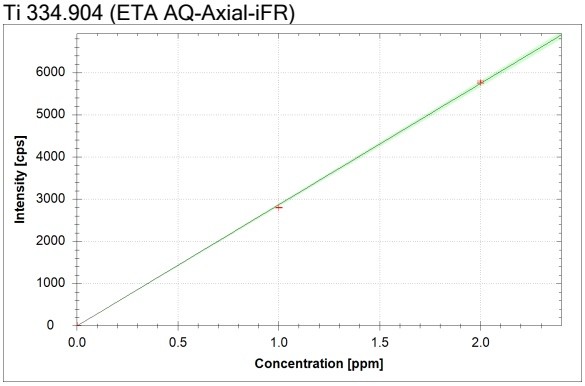
f(x) = 2247.0672*x + 0.3248
R² = 0.9989
BEC = 0.000 ppm
LoD = 0.0011 ppm

Ag 328.068 (ETA AQ-Axial-iFR)



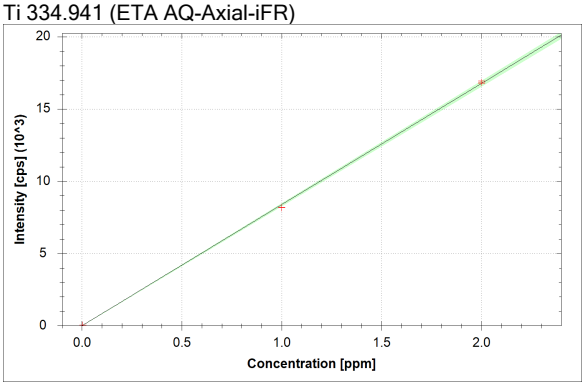
f(x) = 2907.6046*x + -14.0894
R² = 0.9994
BEC = -0.005 ppm
LoD = 0.0009 ppm

Ti 334.904 (ETA AQ-Axial-iFR)



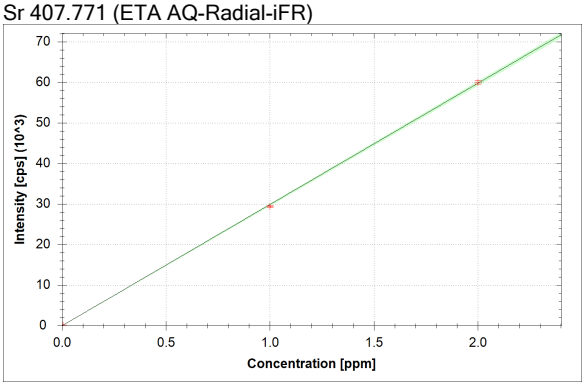
f(x) = 2872.9742*x + -6.3419
R² = 0.9997
BEC = -0.002 ppm
LoD = 0.0009 ppm

Ti 334.941 (ETA AQ-Axial-iFR)



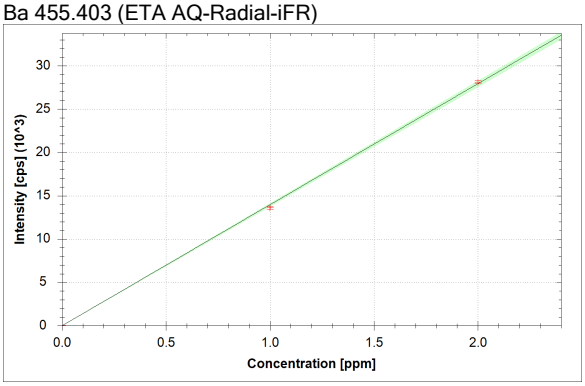
f(x) = 8380.7671*x + 1.2829
R² = 0.9997
BEC = 0.000 ppm
LoD = 0.0002 ppm

Sr 407.771 (ETA AQ-Radial-iFR)



f(x) = 29905.3865*x + -8.2078
R² = 0.9999
BEC = 0.000 ppm
LoD = 0.0000 ppm

Ba 455.403 (ETA AQ-Radial-iFR)



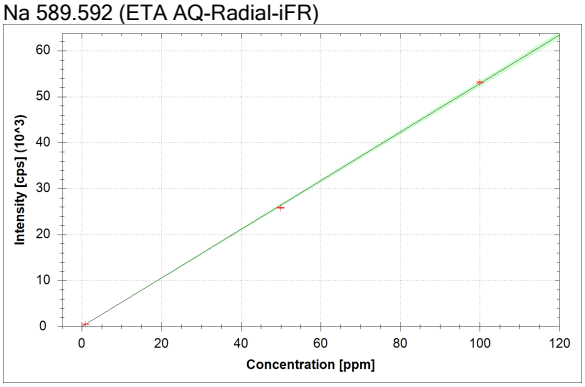
f(x) = 13969.8439*x + -2.2258
R² = 0.9997
BEC = 0.000 ppm
LoD = 0.0001 ppm

Calibration Summary

10/18/2024 4:07:26 PM

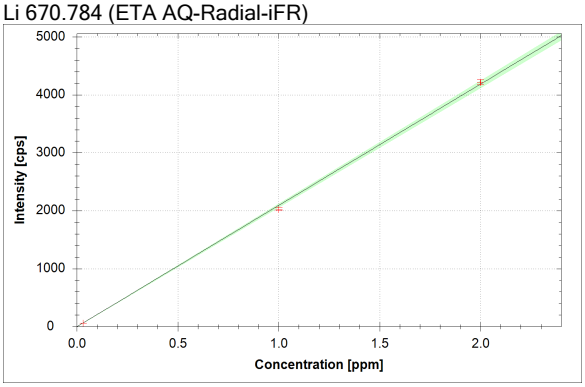
QTEGRA

Na 589.592 (ETA AQ-Radial-iFR)



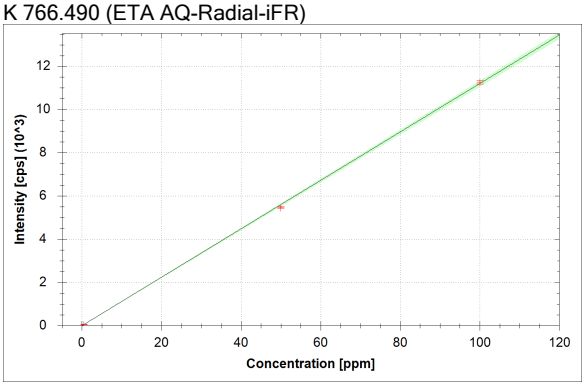
f(x) = 528.1782*x + 4.4993
R² = 0.9997
BEC = 0.009 ppm
LoD = 0.0032 ppm

Li 670.784 (ETA AQ-Radial-iFR)



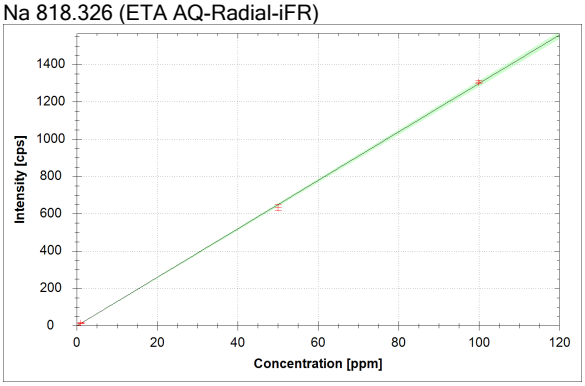
f(x) = 2092.9497*x + -1.4392
R² = 0.9996
BEC = -0.001 ppm
LoD = 0.0005 ppm

K 766.490 (ETA AQ-Radial-iFR)



f(x) = 112.0078*x + 1.8116
R² = 0.9997
BEC = 0.016 ppm
LoD = 0.0405 ppm

Na 818.326 (ETA AQ-Radial-iFR)



f(x) = 12.9825*x + -0.1874
R² = 0.9997
BEC = -0.014 ppm
LoD = 0.1974 ppm

Standards

Standard: IC-8089740
Analysis started at: 10/18/2024 12:53:27 PM
Standard (Stock): IC-8089740
Standard DF: 1

Analyte (Measure Mode)	Concentration average	Concentration RSD	Standard Concentration	Intensity average	Standard Relative Difference
S 182.034 (ETA AQ-Axial-iFR)	0.193 ppm	0.7 %	0.200 ppm	10 cps	3.661 %
As 189.042 (ETA AQ-Axial-iFR)	0.017 ppm	19.7 %	0.015 ppm	0 cps	12.796 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.009 ppm	5.2 %	0.010 ppm	1 cps	13.851 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.010 ppm	17.7 %	0.020 ppm	-1 cps	50.195 %
Se 196.090 (ETA AQ-Axial-iFR)	0.022 ppm	15.8 %	0.025 ppm	3 cps	12.067 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.010 ppm	3.8 %	0.010 ppm	4 cps	0.580 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.011 ppm	0.8 %	0.010 ppm	7 cps	13.116 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.022 ppm	2.4 %	0.020 ppm	1 cps	10.232 %
B 208.959 (ETA AQ-Axial-iFR)	0.020 ppm	3.3 %	0.020 ppm	8 cps	0.866 %
P 213.618 (ETA AQ-Axial-iFR)	N/A	N/A	N/A	-5 cps	N/A
Pb 220.353 (ETA AQ-Axial-iFR)	0.011 ppm	21.6 %	0.010 ppm	1 cps	11.944 %
Y 224.306 (ETA AQ-Axial-iFR)	101.030 %	0.4 %		471 cps	0.000 %
Y 224.306 (ETA AQ-Radial-iFR)	100.138 %	0.4 %		132 cps	0.000 %
Co 228.616 (ETA AQ-Axial-iFR)	0.004 ppm	9.5 %	0.004 ppm	0 cps	0.245 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.002 ppm	20.1 %	0.002 ppm	4 cps	1.879 %
In 230.606 (ETA AQ-Axial-iFR)	99.851 %	0.5 %		473 cps	0.000 %
Ni 231.604 (ETA AQ-Axial-iFR)	0.010 ppm	7.3 %	0.010 ppm	3 cps	2.930 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.003 ppm	2.2 %	0.003 ppm	6 cps	7.971 %
Fe 259.940 (ETA AQ-Axial-iFR)	0.051 ppm	0.8 %	0.050 ppm	63 cps	2.743 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.004 ppm	4.9 %	0.004 ppm	5 cps	6.758 %
Fe 271.441 (ETA AQ-Radial-iFR)	0.055 ppm	45.9 %	0.050 ppm	1 cps	10.020 %
Mg 279.079 (ETA AQ-Radial-iFR)	0.181 ppm	11.3 %	0.200 ppm	9 cps	9.332 %
Si 288.158 (ETA AQ-Radial-iFR)	0.472 ppm	1.0 %	0.500 ppm	45 cps	5.582 %
V 292.402 (ETA AQ-Axial-iFR)	0.005 ppm	1.7 %	0.005 ppm	9 cps	2.674 %
Al 308.215 (ETA AQ-Radial-iFR)	0.176 ppm	5.8 %	0.200 ppm	11 cps	11.985 %
Be 313.042 (ETA AQ-Radial-iFR)	0.002 ppm	2.8 %	0.002 ppm	26 cps	2.747 %
Ca 317.933 (ETA AQ-Radial-iFR)	0.473 ppm	1.1 %	0.500 ppm	126 cps	5.333 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.009 ppm	6.3 %	0.010 ppm	21 cps	10.366 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.006 ppm	2.8 %	0.006 ppm	2 cps	7.011 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.005 ppm	0.7 %	0.005 ppm	8 cps	0.836 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.005 ppm	1.2 %	0.005 ppm	43 cps	1.305 %
Y 360.073 (ETA AQ-Axial-iFR)	100.824 %	0.3 %		6,708 cps	0.000 %
Y 360.073 (ETA AQ-Radial-iFR)	99.743 %	0.1 %		1,477 cps	0.000 %
Y 377.433 (ETA AQ-Axial-iFR)	100.908 %	0.4 %		9,596 cps	0.000 %
Y 377.433 (ETA AQ-Radial-iFR)	99.645 %	0.2 %		2,094 cps	0.000 %
Sr 407.771 (ETA AQ-Radial-iFR)	0.005 ppm	0.2 %	0.005 ppm	135 cps	3.968 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.002 ppm	4.1 %	0.002 ppm	26 cps	0.555 %
Na 589.592 (ETA AQ-Radial-iFR)	0.974 ppm	1.1 %	1.000 ppm	517 cps	2.643 %
Li 670.784 (ETA AQ-Radial-iFR)	0.029 ppm	1.2 %	0.030 ppm	59 cps	2.646 %
K 766.490 (ETA AQ-Radial-iFR)	0.482 ppm	3.3 %	0.500 ppm	56 cps	3.549 %
Na 818.326 (ETA AQ-Radial-iFR)	1.040 ppm	12.2 %	1.000 ppm	13 cps	3.975 %

Standard: IC-8089741
Analysis started at: 10/18/2024 12:55:20 PM
Standard (Stock): IC-8089741
Standard DF: 1

Analyte (Measure Mode)	Concentration average	Concentration RSD	Standard Concentration	Intensity average	Standard Relative Difference
S 182.034 (ETA AQ-Axial-iFR)	24.210 ppm	0.8 %	25.000 ppm	935 cps	3.161 %
As 189.042 (ETA AQ-Axial-iFR)	0.973 ppm	1.1 %	1.000 ppm	67 cps	2.671 %
Sn 189.989 (ETA AQ-Axial-iFR)	0.967 ppm	0.6 %	1.000 ppm	134 cps	3.303 %
Tl 190.856 (ETA AQ-Axial-iFR)	0.948 ppm	1.4 %	1.000 ppm	48 cps	5.249 %
Se 196.090 (ETA AQ-Axial-iFR)	0.964 ppm	0.7 %	1.000 ppm	74 cps	3.641 %
Mo 202.030 (ETA AQ-Axial-iFR)	0.974 ppm	0.8 %	1.000 ppm	239 cps	2.629 %
Zn 206.200 (ETA AQ-Axial-iFR)	0.992 ppm	0.4 %	1.000 ppm	665 cps	0.797 %
Sb 206.833 (ETA AQ-Axial-iFR)	0.968 ppm	0.4 %	1.000 ppm	53 cps	3.179 %
B 208.959 (ETA AQ-Axial-iFR)	0.961 ppm	1.1 %	1.000 ppm	306 cps	3.889 %
P 213.618 (ETA AQ-Axial-iFR)	24.248 ppm	0.7 %	25.000 ppm	2,118 cps	3.008 %
Pb 220.353 (ETA AQ-Axial-iFR)	0.962 ppm	0.9 %	1.000 ppm	64 cps	3.810 %
Y 224.306 (ETA AQ-Axial-iFR)	102.634 %	0.5 %		478 cps	0.000 %

Calibration Summary

10/18/2024 4:07:26 PM

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Analyte (Measure Mode)	Concentration average	Concentration RSD	Standard Concentration	Intensity average	Standard Relative Difference
Y 224.306 (ETA AQ-Radial-iFR)	97.617 %	0.3 %		129 cps	0.000 %
Co 228.616 (ETA AQ-Axial-iFR)	0.965 ppm	0.5 %	1.000 ppm	579 cps	3.495 %
Cd 228.802 (ETA AQ-Axial-iFR)	0.965 ppm	0.4 %	1.000 ppm	1,022 cps	3.510 %
In 230.606 (ETA AQ-Axial-iFR)	99.991 %	0.4 %		473 cps	0.000 %
Ni 231.604 (ETA AQ-Axial-iFR)	0.981 ppm	0.9 %	1.000 ppm	416 cps	1.885 %
Mn 257.610 (ETA AQ-Radial-iFR)	0.981 ppm	0.5 %	1.000 ppm	2,236 cps	1.888 %
Fe 259.940 (ETA AQ-Axial-iFR)	50.898 ppm	0.9 %	50.000 ppm	62,689 cps	1.796 %
Cr 267.716 (ETA AQ-Axial-iFR)	0.981 ppm	0.6 %	1.000 ppm	1,205 cps	1.920 %
Fe 271.441 (ETA AQ-Radial-iFR)	49.233 ppm	0.6 %	50.000 ppm	941 cps	1.535 %
Mg 279.079 (ETA AQ-Radial-iFR)	48.213 ppm	0.3 %	50.000 ppm	2,279 cps	3.574 %
Si 288.158 (ETA AQ-Radial-iFR)	9.886 ppm	0.6 %	10.000 ppm	886 cps	1.141 %
V 292.402 (ETA AQ-Axial-iFR)	0.980 ppm	0.7 %	1.000 ppm	1,795 cps	1.997 %
Al 308.215 (ETA AQ-Radial-iFR)	48.630 ppm	0.3 %	50.000 ppm	2,698 cps	2.741 %
Be 313.042 (ETA AQ-Radial-iFR)	0.990 ppm	0.6 %	1.000 ppm	11,749 cps	1.017 %
Ca 317.933 (ETA AQ-Radial-iFR)	49.372 ppm	1.1 %	50.000 ppm	12,497 cps	1.255 %
Cu 327.396 (ETA AQ-Axial-iFR)	0.951 ppm	0.3 %	1.000 ppm	2,248 cps	4.862 %
Ag 328.068 (ETA AQ-Axial-iFR)	0.965 ppm	0.0 %	1.000 ppm	2,960 cps	3.498 %
Ti 334.904 (ETA AQ-Axial-iFR)	0.976 ppm	0.2 %	1.000 ppm	2,971 cps	2.375 %
Ti 334.941 (ETA AQ-Axial-iFR)	0.976 ppm	0.1 %	1.000 ppm	8,686 cps	2.396 %
Y 360.073 (ETA AQ-Axial-iFR)	106.164 %	0.3 %		7,064 cps	0.000 %
Y 360.073 (ETA AQ-Radial-iFR)	97.611 %	0.2 %		1,446 cps	0.000 %
Y 377.433 (ETA AQ-Axial-iFR)	105.151 %	0.5 %		10,000 cps	0.000 %
Y 377.433 (ETA AQ-Radial-iFR)	97.418 %	0.5 %		2,047 cps	0.000 %
Sr 407.771 (ETA AQ-Radial-iFR)	0.982 ppm	0.9 %	1.000 ppm	28,610 cps	1.810 %
Ba 455.403 (ETA AQ-Radial-iFR)	0.974 ppm	1.3 %	1.000 ppm	13,283 cps	2.591 %
Na 589.592 (ETA AQ-Radial-iFR)	48.823 ppm	0.4 %	50.000 ppm	25,126 cps	2.354 %
Li 670.784 (ETA AQ-Radial-iFR)	0.969 ppm	1.2 %	1.000 ppm	1,974 cps	3.119 %
K 766.490 (ETA AQ-Radial-iFR)	48.792 ppm	0.9 %	50.000 ppm	5,326 cps	2.416 %
Na 818.326 (ETA AQ-Radial-iFR)	48.801 ppm	2.6 %	50.000 ppm	617 cps	2.398 %

Standard: IC-8089742
Analysis started at: 10/18/2024 12:57:13 PM
Standard (Stock): IC-8089742
Standard DF: 1

Analyte (Measure Mode)	Concentration average	Concentration RSD	Standard Concentration	Intensity average	Standard Relative Difference
S 182.034 (ETA AQ-Axial-iFR)	50.395 ppm	0.8 %	50.000 ppm	1,918 cps	0.790 %
As 189.042 (ETA AQ-Axial-iFR)	2.013 ppm	0.2 %	2.000 ppm	138 cps	0.667 %
Sn 189.989 (ETA AQ-Axial-iFR)	2.017 ppm	0.2 %	2.000 ppm	273 cps	0.826 %
Tl 190.856 (ETA AQ-Axial-iFR)	2.026 ppm	1.2 %	2.000 ppm	102 cps	1.317 %
Se 196.090 (ETA AQ-Axial-iFR)	2.018 ppm	0.3 %	2.000 ppm	151 cps	0.912 %
Mo 202.030 (ETA AQ-Axial-iFR)	2.013 ppm	0.3 %	2.000 ppm	487 cps	0.657 %
Zn 206.200 (ETA AQ-Axial-iFR)	2.004 ppm	0.4 %	2.000 ppm	1,333 cps	0.199 %
Sb 206.833 (ETA AQ-Axial-iFR)	2.016 ppm	0.4 %	2.000 ppm	108 cps	0.794 %
B 208.959 (ETA AQ-Axial-iFR)	2.019 ppm	0.3 %	2.000 ppm	631 cps	0.972 %
P 213.618 (ETA AQ-Axial-iFR)	50.376 ppm	0.3 %	50.000 ppm	4,345 cps	0.752 %
Pb 220.353 (ETA AQ-Axial-iFR)	2.019 ppm	0.4 %	2.000 ppm	132 cps	0.952 %
Y 224.306 (ETA AQ-Axial-iFR)	101.230 %	0.8 %		471 cps	0.000 %
Y 224.306 (ETA AQ-Radial-iFR)	95.072 %	0.5 %		126 cps	0.000 %
Co 228.616 (ETA AQ-Axial-iFR)	2.017 ppm	0.7 %	2.000 ppm	1,185 cps	0.874 %
Cd 228.802 (ETA AQ-Axial-iFR)	2.018 ppm	0.4 %	2.000 ppm	2,106 cps	0.877 %
In 230.606 (ETA AQ-Axial-iFR)	97.754 %	0.1 %		463 cps	0.000 %
Ni 231.604 (ETA AQ-Axial-iFR)	2.009 ppm	0.1 %	2.000 ppm	848 cps	0.471 %
Mn 257.610 (ETA AQ-Radial-iFR)	2.009 ppm	0.6 %	2.000 ppm	4,493 cps	0.472 %
Fe 259.940 (ETA AQ-Axial-iFR)	99.551 ppm	0.1 %	100.000 ppm	120,937 cps	0.449 %
Cr 267.716 (ETA AQ-Axial-iFR)	2.010 ppm	0.6 %	2.000 ppm	2,451 cps	0.480 %
Fe 271.441 (ETA AQ-Radial-iFR)	100.384 ppm	0.5 %	100.000 ppm	1,882 cps	0.384 %
Mg 279.079 (ETA AQ-Radial-iFR)	100.893 ppm	0.5 %	100.000 ppm	4,677 cps	0.893 %
Si 288.158 (ETA AQ-Radial-iFR)	20.058 ppm	0.7 %	20.000 ppm	1,760 cps	0.289 %
V 292.402 (ETA AQ-Axial-iFR)	2.010 ppm	0.6 %	2.000 ppm	3,656 cps	0.499 %
Al 308.215 (ETA AQ-Radial-iFR)	100.685 ppm	0.3 %	100.000 ppm	5,478 cps	0.685 %
Be 313.042 (ETA AQ-Radial-iFR)	2.005 ppm	0.8 %	2.000 ppm	23,337 cps	0.254 %
Ca 317.933 (ETA AQ-Radial-iFR)	100.314 ppm	0.9 %	100.000 ppm	24,896 cps	0.314 %
Cu 327.396 (ETA AQ-Axial-iFR)	2.024 ppm	0.5 %	2.000 ppm	4,757 cps	1.216 %
Ag 328.068 (ETA AQ-Axial-iFR)	2.017 ppm	0.5 %	2.000 ppm	6,159 cps	0.875 %
Ti 334.904 (ETA AQ-Axial-iFR)	2.012 ppm	0.4 %	2.000 ppm	6,086 cps	0.594 %
Ti 334.941 (ETA AQ-Axial-iFR)	2.012 ppm	0.5 %	2.000 ppm	17,774 cps	0.599 %

Calibration Summary

10/18/2024 4:07:26 PM

QTEGRA

Analyte (Measure Mode)	Concentration average	Concentration RSD	Standard Concentration	Intensity average	Standard Relative Difference
Y 360.073 (ETA AQ-Axial-iFR)	105.403 %	0.8 %		7,013 cps	0.000 %
Y 360.073 (ETA AQ-Radial-iFR)	95.528 %	0.6 %		1,415 cps	0.000 %
Y 377.433 (ETA AQ-Axial-iFR)	104.559 %	0.9 %		9,943 cps	0.000 %
Y 377.433 (ETA AQ-Radial-iFR)	95.533 %	1.0 %		2,008 cps	0.000 %
Sr 407.771 (ETA AQ-Radial-iFR)	2.009 ppm	0.8 %	2.000 ppm	57,413 cps	0.452 %
Ba 455.403 (ETA AQ-Radial-iFR)	2.013 ppm	0.6 %	2.000 ppm	26,735 cps	0.648 %
Na 589.592 (ETA AQ-Radial-iFR)	100.589 ppm	0.3 %	100.000 ppm	50,759 cps	0.589 %
Li 670.784 (ETA AQ-Radial-iFR)	2.016 ppm	1.1 %	2.000 ppm	4,028 cps	0.780 %
K 766.490 (ETA AQ-Radial-iFR)	100.604 ppm	0.8 %	100.000 ppm	10,767 cps	0.604 %
Na 818.326 (ETA AQ-Radial-iFR)	100.599 ppm	0.6 %	100.000 ppm	1,247 cps	0.599 %

METALS BATCH WORKSHEET

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Batch Number: 728745 Batch Start Date: 10/18/24 09:09 Batch Analyst: O'Brien, Emily M

Batch Method: 200.7 Batch End Date: 10/18/24 12:45

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	Initial pH	InitialAmount	FinalAmount	MED_03_Ag 00212	MEP_Mix4 00011	Spike Mx 1 00006
MB 480-728745/1		200.7, 200.7 Rev 4.4				50 mL	50 mL			
LCS 480-728745/2		200.7, 200.7 Rev 4.4				50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL
480-224430-C-1	TREATMENT EFFLUENT	200.7, 200.7 Rev 4.4	Water	T	<2	50 mL	50 mL			

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	Spike Mx 2 00005	Spike Mx 3 00005				
MB 480-728745/1		200.7, 200.7 Rev 4.4								
LCS 480-728745/2		200.7, 200.7 Rev 4.4			0.25 mL	0.25 mL				
480-224430-C-1	TREATMENT EFFLUENT	200.7, 200.7 Rev 4.4	Water	T						

Batch Notes	
First Start time	0909
First End time	1245
Lot # of hydrochloric acid	8085295
Lot # of Nitric Acid	8105212
Uncorrected Temperature	96.5 Celsius
Oven, Bath or Block Temperature 1	96.6
Uncorrected Temperature 2	93.2 Celsius
Oven, Bath or Block Temperature 2	93.3
Hot Block ID	C
Digestion Tube/Cup ID	LV24061004
Thermometer Location ID	A6
Thermometer ID	211049591
Pipette ID	MDL-8

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG No.:

Project: Frewsburg Site - Monthly Analysis

Client Sample ID	Lab Sample ID
TREATMENT EFFLUENT	480-224430-1

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-224430-1
Lab Name: Eurofins Buffalo
Job No.: 480-224430-1
SDG ID.:
Matrix: Water
Date Sampled: 10/15/2024 13:00
Reporting Basis: WET
Date Received: 10/16/2024 14:23
Preparation Batch Number: 728937
Instrument ID: Balance-11

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Oil & Grease	ND	4.7	1.3	mg/L			1	1664B

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 728953	Date: 10/19/2024 09:59	Prep Batch: 728937	Date: 10/19/2024 08:24				
1664B	MB 480-728937/1-A	Oil & Grease	ND		mg/L	5.0	1

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 728953	Date: 10/19/2024 09:59		Prep Batch: 728937		Date: 10/19/2024 08:24						
1664B	480-224430-1	Oil & Grease	ND		mg/L						
1664B	480-224430-1 MS	Oil & Grease	34.13		mg/L	38.0	90	78-114			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 728953	Date: 10/19/2024 09:59		Prep Batch: 728937		Date: 10/19/2024 08:24						
					LCS Source: restek og lcs_00121						
1664B	LCS 480-728937/2-A	Oil & Grease	34.80		mg/L	40.0	87	78-114			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG Number:

Matrix: Water Instrument ID: Balance-11

Method: 1664B MDL Date: 06/21/2021 16:03

Prep Method: 1664B

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Oil & Grease		5	1.4

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Buffalo Job Number: 480-224430-1

SDG Number:

Matrix: Water Instrument ID: Balance-11

Method: 1664B XMDL Date: 01/07/2010 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Oil & Grease		5	1.4

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Prep Method: 1664B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 480-728937/1-A	10/19/2024 08:24	728937		1000	1000
LCS 480-728937/2-A	10/19/2024 08:24	728937		1000	1000
480-224430-1	10/19/2024 08:24	728937		1055	1000
480-224430-1 MS	10/19/2024 08:24	728937		1052	1000

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Instrument ID: Balance-11 Method: 1664B

Start Date: 10/19/2024 09:59 End Date: 10/19/2024 09:59

Lab Sample ID	D / F	Type	Time	Analytes																			
				HEM																			
MB 480-728937/1-A	1	T	09:59	X																			
LCS 480-728937/2-A	1	T	09:59	X																			
ZZZZZZ (Client)			09:59																				
ZZZZZZ (Client)			09:59																				
480-224430-1	1	T	09:59	X																			
480-224430-1 MS	1	T	09:59	X																			
ZZZZZZ (Client)			09:59																				
ZZZZZZ (Client)			09:59																				
ZZZZZZ (Client)			09:59																				
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ZZZZZZ (Client)			09:59																				
ZZZZZZ (Client)			09:59																				

Prep Types
T = Total/NA

General Chemistry Raw Data Report

Job ID: 480-224430-1

Batch: 728953 **Analyst Initials: KM**

Method: 1664B **Instrument: Balance-11**

Lab Sample ID: MB 480-728937/1-A

Analysis Date: Oct 19, 2024 09:59

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Oil & Grease	None	1	-0.299999999999301	mg/L	1000 mL	1000 mL

Lab Sample ID: LCS 480-728937/2-A

Analysis Date: Oct 19, 2024 09:59

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Oil & Grease	None	1	34.7999999999997	mg/L	1000 mL	1000 mL

Lab Sample ID: 480-224430-A-1-A

Analysis Date: Oct 19, 2024 09:59

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Oil & Grease	None	1	0.900000000000567	mg/L	1055 mL	1000 mL

Lab Sample ID: 480-224430-B-1-A MS

Analysis Date: Oct 19, 2024 09:59

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Oil & Grease	None	1	35.8999999999998	mg/L	1052 mL	1000 mL

Historical Data Summary Report

For Batch 728953

Lab Sample ID	Client Sample	Method	Analyte	Prep Type	Unit	Data Points	Dilution	Result	Fail	3-Sigma Limits	Fail	Client Limits
480-224431-B-1-A	COV-SW-1	1664B	Oil & Grease	Total/NA	mg/L	8	1.0	1.5	☐	0 - 8.969	☐	0 - 9
480-224441-B-3-A	STAGE 2 PRIMARY	1664B	Oil & Grease	Total/NA	mg/L	5	1.0	6.6	☐	0 - 19.23	☐	0 - 15.24
480-224441-B-4-A	STAGE 2 SECOND	1664B	Oil & Grease	Total/NA	mg/L	5	1.0	14.7	☑	0 - 7	☑	0 - 6 OK KM 10/19
480-224441-B-5-A	STAGE 3 PRIMARY	1664B	Oil & Grease	Total/NA	mg/L	5	1.0	8.6	☐	0 - 11.575	☐	0 - 8.64
480-224453-B-3-A	MH20_Grab	1664B	Oil & Grease	Total/NA	mg/L	8	1.0	22.1	☑	0 - 7.708	☑	0 - 8.28 OK KM 10/19
480-224453-B-4-A	MH21_Grab	1664B	Oil & Grease	Total/NA	mg/L	8	1.0	6.7	☑	0 - 0	☑	0 - 0 OK KM 10/19
480-224476-B-1-A	EFFLUENT	1664B	Oil & Grease	Total/NA	mg/L	8	1.0	5.2	☐	0 - 36.362	☐	0 - 36.12
480-224491-A-1-A	OUTFALL 001	1664B	Oil & Grease	Total/NA	mg/L	8	1.0	ND	☐	0 - 1.899	☐	0 - 2.04
480-224491-A-2-A	OUTFALL 002	1664B	Oil & Grease	Total/NA	mg/L	8	1.0	1.5	☐	0 - 3.494	☐	0 - 2.88

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Batch Number: 728937 Batch Start Date: 10/19/24 08:24 Batch Analyst: McCadden, Kayley

Batch Method: 1664B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	Initial pH	Final pH	GrossWeight	TareWeight	DensityAcc	InitialAmount
MB 480-728937/1		1664B, 1664B			5 SU	2 SU	1400 g	400 g	1	1000 mL
LCS 480-728937/2		1664B, 1664B			5 SU	2 SU	1400 g	400 g	1	1000 mL
480-224430-A-1	TREATMENT EFFLUENT	1664B, 1664B	Water	T	2 SU	2 SU	1560 g	505 g	1	1055 mL
480-224430-B-1 MS	TREATMENT EFFLUENT	1664B, 1664B		T	2 SU	2 SU	1558 g	506 g	1	1052 mL

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	FinalAmount	ReceiverTube	OG Std EnvExp 00028	restek og lcs 00121		
MB 480-728937/1		1664B, 1664B			1000 mL	6.4209 g				
LCS 480-728937/2		1664B, 1664B			1000 mL	6.4227 g		5 mL		
480-224430-A-1	TREATMENT EFFLUENT	1664B, 1664B	Water	T	1000 mL	6.4300 g				
480-224430-B-1 MS	TREATMENT EFFLUENT	1664B, 1664B		T	1000 mL	6.3677 g	5 mL			

Batch Notes	
Nominal Amount Used	1000 mL
Analyst ID - HEM Extraction	km
Hexane ID	23e0262005
Acid ID	7429276
Balance ID	11/13
Balance is Level? (Y/N)	yes
Weight Set ID	76665/50524

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Batch Number: 728953 Batch Start Date: 10/19/24 09:59 Batch Analyst: McCadden, Kayley

Batch Method: 1664B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	FinalAmount	ReceiverTube	HEMWgt1	HEMWgt2	Residue	Residue2
MB 480-728937/1-A		1664B			1000 mL	6.4209 g	6.4210 g	6.4206 g	0.0001 g	-0.0003 g
LCS 480-728937/2-A		1664B			1000 mL	6.4227 g	6.4579 g	6.4575 g	0.0352 g	0.0348 g
480-224430-A-1-A	TREATMENT EFFLUENT	1664B	Water	T	1000 mL	6.4300 g	6.4309 g	6.4309 g	0.0009 g	0.0009 g
480-224430-B-1-A MS	TREATMENT EFFLUENT	1664B		T	1000 mL	6.3677 g	6.4032 g	6.4036 g	0.0355 g	0.0359 g

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	Weight2OK	MinSilicaGel	SgtRecomendedSplit	SGTRecTube	SGTWgt1	SGTWgt2
MB 480-728937/1-A		1664B			Pass 0.0005g	3 g	Not Required	6.3847 g	6.3848 g	6.3845 g
LCS 480-728937/2-A		1664B			Pass 0.0005g	3 g	Not Required	6.4578 g	6.4779 g	6.4774 g
480-224430-A-1-A	TREATMENT EFFLUENT	1664B	Water	T	Pass 0.0005g	3 g	Not Required	6.4303 g	6.4307 g	6.4309 g
480-224430-B-1-A MS	TREATMENT EFFLUENT	1664B		T	Pass 0.0005g	3 g	Not Required	6.3700 g	6.3877 g	6.3874 g

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	SGTResidue1	SGTResidue2	SGTWeightOne%Diff	CalcMsg	Silica Gel 00031	
MB 480-728937/1-A		1664B			0.0001 g	-0.0002 g	Pass 0.0005g %	OK	2.9979 g	
LCS 480-728937/2-A		1664B			0.0201 g	0.0196 g	Pass 0.0005g %	OK	3.0213 g	
480-224430-A-1-A	TREATMENT EFFLUENT	1664B	Water	T	0.0004 g	0.0006 g	Pass 0.0005g %	OK	2.9938 g	
480-224430-B-1-A MS	TREATMENT EFFLUENT	1664B		T	0.0177 g	0.0174 g	Pass 0.0005g %	OK	3.0175 g	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Buffalo Job No.: 480-224430-1

SDG No.:

Batch Number: 728953 Batch Start Date: 10/19/24 09:59 Batch Analyst: McCadden, Kayley

Batch Method: 1664B Batch End Date:

Batch Notes	
Perform Calculation (0=No, 1=Yes)	1
Desiccator In Time - 1st Weight	10:05
Desiccator Out Time - 1st Weight	11:15
Desiccator In Time - 2nd Weight	11:30
Desiccator Out Time - 2nd Weight	12:22
Cal check before 1st Weighing - 1g	1.0000 g
Cal check before 1st Weighing - 2 mg	0.0018 g
Cal check after 2nd Weighing - 1g	1.0000 g
Cal check after 2nd Weighing - 2 mg	0.0018 g
Balance ID	11/13
Balance is Level? (Y/N)	yes
Weight Set ID	76665/50524

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

CHAIN OF CUSTODY

10/15/24

Client: New York State Dept. of Environm

FED-EX Tracking # | Bottle Order Control #

Lab Quote # | Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax #N/A **866-902-2187**	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name: | Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent	NA	10/15	1300	MR	WG	6	3		1	2						X	X	X	
	Treatment Influent	NA	10/15	1310	MR	WG	3	3									X	X	X	
	Trip Blank	NA	10/15	-	MR	WG	2	2									X			

480-224430 Chain of Custody

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days ____/____
- [ ] 1 day RUSH ____/____
- [ ] Other _____ ____/____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler	Date / Time	Received By
1	GK to fedex	10/15 1630	
2	Relinquished By :	Date / Time:	Received By:
3	Relinquished By :	Date / Time:	Received By: 10/16/24 1420 TMB

Custody Seal Number: [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice **Cooler Temp** _____

4.0 IR#5C Ice

N:\Buffalo\Projects\Projects\NYSDEC Contract\PROJECTS\Frewsburg, Former Vac-Air Specialty Alloys\Old Data Tables\Archive\Ogiony\Frewsburg PSID with COC

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-224430-1

Login Number: 224430
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 11/13/2024 8:00:15 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-225227-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
11/13/2024 8:00:15 AM

Authorized for release by
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 16
Lab Chronicle 17
Certification Summary 18
Method Summary 19
Sample Summary 20
Chain of Custody 21
Receipt Checklists 22

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-225227-1 Eurofins Buffalo

Job Narrative
480-225227-1

Receipt
The samples were received on 11/5/2024 3:20 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.8º C.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Treatment Influent (480-225227-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Treatment Effluent
Lab Sample ID: 480-225227-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.0	J	10	3.0	ug/L	1		8260C	Total/NA
Iron	3.9		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.012		0.010	0.0068	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: Treatment Influent
Lab Sample ID: 480-225227-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	940		20	16	ug/L	20		8260C	Total/NA
Vinyl chloride	140		20	18	ug/L	20		8260C	Total/NA

Client Sample ID: Trip Blank
Lab Sample ID: 480-225227-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Treatment Effluent
Lab Sample ID: 480-225227-1

Date Collected: 11/05/24 12:00
Matrix: Water
Date Received: 11/05/24 15:20

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/12/24 00:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/12/24 00:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/12/24 00:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/12/24 00:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/12/24 00:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/12/24 00:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/12/24 00:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/12/24 00:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/12/24 00:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/12/24 00:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/12/24 00:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/12/24 00:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/12/24 00:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/12/24 00:55	1
2-Hexanone	ND		5.0	1.2	ug/L			11/12/24 00:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/12/24 00:55	1
Acetone	**3.0**	**J**	10	3.0	ug/L			11/12/24 00:55	1
Benzene	ND		1.0	0.41	ug/L			11/12/24 00:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/12/24 00:55	1
Bromoform	ND		1.0	0.26	ug/L			11/12/24 00:55	1
Bromomethane	ND		1.0	0.69	ug/L			11/12/24 00:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/12/24 00:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/12/24 00:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/12/24 00:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/12/24 00:55	1
Chloroethane	ND		1.0	0.32	ug/L			11/12/24 00:55	1
Chloroform	ND		1.0	0.34	ug/L			11/12/24 00:55	1
Chloromethane	ND		1.0	0.35	ug/L			11/12/24 00:55	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/12/24 00:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/12/24 00:55	1
Cyclohexane	ND		1.0	0.18	ug/L			11/12/24 00:55	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/12/24 00:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/12/24 00:55	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/12/24 00:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/12/24 00:55	1
Methyl acetate	ND		2.5	1.3	ug/L			11/12/24 00:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/12/24 00:55	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/12/24 00:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/12/24 00:55	1
Styrene	ND		1.0	0.73	ug/L			11/12/24 00:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/12/24 00:55	1
Toluene	ND		1.0	0.51	ug/L			11/12/24 00:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/12/24 00:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/12/24 00:55	1
Trichloroethene	ND		1.0	0.46	ug/L			11/12/24 00:55	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/12/24 00:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/12/24 00:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/12/24 00:55	1

Client Sample ID: Treatment Effluent
Lab Sample ID: 480-225227-1

Date Collected: 11/05/24 12:00
Matrix: Water
Date Received: 11/05/24 15:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*85*		*80 - 120*		*11/12/24 00:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*		*11/12/24 00:55*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*11/12/24 00:55*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*11/12/24 00:55*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		11/08/24 10:55	11/08/24 16:16	1
Iron	**3.9**		0.050	0.026	mg/L		11/08/24 10:55	11/08/24 16:16	1
Zinc	**0.012**		0.010	0.0068	mg/L		11/08/24 10:55	11/08/24 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		4.7	1.3	mg/L		11/08/24 08:36	11/08/24 09:57	1

Client Sample ID: Treatment Influent
Lab Sample ID: 480-225227-2

Date Collected: 11/05/24 12:15
Matrix: Water
Date Received: 11/05/24 15:20

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			11/12/24 01:17	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			11/12/24 01:17	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			11/12/24 01:17	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			11/12/24 01:17	20
1,1-Dichloroethane	ND		20	7.6	ug/L			11/12/24 01:17	20
1,1-Dichloroethene	ND		20	5.8	ug/L			11/12/24 01:17	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			11/12/24 01:17	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			11/12/24 01:17	20
1,2-Dichlorobenzene	ND		20	16	ug/L			11/12/24 01:17	20
1,2-Dichloroethane	ND		20	4.2	ug/L			11/12/24 01:17	20
1,2-Dichloropropane	ND		20	14	ug/L			11/12/24 01:17	20
1,3-Dichlorobenzene	ND		20	16	ug/L			11/12/24 01:17	20
1,4-Dichlorobenzene	ND		20	17	ug/L			11/12/24 01:17	20
2-Butanone (MEK)	ND		200	26	ug/L			11/12/24 01:17	20
2-Hexanone	ND		100	25	ug/L			11/12/24 01:17	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			11/12/24 01:17	20
Acetone	ND		200	60	ug/L			11/12/24 01:17	20
Benzene	ND		20	8.2	ug/L			11/12/24 01:17	20
Bromodichloromethane	ND		20	7.8	ug/L			11/12/24 01:17	20
Bromoform	ND		20	5.2	ug/L			11/12/24 01:17	20
Bromomethane	ND		20	14	ug/L			11/12/24 01:17	20
Carbon disulfide	ND		20	3.8	ug/L			11/12/24 01:17	20
Carbon tetrachloride	ND		20	5.4	ug/L			11/12/24 01:17	20
Chlorobenzene	ND		20	15	ug/L			11/12/24 01:17	20
Dibromochloromethane	ND		20	6.4	ug/L			11/12/24 01:17	20
Chloroethane	ND		20	6.4	ug/L			11/12/24 01:17	20
Chloroform	ND		20	6.8	ug/L			11/12/24 01:17	20
Chloromethane	ND		20	7.0	ug/L			11/12/24 01:17	20
cis-1,2-Dichloroethene	**940**		20	16	ug/L			11/12/24 01:17	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			11/12/24 01:17	20

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Treatment Influent
Lab Sample ID: 480-225227-2
Date Collected: 11/05/24 12:15
Matrix: Water
Date Received: 11/05/24 15:20

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		20	3.6	ug/L			11/12/24 01:17	20
Dichlorodifluoromethane	ND		20	14	ug/L			11/12/24 01:17	20
Ethylbenzene	ND		20	15	ug/L			11/12/24 01:17	20
1,2-Dibromoethane	ND		20	15	ug/L			11/12/24 01:17	20
Isopropylbenzene	ND		20	16	ug/L			11/12/24 01:17	20
Methyl acetate	ND		50	26	ug/L			11/12/24 01:17	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			11/12/24 01:17	20
Methylcyclohexane	ND		20	3.2	ug/L			11/12/24 01:17	20
Methylene Chloride	ND		20	8.8	ug/L			11/12/24 01:17	20
Styrene	ND		20	15	ug/L			11/12/24 01:17	20
Tetrachloroethene	ND		20	7.2	ug/L			11/12/24 01:17	20
Toluene	ND		20	10	ug/L			11/12/24 01:17	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			11/12/24 01:17	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			11/12/24 01:17	20
Trichloroethene	ND		20	9.2	ug/L			11/12/24 01:17	20
Trichlorofluoromethane	ND		20	18	ug/L			11/12/24 01:17	20
Vinyl chloride	**140**		20	18	ug/L			11/12/24 01:17	20
Xylenes, Total	ND		40	13	ug/L			11/12/24 01:17	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*80 - 120*		*11/12/24 01:17*	*20*
1,2-Dichloroethane-d4 (Surr)	*86*		*77 - 120*		*11/12/24 01:17*	*20*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*11/12/24 01:17*	*20*
Dibromofluoromethane (Surr)	*88*		*75 - 123*		*11/12/24 01:17*	*20*

Client Sample ID: Trip Blank
Lab Sample ID: 480-225227-3
Date Collected: 11/05/24 00:00
Matrix: Water
Date Received: 11/05/24 15:20

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/12/24 01:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/12/24 01:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/12/24 01:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/12/24 01:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/12/24 01:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/12/24 01:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/12/24 01:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/12/24 01:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/12/24 01:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/12/24 01:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/12/24 01:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/12/24 01:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/12/24 01:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/12/24 01:39	1
2-Hexanone	ND		5.0	1.2	ug/L			11/12/24 01:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/12/24 01:39	1
Acetone	ND		10	3.0	ug/L			11/12/24 01:39	1
Benzene	ND		1.0	0.41	ug/L			11/12/24 01:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/12/24 01:39	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Trip Blank
Lab Sample ID: 480-225227-3
Date Collected: 11/05/24 00:00
Matrix: Water
Date Received: 11/05/24 15:20

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			11/12/24 01:39	1
Bromomethane	ND		1.0	0.69	ug/L			11/12/24 01:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/12/24 01:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/12/24 01:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/12/24 01:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/12/24 01:39	1
Chloroethane	ND		1.0	0.32	ug/L			11/12/24 01:39	1
Chloroform	ND		1.0	0.34	ug/L			11/12/24 01:39	1
Chloromethane	ND		1.0	0.35	ug/L			11/12/24 01:39	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/12/24 01:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/12/24 01:39	1
Cyclohexane	ND		1.0	0.18	ug/L			11/12/24 01:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/12/24 01:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/12/24 01:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/12/24 01:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/12/24 01:39	1
Methyl acetate	ND		2.5	1.3	ug/L			11/12/24 01:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/12/24 01:39	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/12/24 01:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/12/24 01:39	1
Styrene	ND		1.0	0.73	ug/L			11/12/24 01:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/12/24 01:39	1
Toluene	ND		1.0	0.51	ug/L			11/12/24 01:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/12/24 01:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/12/24 01:39	1
Trichloroethene	ND		1.0	0.46	ug/L			11/12/24 01:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/12/24 01:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/12/24 01:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/12/24 01:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*80 - 120*		*11/12/24 01:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*		*11/12/24 01:39*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*11/12/24 01:39*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*11/12/24 01:39*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-225227-1	Treatment Effluent	85	90	89	90
480-225227-2	Treatment Influent	89	86	94	88
480-225227-3	Trip Blank	88	91	93	91
LCS 480-731971/6	Lab Control Sample	88	88	95	92
MB 480-731971/8	Method Blank	86	88	93	88

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-731971/8
Matrix: Water
Analysis Batch: 731971

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/12/24 00:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/12/24 00:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/12/24 00:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/12/24 00:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/12/24 00:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/12/24 00:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/12/24 00:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/12/24 00:10	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/12/24 00:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/12/24 00:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/12/24 00:10	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/12/24 00:10	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/12/24 00:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/12/24 00:10	1
2-Hexanone	ND		5.0	1.2	ug/L			11/12/24 00:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/12/24 00:10	1
Acetone	ND		10	3.0	ug/L			11/12/24 00:10	1
Benzene	ND		1.0	0.41	ug/L			11/12/24 00:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/12/24 00:10	1
Bromoform	ND		1.0	0.26	ug/L			11/12/24 00:10	1
Bromomethane	ND		1.0	0.69	ug/L			11/12/24 00:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/12/24 00:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/12/24 00:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/12/24 00:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/12/24 00:10	1
Chloroethane	ND		1.0	0.32	ug/L			11/12/24 00:10	1
Chloroform	ND		1.0	0.34	ug/L			11/12/24 00:10	1
Chloromethane	ND		1.0	0.35	ug/L			11/12/24 00:10	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/12/24 00:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/12/24 00:10	1
Cyclohexane	ND		1.0	0.18	ug/L			11/12/24 00:10	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/12/24 00:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/12/24 00:10	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/12/24 00:10	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/12/24 00:10	1
Methyl acetate	ND		2.5	1.3	ug/L			11/12/24 00:10	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/12/24 00:10	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/12/24 00:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/12/24 00:10	1
Styrene	ND		1.0	0.73	ug/L			11/12/24 00:10	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/12/24 00:10	1
Toluene	ND		1.0	0.51	ug/L			11/12/24 00:10	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/12/24 00:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/12/24 00:10	1
Trichloroethene	ND		1.0	0.46	ug/L			11/12/24 00:10	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/12/24 00:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/12/24 00:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/12/24 00:10	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-731971/8
Matrix: Water
Analysis Batch: 731971

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*86*		*80 - 120*		*11/12/24 00:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*77 - 120*		*11/12/24 00:10*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*11/12/24 00:10*	*1*
Dibromofluoromethane (Surr)	*88*		*75 - 123*		*11/12/24 00:10*	*1*

Lab Sample ID: LCS 480-731971/6
Matrix: Water
Analysis Batch: 731971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	22.5		ug/L		90	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.8		ug/L		99	76 - 120
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.8		ug/L		87	61 - 148
1,1-Dichloroethane	25.0	22.6		ug/L		90	77 - 120
1,1-Dichloroethene	25.0	21.0		ug/L		84	66 - 127
1,2,4-Trichlorobenzene	25.0	23.5		ug/L		94	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.8		ug/L		103	56 - 134
1,2-Dichlorobenzene	25.0	22.1		ug/L		89	80 - 124
1,2-Dichloroethane	25.0	24.2		ug/L		97	75 - 120
1,2-Dichloropropane	25.0	22.2		ug/L		89	76 - 120
1,3-Dichlorobenzene	25.0	21.6		ug/L		86	77 - 120
1,4-Dichlorobenzene	25.0	21.6		ug/L		87	80 - 120
2-Butanone (MEK)	125	129		ug/L		103	57 - 140
2-Hexanone	125	128		ug/L		102	65 - 127
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125
Acetone	125	115		ug/L		92	56 - 142
Benzene	25.0	22.1		ug/L		89	71 - 124
Bromodichloromethane	25.0	24.1		ug/L		96	80 - 122
Bromoform	25.0	25.0		ug/L		100	61 - 132
Bromomethane	25.0	21.3		ug/L		85	55 - 144
Carbon disulfide	25.0	20.9		ug/L		84	59 - 134
Carbon tetrachloride	25.0	21.6		ug/L		86	72 - 134
Chlorobenzene	25.0	23.1		ug/L		93	80 - 120
Dibromochloromethane	25.0	23.9		ug/L		95	75 - 125
Chloroethane	25.0	21.8		ug/L		87	69 - 136
Chloroform	25.0	21.1		ug/L		84	73 - 127
Chloromethane	25.0	19.6		ug/L		78	68 - 124
cis-1,2-Dichloroethene	25.0	22.9		ug/L		92	74 - 124
cis-1,3-Dichloropropene	25.0	24.5		ug/L		98	74 - 124
Cyclohexane	25.0	21.5		ug/L		86	59 - 135
Dichlorodifluoromethane	25.0	19.5		ug/L		78	59 - 135
Ethylbenzene	25.0	22.4		ug/L		90	77 - 123
1,2-Dibromoethane	25.0	24.7		ug/L		99	77 - 120
Isopropylbenzene	25.0	22.3		ug/L		89	77 - 122
Methyl acetate	50.0	49.6		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	24.1		ug/L		96	77 - 120
Methylcyclohexane	25.0	21.7		ug/L		87	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-731971/6
Matrix: Water
Analysis Batch: 731971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	23.8		ug/L		95	75 - 124
Styrene	25.0	23.8		ug/L		95	80 - 120
Tetrachloroethene	25.0	19.9		ug/L		80	74 - 122
Toluene	25.0	22.1		ug/L		88	80 - 122
trans-1,2-Dichloroethene	25.0	21.5		ug/L		86	73 - 127
trans-1,3-Dichloropropene	25.0	24.3		ug/L		97	80 - 120
Trichloroethene	25.0	23.4		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	22.8		ug/L		91	62 - 150
Vinyl chloride	25.0	22.1		ug/L		88	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*88*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*88*		*77 - 120*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*
Dibromofluoromethane (Surr)	*92*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-731679/1-A
Matrix: Water
Analysis Batch: 731766

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731679

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		11/08/24 10:55	11/08/24 16:13	1
Iron	ND		0.050	0.026	mg/L		11/08/24 10:55	11/08/24 16:13	1
Zinc	ND		0.010	0.0068	mg/L		11/08/24 10:55	11/08/24 16:13	1

Lab Sample ID: LCS 480-731679/2-A
Matrix: Water
Analysis Batch: 731766

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731679

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	4.96		mg/L		97	85 - 115
Iron	5.10	5.25		mg/L		103	85 - 115
Zinc	0.500	0.504		mg/L		101	85 - 115

Lab Sample ID: 480-225227-1 MS
Matrix: Water
Analysis Batch: 731766

Client Sample ID: Treatment Effluent
Prep Type: Total/NA
Prep Batch: 731679

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	ND		5.10	5.03		mg/L		99	70 - 130
Iron	3.9		5.10	9.23		mg/L		105	70 - 130
Zinc	0.012		0.500	0.512		mg/L		100	70 - 130

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 480-225227-1 MSD
Client Sample ID: Treatment Effluent
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 731766
Prep Batch: 731679

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	ND		5.10	4.97		mg/L		97	70 - 130	1	20
Iron	3.9		5.10	9.13		mg/L		103	70 - 130	1	20
Zinc	0.012		0.500	0.506		mg/L		99	70 - 130	1	20

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-731639/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 731675
Prep Batch: 731639

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		11/08/24 08:36	11/08/24 09:57	1

Lab Sample ID: LCS 480-731639/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 731675
Prep Batch: 731639

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.0	38.60		mg/L		96	78 - 114

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 731971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225227-1	Treatment Effluent	Total/NA	Water	8260C	
480-225227-2	Treatment Influent	Total/NA	Water	8260C	
480-225227-3	Trip Blank	Total/NA	Water	8260C	
MB 480-731971/8	Method Blank	Total/NA	Water	8260C	
LCS 480-731971/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 731679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225227-1	Treatment Effluent	Total/NA	Water	200.7	
MB 480-731679/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-731679/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-225227-1 MS	Treatment Effluent	Total/NA	Water	200.7	
480-225227-1 MSD	Treatment Effluent	Total/NA	Water	200.7	

Analysis Batch: 731766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225227-1	Treatment Effluent	Total/NA	Water	200.7 Rev 4.4	731679
MB 480-731679/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	731679
LCS 480-731679/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	731679
480-225227-1 MS	Treatment Effluent	Total/NA	Water	200.7 Rev 4.4	731679
480-225227-1 MSD	Treatment Effluent	Total/NA	Water	200.7 Rev 4.4	731679

General Chemistry

Prep Batch: 731639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225227-1	Treatment Effluent	Total/NA	Water	1664B	
MB 480-731639/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-731639/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 731675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225227-1	Treatment Effluent	Total/NA	Water	1664B	731639
MB 480-731639/1-A	Method Blank	Total/NA	Water	1664B	731639
LCS 480-731639/2-A	Lab Control Sample	Total/NA	Water	1664B	731639

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Treatment Effluent
Lab Sample ID: 480-225227-1
Date Collected: 11/05/24 12:00
Matrix: Water
Date Received: 11/05/24 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	731971	AD	EET BUF	11/12/24 00:55
Total/NA	Prep	200.7			731679	ET	EET BUF	11/08/24 10:55
Total/NA	Analysis	200.7 Rev 4.4		1	731766	BMB	EET BUF	11/08/24 16:16
Total/NA	Prep	1664B			731639	KM	EET BUF	11/08/24 08:36
Total/NA	Analysis	1664B		1	731675	KM	EET BUF	11/08/24 09:57

Client Sample ID: Treatment Influent
Lab Sample ID: 480-225227-2
Date Collected: 11/05/24 12:15
Matrix: Water
Date Received: 11/05/24 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		20	731971	AD	EET BUF	11/12/24 01:17

Client Sample ID: Trip Blank
Lab Sample ID: 480-225227-3
Date Collected: 11/05/24 00:00
Matrix: Water
Date Received: 11/05/24 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	731971	AD	EET BUF	11/12/24 01:39

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225227-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-225227-1	Treatment Effluent	Water	11/05/24 12:00	11/05/24 15:20
480-225227-2	Treatment Influent	Water	11/05/24 12:15	11/05/24 15:20
480-225227-3	Trip Blank	Water	11/05/24 00:00	11/05/24 15:20

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

11/5/24

PAGE 1 OF 1

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax #N/A **866-902-2187**	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent	NA	11/5	1200	MR	WG	6	3		1	2						X	X	X	
	Treatment Influent	NA	11/5	1215		WG	3	3									X	X	X	
	Trip Blank	NA				WG	2	2									X			

480-225227 Chain of Custody

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other _____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	to Stage	11/5 1800	
2	Relinquished By :	Date / Time:	Received By:
3	Relinquished By :	Date / Time:	Received By: TMB 11/5 1520

Custody Seal Number: [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice Cooler Temp _____

5.8 IR#SC ice

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-225227-1

Login Number: 225227
List Number: 1
Creator: Stapleton, Kaitlyn

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.8 IR#SC ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 12/26/2024 9:49:15 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-226421-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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12/26/2024 9:49:15 AM

Authorized for release by
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Designee for
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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 19
Lab Chronicle 20
Certification Summary 21
Method Summary 22
Sample Summary 23
Chain of Custody 24
Receipt Checklists 25

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-226421-1 Eurofins Buffalo

Job Narrative
480-226421-1

Receipt
The samples were received on 12/18/2024 11:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1º C.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: TREATMENT INFLUENT (480-226421-2). Elevated reporting limits (RLs) are provided.

Method 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) associated with batch 480-735828 . The following samples were affected : TREATMENT EFFLUENT (480-226421-1) and TREATMENT INFLUENT (480-226421-2)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 200.7: The reference method requires samples to be preserved to a pH of <2. The following sample(s) was received with insufficient preservation at a pH of >2. The sample(s) was preserved to the appropriate pH in the laboratory. preserved 12/18/2024 at 1359. Second pH check 12/20/2024 at 0800.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-226421-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.1	J	10	3.0	ug/L	1		8260C	Total/NA
Iron	0.35		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA
Oil & Grease	1.3	J	4.7	1.3	mg/L	1		1664B	Total/NA

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-226421-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	190		5.0	4.1	ug/L	5		8260C	Total/NA
Trichloroethene	230		5.0	2.3	ug/L	5		8260C	Total/NA
Vinyl chloride	11		5.0	4.5	ug/L	5		8260C	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-226421-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-226421-1

Date Collected: 12/17/24 10:30
Matrix: Water
Date Received: 12/18/24 11:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/20/24 15:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/20/24 15:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/20/24 15:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/20/24 15:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/20/24 15:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/20/24 15:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/20/24 15:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/20/24 15:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/20/24 15:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/20/24 15:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/20/24 15:11	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/20/24 15:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/20/24 15:11	1
2-Butanone (MEK)	ND	*+	10	1.3	ug/L			12/20/24 15:11	1
2-Hexanone	ND		5.0	1.2	ug/L			12/20/24 15:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/20/24 15:11	1
Acetone	**4.1**	**J**	10	3.0	ug/L			12/20/24 15:11	1
Benzene	ND		1.0	0.41	ug/L			12/20/24 15:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/20/24 15:11	1
Bromoform	ND		1.0	0.26	ug/L			12/20/24 15:11	1
Bromomethane	ND		1.0	0.69	ug/L			12/20/24 15:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/20/24 15:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/20/24 15:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/20/24 15:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/20/24 15:11	1
Chloroethane	ND		1.0	0.32	ug/L			12/20/24 15:11	1
Chloroform	ND		1.0	0.34	ug/L			12/20/24 15:11	1
Chloromethane	ND		1.0	0.35	ug/L			12/20/24 15:11	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/20/24 15:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/20/24 15:11	1
Cyclohexane	ND		1.0	0.18	ug/L			12/20/24 15:11	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/20/24 15:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/20/24 15:11	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/20/24 15:11	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/20/24 15:11	1
Methyl acetate	ND		2.5	1.3	ug/L			12/20/24 15:11	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/20/24 15:11	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/20/24 15:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/20/24 15:11	1
Styrene	ND		1.0	0.73	ug/L			12/20/24 15:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/20/24 15:11	1
Toluene	ND		1.0	0.51	ug/L			12/20/24 15:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/20/24 15:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/20/24 15:11	1
Trichloroethene	ND		1.0	0.46	ug/L			12/20/24 15:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/20/24 15:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/20/24 15:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/20/24 15:11	1

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-226421-1
Date Collected: 12/17/24 10:30
Matrix: Water
Date Received: 12/18/24 11:35

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/20/24 15:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*12/20/24 15:11*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*12/20/24 15:11*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*12/20/24 15:11*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		12/20/24 08:31	12/20/24 17:04	1
Iron	**0.35**		0.050	0.026	mg/L		12/20/24 08:31	12/20/24 17:04	1
Zinc	ND		0.010	0.0068	mg/L		12/20/24 08:31	12/20/24 17:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	**1.3**	**J**	4.7	1.3	mg/L		12/19/24 08:26	12/19/24 10:03	1

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-226421-2
Date Collected: 12/17/24 10:35
Matrix: Water
Date Received: 12/18/24 11:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			12/20/24 15:35	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			12/20/24 15:35	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			12/20/24 15:35	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			12/20/24 15:35	5
1,1-Dichloroethane	ND		5.0	1.9	ug/L			12/20/24 15:35	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			12/20/24 15:35	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			12/20/24 15:35	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			12/20/24 15:35	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			12/20/24 15:35	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			12/20/24 15:35	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			12/20/24 15:35	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			12/20/24 15:35	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			12/20/24 15:35	5
2-Butanone (MEK)	ND	*+	50	6.6	ug/L			12/20/24 15:35	5
2-Hexanone	ND		25	6.2	ug/L			12/20/24 15:35	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			12/20/24 15:35	5
Acetone	ND		50	15	ug/L			12/20/24 15:35	5
Benzene	ND		5.0	2.1	ug/L			12/20/24 15:35	5
Bromodichloromethane	ND		5.0	2.0	ug/L			12/20/24 15:35	5
Bromoform	ND		5.0	1.3	ug/L			12/20/24 15:35	5
Bromomethane	ND		5.0	3.5	ug/L			12/20/24 15:35	5
Carbon disulfide	ND		5.0	0.95	ug/L			12/20/24 15:35	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			12/20/24 15:35	5
Chlorobenzene	ND		5.0	3.8	ug/L			12/20/24 15:35	5
Dibromochloromethane	ND		5.0	1.6	ug/L			12/20/24 15:35	5
Chloroethane	ND		5.0	1.6	ug/L			12/20/24 15:35	5
Chloroform	ND		5.0	1.7	ug/L			12/20/24 15:35	5
Chloromethane	ND		5.0	1.8	ug/L			12/20/24 15:35	5
cis-1,2-Dichloroethene	**190**		5.0	4.1	ug/L			12/20/24 15:35	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			12/20/24 15:35	5

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-226421-2
Date Collected: 12/17/24 10:35
Matrix: Water
Date Received: 12/18/24 11:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		5.0	0.90	ug/L			12/20/24 15:35	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			12/20/24 15:35	5
Ethylbenzene	ND		5.0	3.7	ug/L			12/20/24 15:35	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			12/20/24 15:35	5
Isopropylbenzene	ND		5.0	4.0	ug/L			12/20/24 15:35	5
Methyl acetate	ND		13	6.5	ug/L			12/20/24 15:35	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			12/20/24 15:35	5
Methylcyclohexane	ND		5.0	0.80	ug/L			12/20/24 15:35	5
Methylene Chloride	ND		5.0	2.2	ug/L			12/20/24 15:35	5
Styrene	ND		5.0	3.7	ug/L			12/20/24 15:35	5
Tetrachloroethene	ND		5.0	1.8	ug/L			12/20/24 15:35	5
Toluene	ND		5.0	2.6	ug/L			12/20/24 15:35	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			12/20/24 15:35	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			12/20/24 15:35	5
Trichloroethene	**230**		5.0	2.3	ug/L			12/20/24 15:35	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			12/20/24 15:35	5
Vinyl chloride	**11**		5.0	4.5	ug/L			12/20/24 15:35	5
Xylenes, Total	ND		10	3.3	ug/L			12/20/24 15:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/20/24 15:35*	*5*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*12/20/24 15:35*	*5*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*12/20/24 15:35*	*5*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*12/20/24 15:35*	*5*

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-226421-3
Date Collected: 12/17/24 00:00
Matrix: Water
Date Received: 12/18/24 11:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/19/24 17:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/19/24 17:50	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/19/24 17:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/19/24 17:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/19/24 17:50	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/19/24 17:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/19/24 17:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/19/24 17:50	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/19/24 17:50	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/19/24 17:50	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/19/24 17:50	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/19/24 17:50	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/19/24 17:50	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/19/24 17:50	1
2-Hexanone	ND		5.0	1.2	ug/L			12/19/24 17:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/19/24 17:50	1
Acetone	ND		10	3.0	ug/L			12/19/24 17:50	1
Benzene	ND		1.0	0.41	ug/L			12/19/24 17:50	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/19/24 17:50	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-226421-3
Date Collected: 12/17/24 00:00
Matrix: Water
Date Received: 12/18/24 11:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			12/19/24 17:50	1
Bromomethane	ND		1.0	0.69	ug/L			12/19/24 17:50	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/19/24 17:50	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/19/24 17:50	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/19/24 17:50	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/19/24 17:50	1
Chloroethane	ND		1.0	0.32	ug/L			12/19/24 17:50	1
Chloroform	ND		1.0	0.34	ug/L			12/19/24 17:50	1
Chloromethane	ND		1.0	0.35	ug/L			12/19/24 17:50	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/19/24 17:50	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/19/24 17:50	1
Cyclohexane	ND		1.0	0.18	ug/L			12/19/24 17:50	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/19/24 17:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/19/24 17:50	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/19/24 17:50	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/19/24 17:50	1
Methyl acetate	ND		2.5	1.3	ug/L			12/19/24 17:50	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/19/24 17:50	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/19/24 17:50	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/19/24 17:50	1
Styrene	ND		1.0	0.73	ug/L			12/19/24 17:50	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/19/24 17:50	1
Toluene	ND		1.0	0.51	ug/L			12/19/24 17:50	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/19/24 17:50	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/19/24 17:50	1
Trichloroethene	ND		1.0	0.46	ug/L			12/19/24 17:50	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/19/24 17:50	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/19/24 17:50	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/19/24 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*12/19/24 17:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*12/19/24 17:50*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*12/19/24 17:50*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*12/19/24 17:50*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-226421-1	TREATMENT EFFLUENT	94	92	103	93
480-226421-2	TREATMENT INFLUENT	94	92	104	96
480-226421-3	TRIP BLANK	92	97	98	98
LCS 480-735722/6	Lab Control Sample	94	101	104	99
LCS 480-735828/6	Lab Control Sample	95	105	106	96
LCSD 480-735828/7	Lab Control Sample Dup	94	94	105	97
MB 480-735722/8	Method Blank	93	98	100	100
MB 480-735828/9	Method Blank	93	94	102	96

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-735722/8
Matrix: Water
Analysis Batch: 735722

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/19/24 12:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/19/24 12:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/19/24 12:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/19/24 12:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/19/24 12:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/19/24 12:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/19/24 12:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/19/24 12:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/19/24 12:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/19/24 12:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/19/24 12:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/19/24 12:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/19/24 12:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/19/24 12:55	1
2-Hexanone	ND		5.0	1.2	ug/L			12/19/24 12:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/19/24 12:55	1
Acetone	ND		10	3.0	ug/L			12/19/24 12:55	1
Benzene	ND		1.0	0.41	ug/L			12/19/24 12:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/19/24 12:55	1
Bromoform	ND		1.0	0.26	ug/L			12/19/24 12:55	1
Bromomethane	ND		1.0	0.69	ug/L			12/19/24 12:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/19/24 12:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/19/24 12:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/19/24 12:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/19/24 12:55	1
Chloroethane	ND		1.0	0.32	ug/L			12/19/24 12:55	1
Chloroform	ND		1.0	0.34	ug/L			12/19/24 12:55	1
Chloromethane	ND		1.0	0.35	ug/L			12/19/24 12:55	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/19/24 12:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/19/24 12:55	1
Cyclohexane	ND		1.0	0.18	ug/L			12/19/24 12:55	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/19/24 12:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/19/24 12:55	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/19/24 12:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/19/24 12:55	1
Methyl acetate	ND		2.5	1.3	ug/L			12/19/24 12:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/19/24 12:55	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/19/24 12:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/19/24 12:55	1
Styrene	ND		1.0	0.73	ug/L			12/19/24 12:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/19/24 12:55	1
Toluene	ND		1.0	0.51	ug/L			12/19/24 12:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/19/24 12:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/19/24 12:55	1
Trichloroethene	ND		1.0	0.46	ug/L			12/19/24 12:55	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/19/24 12:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/19/24 12:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/19/24 12:55	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-735722/8
Matrix: Water
Analysis Batch: 735722

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/19/24 12:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*12/19/24 12:55*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*12/19/24 12:55*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*12/19/24 12:55*	*1*

Lab Sample ID: LCS 480-735722/6
Matrix: Water
Analysis Batch: 735722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	24.4		ug/L		98	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	76 - 120
1,1,2-Trichloroethane	25.0	22.9		ug/L		92	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.6		ug/L		90	61 - 148
1,1-Dichloroethane	25.0	22.5		ug/L		90	77 - 120
1,1-Dichloroethene	25.0	23.0		ug/L		92	66 - 127
1,2,4-Trichlorobenzene	25.0	23.3		ug/L		93	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.9		ug/L		92	56 - 134
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 124
1,2-Dichloroethane	25.0	22.9		ug/L		92	75 - 120
1,2-Dichloropropane	25.0	24.4		ug/L		98	76 - 120
1,3-Dichlorobenzene	25.0	23.9		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 120
2-Butanone (MEK)	125	109		ug/L		87	57 - 140
2-Hexanone	125	107		ug/L		86	65 - 127
4-Methyl-2-pentanone (MIBK)	125	106		ug/L		85	71 - 125
Acetone	125	105		ug/L		84	56 - 142
Benzene	25.0	23.6		ug/L		94	71 - 124
Bromodichloromethane	25.0	24.8		ug/L		99	80 - 122
Bromoform	25.0	22.7		ug/L		91	61 - 132
Bromomethane	25.0	21.4		ug/L		86	55 - 144
Carbon disulfide	25.0	22.1		ug/L		88	59 - 134
Carbon tetrachloride	25.0	24.7		ug/L		99	72 - 134
Chlorobenzene	25.0	23.1		ug/L		92	80 - 120
Dibromochloromethane	25.0	22.8		ug/L		91	75 - 125
Chloroethane	25.0	22.8		ug/L		91	69 - 136
Chloroform	25.0	22.2		ug/L		89	73 - 127
Chloromethane	25.0	21.6		ug/L		86	68 - 124
cis-1,2-Dichloroethene	25.0	23.6		ug/L		94	74 - 124
cis-1,3-Dichloropropene	25.0	25.9		ug/L		103	74 - 124
Cyclohexane	25.0	23.3		ug/L		93	59 - 135
Dichlorodifluoromethane	25.0	20.6		ug/L		82	59 - 135
Ethylbenzene	25.0	24.0		ug/L		96	77 - 123
1,2-Dibromoethane	25.0	22.9		ug/L		92	77 - 120
Isopropylbenzene	25.0	23.4		ug/L		94	77 - 122
Methyl acetate	50.0	42.9		ug/L		86	74 - 133
Methyl tert-butyl ether	25.0	20.9		ug/L		84	77 - 120
Methylcyclohexane	25.0	24.8		ug/L		99	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-735722/6
Matrix: Water
Analysis Batch: 735722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	23.0		ug/L		92	75 - 124
Styrene	25.0	23.8		ug/L		95	80 - 120
Tetrachloroethene	25.0	24.9		ug/L		100	74 - 122
Toluene	25.0	22.4		ug/L		90	80 - 122
trans-1,2-Dichloroethene	25.0	21.8		ug/L		87	73 - 127
trans-1,3-Dichloropropene	25.0	23.3		ug/L		93	80 - 120
Trichloroethene	25.0	24.4		ug/L		98	74 - 123
Trichlorofluoromethane	25.0	24.1		ug/L		96	62 - 150
Vinyl chloride	25.0	21.2		ug/L		85	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Lab Sample ID: MB 480-735828/9
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/20/24 14:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/20/24 14:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/20/24 14:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/20/24 14:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/20/24 14:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/20/24 14:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/20/24 14:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/20/24 14:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/20/24 14:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/20/24 14:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/20/24 14:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/20/24 14:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/20/24 14:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/20/24 14:20	1
2-Hexanone	ND		5.0	1.2	ug/L			12/20/24 14:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/20/24 14:20	1
Acetone	ND		10	3.0	ug/L			12/20/24 14:20	1
Benzene	ND		1.0	0.41	ug/L			12/20/24 14:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/20/24 14:20	1
Bromoform	ND		1.0	0.26	ug/L			12/20/24 14:20	1
Bromomethane	ND		1.0	0.69	ug/L			12/20/24 14:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/20/24 14:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/20/24 14:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/20/24 14:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/20/24 14:20	1
Chloroethane	ND		1.0	0.32	ug/L			12/20/24 14:20	1
Chloroform	ND		1.0	0.34	ug/L			12/20/24 14:20	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-735828/9
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.35	ug/L			12/20/24 14:20	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/20/24 14:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/20/24 14:20	1
Cyclohexane	ND		1.0	0.18	ug/L			12/20/24 14:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/20/24 14:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/20/24 14:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/20/24 14:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/20/24 14:20	1
Methyl acetate	ND		2.5	1.3	ug/L			12/20/24 14:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/20/24 14:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/20/24 14:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/20/24 14:20	1
Styrene	ND		1.0	0.73	ug/L			12/20/24 14:20	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/20/24 14:20	1
Toluene	ND		1.0	0.51	ug/L			12/20/24 14:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/20/24 14:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/20/24 14:20	1
Trichloroethene	ND		1.0	0.46	ug/L			12/20/24 14:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/20/24 14:20	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/20/24 14:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/20/24 14:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/20/24 14:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*12/20/24 14:20*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*12/20/24 14:20*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*12/20/24 14:20*	*1*

Lab Sample ID: LCS 480-735828/6
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	24.1		ug/L		96	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.3		ug/L		93	76 - 120
1,1,2-Trichloroethane	25.0	22.6		ug/L		90	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.3		ug/L		89	61 - 148
1,1-Dichloroethane	25.0	23.1		ug/L		93	77 - 120
1,1-Dichloroethene	25.0	22.9		ug/L		92	66 - 127
1,2,4-Trichlorobenzene	25.0	24.8		ug/L		99	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.6		ug/L		94	56 - 134
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 124
1,2-Dichloroethane	25.0	22.3		ug/L		89	75 - 120
1,2-Dichloropropane	25.0	23.3		ug/L		93	76 - 120
1,3-Dichlorobenzene	25.0	23.9		ug/L		95	77 - 120
1,4-Dichlorobenzene	25.0	22.9		ug/L		91	80 - 120
2-Butanone (MEK)	125	201	*+	ug/L		161	57 - 140
2-Hexanone	125	105		ug/L		84	65 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-735828/6
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Methyl-2-pentanone (MIBK)	125	102		ug/L		82	71 - 125
Acetone	125	108		ug/L		86	56 - 142
Benzene	25.0	23.0		ug/L		92	71 - 124
Bromodichloromethane	25.0	24.3		ug/L		97	80 - 122
Bromoform	25.0	22.7		ug/L		91	61 - 132
Bromomethane	25.0	24.1		ug/L		96	55 - 144
Carbon disulfide	25.0	21.0		ug/L		84	59 - 134
Carbon tetrachloride	25.0	23.8		ug/L		95	72 - 134
Chlorobenzene	25.0	23.1		ug/L		92	80 - 120
Dibromochloromethane	25.0	23.1		ug/L		92	75 - 125
Chloroethane	25.0	23.6		ug/L		94	69 - 136
Chloroform	25.0	21.7		ug/L		87	73 - 127
Chloromethane	25.0	23.0		ug/L		92	68 - 124
cis-1,2-Dichloroethene	25.0	23.1		ug/L		92	74 - 124
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124
Cyclohexane	25.0	22.2		ug/L		89	59 - 135
Dichlorodifluoromethane	25.0	25.5		ug/L		102	59 - 135
Ethylbenzene	25.0	23.6		ug/L		94	77 - 123
1,2-Dibromoethane	25.0	23.6		ug/L		95	77 - 120
Isopropylbenzene	25.0	23.4		ug/L		93	77 - 122
Methyl acetate	50.0	37.7		ug/L		75	74 - 133
Methyl tert-butyl ether	25.0	20.6		ug/L		83	77 - 120
Methylcyclohexane	25.0	24.3		ug/L		97	68 - 134
Methylene Chloride	25.0	23.5		ug/L		94	75 - 124
Styrene	25.0	23.8		ug/L		95	80 - 120
Tetrachloroethene	25.0	24.8		ug/L		99	74 - 122
Toluene	25.0	22.1		ug/L		89	80 - 122
trans-1,2-Dichloroethene	25.0	21.6		ug/L		86	73 - 127
trans-1,3-Dichloropropene	25.0	23.2		ug/L		93	80 - 120
Trichloroethene	25.0	25.0		ug/L		100	74 - 123
Trichlorofluoromethane	25.0	24.7		ug/L		99	62 - 150
Vinyl chloride	25.0	24.0		ug/L		96	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*

Lab Sample ID: LCSD 480-735828/7
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	25.0	23.8		ug/L		95	73 - 126	1	15
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	76 - 120	0	15
1,1,2-Trichloroethane	25.0	22.2		ug/L		89	76 - 122	2	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.2		ug/L		97	61 - 148	8	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-735828/7
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane			25.0	23.0		ug/L		92	77 - 120	0	20
1,1-Dichloroethene			25.0	22.6		ug/L		90	66 - 127	1	16
1,2,4-Trichlorobenzene			25.0	24.4		ug/L		98	79 - 122	2	20
1,2-Dibromo-3-Chloropropane			25.0	24.4		ug/L		97	56 - 134	3	15
1,2-Dichlorobenzene			25.0	22.5		ug/L		90	80 - 124	3	20
1,2-Dichloroethane			25.0	22.1		ug/L		89	75 - 120	1	20
1,2-Dichloropropane			25.0	23.1		ug/L		92	76 - 120	1	20
1,3-Dichlorobenzene			25.0	23.6		ug/L		94	77 - 120	1	20
1,4-Dichlorobenzene			25.0	22.5		ug/L		90	80 - 120	1	20
2-Butanone (MEK)			125	189	*+	ug/L		152	57 - 140	6	20
2-Hexanone			125	110		ug/L		88	65 - 127	5	15
4-Methyl-2-pentanone (MIBK)			125	106		ug/L		85	71 - 125	4	35
Acetone			125	117		ug/L		94	56 - 142	8	15
Benzene			25.0	22.9		ug/L		92	71 - 124	0	13
Bromodichloromethane			25.0	24.1		ug/L		96	80 - 122	1	15
Bromoform			25.0	23.3		ug/L		93	61 - 132	3	15
Bromomethane			25.0	24.1		ug/L		96	55 - 144	0	15
Carbon disulfide			25.0	21.4		ug/L		85	59 - 134	2	15
Carbon tetrachloride			25.0	24.1		ug/L		96	72 - 134	1	15
Chlorobenzene			25.0	22.8		ug/L		91	80 - 120	1	25
Dibromochloromethane			25.0	23.1		ug/L		93	75 - 125	0	15
Chloroethane			25.0	24.2		ug/L		97	69 - 136	3	15
Chloroform			25.0	21.7		ug/L		87	73 - 127	0	20
Chloromethane			25.0	23.3		ug/L		93	68 - 124	1	15
cis-1,2-Dichloroethene			25.0	23.0		ug/L		92	74 - 124	1	15
cis-1,3-Dichloropropene			25.0	25.0		ug/L		100	74 - 124	3	15
Cyclohexane			25.0	21.4		ug/L		85	59 - 135	4	20
Dichlorodifluoromethane			25.0	25.9		ug/L		104	59 - 135	2	20
Ethylbenzene			25.0	23.7		ug/L		95	77 - 123	1	15
1,2-Dibromoethane			25.0	23.6		ug/L		94	77 - 120	0	15
Isopropylbenzene			25.0	23.0		ug/L		92	77 - 122	2	20
Methyl acetate			50.0	42.1		ug/L		84	74 - 133	11	20
Methyl tert-butyl ether			25.0	20.5		ug/L		82	77 - 120	1	37
Methylcyclohexane			25.0	23.9		ug/L		96	68 - 134	2	20
Methylene Chloride			25.0	23.0		ug/L		92	75 - 124	2	15
Styrene			25.0	24.0		ug/L		96	80 - 120	1	20
Tetrachloroethene			25.0	25.4		ug/L		101	74 - 122	2	20
Toluene			25.0	21.7		ug/L		87	80 - 122	2	15
trans-1,2-Dichloroethene			25.0	21.2		ug/L		85	73 - 127	2	20
trans-1,3-Dichloropropene			25.0	23.4		ug/L		93	80 - 120	1	15
Trichloroethene			25.0	24.1		ug/L		96	74 - 123	4	16
Trichlorofluoromethane			25.0	25.1		ug/L		100	62 - 150	1	20
Vinyl chloride			25.0	23.9		ug/L		96	65 - 133	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-735828/7
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	97		75 - 123

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-735784/1-A
Matrix: Water
Analysis Batch: 735964

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 735784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		12/20/24 08:31	12/20/24 16:11	1
Iron	ND		0.050	0.026	mg/L		12/20/24 08:31	12/20/24 16:11	1
Zinc	ND		0.010	0.0068	mg/L		12/20/24 08:31	12/20/24 16:11	1

Lab Sample ID: LCS 480-735784/2-A
Matrix: Water
Analysis Batch: 735964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 735784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.11	5.02		mg/L		98	85 - 115
Iron	5.12	5.62		mg/L		110	85 - 115
Zinc	0.500	0.503		mg/L		101	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-735700/1-A
Matrix: Water
Analysis Batch: 735730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 735700

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		12/19/24 08:26	12/19/24 10:03	1

Lab Sample ID: LCS 480-735700/2-A
Matrix: Water
Analysis Batch: 735730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 735700

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.0	33.50		mg/L		84	78 - 114

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 735722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226421-3	TRIP BLANK	Total/NA	Water	8260C	
MB 480-735722/8	Method Blank	Total/NA	Water	8260C	
LCS 480-735722/6	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 735828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226421-1	TREATMENT EFFLUENT	Total/NA	Water	8260C	
480-226421-2	TREATMENT INFLUENT	Total/NA	Water	8260C	
MB 480-735828/9	Method Blank	Total/NA	Water	8260C	
LCS 480-735828/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-735828/7	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 735784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226421-1	TREATMENT EFFLUENT	Total/NA	Water	200.7	
MB 480-735784/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-735784/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 735964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226421-1	TREATMENT EFFLUENT	Total/NA	Water	200.7 Rev 4.4	735784
MB 480-735784/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	735784
LCS 480-735784/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	735784

General Chemistry

Prep Batch: 735700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226421-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	
MB 480-735700/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-735700/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 735730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226421-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	735700
MB 480-735700/1-A	Method Blank	Total/NA	Water	1664B	735700
LCS 480-735700/2-A	Lab Control Sample	Total/NA	Water	1664B	735700

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-226421-1
Date Collected: 12/17/24 10:30
Matrix: Water
Date Received: 12/18/24 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	735828	ZN	EET BUF	12/20/24 15:11
Total/NA	Prep	200.7			735784	ET	EET BUF	12/20/24 08:31
Total/NA	Analysis	200.7 Rev 4.4		1	735964	BMB	EET BUF	12/20/24 17:04
Total/NA	Prep	1664B			735700	KM	EET BUF	12/19/24 08:26
Total/NA	Analysis	1664B		1	735730	KM	EET BUF	12/19/24 10:03

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-226421-2
Date Collected: 12/17/24 10:35
Matrix: Water
Date Received: 12/18/24 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		5	735828	ZN	EET BUF	12/20/24 15:35

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-226421-3
Date Collected: 12/17/24 00:00
Matrix: Water
Date Received: 12/18/24 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	735722	ERS	EET BUF	12/19/24 17:50

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226421-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-226421-1	TREATMENT EFFLUENT	Water	12/17/24 10:30	12/18/24 11:35
480-226421-2	TREATMENT INFLUENT	Water	12/17/24 10:35	12/18/24 11:35
480-226421-3	TRIP BLANK	Water	12/17/24 00:00	12/18/24 11:35

12/17/24

CHAIN OF CUSTODY

Client: New York State Dept. of Environ

FED-EX Tracking # | Bottle Order Control #

Lab Quote # | Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer TPalmer@gesonline.com #N/A **Phone #:** 800-287-7857 fax 866-902-2187	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name: | Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent	NA	12/17	1030	ML	WG	6	3		1	2						X	X	X	
	Treatment Influent	NA	12/17	1035	ML	WG	3	X									X	X	X	
	Trip Blank	NA	12/17			WG	2	X									X			

480-226421 Chain of Custody

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other _____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908_EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	fedex	12/17 24 1620	1 12/18/24 1135
2		12/18 1135	2
3	Relinquished By:	Date / Time:	Received By: 3

Custody Seal Number: [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice Cooler Temp _____

2.1 ICE IR#5C

12/26/2024

N:\Buffalo\Projects\Projects\NYSDEC Contract\PROJECTS\Frewsburg, Former Vac-Air Specialty Alloys\Old Data Tables\Archive\Ogiony\Frewsburg PSID with COC

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-226421-1

Login Number: 226421
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 10/21/2024 11:03:07 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-224430-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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10/21/2024 11:03:07 AM

Authorized for release by
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 22
Lab Chronicle 23
Certification Summary 24
Method Summary 25
Sample Summary 26
Chain of Custody 27
Receipt Checklists 28

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-224430-1 Eurofins Buffalo

Job Narrative
480-224430-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/16/2024 2:23 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C.

GC/MS VOA
Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: TREATMENT INFLUENT (480-224430-2), (480-224430-B-2 MS) and (480-224430-B-2 MSD). Elevated reporting limits (RLs) are provided.

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-728892 recovered outside control limits for the following analytes: Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: TREATMENT INFLUENT (480-224430-2) and TRIP BLANK (480-224430-3).

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-728892 were outside control limits for one or more analytes. See QC Sample Results for detail. The associated sample is impacted: (480-224430-B-2 MSD).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-728964 recovered above the upper control limit for Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: TREATMENT EFFLUENT (480-224430-1).

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 480-728964 recovered outside control limits for the following analyte: Bromoform. The associated sample is impacted: TREATMENT EFFLUENT (480-224430-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-224430-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.1	J	10	3.0	ug/L	1		8260C	Total/NA
Iron	5.5		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.022		0.010	0.0068	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-224430-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	580		20	16	ug/L	20		8260C	Total/NA
Vinyl chloride	65		20	18	ug/L	20		8260C	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224430-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-224430-1

Date Collected: 10/15/24 13:00
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/20/24 01:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/20/24 01:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/20/24 01:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/20/24 01:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/20/24 01:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/20/24 01:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/20/24 01:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/20/24 01:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/20/24 01:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/20/24 01:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/20/24 01:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/20/24 01:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/20/24 01:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/20/24 01:36	1
2-Hexanone	ND		5.0	1.2	ug/L			10/20/24 01:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/20/24 01:36	1
Acetone	**3.1**	**J**	10	3.0	ug/L			10/20/24 01:36	1
Benzene	ND		1.0	0.41	ug/L			10/20/24 01:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/20/24 01:36	1
Bromoform	ND	*1	1.0	0.26	ug/L			10/20/24 01:36	1
Bromomethane	ND		1.0	0.69	ug/L			10/20/24 01:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/20/24 01:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/20/24 01:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/20/24 01:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/20/24 01:36	1
Chloroethane	ND		1.0	0.32	ug/L			10/20/24 01:36	1
Chloroform	ND		1.0	0.34	ug/L			10/20/24 01:36	1
Chloromethane	ND		1.0	0.35	ug/L			10/20/24 01:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/20/24 01:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/20/24 01:36	1
Cyclohexane	ND		1.0	0.18	ug/L			10/20/24 01:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/20/24 01:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/20/24 01:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/20/24 01:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/20/24 01:36	1
Methyl acetate	ND		2.5	1.3	ug/L			10/20/24 01:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/20/24 01:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/20/24 01:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/20/24 01:36	1
Styrene	ND		1.0	0.73	ug/L			10/20/24 01:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/20/24 01:36	1
Toluene	ND		1.0	0.51	ug/L			10/20/24 01:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/20/24 01:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/20/24 01:36	1
Trichloroethene	ND		1.0	0.46	ug/L			10/20/24 01:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/20/24 01:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/20/24 01:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/20/24 01:36	1

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-224430-1
Date Collected: 10/15/24 13:00
Matrix: Water
Date Received: 10/16/24 14:23

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/20/24 01:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*10/20/24 01:36*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*10/20/24 01:36*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*10/20/24 01:36*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		10/18/24 09:09	10/18/24 19:55	1
Iron	**5.5**		0.050	0.026	mg/L		10/18/24 09:09	10/18/24 19:55	1
Zinc	**0.022**		0.010	0.0068	mg/L		10/18/24 09:09	10/18/24 19:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		4.7	1.3	mg/L		10/19/24 08:24	10/19/24 09:59	1

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-224430-2
Date Collected: 10/15/24 13:10
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			10/19/24 02:34	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			10/19/24 02:34	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			10/19/24 02:34	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			10/19/24 02:34	20
1,1-Dichloroethane	ND		20	7.6	ug/L			10/19/24 02:34	20
1,1-Dichloroethene	ND		20	5.8	ug/L			10/19/24 02:34	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			10/19/24 02:34	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			10/19/24 02:34	20
1,2-Dichlorobenzene	ND		20	16	ug/L			10/19/24 02:34	20
1,2-Dichloroethane	ND		20	4.2	ug/L			10/19/24 02:34	20
1,2-Dichloropropane	ND		20	14	ug/L			10/19/24 02:34	20
1,3-Dichlorobenzene	ND		20	16	ug/L			10/19/24 02:34	20
1,4-Dichlorobenzene	ND		20	17	ug/L			10/19/24 02:34	20
2-Butanone (MEK)	ND		200	26	ug/L			10/19/24 02:34	20
2-Hexanone	ND		100	25	ug/L			10/19/24 02:34	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			10/19/24 02:34	20
Acetone	ND		200	60	ug/L			10/19/24 02:34	20
Benzene	ND		20	8.2	ug/L			10/19/24 02:34	20
Bromodichloromethane	ND		20	7.8	ug/L			10/19/24 02:34	20
Bromoform	ND		20	5.2	ug/L			10/19/24 02:34	20
Bromomethane	ND		20	14	ug/L			10/19/24 02:34	20
Carbon disulfide	ND		20	3.8	ug/L			10/19/24 02:34	20
Carbon tetrachloride	ND		20	5.4	ug/L			10/19/24 02:34	20
Chlorobenzene	ND		20	15	ug/L			10/19/24 02:34	20
Dibromochloromethane	ND		20	6.4	ug/L			10/19/24 02:34	20
Chloroethane	ND		20	6.4	ug/L			10/19/24 02:34	20
Chloroform	ND		20	6.8	ug/L			10/19/24 02:34	20
Chloromethane	ND	*+ F1	20	7.0	ug/L			10/19/24 02:34	20
cis-1,2-Dichloroethene	**580**		20	16	ug/L			10/19/24 02:34	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			10/19/24 02:34	20

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-224430-2
Date Collected: 10/15/24 13:10
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		20	3.6	ug/L			10/19/24 02:34	20
Dichlorodifluoromethane	ND		20	14	ug/L			10/19/24 02:34	20
Ethylbenzene	ND		20	15	ug/L			10/19/24 02:34	20
1,2-Dibromoethane	ND		20	15	ug/L			10/19/24 02:34	20
Isopropylbenzene	ND		20	16	ug/L			10/19/24 02:34	20
Methyl acetate	ND		50	26	ug/L			10/19/24 02:34	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			10/19/24 02:34	20
Methylcyclohexane	ND		20	3.2	ug/L			10/19/24 02:34	20
Methylene Chloride	ND		20	8.8	ug/L			10/19/24 02:34	20
Styrene	ND		20	15	ug/L			10/19/24 02:34	20
Tetrachloroethene	ND		20	7.2	ug/L			10/19/24 02:34	20
Toluene	ND		20	10	ug/L			10/19/24 02:34	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			10/19/24 02:34	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			10/19/24 02:34	20
Trichloroethene	ND		20	9.2	ug/L			10/19/24 02:34	20
Trichlorofluoromethane	ND		20	18	ug/L			10/19/24 02:34	20
Vinyl chloride	**65**		20	18	ug/L			10/19/24 02:34	20
Xylenes, Total	ND		40	13	ug/L			10/19/24 02:34	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/19/24 02:34*	*20*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*10/19/24 02:34*	*20*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*10/19/24 02:34*	*20*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*10/19/24 02:34*	*20*

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224430-3
Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/19/24 02:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/19/24 02:57	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/19/24 02:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/19/24 02:57	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/19/24 02:57	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/19/24 02:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/19/24 02:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/19/24 02:57	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/19/24 02:57	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/19/24 02:57	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/19/24 02:57	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/19/24 02:57	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/19/24 02:57	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/19/24 02:57	1
2-Hexanone	ND		5.0	1.2	ug/L			10/19/24 02:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/19/24 02:57	1
Acetone	ND		10	3.0	ug/L			10/19/24 02:57	1
Benzene	ND		1.0	0.41	ug/L			10/19/24 02:57	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/19/24 02:57	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224430-3
Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			10/19/24 02:57	1
Bromomethane	ND		1.0	0.69	ug/L			10/19/24 02:57	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/19/24 02:57	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/19/24 02:57	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/19/24 02:57	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/19/24 02:57	1
Chloroethane	ND		1.0	0.32	ug/L			10/19/24 02:57	1
Chloroform	ND		1.0	0.34	ug/L			10/19/24 02:57	1
Chloromethane	ND	*+	1.0	0.35	ug/L			10/19/24 02:57	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/19/24 02:57	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/19/24 02:57	1
Cyclohexane	ND		1.0	0.18	ug/L			10/19/24 02:57	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/19/24 02:57	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/19/24 02:57	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/19/24 02:57	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/19/24 02:57	1
Methyl acetate	ND		2.5	1.3	ug/L			10/19/24 02:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/19/24 02:57	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/19/24 02:57	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/19/24 02:57	1
Styrene	ND		1.0	0.73	ug/L			10/19/24 02:57	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/19/24 02:57	1
Toluene	ND		1.0	0.51	ug/L			10/19/24 02:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/19/24 02:57	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/19/24 02:57	1
Trichloroethene	ND		1.0	0.46	ug/L			10/19/24 02:57	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/19/24 02:57	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/19/24 02:57	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/19/24 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/19/24 02:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*10/19/24 02:57*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*10/19/24 02:57*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*10/19/24 02:57*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-224430-1	TREATMENT EFFLUENT	95	103	95	95
480-224430-2	TREATMENT INFLUENT	97	102	95	97
480-224430-2 MS	TREATMENT INFLUENT	99	103	92	98
480-224430-2 MSD	TREATMENT INFLUENT	100	104	94	100
480-224430-3	TRIP BLANK	97	103	96	96
LCS 480-728892/6	Lab Control Sample	98	102	94	99
LCS 480-728964/6	Lab Control Sample	100	100	93	96
LCSD 480-728964/46	Lab Control Sample Dup	96	103	92	97
MB 480-728892/8	Method Blank	99	103	92	105
MB 480-728964/8	Method Blank	101	105	93	100

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-728892/8
Matrix: Water
Analysis Batch: 728892

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/18/24 22:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/18/24 22:42	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/18/24 22:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/18/24 22:42	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/18/24 22:42	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/18/24 22:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 22:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/18/24 22:42	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/18/24 22:42	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/18/24 22:42	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/18/24 22:42	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/18/24 22:42	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/18/24 22:42	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/18/24 22:42	1
2-Hexanone	ND		5.0	1.2	ug/L			10/18/24 22:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/18/24 22:42	1
Acetone	ND		10	3.0	ug/L			10/18/24 22:42	1
Benzene	ND		1.0	0.41	ug/L			10/18/24 22:42	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/18/24 22:42	1
Bromoform	ND		1.0	0.26	ug/L			10/18/24 22:42	1
Bromomethane	ND		1.0	0.69	ug/L			10/18/24 22:42	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/18/24 22:42	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/18/24 22:42	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/18/24 22:42	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/18/24 22:42	1
Chloroethane	ND		1.0	0.32	ug/L			10/18/24 22:42	1
Chloroform	ND		1.0	0.34	ug/L			10/18/24 22:42	1
Chloromethane	ND		1.0	0.35	ug/L			10/18/24 22:42	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/18/24 22:42	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/18/24 22:42	1
Cyclohexane	ND		1.0	0.18	ug/L			10/18/24 22:42	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/18/24 22:42	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/18/24 22:42	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/18/24 22:42	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/18/24 22:42	1
Methyl acetate	ND		2.5	1.3	ug/L			10/18/24 22:42	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/18/24 22:42	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/18/24 22:42	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/18/24 22:42	1
Styrene	ND		1.0	0.73	ug/L			10/18/24 22:42	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/18/24 22:42	1
Toluene	ND		1.0	0.51	ug/L			10/18/24 22:42	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/18/24 22:42	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/18/24 22:42	1
Trichloroethene	ND		1.0	0.46	ug/L			10/18/24 22:42	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/18/24 22:42	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/18/24 22:42	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/18/24 22:42	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-728892/8
Matrix: Water
Analysis Batch: 728892

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/18/24 22:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*10/18/24 22:42*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/18/24 22:42*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*10/18/24 22:42*	*1*

Lab Sample ID: LCS 480-728892/6
Matrix: Water
Analysis Batch: 728892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	76 - 120
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.7		ug/L		115	61 - 148
1,1-Dichloroethane	25.0	26.3		ug/L		105	77 - 120
1,1-Dichloroethene	25.0	27.7		ug/L		111	66 - 127
1,2,4-Trichlorobenzene	25.0	25.7		ug/L		103	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.6		ug/L		90	56 - 134
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	25.6		ug/L		102	75 - 120
1,2-Dichloropropane	25.0	25.2		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	80 - 120
2-Butanone (MEK)	125	132		ug/L		105	57 - 140
2-Hexanone	125	145		ug/L		116	65 - 127
4-Methyl-2-pentanone (MIBK)	125	143		ug/L		114	71 - 125
Acetone	125	125		ug/L		100	56 - 142
Benzene	25.0	25.5		ug/L		102	71 - 124
Bromodichloromethane	25.0	25.3		ug/L		101	80 - 122
Bromoform	25.0	24.5		ug/L		98	61 - 132
Bromomethane	25.0	23.3		ug/L		93	55 - 144
Carbon disulfide	25.0	27.2		ug/L		109	59 - 134
Carbon tetrachloride	25.0	27.6		ug/L		111	72 - 134
Chlorobenzene	25.0	24.6		ug/L		98	80 - 120
Dibromochloromethane	25.0	26.6		ug/L		107	75 - 125
Chloroethane	25.0	26.0		ug/L		104	69 - 136
Chloroform	25.0	23.9		ug/L		95	73 - 127
Chloromethane	25.0	31.6	*+	ug/L		127	68 - 124
cis-1,2-Dichloroethene	25.0	26.5		ug/L		106	74 - 124
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	74 - 124
Cyclohexane	25.0	28.6		ug/L		115	59 - 135
Dichlorodifluoromethane	25.0	30.6		ug/L		123	59 - 135
Ethylbenzene	25.0	25.5		ug/L		102	77 - 123
1,2-Dibromoethane	25.0	24.4		ug/L		98	77 - 120
Isopropylbenzene	25.0	26.8		ug/L		107	77 - 122
Methyl acetate	50.0	51.4		ug/L		103	74 - 133
Methyl tert-butyl ether	25.0	24.4		ug/L		98	77 - 120
Methylcyclohexane	25.0	27.0		ug/L		108	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-728892/6
Matrix: Water
Analysis Batch: 728892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	24.5		ug/L		98	75 - 124
Styrene	25.0	24.1		ug/L		96	80 - 120
Tetrachloroethene	25.0	26.0		ug/L		104	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	25.3		ug/L		101	73 - 127
trans-1,3-Dichloropropene	25.0	25.6		ug/L		102	80 - 120
Trichloroethene	25.0	25.3		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	30.6		ug/L		122	62 - 150
Vinyl chloride	25.0	29.3		ug/L		117	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Lab Sample ID: 480-224430-2 MS
Matrix: Water
Analysis Batch: 728892

Client Sample ID: TREATMENT INFLUENT
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		500	518		ug/L		104	73 - 126
1,1,2,2-Tetrachloroethane	ND		500	530		ug/L		106	76 - 120
1,1,2-Trichloroethane	ND		500	494		ug/L		99	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	564		ug/L		113	61 - 148
1,1-Dichloroethane	ND		500	510		ug/L		102	77 - 120
1,1-Dichloroethene	ND		500	534		ug/L		107	66 - 127
1,2,4-Trichlorobenzene	ND		500	503		ug/L		101	79 - 122
1,2-Dibromo-3-Chloropropane	ND		500	440		ug/L		88	56 - 134
1,2-Dichlorobenzene	ND		500	499		ug/L		100	80 - 124
1,2-Dichloroethane	ND		500	504		ug/L		101	75 - 120
1,2-Dichloropropane	ND		500	500		ug/L		100	76 - 120
1,3-Dichlorobenzene	ND		500	491		ug/L		98	77 - 120
1,4-Dichlorobenzene	ND		500	486		ug/L		97	78 - 124
2-Butanone (MEK)	ND		2500	2700		ug/L		108	57 - 140
2-Hexanone	ND		2500	2910		ug/L		116	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		2500	2880		ug/L		115	71 - 125
Acetone	ND		2500	2590		ug/L		104	56 - 142
Benzene	ND		500	497		ug/L		99	71 - 124
Bromodichloromethane	ND		500	501		ug/L		100	80 - 122
Bromoform	ND		500	473		ug/L		95	61 - 132
Bromomethane	ND		500	468		ug/L		94	55 - 144
Carbon disulfide	ND		500	524		ug/L		105	59 - 134
Carbon tetrachloride	ND		500	517		ug/L		103	72 - 134
Chlorobenzene	ND		500	486		ug/L		97	80 - 120
Dibromochloromethane	ND		500	496		ug/L		99	75 - 125
Chloroethane	ND		500	532		ug/L		106	69 - 136
Chloroform	ND		500	470		ug/L		94	73 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-224430-2 MS
Matrix: Water
Analysis Batch: 728892

Client Sample ID: TREATMENT INFLUENT
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloromethane	ND	*+ F1	500	592		ug/L		118	68 - 124
cis-1,2-Dichloroethene	580		500	974		ug/L		78	74 - 124
cis-1,3-Dichloropropene	ND		500	490		ug/L		98	74 - 124
Cyclohexane	ND		500	578		ug/L		116	59 - 135
Dichlorodifluoromethane	ND		500	599		ug/L		120	59 - 135
Ethylbenzene	ND		500	495		ug/L		99	77 - 123
1,2-Dibromoethane	ND		500	488		ug/L		98	77 - 120
Isopropylbenzene	ND		500	521		ug/L		104	77 - 122
Methyl acetate	ND		1000	1050		ug/L		105	74 - 133
Methyl tert-butyl ether	ND		500	488		ug/L		98	77 - 120
Methylcyclohexane	ND		500	545		ug/L		109	68 - 134
Methylene Chloride	ND		500	477		ug/L		95	75 - 124
Styrene	ND		500	486		ug/L		97	80 - 120
Tetrachloroethene	ND		500	508		ug/L		102	74 - 122
Toluene	ND		500	477		ug/L		95	80 - 122
trans-1,2-Dichloroethene	ND		500	492		ug/L		98	73 - 127
trans-1,3-Dichloropropene	ND		500	489		ug/L		98	80 - 120
Trichloroethene	ND		500	480		ug/L		96	74 - 123
Trichlorofluoromethane	ND		500	574		ug/L		115	62 - 150
Vinyl chloride	65		500	621		ug/L		111	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*

Lab Sample ID: 480-224430-2 MSD
Matrix: Water
Analysis Batch: 728892

Client Sample ID: TREATMENT INFLUENT
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		500	536		ug/L		107	73 - 126	3	15
1,1,2,2-Tetrachloroethane	ND		500	518		ug/L		104	76 - 120	2	15
1,1,2-Trichloroethane	ND		500	492		ug/L		98	76 - 122	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	549		ug/L		110	61 - 148	3	20
1,1-Dichloroethane	ND		500	536		ug/L		107	77 - 120	5	20
1,1-Dichloroethene	ND		500	526		ug/L		105	66 - 127	2	16
1,2,4-Trichlorobenzene	ND		500	512		ug/L		102	79 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND		500	453		ug/L		91	56 - 134	3	15
1,2-Dichlorobenzene	ND		500	499		ug/L		100	80 - 124	0	20
1,2-Dichloroethane	ND		500	518		ug/L		104	75 - 120	3	20
1,2-Dichloropropane	ND		500	507		ug/L		101	76 - 120	1	20
1,3-Dichlorobenzene	ND		500	491		ug/L		98	77 - 120	0	20
1,4-Dichlorobenzene	ND		500	497		ug/L		99	78 - 124	2	20
2-Butanone (MEK)	ND		2500	2730		ug/L		109	57 - 140	1	20
2-Hexanone	ND		2500	2930		ug/L		117	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	ND		2500	2900		ug/L		116	71 - 125	1	35

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-224430-2 MSD
Client Sample ID: TREATMENT INFLUENT
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 728892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND		2500	2610		ug/L		104	56 - 142	1	15
Benzene	ND		500	514		ug/L		103	71 - 124	3	13
Bromodichloromethane	ND		500	515		ug/L		103	80 - 122	3	15
Bromoform	ND		500	468		ug/L		94	61 - 132	1	15
Bromomethane	ND		500	471		ug/L		94	55 - 144	1	15
Carbon disulfide	ND		500	557		ug/L		111	59 - 134	6	15
Carbon tetrachloride	ND		500	544		ug/L		109	72 - 134	5	15
Chlorobenzene	ND		500	497		ug/L		99	80 - 120	2	25
Dibromochloromethane	ND		500	513		ug/L		103	75 - 125	3	15
Chloroethane	ND		500	534		ug/L		107	69 - 136	0	15
Chloroform	ND		500	488		ug/L		98	73 - 127	4	20
Chloromethane	ND	*+ F1	500	631	F1	ug/L		126	68 - 124	6	15
cis-1,2-Dichloroethene	580		500	1010		ug/L		85	74 - 124	3	15
cis-1,3-Dichloropropene	ND		500	506		ug/L		101	74 - 124	3	15
Cyclohexane	ND		500	596		ug/L		119	59 - 135	3	20
Dichlorodifluoromethane	ND		500	632		ug/L		126	59 - 135	5	20
Ethylbenzene	ND		500	510		ug/L		102	77 - 123	3	15
1,2-Dibromoethane	ND		500	500		ug/L		100	77 - 120	2	15
Isopropylbenzene	ND		500	535		ug/L		107	77 - 122	3	20
Methyl acetate	ND		1000	1060		ug/L		106	74 - 133	1	20
Methyl tert-butyl ether	ND		500	495		ug/L		99	77 - 120	2	37
Methylcyclohexane	ND		500	557		ug/L		111	68 - 134	2	20
Methylene Chloride	ND		500	490		ug/L		98	75 - 124	3	15
Styrene	ND		500	484		ug/L		97	80 - 120	1	20
Tetrachloroethene	ND		500	508		ug/L		102	74 - 122	0	20
Toluene	ND		500	495		ug/L		99	80 - 122	4	15
trans-1,2-Dichloroethene	ND		500	515		ug/L		103	73 - 127	5	20
trans-1,3-Dichloropropene	ND		500	505		ug/L		101	80 - 120	3	15
Trichloroethene	ND		500	512		ug/L		102	74 - 123	6	16
Trichlorofluoromethane	ND		500	608		ug/L		122	62 - 150	6	20
Vinyl chloride	65		500	654		ug/L		118	65 - 133	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*

Lab Sample ID: MB 480-728964/8
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 728964

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/20/24 01:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/20/24 01:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/20/24 01:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/20/24 01:13	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/20/24 01:13	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-728964/8
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/20/24 01:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/20/24 01:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/20/24 01:13	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/20/24 01:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/20/24 01:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/20/24 01:13	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/20/24 01:13	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/20/24 01:13	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/20/24 01:13	1
2-Hexanone	ND		5.0	1.2	ug/L			10/20/24 01:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/20/24 01:13	1
Acetone	ND		10	3.0	ug/L			10/20/24 01:13	1
Benzene	ND		1.0	0.41	ug/L			10/20/24 01:13	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/20/24 01:13	1
Bromoform	ND		1.0	0.26	ug/L			10/20/24 01:13	1
Bromomethane	ND		1.0	0.69	ug/L			10/20/24 01:13	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/20/24 01:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/20/24 01:13	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/20/24 01:13	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/20/24 01:13	1
Chloroethane	ND		1.0	0.32	ug/L			10/20/24 01:13	1
Chloroform	ND		1.0	0.34	ug/L			10/20/24 01:13	1
Chloromethane	ND		1.0	0.35	ug/L			10/20/24 01:13	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/20/24 01:13	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/20/24 01:13	1
Cyclohexane	ND		1.0	0.18	ug/L			10/20/24 01:13	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/20/24 01:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/20/24 01:13	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/20/24 01:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/20/24 01:13	1
Methyl acetate	ND		2.5	1.3	ug/L			10/20/24 01:13	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/20/24 01:13	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/20/24 01:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/20/24 01:13	1
Styrene	ND		1.0	0.73	ug/L			10/20/24 01:13	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/20/24 01:13	1
Toluene	ND		1.0	0.51	ug/L			10/20/24 01:13	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/20/24 01:13	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/20/24 01:13	1
Trichloroethene	ND		1.0	0.46	ug/L			10/20/24 01:13	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/20/24 01:13	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/20/24 01:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/20/24 01:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*10/20/24 01:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*10/20/24 01:13*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/20/24 01:13*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-728964/8
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*10/20/24 01:13*	*1*

Lab Sample ID: LCS 480-728964/6
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	24.2		ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		96	76 - 120
1,1,2-Trichloroethane	25.0	23.0		ug/L		92	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.9		ug/L		99	61 - 148
1,1-Dichloroethane	25.0	24.4		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	22.8		ug/L		91	66 - 127
1,2,4-Trichlorobenzene	25.0	23.7		ug/L		95	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	20.9		ug/L		84	56 - 134
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 124
1,2-Dichloroethane	25.0	23.7		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	23.3		ug/L		93	76 - 120
1,3-Dichlorobenzene	25.0	23.1		ug/L		92	77 - 120
1,4-Dichlorobenzene	25.0	22.7		ug/L		91	80 - 120
2-Butanone (MEK)	125	122		ug/L		98	57 - 140
2-Hexanone	125	135		ug/L		108	65 - 127
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	71 - 125
Acetone	125	119		ug/L		95	56 - 142
Benzene	25.0	22.9		ug/L		92	71 - 124
Bromodichloromethane	25.0	23.7		ug/L		95	80 - 122
Bromoform	25.0	22.5		ug/L		90	61 - 132
Bromomethane	25.0	22.3		ug/L		89	55 - 144
Carbon disulfide	25.0	24.5		ug/L		98	59 - 134
Carbon tetrachloride	25.0	24.7		ug/L		99	72 - 134
Chlorobenzene	25.0	23.3		ug/L		93	80 - 120
Dibromochloromethane	25.0	24.7		ug/L		99	75 - 125
Chloroethane	25.0	25.0		ug/L		100	69 - 136
Chloroform	25.0	22.1		ug/L		88	73 - 127
Chloromethane	25.0	29.8		ug/L		119	68 - 124
cis-1,2-Dichloroethene	25.0	23.9		ug/L		95	74 - 124
cis-1,3-Dichloropropene	25.0	23.4		ug/L		93	74 - 124
Cyclohexane	25.0	26.7		ug/L		107	59 - 135
Dichlorodifluoromethane	25.0	29.0		ug/L		116	59 - 135
Ethylbenzene	25.0	23.3		ug/L		93	77 - 123
1,2-Dibromoethane	25.0	22.8		ug/L		91	77 - 120
Isopropylbenzene	25.0	24.4		ug/L		98	77 - 122
Methyl acetate	50.0	48.8		ug/L		98	74 - 133
Methyl tert-butyl ether	25.0	23.1		ug/L		92	77 - 120
Methylcyclohexane	25.0	25.5		ug/L		102	68 - 134
Methylene Chloride	25.0	22.7		ug/L		91	75 - 124
Styrene	25.0	22.0		ug/L		88	80 - 120
Tetrachloroethene	25.0	23.6		ug/L		94	74 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-728964/6
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Toluene			25.0	22.7		ug/L		91	80 - 122		
trans-1,2-Dichloroethene			25.0	22.9		ug/L		92	73 - 127		
trans-1,3-Dichloropropene			25.0	23.9		ug/L		96	80 - 120		
Trichloroethene			25.0	22.7		ug/L		91	74 - 123		
Trichlorofluoromethane			25.0	28.4		ug/L		114	62 - 150		
Vinyl chloride			25.0	26.6		ug/L		106	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*

Lab Sample ID: LCSD 480-728964/46
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			25.0	24.7		ug/L		99	73 - 126	2	15
1,1,2,2-Tetrachloroethane			25.0	24.0		ug/L		96	76 - 120	0	15
1,1,2-Trichloroethane			25.0	22.8		ug/L		91	76 - 122	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	26.7		ug/L		107	61 - 148	7	20
1,1-Dichloroethane			25.0	24.8		ug/L		99	77 - 120	2	20
1,1-Dichloroethene			25.0	25.2		ug/L		101	66 - 127	10	16
1,2,4-Trichlorobenzene			25.0	23.2		ug/L		93	79 - 122	2	20
1,2-Dibromo-3-Chloropropane			25.0	19.4		ug/L		77	56 - 134	8	15
1,2-Dichlorobenzene			25.0	23.6		ug/L		95	80 - 124	2	20
1,2-Dichloroethane			25.0	24.9		ug/L		100	75 - 120	5	20
1,2-Dichloropropane			25.0	24.0		ug/L		96	76 - 120	3	20
1,3-Dichlorobenzene			25.0	23.3		ug/L		93	77 - 120	1	20
1,4-Dichlorobenzene			25.0	22.9		ug/L		92	80 - 120	1	20
2-Butanone (MEK)			125	135		ug/L		108	57 - 140	10	20
2-Hexanone			125	143		ug/L		114	65 - 127	5	15
4-Methyl-2-pentanone (MIBK)			125	139		ug/L		111	71 - 125	2	35
Acetone			125	129		ug/L		103	56 - 142	8	15
Benzene			25.0	23.7		ug/L		95	71 - 124	3	13
Bromodichloromethane			25.0	24.1		ug/L		96	80 - 122	1	15
Bromoform			25.0	18.9	*1	ug/L		75	61 - 132	18	15
Bromomethane			25.0	22.8		ug/L		91	55 - 144	2	15
Carbon disulfide			25.0	24.3		ug/L		97	59 - 134	1	15
Carbon tetrachloride			25.0	24.8		ug/L		99	72 - 134	0	15
Chlorobenzene			25.0	22.8		ug/L		91	80 - 120	2	25
Dibromochloromethane			25.0	22.6		ug/L		90	75 - 125	9	15
Chloroethane			25.0	25.4		ug/L		102	69 - 136	2	15
Chloroform			25.0	22.6		ug/L		90	73 - 127	2	20
Chloromethane			25.0	28.9		ug/L		115	68 - 124	3	15
cis-1,2-Dichloroethene			25.0	24.5		ug/L		98	74 - 124	3	15
cis-1,3-Dichloropropene			25.0	23.2		ug/L		93	74 - 124	1	15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-728964/46
Matrix: Water
Analysis Batch: 728964

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyclohexane	25.0	27.2		ug/L		109	59 - 135	2	20
Dichlorodifluoromethane	25.0	28.1		ug/L		113	59 - 135	3	20
Ethylbenzene	25.0	23.0		ug/L		92	77 - 123	1	15
1,2-Dibromoethane	25.0	23.3		ug/L		93	77 - 120	2	15
Isopropylbenzene	25.0	24.2		ug/L		97	77 - 122	1	20
Methyl acetate	50.0	50.4		ug/L		101	74 - 133	3	20
Methyl tert-butyl ether	25.0	23.1		ug/L		93	77 - 120	0	37
Methylcyclohexane	25.0	25.1		ug/L		100	68 - 134	2	20
Methylene Chloride	25.0	23.2		ug/L		93	75 - 124	2	15
Styrene	25.0	21.6		ug/L		86	80 - 120	2	20
Tetrachloroethene	25.0	23.1		ug/L		93	74 - 122	2	20
Toluene	25.0	22.3		ug/L		89	80 - 122	2	15
trans-1,2-Dichloroethene	25.0	23.4		ug/L		94	73 - 127	2	20
trans-1,3-Dichloropropene	25.0	21.7		ug/L		87	80 - 120	10	15
Trichloroethene	25.0	23.0		ug/L		92	74 - 123	1	16
Trichlorofluoromethane	25.0	28.3		ug/L		113	62 - 150	1	20
Vinyl chloride	25.0	26.7		ug/L		107	65 - 133	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-728745/1-A
Matrix: Water
Analysis Batch: 729007

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 728745

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		10/18/24 09:09	10/18/24 19:06	1
Iron	ND		0.050	0.026	mg/L		10/18/24 09:09	10/18/24 19:06	1
Zinc	ND		0.010	0.0068	mg/L		10/18/24 09:09	10/18/24 19:06	1

Lab Sample ID: LCS 480-728745/2-A
Matrix: Water
Analysis Batch: 729007

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 728745

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	4.89		mg/L		96	85 - 115
Iron	5.10	5.43		mg/L		107	85 - 115
Zinc	0.500	0.560		mg/L		112	85 - 115

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-728937/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 728953
Prep Batch: 728937

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		10/19/24 08:24	10/19/24 09:59	1

Lab Sample ID: LCS 480-728937/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 728953
Prep Batch: 728937

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Oil & Grease			40.0	34.80		mg/L		87	78 - 114		

Lab Sample ID: 480-224430-1 MS
Client Sample ID: TREATMENT EFFLUENT
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 728953
Prep Batch: 728937

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Oil & Grease	ND		38.0	34.13		mg/L		90	78 - 114		

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 728892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-2	TREATMENT INFLUENT	Total/NA	Water	8260C	
480-224430-3	TRIP BLANK	Total/NA	Water	8260C	
MB 480-728892/8	Method Blank	Total/NA	Water	8260C	
LCS 480-728892/6	Lab Control Sample	Total/NA	Water	8260C	
480-224430-2 MS	TREATMENT INFLUENT	Total/NA	Water	8260C	
480-224430-2 MSD	TREATMENT INFLUENT	Total/NA	Water	8260C	

Analysis Batch: 728964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-1	TREATMENT EFFLUENT	Total/NA	Water	8260C	
MB 480-728964/8	Method Blank	Total/NA	Water	8260C	
LCS 480-728964/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-728964/46	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 728745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-1	TREATMENT EFFLUENT	Total/NA	Water	200.7	
MB 480-728745/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-728745/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 729007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-1	TREATMENT EFFLUENT	Total/NA	Water	200.7 Rev 4.4	728745
MB 480-728745/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	728745
LCS 480-728745/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	728745

General Chemistry

Prep Batch: 728937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	
MB 480-728937/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-728937/2-A	Lab Control Sample	Total/NA	Water	1664B	
480-224430-1 MS	TREATMENT EFFLUENT	Total/NA	Water	1664B	

Analysis Batch: 728953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224430-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	728937
MB 480-728937/1-A	Method Blank	Total/NA	Water	1664B	728937
LCS 480-728937/2-A	Lab Control Sample	Total/NA	Water	1664B	728937
480-224430-1 MS	TREATMENT EFFLUENT	Total/NA	Water	1664B	728937

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TREATMENT EFFLUENT
Lab Sample ID: 480-224430-1
Date Collected: 10/15/24 13:00
Matrix: Water
Date Received: 10/16/24 14:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	728964	ZN	EET BUF	10/20/24 01:36
Total/NA	Prep	200.7			728745	EMO	EET BUF	10/18/24 09:09
Total/NA	Analysis	200.7 Rev 4.4		1	729007	BMB	EET BUF	10/18/24 19:55
Total/NA	Prep	1664B			728937	KM	EET BUF	10/19/24 08:24
Total/NA	Analysis	1664B		1	728953	KM	EET BUF	10/19/24 09:59

Client Sample ID: TREATMENT INFLUENT
Lab Sample ID: 480-224430-2
Date Collected: 10/15/24 13:10
Matrix: Water
Date Received: 10/16/24 14:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		20	728892	ZN	EET BUF	10/19/24 02:34

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224430-3
Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 14:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	728892	ZN	EET BUF	10/19/24 02:57

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224430-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-224430-1	TREATMENT EFFLUENT	Water	10/15/24 13:00	10/16/24 14:23
480-224430-2	TREATMENT INFLUENT	Water	10/15/24 13:10	10/16/24 14:23
480-224430-3	TRIP BLANK	Water	10/15/24 00:00	10/16/24 14:23

CHAIN OF CUSTODY

10/15/24

Client: New York State Dept. of Environm

FED-EX Tracking # | Bottle Order Control #

Lab Quote # | Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax #N/A **866-902-2187**	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name: | Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	LAB USE ONLY
	Treatment Effluent	NA	10/15	1300	MR	WG	6	3		1	2						X	X	X	
	Treatment Influent	NA	10/15	1310	MR	WG	3	3									X	X	X	
	Trip Blank	NA	10/15	-	MR	WG	2	2									X			

480-224430 Chain of Custody

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days _____/_____
- [ ] 1 day RUSH _____/_____
- [ ] Other _____ _____/_____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	CR to Fed Ex	10/15 1630	
2	Relinquished By :	Date / Time:	Received By:
3	Relinquished By :	Date / Time:	Received By: 10/16/24 1420 TMO

Custody Seal Number: [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice Cooler Temp _____

4.0 IR#5C Ice

N:\Buffalo\Projects\Projects\NYSDEC Contract\PROJECTS\Frewsburg, Former Vac-Air Specialty Alloys\Old Data Tables\Archive\Ogiony\Frewsburg PSID with COC

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-224430-1

Login Number: 224430
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 3/13/2024 8:48:07 AM

JOB DESCRIPTION

NYSDEC Frewsburg Site - Falconer St

JOB NUMBER

480-217567-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 16
Lab Chronicle 17
Certification Summary 18
Method Summary 19
Sample Summary 20
Chain of Custody 21
Receipt Checklists 22

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217567-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-217567-1 Eurofins Buffalo

Job Narrative
480-217567-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/7/2024 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-703026 recovered outside acceptance criteria, low biased, for 2-Hexanone. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported. The associated samples are impacted: OUTFALL 001 (480-217567-1) and TRIP BLANK (480-217567-2).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-703026 recovered above the upper control limit for Methylene Chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: OUTFALL 001 (480-217567-1) and TRIP BLANK (480-217567-2).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-703026 recovered outside control limits for the following analytes: Benzene, Methylene Chloride, Tetrachloroethene and Trichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: OUTFALL 001 (480-217567-1) and TRIP BLANK (480-217567-2).

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 480-703026 recovered outside control limits for the following analytes: Acetone. The associated samples are impacted: OUTFALL 001 (480-217567-1) and TRIP BLANK (480-217567-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217567-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-217567-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5.1		0.20	0.060	mg/L	1		200.7 Rev 4.4	Total/NA
Iron	7.3		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.50		0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-217567-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Groundwater & Environmental Services Inc
Job ID: 480-217567-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-217567-1
Date Collected: 03/05/24 10:30
Matrix: Water
Date Received: 03/07/24 09:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/08/24 15:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/08/24 15:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/08/24 15:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/08/24 15:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/08/24 15:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/08/24 15:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/08/24 15:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/08/24 15:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/08/24 15:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/08/24 15:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/08/24 15:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/08/24 15:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/08/24 15:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/08/24 15:36	1
2-Hexanone	ND		5.0	1.2	ug/L			03/08/24 15:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/08/24 15:36	1
Acetone	ND	*1	10	3.0	ug/L			03/08/24 15:36	1
Benzene	ND	*+	1.0	0.41	ug/L			03/08/24 15:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/08/24 15:36	1
Bromoform	ND		1.0	0.26	ug/L			03/08/24 15:36	1
Bromomethane	ND		1.0	0.69	ug/L			03/08/24 15:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/08/24 15:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/08/24 15:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/08/24 15:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/08/24 15:36	1
Chloroethane	ND		1.0	0.32	ug/L			03/08/24 15:36	1
Chloroform	ND		1.0	0.34	ug/L			03/08/24 15:36	1
Chloromethane	ND		1.0	0.35	ug/L			03/08/24 15:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/08/24 15:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/08/24 15:36	1
Cyclohexane	ND		1.0	0.18	ug/L			03/08/24 15:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/08/24 15:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/08/24 15:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/08/24 15:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/08/24 15:36	1
Methyl acetate	ND		2.5	1.3	ug/L			03/08/24 15:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/08/24 15:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/08/24 15:36	1
Methylene Chloride	ND	*+	1.0	0.44	ug/L			03/08/24 15:36	1
Styrene	ND		1.0	0.73	ug/L			03/08/24 15:36	1
Tetrachloroethene	ND	*+	1.0	0.36	ug/L			03/08/24 15:36	1
Toluene	ND		1.0	0.51	ug/L			03/08/24 15:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/08/24 15:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/08/24 15:36	1
Trichloroethene	ND	*+	1.0	0.46	ug/L			03/08/24 15:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/08/24 15:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/08/24 15:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/08/24 15:36	1

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-217567-1

Date Collected: 03/05/24 10:30
Matrix: Water
Date Received: 03/07/24 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/08/24 15:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*03/08/24 15:36*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*03/08/24 15:36*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*03/08/24 15:36*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5.1**		0.20	0.060	mg/L		03/07/24 11:55	03/08/24 17:26	1
Iron	**7.3**		0.050	0.019	mg/L		03/07/24 11:55	03/08/24 17:26	1
Zinc	**0.50**		0.010	0.0015	mg/L		03/07/24 11:55	03/08/24 17:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		4.8	1.4	mg/L		03/08/24 07:11	03/08/24 08:23	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			03/08/24 11:24	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-217567-2

Date Collected: 03/05/24 00:00
Matrix: Water
Date Received: 03/07/24 09:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/08/24 15:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/08/24 15:58	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/08/24 15:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/08/24 15:58	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/08/24 15:58	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/08/24 15:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/08/24 15:58	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/08/24 15:58	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/08/24 15:58	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/08/24 15:58	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/08/24 15:58	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/08/24 15:58	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/08/24 15:58	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/08/24 15:58	1
2-Hexanone	ND		5.0	1.2	ug/L			03/08/24 15:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/08/24 15:58	1
Acetone	ND	*1	10	3.0	ug/L			03/08/24 15:58	1
Benzene	ND	*+	1.0	0.41	ug/L			03/08/24 15:58	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/08/24 15:58	1
Bromoform	ND		1.0	0.26	ug/L			03/08/24 15:58	1
Bromomethane	ND		1.0	0.69	ug/L			03/08/24 15:58	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/08/24 15:58	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/08/24 15:58	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/08/24 15:58	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/08/24 15:58	1
Chloroethane	ND		1.0	0.32	ug/L			03/08/24 15:58	1
Chloroform	ND		1.0	0.34	ug/L			03/08/24 15:58	1
Chloromethane	ND		1.0	0.35	ug/L			03/08/24 15:58	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-217567-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-217567-2
Date Collected: 03/05/24 00:00
Matrix: Water
Date Received: 03/07/24 09:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/08/24 15:58	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/08/24 15:58	1
Cyclohexane	ND		1.0	0.18	ug/L			03/08/24 15:58	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/08/24 15:58	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/08/24 15:58	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/08/24 15:58	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/08/24 15:58	1
Methyl acetate	ND		2.5	1.3	ug/L			03/08/24 15:58	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/08/24 15:58	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/08/24 15:58	1
Methylene Chloride	ND	*+	1.0	0.44	ug/L			03/08/24 15:58	1
Styrene	ND		1.0	0.73	ug/L			03/08/24 15:58	1
Tetrachloroethene	ND	*+	1.0	0.36	ug/L			03/08/24 15:58	1
Toluene	ND		1.0	0.51	ug/L			03/08/24 15:58	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/08/24 15:58	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/08/24 15:58	1
Trichloroethene	ND	*+	1.0	0.46	ug/L			03/08/24 15:58	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/08/24 15:58	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/08/24 15:58	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/08/24 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/08/24 15:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*03/08/24 15:58*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*03/08/24 15:58*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*03/08/24 15:58*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217567-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-217567-1	OUTFALL 001	97	94	106	108
480-217567-2	TRIP BLANK	97	95	103	104
LCS 480-703026/6	Lab Control Sample	97	93	105	99
LCSD 480-703026/25	Lab Control Sample Dup	94	91	100	99
MB 480-703026/8	Method Blank	96	91	100	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-703026/8
Matrix: Water
Analysis Batch: 703026

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/08/24 12:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/08/24 12:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/08/24 12:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/08/24 12:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/08/24 12:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/08/24 12:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/08/24 12:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/08/24 12:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/08/24 12:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/08/24 12:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/08/24 12:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/08/24 12:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/08/24 12:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/08/24 12:36	1
2-Hexanone	ND		5.0	1.2	ug/L			03/08/24 12:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/08/24 12:36	1
Acetone	ND		10	3.0	ug/L			03/08/24 12:36	1
Benzene	ND		1.0	0.41	ug/L			03/08/24 12:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/08/24 12:36	1
Bromoform	ND		1.0	0.26	ug/L			03/08/24 12:36	1
Bromomethane	ND		1.0	0.69	ug/L			03/08/24 12:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/08/24 12:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/08/24 12:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/08/24 12:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/08/24 12:36	1
Chloroethane	ND		1.0	0.32	ug/L			03/08/24 12:36	1
Chloroform	ND		1.0	0.34	ug/L			03/08/24 12:36	1
Chloromethane	ND		1.0	0.35	ug/L			03/08/24 12:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/08/24 12:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/08/24 12:36	1
Cyclohexane	ND		1.0	0.18	ug/L			03/08/24 12:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/08/24 12:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/08/24 12:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/08/24 12:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/08/24 12:36	1
Methyl acetate	ND		2.5	1.3	ug/L			03/08/24 12:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/08/24 12:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/08/24 12:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/08/24 12:36	1
Styrene	ND		1.0	0.73	ug/L			03/08/24 12:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/08/24 12:36	1
Toluene	ND		1.0	0.51	ug/L			03/08/24 12:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/08/24 12:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/08/24 12:36	1
Trichloroethene	ND		1.0	0.46	ug/L			03/08/24 12:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/08/24 12:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/08/24 12:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/08/24 12:36	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-703026/8
Matrix: Water
Analysis Batch: 703026

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*96*		*80 - 120*		*03/08/24 12:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*		*03/08/24 12:36*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*03/08/24 12:36*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*03/08/24 12:36*	*1*

Lab Sample ID: LCS 480-703026/6
Matrix: Water
Analysis Batch: 703026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	28.1		ug/L		112	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	76 - 120
1,1,2-Trichloroethane	25.0	25.5		ug/L		102	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	33.6		ug/L		134	61 - 148
1,1-Dichloroethane	25.0	28.1		ug/L		112	77 - 120
1,1-Dichloroethene	25.0	30.9		ug/L		123	66 - 127
1,2,4-Trichlorobenzene	25.0	25.7		ug/L		103	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	18.3		ug/L		73	56 - 134
1,2-Dichlorobenzene	25.0	28.0		ug/L		112	80 - 124
1,2-Dichloroethane	25.0	26.7		ug/L		107	75 - 120
1,2-Dichloropropane	25.0	29.8		ug/L		119	76 - 120
1,3-Dichlorobenzene	25.0	28.1		ug/L		112	77 - 120
1,4-Dichlorobenzene	25.0	27.7		ug/L		111	80 - 120
2-Butanone (MEK)	125	128		ug/L		102	57 - 140
2-Hexanone	125	105		ug/L		84	65 - 127
4-Methyl-2-pentanone (MIBK)	125	106		ug/L		84	71 - 125
Acetone	125	151		ug/L		121	56 - 142
Benzene	25.0	31.4	*+	ug/L		126	71 - 124
Bromodichloromethane	25.0	29.3		ug/L		117	80 - 122
Bromoform	25.0	25.5		ug/L		102	61 - 132
Bromomethane	25.0	27.4		ug/L		110	55 - 144
Carbon disulfide	25.0	29.4		ug/L		118	59 - 134
Carbon tetrachloride	25.0	29.8		ug/L		119	72 - 134
Chlorobenzene	25.0	28.7		ug/L		115	80 - 120
Dibromochloromethane	25.0	28.4		ug/L		113	75 - 125
Chloroethane	25.0	29.5		ug/L		118	69 - 136
Chloroform	25.0	27.5		ug/L		110	73 - 127
Chloromethane	25.0	26.7		ug/L		107	68 - 124
cis-1,2-Dichloroethene	25.0	29.4		ug/L		118	74 - 124
cis-1,3-Dichloropropene	25.0	28.6		ug/L		114	74 - 124
Cyclohexane	25.0	31.2		ug/L		125	59 - 135
Dichlorodifluoromethane	25.0	28.7		ug/L		115	59 - 135
Ethylbenzene	25.0	28.1		ug/L		113	77 - 123
1,2-Dibromoethane	25.0	25.0		ug/L		100	77 - 120
Isopropylbenzene	25.0	30.3		ug/L		121	77 - 122
Methyl acetate	50.0	40.5		ug/L		81	74 - 133
Methyl tert-butyl ether	25.0	25.8		ug/L		103	77 - 120
Methylcyclohexane	25.0	31.3		ug/L		125	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-703026/6
Matrix: Water
Analysis Batch: 703026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	31.4	*+	ug/L		126	75 - 124
Styrene	25.0	28.4		ug/L		114	80 - 120
Tetrachloroethene	25.0	31.9	*+	ug/L		128	74 - 122
Toluene	25.0	30.4		ug/L		121	80 - 122
trans-1,2-Dichloroethene	25.0	29.4		ug/L		118	73 - 127
trans-1,3-Dichloropropene	25.0	24.7		ug/L		99	80 - 120
Trichloroethene	25.0	32.1	*+	ug/L		128	74 - 123
Trichlorofluoromethane	25.0	32.8		ug/L		131	62 - 150
Vinyl chloride	25.0	27.6		ug/L		110	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Lab Sample ID: LCSD 480-703026/25
Matrix: Water
Analysis Batch: 703026

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	25.0	25.6		ug/L		102	73 - 126	9	15
1,1,2,2-Tetrachloroethane	25.0	24.3		ug/L		97	76 - 120	2	15
1,1,2-Trichloroethane	25.0	24.5		ug/L		98	76 - 122	4	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	31.5		ug/L		126	61 - 148	6	20
1,1-Dichloroethane	25.0	26.5		ug/L		106	77 - 120	6	20
1,1-Dichloroethene	25.0	28.6		ug/L		114	66 - 127	8	16
1,2,4-Trichlorobenzene	25.0	25.5		ug/L		102	79 - 122	1	20
1,2-Dibromo-3-Chloropropane	25.0	17.8		ug/L		71	56 - 134	3	15
1,2-Dichlorobenzene	25.0	28.1		ug/L		112	80 - 124	0	20
1,2-Dichloroethane	25.0	25.9		ug/L		104	75 - 120	3	20
1,2-Dichloropropane	25.0	28.3		ug/L		113	76 - 120	5	20
1,3-Dichlorobenzene	25.0	28.0		ug/L		112	77 - 120	0	20
1,4-Dichlorobenzene	25.0	28.1		ug/L		112	80 - 120	1	20
2-Butanone (MEK)	125	115		ug/L		92	57 - 140	10	20
2-Hexanone	125	100		ug/L		80	65 - 127	5	15
4-Methyl-2-pentanone (MIBK)	125	103		ug/L		82	71 - 125	3	35
Acetone	125	115	*1	ug/L		92	56 - 142	27	15
Benzene	25.0	29.9		ug/L		120	71 - 124	5	13
Bromodichloromethane	25.0	27.2		ug/L		109	80 - 122	7	15
Bromoform	25.0	22.6		ug/L		91	61 - 132	12	15
Bromomethane	25.0	26.0		ug/L		104	55 - 144	5	15
Carbon disulfide	25.0	26.8		ug/L		107	59 - 134	9	15
Carbon tetrachloride	25.0	27.6		ug/L		110	72 - 134	8	15
Chlorobenzene	25.0	27.4		ug/L		109	80 - 120	5	25
Dibromochloromethane	25.0	25.4		ug/L		102	75 - 125	11	15
Chloroethane	25.0	27.9		ug/L		111	69 - 136	6	15
Chloroform	25.0	26.5		ug/L		106	73 - 127	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-703026/25
Matrix: Water
Analysis Batch: 703026

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloromethane	25.0	26.3		ug/L		105	68 - 124	2	15
cis-1,2-Dichloroethene	25.0	28.9		ug/L		116	74 - 124	2	15
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124	10	15
Cyclohexane	25.0	28.7		ug/L		115	59 - 135	8	20
Dichlorodifluoromethane	25.0	27.8		ug/L		111	59 - 135	3	20
Ethylbenzene	25.0	26.0		ug/L		104	77 - 123	8	15
1,2-Dibromoethane	25.0	25.1		ug/L		100	77 - 120	0	15
Isopropylbenzene	25.0	28.5		ug/L		114	77 - 122	6	20
Methyl acetate	50.0	40.3		ug/L		81	74 - 133	0	20
Methyl tert-butyl ether	25.0	24.0		ug/L		96	77 - 120	7	37
Methylcyclohexane	25.0	28.7		ug/L		115	68 - 134	9	20
Methylene Chloride	25.0	30.0		ug/L		120	75 - 124	5	15
Styrene	25.0	26.6		ug/L		106	80 - 120	7	20
Tetrachloroethene	25.0	30.8	*+	ug/L		123	74 - 122	4	20
Toluene	25.0	28.6		ug/L		114	80 - 122	6	15
trans-1,2-Dichloroethene	25.0	27.7		ug/L		111	73 - 127	6	20
trans-1,3-Dichloropropene	25.0	22.2		ug/L		89	80 - 120	11	15
Trichloroethene	25.0	30.9	*+	ug/L		124	74 - 123	4	16
Trichlorofluoromethane	25.0	30.8		ug/L		123	62 - 150	6	20
Vinyl chloride	25.0	26.4		ug/L		105	65 - 133	4	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-702828/1-A
Matrix: Water
Analysis Batch: 703064

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702828

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		03/07/24 11:55	03/08/24 02:57	1
Iron	ND		0.050	0.019	mg/L		03/07/24 11:55	03/08/24 02:57	1
Zinc	ND	^+	0.010	0.0015	mg/L		03/07/24 11:55	03/08/24 02:57	1

Lab Sample ID: LCS 480-702828/2-A
Matrix: Water
Analysis Batch: 703064

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	5.24		mg/L		103	85 - 115
Iron	5.10	5.01		mg/L		98	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-702828/2-A
Matrix: Water
Analysis Batch: 703236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.500	0.501		mg/L		100	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-703015/1-A
Matrix: Water
Analysis Batch: 703023

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 703015

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		03/08/24 07:11	03/08/24 08:23	1

Lab Sample ID: LCS 480-703015/2-A
Matrix: Water
Analysis Batch: 703023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 703015

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.1	44.90		mg/L		112	78 - 114

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-703078/1
Matrix: Water
Analysis Batch: 703078

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			03/08/24 11:24	1

Lab Sample ID: LCS 480-703078/2
Matrix: Water
Analysis Batch: 703078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	253	240.8		mg/L		95	88 - 110

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217567-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

GC/MS VOA

Analysis Batch: 703026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217567-1	OUTFALL 001	Total/NA	Water	8260C	
480-217567-2	TRIP BLANK	Total/NA	Water	8260C	
MB 480-703026/8	Method Blank	Total/NA	Water	8260C	
LCS 480-703026/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-703026/25	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 702828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217567-1	OUTFALL 001	Total/NA	Water	200.7	
MB 480-702828/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-702828/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 703064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-702828/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	702828
LCS 480-702828/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	702828

Analysis Batch: 703236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217567-1	OUTFALL 001	Total/NA	Water	200.7 Rev 4.4	702828
LCS 480-702828/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	702828

General Chemistry

Prep Batch: 703015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217567-1	OUTFALL 001	Total/NA	Water	1664B	
MB 480-703015/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-703015/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 703023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217567-1	OUTFALL 001	Total/NA	Water	1664B	703015
MB 480-703015/1-A	Method Blank	Total/NA	Water	1664B	703015
LCS 480-703015/2-A	Lab Control Sample	Total/NA	Water	1664B	703015

Analysis Batch: 703078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-217567-1	OUTFALL 001	Total/NA	Water	SM 2540D	
MB 480-703078/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-703078/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-217567-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-217567-1
Date Collected: 03/05/24 10:30
Matrix: Water
Date Received: 03/07/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	703026	CC	EET BUF	03/08/24 15:36
Total/NA	Prep	200.7			702828	ESB	EET BUF	03/07/24 11:55
Total/NA	Analysis	200.7 Rev 4.4		1	703236	NZG	EET BUF	03/08/24 17:26
Total/NA	Prep	1664B			703015	KM	EET BUF	03/08/24 07:11
Total/NA	Analysis	1664B		1	703023	KM	EET BUF	03/08/24 08:23
Total/NA	Analysis	SM 2540D		1	703078	KO	EET BUF	03/08/24 11:24

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-217567-2
Date Collected: 03/05/24 00:00
Matrix: Water
Date Received: 03/07/24 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	703026	CC	EET BUF	03/08/24 15:58

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217567-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217567-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-217567-1
Project/Site: NYSDEC Frewsburg Site - Falconer St

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-217567-1	OUTFALL 001	Water	03/05/24 10:30	03/07/24 09:30
480-217567-2	TRIP BLANK	Water	03/05/24 00:00	03/07/24 09:30

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

3/5/24

PAGE 1 OF 1

FED-EX Tracking #

Bottle Order Control #

Lab Quote #

Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax #N/A 866-902-2187	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name:

Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	2540D - Total Suspended Solids	LAB USE ONLY
	Outfall 001	NA	3/5	1030	WR	WG	7	3		1	2	1					X	X	X	X	
	Trip Blank	NA	3/5			WG	2										X				

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Please Email the EQEDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Data Deliverable Information

- [ ] Commercial A" (Level 1) = Results Only
- [ ] Commercial B" (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial C"
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished by Sampler:	Date / Time:	Received By:
1	[illegible] to Fedex 1600	3/5 1600	
2	[illegible]	3/6 0930	
3	TAB	3-6-24 930	

Custody Seal Number: ☐ Intact ☐ Not Intact ☐ Preserved where applicable ☐ On Ice Cooler Temp 3.0 #1 Ice

480-217567 Chain of Custody

N:\Buffalo\Projects\Projects\NYSDEC Contract\PROJECTS\Frewsburg, Former Vac-Air Specialty Alloys\Old Data Tables\Archive\Ogiony\Frewsburg PSID with COC

Page 1

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-217567-1

Login Number: 217567
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 4/18/2024 4:56:02 PM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-218645-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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4/18/2024 4:56:02 PM

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Designee for
John Beninati, Project Manager I
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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 15
Lab Chronicle 16
Certification Summary 17
Method Summary 18
Sample Summary 19
Chain of Custody 20
Receipt Checklists 22

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-218645-1 Eurofins Buffalo

Job Narrative
480-218645-1

Receipt
The samples were received on 4/9/2024 11:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-707392 recovered above the upper control limit for Carbon disulfide. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: OUTFALL 001 (480-218645-1) and TRIP BLANK (480-218645-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-218645-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0024	J	0.010	0.0015	mg/L	1		200.7 Rev 4.4	Total/NA
Oil & Grease	1.3	J	4.7	1.3	mg/L	1		1664B	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-218645-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-218645-1
Date Collected: 04/08/24 11:30
Matrix: Water
Date Received: 04/09/24 11:50

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/12/24 18:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/12/24 18:31	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/12/24 18:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/12/24 18:31	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/12/24 18:31	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/12/24 18:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/12/24 18:31	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/12/24 18:31	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/12/24 18:31	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/12/24 18:31	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/12/24 18:31	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/12/24 18:31	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/12/24 18:31	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/12/24 18:31	1
2-Hexanone	ND		5.0	1.2	ug/L			04/12/24 18:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/12/24 18:31	1
Acetone	ND		10	3.0	ug/L			04/12/24 18:31	1
Benzene	ND		1.0	0.41	ug/L			04/12/24 18:31	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/12/24 18:31	1
Bromoform	ND		1.0	0.26	ug/L			04/12/24 18:31	1
Bromomethane	ND		1.0	0.69	ug/L			04/12/24 18:31	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/12/24 18:31	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/12/24 18:31	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/12/24 18:31	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/12/24 18:31	1
Chloroethane	ND		1.0	0.32	ug/L			04/12/24 18:31	1
Chloroform	ND		1.0	0.34	ug/L			04/12/24 18:31	1
Chloromethane	ND		1.0	0.35	ug/L			04/12/24 18:31	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/12/24 18:31	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/12/24 18:31	1
Cyclohexane	ND		1.0	0.18	ug/L			04/12/24 18:31	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/12/24 18:31	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/12/24 18:31	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/12/24 18:31	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/12/24 18:31	1
Methyl acetate	ND		2.5	1.3	ug/L			04/12/24 18:31	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/12/24 18:31	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/12/24 18:31	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/12/24 18:31	1
Styrene	ND		1.0	0.73	ug/L			04/12/24 18:31	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/12/24 18:31	1
Toluene	ND		1.0	0.51	ug/L			04/12/24 18:31	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/12/24 18:31	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/12/24 18:31	1
Trichloroethene	ND		1.0	0.46	ug/L			04/12/24 18:31	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/12/24 18:31	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/12/24 18:31	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/12/24 18:31	1

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-218645-1

Date Collected: 04/08/24 11:30
Matrix: Water
Date Received: 04/09/24 11:50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*80 - 120*		*04/12/24 18:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*04/12/24 18:31*	*1*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*		*04/12/24 18:31*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 123*		*04/12/24 18:31*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		04/12/24 10:45	04/12/24 20:41	1
Iron	ND		0.050	0.019	mg/L		04/12/24 10:45	04/12/24 20:41	1
Zinc	**0.0024**	**J**	0.010	0.0015	mg/L		04/12/24 10:45	04/12/24 20:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	**1.3**	**J**	4.7	1.3	mg/L		04/11/24 07:39	04/11/24 09:46	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			04/11/24 12:01	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-218645-2

Date Collected: 04/08/24 11:30
Matrix: Water
Date Received: 04/09/24 11:50

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/12/24 18:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/12/24 18:54	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/12/24 18:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/12/24 18:54	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/12/24 18:54	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/12/24 18:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/12/24 18:54	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/12/24 18:54	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/12/24 18:54	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/12/24 18:54	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/12/24 18:54	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/12/24 18:54	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/12/24 18:54	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/12/24 18:54	1
2-Hexanone	ND		5.0	1.2	ug/L			04/12/24 18:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/12/24 18:54	1
Acetone	ND		10	3.0	ug/L			04/12/24 18:54	1
Benzene	ND		1.0	0.41	ug/L			04/12/24 18:54	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/12/24 18:54	1
Bromoform	ND		1.0	0.26	ug/L			04/12/24 18:54	1
Bromomethane	ND		1.0	0.69	ug/L			04/12/24 18:54	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/12/24 18:54	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/12/24 18:54	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/12/24 18:54	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/12/24 18:54	1
Chloroethane	ND		1.0	0.32	ug/L			04/12/24 18:54	1
Chloroform	ND		1.0	0.34	ug/L			04/12/24 18:54	1
Chloromethane	ND		1.0	0.35	ug/L			04/12/24 18:54	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-218645-2
Date Collected: 04/08/24 11:30
Matrix: Water
Date Received: 04/09/24 11:50

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/12/24 18:54	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/12/24 18:54	1
Cyclohexane	ND		1.0	0.18	ug/L			04/12/24 18:54	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/12/24 18:54	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/12/24 18:54	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/12/24 18:54	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/12/24 18:54	1
Methyl acetate	ND		2.5	1.3	ug/L			04/12/24 18:54	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/12/24 18:54	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/12/24 18:54	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/12/24 18:54	1
Styrene	ND		1.0	0.73	ug/L			04/12/24 18:54	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/12/24 18:54	1
Toluene	ND		1.0	0.51	ug/L			04/12/24 18:54	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/12/24 18:54	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/12/24 18:54	1
Trichloroethene	ND		1.0	0.46	ug/L			04/12/24 18:54	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/12/24 18:54	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/12/24 18:54	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/12/24 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*80 - 120*		*04/12/24 18:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*04/12/24 18:54*	*1*
4-Bromofluorobenzene (Surr)	*113*		*73 - 120*		*04/12/24 18:54*	*1*
Dibromofluoromethane (Surr)	*115*		*75 - 123*		*04/12/24 18:54*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-218645-1	OUTFALL 001	106	106	109	112
480-218645-2	TRIP BLANK	110	106	113	115
LCS 480-707392/6	Lab Control Sample	99	92	96	101
MB 480-707392/8	Method Blank	107	99	102	112

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-707392/8
Matrix: Water
Analysis Batch: 707392

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/12/24 14:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/12/24 14:02	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/12/24 14:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/12/24 14:02	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/12/24 14:02	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/12/24 14:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/12/24 14:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/12/24 14:02	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/12/24 14:02	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/12/24 14:02	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/12/24 14:02	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/12/24 14:02	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/12/24 14:02	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/12/24 14:02	1
2-Hexanone	ND		5.0	1.2	ug/L			04/12/24 14:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/12/24 14:02	1
Acetone	ND		10	3.0	ug/L			04/12/24 14:02	1
Benzene	ND		1.0	0.41	ug/L			04/12/24 14:02	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/12/24 14:02	1
Bromoform	ND		1.0	0.26	ug/L			04/12/24 14:02	1
Bromomethane	ND		1.0	0.69	ug/L			04/12/24 14:02	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/12/24 14:02	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/12/24 14:02	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/12/24 14:02	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/12/24 14:02	1
Chloroethane	ND		1.0	0.32	ug/L			04/12/24 14:02	1
Chloroform	ND		1.0	0.34	ug/L			04/12/24 14:02	1
Chloromethane	ND		1.0	0.35	ug/L			04/12/24 14:02	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/12/24 14:02	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/12/24 14:02	1
Cyclohexane	ND		1.0	0.18	ug/L			04/12/24 14:02	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/12/24 14:02	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/12/24 14:02	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/12/24 14:02	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/12/24 14:02	1
Methyl acetate	ND		2.5	1.3	ug/L			04/12/24 14:02	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/12/24 14:02	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/12/24 14:02	1
Methylene Chloride	0.600	J	1.0	0.44	ug/L			04/12/24 14:02	1
Styrene	ND		1.0	0.73	ug/L			04/12/24 14:02	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/12/24 14:02	1
Toluene	ND		1.0	0.51	ug/L			04/12/24 14:02	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/12/24 14:02	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/12/24 14:02	1
Trichloroethene	ND		1.0	0.46	ug/L			04/12/24 14:02	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/12/24 14:02	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/12/24 14:02	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/12/24 14:02	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-707392/8
Matrix: Water
Analysis Batch: 707392

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*107*		*80 - 120*		*04/12/24 14:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*04/12/24 14:02*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*04/12/24 14:02*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 123*		*04/12/24 14:02*	*1*

Lab Sample ID: LCS 480-707392/6
Matrix: Water
Analysis Batch: 707392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	23.2		ug/L		93	73 - 126
1,1,2,2-Tetrachloroethane	25.0	21.6		ug/L		86	76 - 120
1,1,2-Trichloroethane	25.0	22.4		ug/L		90	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.3		ug/L		101	61 - 148
1,1-Dichloroethane	25.0	23.0		ug/L		92	77 - 120
1,1-Dichloroethene	25.0	27.2		ug/L		109	66 - 127
1,2,4-Trichlorobenzene	25.0	22.6		ug/L		90	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	20.6		ug/L		82	56 - 134
1,2-Dichlorobenzene	25.0	22.7		ug/L		91	80 - 124
1,2-Dichloroethane	25.0	21.4		ug/L		86	75 - 120
1,2-Dichloropropane	25.0	22.5		ug/L		90	76 - 120
1,3-Dichlorobenzene	25.0	23.2		ug/L		93	77 - 120
1,4-Dichlorobenzene	25.0	22.8		ug/L		91	80 - 120
2-Butanone (MEK)	125	109		ug/L		87	57 - 140
2-Hexanone	125	104		ug/L		83	65 - 127
4-Methyl-2-pentanone (MIBK)	125	104		ug/L		83	71 - 125
Acetone	125	128		ug/L		103	56 - 142
Benzene	25.0	23.2		ug/L		93	71 - 124
Bromodichloromethane	25.0	23.1		ug/L		92	80 - 122
Bromoform	25.0	22.6		ug/L		90	61 - 132
Bromomethane	25.0	31.3		ug/L		125	55 - 144
Carbon disulfide	25.0	28.9		ug/L		116	59 - 134
Carbon tetrachloride	25.0	24.6		ug/L		98	72 - 134
Chlorobenzene	25.0	23.8		ug/L		95	80 - 120
Dibromochloromethane	25.0	24.4		ug/L		98	75 - 125
Chloroethane	25.0	28.9		ug/L		116	69 - 136
Chloroform	25.0	23.1		ug/L		92	73 - 127
Chloromethane	25.0	25.6		ug/L		102	68 - 124
cis-1,2-Dichloroethene	25.0	23.8		ug/L		95	74 - 124
cis-1,3-Dichloropropene	25.0	23.0		ug/L		92	74 - 124
Cyclohexane	25.0	22.6		ug/L		90	59 - 135
Dichlorodifluoromethane	25.0	24.2		ug/L		97	59 - 135
Ethylbenzene	25.0	22.9		ug/L		92	77 - 123
1,2-Dibromoethane	25.0	23.5		ug/L		94	77 - 120
Isopropylbenzene	25.0	24.2		ug/L		97	77 - 122
Methyl acetate	50.0	44.5		ug/L		89	74 - 133
Methyl tert-butyl ether	25.0	22.2		ug/L		89	77 - 120
Methylcyclohexane	25.0	22.1		ug/L		88	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-707392/6
Matrix: Water
Analysis Batch: 707392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	25.8		ug/L		103	75 - 124
Styrene	25.0	22.5		ug/L		90	80 - 120
Tetrachloroethene	25.0	22.8		ug/L		91	74 - 122
Toluene	25.0	23.2		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	23.6		ug/L		95	73 - 127
trans-1,3-Dichloropropene	25.0	23.0		ug/L		92	80 - 120
Trichloroethene	25.0	23.2		ug/L		93	74 - 123
Trichlorofluoromethane	25.0	26.4		ug/L		105	62 - 150
Vinyl chloride	25.0	27.0		ug/L		108	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-707316/1-A
Matrix: Water
Analysis Batch: 707583

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707316

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		04/12/24 10:45	04/12/24 19:47	1
Iron	ND		0.050	0.019	mg/L		04/12/24 10:45	04/12/24 19:47	1
Zinc	ND		0.010	0.0015	mg/L		04/12/24 10:45	04/12/24 19:47	1

Lab Sample ID: LCS 480-707316/2-A
Matrix: Water
Analysis Batch: 707583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707316

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	5.05		mg/L		99	85 - 115
Iron	5.10	5.12		mg/L		100	85 - 115
Zinc	0.500	0.508		mg/L		102	85 - 115

Lab Sample ID: 480-218645-1 MS
Matrix: Water
Analysis Batch: 707583

Client Sample ID: OUTFALL 001
Prep Type: Total/NA
Prep Batch: 707316

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	ND		5.10	5.50		mg/L		108	70 - 130
Iron	ND		5.10	5.12		mg/L		100	70 - 130
Zinc	0.0024	J	0.500	0.502		mg/L		100	70 - 130

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 480-218645-1 MSD
Matrix: Water
Analysis Batch: 707583

Client Sample ID: OUTFALL 001
Prep Type: Total/NA
Prep Batch: 707316

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	ND		5.10	5.05		mg/L		99	70 - 130	8	20
Iron	ND		5.10	5.09		mg/L		100	70 - 130	1	20
Zinc	0.0024	J	0.500	0.502		mg/L		100	70 - 130	0	20

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-707149/1-A
Matrix: Water
Analysis Batch: 707201

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		04/11/24 07:39	04/11/24 09:46	1

Lab Sample ID: LCS 480-707149/2-A
Matrix: Water
Analysis Batch: 707201

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707149

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Oil & Grease			40.1	37.50		mg/L		93	78 - 114		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-707233/1
Matrix: Water
Analysis Batch: 707233

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			04/11/24 12:01	1

Lab Sample ID: LCS 480-707233/2
Matrix: Water
Analysis Batch: 707233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			245	238.4		mg/L		97	88 - 110		

Lab Sample ID: 480-218645-1 DU
Matrix: Water
Analysis Batch: 707233

Client Sample ID: OUTFALL 001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 707392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218645-1	OUTFALL 001	Total/NA	Water	8260C	
480-218645-2	TRIP BLANK	Total/NA	Water	8260C	
MB 480-707392/8	Method Blank	Total/NA	Water	8260C	
LCS 480-707392/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 707316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218645-1	OUTFALL 001	Total/NA	Water	200.7	
MB 480-707316/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-707316/2-A	Lab Control Sample	Total/NA	Water	200.7	
480-218645-1 MS	OUTFALL 001	Total/NA	Water	200.7	
480-218645-1 MSD	OUTFALL 001	Total/NA	Water	200.7	

Analysis Batch: 707583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218645-1	OUTFALL 001	Total/NA	Water	200.7 Rev 4.4	707316
MB 480-707316/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	707316
LCS 480-707316/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	707316
480-218645-1 MS	OUTFALL 001	Total/NA	Water	200.7 Rev 4.4	707316
480-218645-1 MSD	OUTFALL 001	Total/NA	Water	200.7 Rev 4.4	707316

General Chemistry

Prep Batch: 707149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218645-1	OUTFALL 001	Total/NA	Water	1664B	
MB 480-707149/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-707149/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 707201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218645-1	OUTFALL 001	Total/NA	Water	1664B	707149
MB 480-707149/1-A	Method Blank	Total/NA	Water	1664B	707149
LCS 480-707149/2-A	Lab Control Sample	Total/NA	Water	1664B	707149

Analysis Batch: 707233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-218645-1	OUTFALL 001	Total/NA	Water	SM 2540D	
MB 480-707233/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-707233/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-218645-1 DU	OUTFALL 001	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-218645-1
Date Collected: 04/08/24 11:30
Matrix: Water
Date Received: 04/09/24 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	707392	ZN	EET BUF	04/12/24 18:31
Total/NA	Prep	200.7			707316	EMO	EET BUF	04/12/24 10:45
Total/NA	Analysis	200.7 Rev 4.4		1	707583	NZG	EET BUF	04/12/24 20:41
Total/NA	Prep	1664B			707149	KM	EET BUF	04/11/24 07:39
Total/NA	Analysis	1664B		1	707201	KM	EET BUF	04/11/24 09:46
Total/NA	Analysis	SM 2540D		1	707233	KO	EET BUF	04/11/24 12:01

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-218645-2
Date Collected: 04/08/24 11:30
Matrix: Water
Date Received: 04/09/24 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	707392	ZN	EET BUF	04/12/24 18:54

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-218645-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-218645-1	OUTFALL 001	Water	04/08/24 11:30	04/09/24 11:50
480-218645-2	TRIP BLANK	Water	04/08/24 11:30	04/09/24 11:50

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

4/8/24

PAGE | OF |

FED-EX Tracking #

Bottle Order Control #

Lab Quote #

Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 300-287-7857 TPalmer@gesonline.com **fax** 366-902-2187 #N/A	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCL VOCs 6UM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	2540D - Total Suspended Solids	LAB USE ONLY
	Outfall 001	NA	4/8	1130	MR	WG	7	3		1	2	1					X	X	X	X	
	Trip Blank	NA	4/8	1130	MR	WG	2	2									X				

Turnaround Time (Business Days) Approved By (Lab PM) / Date

- [x] Standard 14 Days ____/____
- [ ] 1 day RUSH ____/____
- [ ] Other ____ ____/____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: John.Beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw
- [ ] Commercial 'C'
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other

Please Email the EQEDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

480-218845 Chain of Custody

Sample Custody must be documented below each time samples change possession, including courier.

	Date / Time	Received By:
1 Relinquished By: DVC to Fedex	1 4/8 1630	1 [illegible] 4-9-24 1150
2 Relinquished By: DVC	2 4/9 1150	2 [illegible] 4/9/24 1150
3 Relinquished By:	3 Date / Time:	3 Received By:

Custody Seal Number: ☐ Intact ☐ Not Intact ☐ Preserved where applicable ☐ On Ice Cooler Temp 3.3 #1

Page 20 of 22

4/18/2024

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

4/8/24

PAGE | OF |

FED-EX Tracking #

Bottle Order Control #

Lab Quote #

Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax #N/A 866-902-2187	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/ 05/220

REQUESTED ANALYSIS (see Test Code sheet)

LAB USE ONLY

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	2540D - Total Suspended Solids
	Outfall 001	NA	4/8	1130	MR	WG	7	3		1	2	1					X	X	X	X
	Trip Blank	NA	4/8	1130	MR	WG	2	2									X			

Sampler(s) Name:

Sampler(s) Name:

Page 21 of 22

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial "A" (Level 1) = Results Only
- [ ] Commercial "B" (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw
- [ ] Commercial "C"
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other

Please Email the EQuIS EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#27908.EQEDD.zip

480-218645 Chain of Custody

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished by Sampler:	Date / Time:	Received By:
1	to Fedex	4/8 1630	4-9-24 1150
2		4/9 1150	4/09/24 1150
3			

Custody Seal Number: [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice Cooler Temp 3.3 #1

4/18/2024

N:\Buffalo\Projects\Projects\NYSDEC Contract\PROJECTS\Frewsburg, Former Vac-Air Specialty Alloys\Old Data Tables\Archive\Ogiony\Frewsburg PSID with COC

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-218645-1

Login Number: 218645
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 6/3/2024 7:53:02 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-219653-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 15
Lab Chronicle 16
Certification Summary 17
Method Summary 18
Sample Summary 19
Chain of Custody 20
Receipt Checklists 22

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-219653-1 Eurofins Buffalo

Job Narrative
480-219653-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 5/8/2024 1:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-711361 recovered outside acceptance criteria, low biased, for 2-Hexanone. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte, the data are reported. The associated samples are impacted: OUTFALL 001 (480-219653-1) and TRIP BLANK (480-219653-2).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-711361 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: OUTFALL 001 (480-219653-1) and TRIP BLANK (480-219653-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-219653-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.52		0.15	0.077	mg/L	1		200.7 Rev 4.4	Total Recoverable
Zinc	0.012	J	0.030	0.0045	mg/L	1		200.7 Rev 4.4	Total Recoverable

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-219653-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-219653-1
Date Collected: 05/07/24 12:15
Matrix: Water
Date Received: 05/08/24 13:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/10/24 05:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/10/24 05:19	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/10/24 05:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/10/24 05:19	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/10/24 05:19	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/10/24 05:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/10/24 05:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/10/24 05:19	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/10/24 05:19	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/10/24 05:19	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/10/24 05:19	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/10/24 05:19	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/10/24 05:19	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/10/24 05:19	1
2-Hexanone	ND		5.0	1.2	ug/L			05/10/24 05:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/10/24 05:19	1
Acetone	ND		10	3.0	ug/L			05/10/24 05:19	1
Benzene	ND		1.0	0.41	ug/L			05/10/24 05:19	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/10/24 05:19	1
Bromoform	ND		1.0	0.26	ug/L			05/10/24 05:19	1
Bromomethane	ND		1.0	0.69	ug/L			05/10/24 05:19	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/10/24 05:19	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/10/24 05:19	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/10/24 05:19	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/10/24 05:19	1
Chloroethane	ND		1.0	0.32	ug/L			05/10/24 05:19	1
Chloroform	ND		1.0	0.34	ug/L			05/10/24 05:19	1
Chloromethane	ND		1.0	0.35	ug/L			05/10/24 05:19	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/10/24 05:19	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/10/24 05:19	1
Cyclohexane	ND		1.0	0.18	ug/L			05/10/24 05:19	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/10/24 05:19	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/10/24 05:19	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/10/24 05:19	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/10/24 05:19	1
Methyl acetate	ND		2.5	1.3	ug/L			05/10/24 05:19	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/10/24 05:19	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/10/24 05:19	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/10/24 05:19	1
Styrene	ND		1.0	0.73	ug/L			05/10/24 05:19	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/10/24 05:19	1
Toluene	ND		1.0	0.51	ug/L			05/10/24 05:19	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/10/24 05:19	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/10/24 05:19	1
Trichloroethene	ND		1.0	0.46	ug/L			05/10/24 05:19	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/10/24 05:19	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/10/24 05:19	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/10/24 05:19	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-219653-1
Date Collected: 05/07/24 12:15
Matrix: Water
Date Received: 05/08/24 13:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/10/24 05:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*05/10/24 05:19*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*05/10/24 05:19*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/10/24 05:19*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.093	mg/L		05/30/24 20:50	05/31/24 13:01	1
Iron	**0.52**		0.15	0.077	mg/L		05/30/24 20:50	05/31/24 13:01	1
Zinc	**0.012**	**J**	0.030	0.0045	mg/L		05/30/24 20:50	05/31/24 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		4.9	1.4	mg/L		05/09/24 07:24	05/09/24 08:31	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			05/09/24 11:43	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-219653-2
Date Collected: 05/07/24 00:00
Matrix: Water
Date Received: 05/08/24 13:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/10/24 05:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/10/24 05:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/10/24 05:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/10/24 05:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/10/24 05:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/10/24 05:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/10/24 05:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/10/24 05:41	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/10/24 05:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/10/24 05:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/10/24 05:41	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/10/24 05:41	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/10/24 05:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/10/24 05:41	1
2-Hexanone	ND		5.0	1.2	ug/L			05/10/24 05:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/10/24 05:41	1
Acetone	ND		10	3.0	ug/L			05/10/24 05:41	1
Benzene	ND		1.0	0.41	ug/L			05/10/24 05:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/10/24 05:41	1
Bromoform	ND		1.0	0.26	ug/L			05/10/24 05:41	1
Bromomethane	ND		1.0	0.69	ug/L			05/10/24 05:41	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/10/24 05:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/10/24 05:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/10/24 05:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/10/24 05:41	1
Chloroethane	ND		1.0	0.32	ug/L			05/10/24 05:41	1
Chloroform	ND		1.0	0.34	ug/L			05/10/24 05:41	1
Chloromethane	ND		1.0	0.35	ug/L			05/10/24 05:41	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-219653-2
Date Collected: 05/07/24 00:00
Matrix: Water
Date Received: 05/08/24 13:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/10/24 05:41	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/10/24 05:41	1
Cyclohexane	ND		1.0	0.18	ug/L			05/10/24 05:41	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/10/24 05:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/10/24 05:41	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/10/24 05:41	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/10/24 05:41	1
Methyl acetate	ND		2.5	1.3	ug/L			05/10/24 05:41	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/10/24 05:41	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/10/24 05:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/10/24 05:41	1
Styrene	ND		1.0	0.73	ug/L			05/10/24 05:41	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/10/24 05:41	1
Toluene	ND		1.0	0.51	ug/L			05/10/24 05:41	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/10/24 05:41	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/10/24 05:41	1
Trichloroethene	ND		1.0	0.46	ug/L			05/10/24 05:41	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/10/24 05:41	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/10/24 05:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/10/24 05:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/10/24 05:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*05/10/24 05:41*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*05/10/24 05:41*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*05/10/24 05:41*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-219653-1	OUTFALL 001	98	99	92	100
480-219653-2	TRIP BLANK	98	100	96	99
LCS 480-711361/6	Lab Control Sample	97	96	92	96
MB 480-711361/8	Method Blank	97	96	99	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-711361/8
Matrix: Water
Analysis Batch: 711361

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/09/24 23:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/09/24 23:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/09/24 23:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/09/24 23:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/09/24 23:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/09/24 23:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/09/24 23:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/09/24 23:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/09/24 23:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/09/24 23:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/09/24 23:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/09/24 23:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/09/24 23:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/09/24 23:20	1
2-Hexanone	ND		5.0	1.2	ug/L			05/09/24 23:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/09/24 23:20	1
Acetone	ND		10	3.0	ug/L			05/09/24 23:20	1
Benzene	ND		1.0	0.41	ug/L			05/09/24 23:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/09/24 23:20	1
Bromoform	ND		1.0	0.26	ug/L			05/09/24 23:20	1
Bromomethane	ND		1.0	0.69	ug/L			05/09/24 23:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/09/24 23:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/09/24 23:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/09/24 23:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/09/24 23:20	1
Chloroethane	ND		1.0	0.32	ug/L			05/09/24 23:20	1
Chloroform	ND		1.0	0.34	ug/L			05/09/24 23:20	1
Chloromethane	ND		1.0	0.35	ug/L			05/09/24 23:20	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/09/24 23:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/09/24 23:20	1
Cyclohexane	ND		1.0	0.18	ug/L			05/09/24 23:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/09/24 23:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/09/24 23:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/09/24 23:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/09/24 23:20	1
Methyl acetate	ND		2.5	1.3	ug/L			05/09/24 23:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/09/24 23:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/09/24 23:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/09/24 23:20	1
Styrene	ND		1.0	0.73	ug/L			05/09/24 23:20	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/09/24 23:20	1
Toluene	ND		1.0	0.51	ug/L			05/09/24 23:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/09/24 23:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/09/24 23:20	1
Trichloroethene	ND		1.0	0.46	ug/L			05/09/24 23:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/09/24 23:20	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/09/24 23:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/09/24 23:20	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-711361/8
Matrix: Water
Analysis Batch: 711361

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/09/24 23:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*05/09/24 23:20*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*05/09/24 23:20*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*05/09/24 23:20*	*1*

Lab Sample ID: LCS 480-711361/6
Matrix: Water
Analysis Batch: 711361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	24.3		ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	76 - 120
1,1,2-Trichloroethane	25.0	23.1		ug/L		93	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.9		ug/L		104	61 - 148
1,1-Dichloroethane	25.0	23.8		ug/L		95	77 - 120
1,1-Dichloroethene	25.0	23.8		ug/L		95	66 - 127
1,2,4-Trichlorobenzene	25.0	25.7		ug/L		103	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.2		ug/L		101	56 - 134
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	25.0		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	25.1		ug/L		100	76 - 120
1,3-Dichlorobenzene	25.0	25.5		ug/L		102	77 - 120
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 120
2-Butanone (MEK)	125	120		ug/L		96	57 - 140
2-Hexanone	125	106		ug/L		85	65 - 127
4-Methyl-2-pentanone (MIBK)	125	109		ug/L		87	71 - 125
Acetone	125	115		ug/L		92	56 - 142
Benzene	25.0	24.1		ug/L		96	71 - 124
Bromodichloromethane	25.0	24.5		ug/L		98	80 - 122
Bromoform	25.0	21.7		ug/L		87	61 - 132
Bromomethane	25.0	17.3		ug/L		69	55 - 144
Carbon disulfide	25.0	23.8		ug/L		95	59 - 134
Carbon tetrachloride	25.0	24.5		ug/L		98	72 - 134
Chlorobenzene	25.0	24.6		ug/L		99	80 - 120
Dibromochloromethane	25.0	24.9		ug/L		100	75 - 125
Chloroethane	25.0	20.9		ug/L		84	69 - 136
Chloroform	25.0	22.6		ug/L		90	73 - 127
Chloromethane	25.0	22.3		ug/L		89	68 - 124
cis-1,2-Dichloroethene	25.0	22.6		ug/L		90	74 - 124
cis-1,3-Dichloropropene	25.0	25.9		ug/L		104	74 - 124
Cyclohexane	25.0	23.5		ug/L		94	59 - 135
Dichlorodifluoromethane	25.0	23.6		ug/L		94	59 - 135
Ethylbenzene	25.0	24.2		ug/L		97	77 - 123
1,2-Dibromoethane	25.0	25.9		ug/L		104	77 - 120
Isopropylbenzene	25.0	27.7		ug/L		111	77 - 122
Methyl acetate	50.0	45.2		ug/L		90	74 - 133
Methyl tert-butyl ether	25.0	22.6		ug/L		90	77 - 120
Methylcyclohexane	25.0	25.0		ug/L		100	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-711361/6
Matrix: Water
Analysis Batch: 711361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	22.3		ug/L		89	75 - 124
Styrene	25.0	24.3		ug/L		97	80 - 120
Tetrachloroethene	25.0	26.4		ug/L		106	74 - 122
Toluene	25.0	24.0		ug/L		96	80 - 122
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	73 - 127
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	80 - 120
Trichloroethene	25.0	25.2		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	23.7		ug/L		95	62 - 150
Vinyl chloride	25.0	22.7		ug/L		91	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 460-977640/1-A
Matrix: Water
Analysis Batch: 977765

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 977640

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.093	mg/L		05/30/24 20:50	05/31/24 12:08	1
Iron	ND		0.15	0.077	mg/L		05/30/24 20:50	05/31/24 12:08	1
Zinc	ND		0.030	0.0045	mg/L		05/30/24 20:50	05/31/24 12:08	1

Lab Sample ID: LCS 460-977640/2-A
Matrix: Water
Analysis Batch: 977765

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 977640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	2.00	1.97		mg/L		99	85 - 115
Iron	1.00	1.00		mg/L		100	85 - 115
Zinc	0.500	0.534		mg/L		107	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-711266/1-A
Matrix: Water
Analysis Batch: 711280

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 711266

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		05/09/24 07:24	05/09/24 08:31	1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 480-711266/2-A
Matrix: Water
Analysis Batch: 711280

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 711266

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Oil & Grease			40.0	36.80		mg/L		92	78 - 114		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-711342/1
Matrix: Water
Analysis Batch: 711342

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			05/09/24 11:43	1

Lab Sample ID: LCS 480-711342/2
Matrix: Water
Analysis Batch: 711342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			246	243.6		mg/L		99	88 - 110		

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 711361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219653-1	OUTFALL 001	Total/NA	Water	8260C	
480-219653-2	TRIP BLANK	Total/NA	Water	8260C	
MB 480-711361/8	Method Blank	Total/NA	Water	8260C	
LCS 480-711361/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 977640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219653-1	OUTFALL 001	Total Recoverable	Water	200.7	
MB 460-977640/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 460-977640/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 977765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219653-1	OUTFALL 001	Total Recoverable	Water	200.7 Rev 4.4	977640
MB 460-977640/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	977640
LCS 460-977640/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	977640

General Chemistry

Prep Batch: 711266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219653-1	OUTFALL 001	Total/NA	Water	1664B	
MB 480-711266/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-711266/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 711280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219653-1	OUTFALL 001	Total/NA	Water	1664B	711266
MB 480-711266/1-A	Method Blank	Total/NA	Water	1664B	711266
LCS 480-711266/2-A	Lab Control Sample	Total/NA	Water	1664B	711266

Analysis Batch: 711342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-219653-1	OUTFALL 001	Total/NA	Water	SM 2540D	
MB 480-711342/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-711342/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-219653-1
Date Collected: 05/07/24 12:15
Matrix: Water
Date Received: 05/08/24 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	711361	CC	EET BUF	05/10/24 05:19
Total Recoverable	Prep	200.7			977640	GAE	EET EDI	05/30/24 20:50
Total Recoverable	Analysis	200.7 Rev 4.4		1	977765	CDC	EET EDI	05/31/24 13:01
Total/NA	Prep	1664B			711266	KM	EET BUF	05/09/24 07:24
Total/NA	Analysis	1664B		1	711280	KM	EET BUF	05/09/24 08:31
Total/NA	Analysis	SM 2540D		1	711342	AB	EET BUF	05/09/24 11:43

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-219653-2
Date Collected: 05/07/24 00:00
Matrix: Water
Date Received: 05/08/24 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	711361	CC	EET BUF	05/10/24 05:41

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	05-27-24

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-02-25
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-25
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	525-24-149-77606	05-21-27

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET EDI
1664B	HEM and SGT-HEM	1664B	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Recoverable Metals	EPA	EET EDI
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-219653-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-219653-1	OUTFALL 001	Water	05/07/24 12:15	05/08/24 13:30
480-219653-2	TRIP BLANK	Water	05/07/24 00:00	05/08/24 13:30

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

5/7/2024

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer — **Phone #:** 800-287-7857 TPalmer@gesonline.com — fax #N/A — 866-902-2187	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name:	Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	2540D - Total Suspended Solids	LAB USE ONLY
	Outfall 001	NA	5/7	1215	MR	WG	7	3		1	2	1					X	X	X	X	
	Trip Blank	NA	5/7	-		WG	2	2									X				

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other _____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

Relinquished By Sampler:	Date / Time:	Received By:
1 TK to Gesh	1 5/7 1745	1
Relinquished By: 2 TK	Date / Time: 2 5/8 1330	Received By: 2
Relinquished By: 3	Date / Time: 3	Received By: 3 5/10/24 1330

Custody Seal Number: ☐ Intact ☐ Not Intact — ☐ Preserved where applicable ☐ On Ice — Cooler Temp 5.0 #1 ICE

480-219653 Chain of Custody

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-87687 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP New York		Job #: 480-219653-1
Address: 777 New Durham Road,	Due Date Requested: 5/21/2024			Preservation Codes:
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Frewsburg Site Monthly Analysis	Project #: 48027424			
Site:	SSOW#:			Other:

Analysis Requested

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7/200.7_P_TR Metals ICP Al,Fe,Zn	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
OUTFALL 001 (480-219653-1)	5/7/24	12:15 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested. I, II, III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Fedex

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible]	5/28/24 16	[illegible]	[illegible]	5/29/24 11:40	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

1.2 0.8c 1.2c 1.1c 1.5c 1.0c 1.4c 1.2c 1.6c

Ver 04/02/2024

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-219653-1

Login Number: 219653
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-219653-1

Login Number: 219653
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 05/29/24 03:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8/1.2, 1.1/1.5, 1.0/1.4, 1.2/1.6°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 6/19/2024 4:29:27 PM

JOB DESCRIPTION

Frewsburg Site - Monthly Outfall Analysis

JOB NUMBER

480-220756-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
6/19/2024 4:29:27 PM

Authorized for release by
Wyatt Watson, Project Management Assistant I
Wyatt.Watson@et.eurofinsus.com
Designee for
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 15
Lab Chronicle 16
Certification Summary 17
Method Summary 18
Sample Summary 19
Chain of Custody 20
Receipt Checklists 21

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220756-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-220756-1 Eurofins Buffalo

Job Narrative
480-220756-1

Receipt
The samples were received on 6/12/2024 9:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.5º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220756-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-220756-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.23		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220756-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-220756-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-220756-1
Date Collected: 06/11/24 12:40
Matrix: Water
Date Received: 06/12/24 09:25

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/13/24 18:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/13/24 18:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/13/24 18:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/13/24 18:33	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/13/24 18:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/13/24 18:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/13/24 18:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/13/24 18:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/13/24 18:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/13/24 18:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/13/24 18:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/13/24 18:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/13/24 18:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/13/24 18:33	1
2-Hexanone	ND		5.0	1.2	ug/L			06/13/24 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/13/24 18:33	1
Acetone	ND		10	3.0	ug/L			06/13/24 18:33	1
Benzene	ND		1.0	0.41	ug/L			06/13/24 18:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/13/24 18:33	1
Bromoform	ND		1.0	0.26	ug/L			06/13/24 18:33	1
Bromomethane	ND		1.0	0.69	ug/L			06/13/24 18:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/13/24 18:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/13/24 18:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/13/24 18:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/13/24 18:33	1
Chloroethane	ND		1.0	0.32	ug/L			06/13/24 18:33	1
Chloroform	ND		1.0	0.34	ug/L			06/13/24 18:33	1
Chloromethane	ND		1.0	0.35	ug/L			06/13/24 18:33	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/13/24 18:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/13/24 18:33	1
Cyclohexane	ND		1.0	0.18	ug/L			06/13/24 18:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/13/24 18:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/13/24 18:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/13/24 18:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/13/24 18:33	1
Methyl acetate	ND		2.5	1.3	ug/L			06/13/24 18:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/13/24 18:33	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/13/24 18:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/13/24 18:33	1
Styrene	ND		1.0	0.73	ug/L			06/13/24 18:33	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/13/24 18:33	1
Toluene	ND		1.0	0.51	ug/L			06/13/24 18:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/13/24 18:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/13/24 18:33	1
Trichloroethene	ND		1.0	0.46	ug/L			06/13/24 18:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/13/24 18:33	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/13/24 18:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/13/24 18:33	1

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-220756-1

Date Collected: 06/11/24 12:40
Matrix: Water
Date Received: 06/12/24 09:25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/13/24 18:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*06/13/24 18:33*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*06/13/24 18:33*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*06/13/24 18:33*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		06/14/24 08:49	06/14/24 14:21	1
Iron	**0.23**		0.050	0.026	mg/L		06/14/24 08:49	06/14/24 14:21	1
Zinc	ND		0.010	0.0068	mg/L		06/14/24 08:49	06/14/24 14:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		4.8	1.3	mg/L		06/13/24 10:59	06/13/24 13:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			06/14/24 11:25	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220756-2

Date Collected: 06/11/24 00:00
Matrix: Water
Date Received: 06/12/24 09:25

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/13/24 18:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/13/24 18:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/13/24 18:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/13/24 18:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/13/24 18:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/13/24 18:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/13/24 18:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/13/24 18:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/13/24 18:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/13/24 18:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/13/24 18:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/13/24 18:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/13/24 18:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/13/24 18:55	1
2-Hexanone	ND		5.0	1.2	ug/L			06/13/24 18:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/13/24 18:55	1
Acetone	ND		10	3.0	ug/L			06/13/24 18:55	1
Benzene	ND		1.0	0.41	ug/L			06/13/24 18:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/13/24 18:55	1
Bromoform	ND		1.0	0.26	ug/L			06/13/24 18:55	1
Bromomethane	ND		1.0	0.69	ug/L			06/13/24 18:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/13/24 18:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/13/24 18:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/13/24 18:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/13/24 18:55	1
Chloroethane	ND		1.0	0.32	ug/L			06/13/24 18:55	1
Chloroform	ND		1.0	0.34	ug/L			06/13/24 18:55	1
Chloromethane	ND		1.0	0.35	ug/L			06/13/24 18:55	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-220756-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220756-2
Date Collected: 06/11/24 00:00
Matrix: Water
Date Received: 06/12/24 09:25

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/13/24 18:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/13/24 18:55	1
Cyclohexane	ND		1.0	0.18	ug/L			06/13/24 18:55	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/13/24 18:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/13/24 18:55	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/13/24 18:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/13/24 18:55	1
Methyl acetate	ND		2.5	1.3	ug/L			06/13/24 18:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/13/24 18:55	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/13/24 18:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/13/24 18:55	1
Styrene	ND		1.0	0.73	ug/L			06/13/24 18:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/13/24 18:55	1
Toluene	ND		1.0	0.51	ug/L			06/13/24 18:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/13/24 18:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/13/24 18:55	1
Trichloroethene	ND		1.0	0.46	ug/L			06/13/24 18:55	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/13/24 18:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/13/24 18:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/13/24 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/13/24 18:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/13/24 18:55*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/13/24 18:55*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*06/13/24 18:55*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220756-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-220756-1	OUTFALL 001	99	104	101	109
480-220756-2	TRIP BLANK	98	105	100	109
LCS 480-715463/6	Lab Control Sample	103	103	104	107
MB 480-715463/8	Method Blank	98	103	103	105

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-715463/8
Matrix: Water
Analysis Batch: 715463

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/13/24 13:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/13/24 13:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/13/24 13:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/13/24 13:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/13/24 13:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/13/24 13:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/13/24 13:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/13/24 13:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/13/24 13:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/13/24 13:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/13/24 13:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/13/24 13:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/13/24 13:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/13/24 13:03	1
2-Hexanone	ND		5.0	1.2	ug/L			06/13/24 13:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/13/24 13:03	1
Acetone	ND		10	3.0	ug/L			06/13/24 13:03	1
Benzene	ND		1.0	0.41	ug/L			06/13/24 13:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/13/24 13:03	1
Bromoform	ND		1.0	0.26	ug/L			06/13/24 13:03	1
Bromomethane	ND		1.0	0.69	ug/L			06/13/24 13:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/13/24 13:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/13/24 13:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/13/24 13:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/13/24 13:03	1
Chloroethane	ND		1.0	0.32	ug/L			06/13/24 13:03	1
Chloroform	ND		1.0	0.34	ug/L			06/13/24 13:03	1
Chloromethane	ND		1.0	0.35	ug/L			06/13/24 13:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/13/24 13:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/13/24 13:03	1
Cyclohexane	ND		1.0	0.18	ug/L			06/13/24 13:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/13/24 13:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/13/24 13:03	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/13/24 13:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/13/24 13:03	1
Methyl acetate	ND		2.5	1.3	ug/L			06/13/24 13:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/13/24 13:03	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/13/24 13:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/13/24 13:03	1
Styrene	ND		1.0	0.73	ug/L			06/13/24 13:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/13/24 13:03	1
Toluene	ND		1.0	0.51	ug/L			06/13/24 13:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/13/24 13:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/13/24 13:03	1
Trichloroethene	ND		1.0	0.46	ug/L			06/13/24 13:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/13/24 13:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/13/24 13:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/13/24 13:03	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-715463/8
Matrix: Water
Analysis Batch: 715463

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/13/24 13:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/13/24 13:03*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/13/24 13:03*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*06/13/24 13:03*	*1*

Lab Sample ID: LCS 480-715463/6
Matrix: Water
Analysis Batch: 715463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	29.0		ug/L		116	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.2		ug/L		89	76 - 120
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.3		ug/L		105	61 - 148
1,1-Dichloroethane	25.0	26.5		ug/L		106	77 - 120
1,1-Dichloroethene	25.0	27.8		ug/L		111	66 - 127
1,2,4-Trichlorobenzene	25.0	26.8		ug/L		107	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.2		ug/L		97	56 - 134
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	25.4		ug/L		102	75 - 120
1,2-Dichloropropane	25.0	25.2		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 120
2-Butanone (MEK)	125	122		ug/L		98	57 - 140
2-Hexanone	125	132		ug/L		106	65 - 127
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	71 - 125
Acetone	125	133		ug/L		107	56 - 142
Benzene	25.0	25.1		ug/L		100	71 - 124
Bromodichloromethane	25.0	27.0		ug/L		108	80 - 122
Bromoform	25.0	27.4		ug/L		109	61 - 132
Bromomethane	25.0	27.6		ug/L		111	55 - 144
Carbon disulfide	25.0	26.9		ug/L		108	59 - 134
Carbon tetrachloride	25.0	30.9		ug/L		123	72 - 134
Chlorobenzene	25.0	25.1		ug/L		100	80 - 120
Dibromochloromethane	25.0	28.1		ug/L		112	75 - 125
Chloroethane	25.0	31.3		ug/L		125	69 - 136
Chloroform	25.0	26.0		ug/L		104	73 - 127
Chloromethane	25.0	23.2		ug/L		93	68 - 124
cis-1,2-Dichloroethene	25.0	26.5		ug/L		106	74 - 124
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	74 - 124
Cyclohexane	25.0	26.1		ug/L		104	59 - 135
Dichlorodifluoromethane	25.0	20.6		ug/L		83	59 - 135
Ethylbenzene	25.0	25.7		ug/L		103	77 - 123
1,2-Dibromoethane	25.0	25.8		ug/L		103	77 - 120
Isopropylbenzene	25.0	24.8		ug/L		99	77 - 122
Methyl acetate	50.0	54.2		ug/L		108	74 - 133
Methyl tert-butyl ether	25.0	25.3		ug/L		101	77 - 120
Methylcyclohexane	25.0	27.3		ug/L		109	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-715463/6
Matrix: Water
Analysis Batch: 715463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	27.3		ug/L		109	75 - 124
Styrene	25.0	26.9		ug/L		108	80 - 120
Tetrachloroethene	25.0	28.6		ug/L		114	74 - 122
Toluene	25.0	25.9		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	27.4		ug/L		110	73 - 127
trans-1,3-Dichloropropene	25.0	28.2		ug/L		113	80 - 120
Trichloroethene	25.0	26.5		ug/L		106	74 - 123
Trichlorofluoromethane	25.0	30.2		ug/L		121	62 - 150
Vinyl chloride	25.0	26.4		ug/L		106	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-715530/1-A
Matrix: Water
Analysis Batch: 715684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715530

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		06/14/24 08:49	06/14/24 13:57	1
Iron	ND		0.050	0.026	mg/L		06/14/24 08:49	06/14/24 13:57	1
Zinc	ND		0.010	0.0068	mg/L		06/14/24 08:49	06/14/24 13:57	1

Lab Sample ID: LCS 480-715530/2-A
Matrix: Water
Analysis Batch: 715684

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715530

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	4.97		mg/L		97	85 - 115
Iron	5.10	5.25		mg/L		103	85 - 115
Zinc	0.500	0.514		mg/L		103	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-715484/1-A
Matrix: Water
Analysis Batch: 715497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715484

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/13/24 10:59	06/13/24 13:15	1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 480-715484/2-A
Matrix: Water
Analysis Batch: 715497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715484

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Oil & Grease			40.0	31.50		mg/L		79	78 - 114		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-715627/1
Matrix: Water
Analysis Batch: 715627

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			06/14/24 11:25	1

Lab Sample ID: LCS 480-715627/2
Matrix: Water
Analysis Batch: 715627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			268	259.6		mg/L		97	88 - 110		

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220756-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

GC/MS VOA

Analysis Batch: 715463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220756-1	OUTFALL 001	Total/NA	Water	8260C	
480-220756-2	TRIP BLANK	Total/NA	Water	8260C	
MB 480-715463/8	Method Blank	Total/NA	Water	8260C	
LCS 480-715463/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 715530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220756-1	OUTFALL 001	Total/NA	Water	200.7	
MB 480-715530/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-715530/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 715684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220756-1	OUTFALL 001	Total/NA	Water	200.7 Rev 4.4	715530
MB 480-715530/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	715530
LCS 480-715530/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	715530

General Chemistry

Prep Batch: 715484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220756-1	OUTFALL 001	Total/NA	Water	1664B	
MB 480-715484/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-715484/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 715497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220756-1	OUTFALL 001	Total/NA	Water	1664B	715484
MB 480-715484/1-A	Method Blank	Total/NA	Water	1664B	715484
LCS 480-715484/2-A	Lab Control Sample	Total/NA	Water	1664B	715484

Analysis Batch: 715627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-220756-1	OUTFALL 001	Total/NA	Water	SM 2540D	
MB 480-715627/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-715627/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-220756-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-220756-1
Date Collected: 06/11/24 12:40
Matrix: Water
Date Received: 06/12/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	715463	AXK	EET BUF	06/13/24 18:33
Total/NA	Prep	200.7			715530	ET	EET BUF	06/14/24 08:49
Total/NA	Analysis	200.7 Rev 4.4		1	715684	NZG	EET BUF	06/14/24 14:21
Total/NA	Prep	1664B			715484	KM	EET BUF	06/13/24 10:59
Total/NA	Analysis	1664B		1	715497	KM	EET BUF	06/13/24 13:15
Total/NA	Analysis	SM 2540D		1	715627	KO	EET BUF	06/14/24 11:25

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-220756-2
Date Collected: 06/11/24 00:00
Matrix: Water
Date Received: 06/12/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	715463	AXK	EET BUF	06/13/24 18:55

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220756-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220756-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-220756-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-220756-1	OUTFALL 001	Water	06/11/24 12:40	06/12/24 09:25
480-220756-2	TRIP BLANK	Water	06/11/24 00:00	06/12/24 09:25

6/11/24

FED-EX Tracking # | Bottle Order Control #

Lab Quote # | Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax 866-902-2187 #N/A	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name: | Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	2540D - Total Suspended Solids	LAB USE ONLY
	Outfall 001	NA	6/11	1240	MVL	WG	7	3		1	2	1					X	X	X	X	
	Trip Blank	NA				WG	2	2									X				

Turnaround Time (Business Days) | Approved By (Lab PM) / Date

- [x] Standard 14 Days ____/____
- [ ] 1 day RUSH ____/____
- [ ] Other ____ ____/____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: John.beninati@ET.EurofinsUS.com

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other ____

480-220756 Chain of Custody

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	[signature] to Fed Ex	6/11 1700	
2	[signature]	6/12 0928	
3	Relinquished By :	Date / Time:	Received By: [signature] 6/12/24 928 DHL

Custody Seal Number: [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice Cooler Temp ____

3.5 ICE

Page 20 of 21

6/19/2024

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-220756-1

Login Number: 220756
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 7/26/2024 8:37:26 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Outfall Analysis

JOB NUMBER

480-221755-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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7/26/2024 8:37:26 AM

Authorized for release by
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 15
Lab Chronicle 16
Certification Summary 17
Method Summary 18
Sample Summary 19
Chain of Custody 20
Receipt Checklists 21

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-221755-1 Eurofins Buffalo

Job Narrative
480-221755-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 7/17/2024 3:16 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 7.4°C.

GC/MS VOA
Method 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 480-719137 was outside criteria for the following analyte(s): Tetrachloroethene. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated. The following samples were affected : OUTFALL 001 (480-221755-1) and TRIP BLANK (480-221755-2).

Method 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) associated with batch 480-719137 . The following samples were affected : OUTFALL 001 (480-221755-1) and TRIP BLANK (480-221755-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-221755-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.36		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-221755-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-221755-1
Date Collected: 07/16/24 10:15
Matrix: Water
Date Received: 07/17/24 15:16

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/22/24 20:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/22/24 20:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/22/24 20:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/22/24 20:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/22/24 20:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/22/24 20:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/22/24 20:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/22/24 20:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/22/24 20:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/22/24 20:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/22/24 20:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/22/24 20:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/22/24 20:52	1
2-Butanone (MEK)	ND	*+	10	1.3	ug/L			07/22/24 20:52	1
2-Hexanone	ND		5.0	1.2	ug/L			07/22/24 20:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/22/24 20:52	1
Acetone	ND		10	3.0	ug/L			07/22/24 20:52	1
Benzene	ND		1.0	0.41	ug/L			07/22/24 20:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/22/24 20:52	1
Bromoform	ND		1.0	0.26	ug/L			07/22/24 20:52	1
Bromomethane	ND		1.0	0.69	ug/L			07/22/24 20:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/22/24 20:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/22/24 20:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/22/24 20:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/22/24 20:52	1
Chloroethane	ND		1.0	0.32	ug/L			07/22/24 20:52	1
Chloroform	ND		1.0	0.34	ug/L			07/22/24 20:52	1
Chloromethane	ND		1.0	0.35	ug/L			07/22/24 20:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/22/24 20:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/22/24 20:52	1
Cyclohexane	ND		1.0	0.18	ug/L			07/22/24 20:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/22/24 20:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/22/24 20:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/22/24 20:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/22/24 20:52	1
Methyl acetate	ND		2.5	1.3	ug/L			07/22/24 20:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/22/24 20:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/22/24 20:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/22/24 20:52	1
Styrene	ND		1.0	0.73	ug/L			07/22/24 20:52	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/22/24 20:52	1
Toluene	ND		1.0	0.51	ug/L			07/22/24 20:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/22/24 20:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/22/24 20:52	1
Trichloroethene	ND		1.0	0.46	ug/L			07/22/24 20:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/22/24 20:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/22/24 20:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/22/24 20:52	1

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-221755-1

Date Collected: 07/16/24 10:15
Matrix: Water
Date Received: 07/17/24 15:16

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/22/24 20:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*07/22/24 20:52*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*07/22/24 20:52*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 123*		*07/22/24 20:52*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		07/19/24 08:56	07/19/24 14:33	1
Iron	**0.36**		0.050	0.026	mg/L		07/19/24 08:56	07/19/24 14:33	1
Zinc	ND		0.010	0.0068	mg/L		07/19/24 08:56	07/19/24 14:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		4.8	1.3	mg/L		07/20/24 08:56	07/20/24 10:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			07/23/24 16:30	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-221755-2

Date Collected: 07/16/24 00:00
Matrix: Water
Date Received: 07/17/24 15:16

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/22/24 21:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/22/24 21:16	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/22/24 21:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/22/24 21:16	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/22/24 21:16	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/22/24 21:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/22/24 21:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/22/24 21:16	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/22/24 21:16	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/22/24 21:16	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/22/24 21:16	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/22/24 21:16	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/22/24 21:16	1
2-Butanone (MEK)	ND	*+	10	1.3	ug/L			07/22/24 21:16	1
2-Hexanone	ND		5.0	1.2	ug/L			07/22/24 21:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/22/24 21:16	1
Acetone	ND		10	3.0	ug/L			07/22/24 21:16	1
Benzene	ND		1.0	0.41	ug/L			07/22/24 21:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/22/24 21:16	1
Bromoform	ND		1.0	0.26	ug/L			07/22/24 21:16	1
Bromomethane	ND		1.0	0.69	ug/L			07/22/24 21:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/22/24 21:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/22/24 21:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/22/24 21:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/22/24 21:16	1
Chloroethane	ND		1.0	0.32	ug/L			07/22/24 21:16	1
Chloroform	ND		1.0	0.34	ug/L			07/22/24 21:16	1
Chloromethane	ND		1.0	0.35	ug/L			07/22/24 21:16	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-221755-2
Date Collected: 07/16/24 00:00
Matrix: Water
Date Received: 07/17/24 15:16

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/22/24 21:16	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/22/24 21:16	1
Cyclohexane	ND		1.0	0.18	ug/L			07/22/24 21:16	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/22/24 21:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/22/24 21:16	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/22/24 21:16	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/22/24 21:16	1
Methyl acetate	ND		2.5	1.3	ug/L			07/22/24 21:16	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/22/24 21:16	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/22/24 21:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/22/24 21:16	1
Styrene	ND		1.0	0.73	ug/L			07/22/24 21:16	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/22/24 21:16	1
Toluene	ND		1.0	0.51	ug/L			07/22/24 21:16	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/22/24 21:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/22/24 21:16	1
Trichloroethene	ND		1.0	0.46	ug/L			07/22/24 21:16	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/22/24 21:16	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/22/24 21:16	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/22/24 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*07/22/24 21:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/22/24 21:16*	*1*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*07/22/24 21:16*	*1*
Dibromofluoromethane (Surr)	*87*		*75 - 123*		*07/22/24 21:16*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-221755-1	OUTFALL 001	98	97	95	89
480-221755-2	TRIP BLANK	93	96	86	87
LCS 480-719137/8	Lab Control Sample	92	96	90	90
MB 480-719137/11	Method Blank	94	96	92	91

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-719137/11
Matrix: Water
Analysis Batch: 719137

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/22/24 14:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/22/24 14:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/22/24 14:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/22/24 14:33	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/22/24 14:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/22/24 14:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/22/24 14:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/22/24 14:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/22/24 14:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/22/24 14:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/22/24 14:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/22/24 14:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/22/24 14:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/22/24 14:33	1
2-Hexanone	ND		5.0	1.2	ug/L			07/22/24 14:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/22/24 14:33	1
Acetone	ND		10	3.0	ug/L			07/22/24 14:33	1
Benzene	ND		1.0	0.41	ug/L			07/22/24 14:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/22/24 14:33	1
Bromoform	ND		1.0	0.26	ug/L			07/22/24 14:33	1
Bromomethane	ND		1.0	0.69	ug/L			07/22/24 14:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/22/24 14:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/22/24 14:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/22/24 14:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/22/24 14:33	1
Chloroethane	ND		1.0	0.32	ug/L			07/22/24 14:33	1
Chloroform	ND		1.0	0.34	ug/L			07/22/24 14:33	1
Chloromethane	ND		1.0	0.35	ug/L			07/22/24 14:33	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/22/24 14:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/22/24 14:33	1
Cyclohexane	ND		1.0	0.18	ug/L			07/22/24 14:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/22/24 14:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/22/24 14:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/22/24 14:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/22/24 14:33	1
Methyl acetate	ND		2.5	1.3	ug/L			07/22/24 14:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/22/24 14:33	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/22/24 14:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/22/24 14:33	1
Styrene	ND		1.0	0.73	ug/L			07/22/24 14:33	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/22/24 14:33	1
Toluene	ND		1.0	0.51	ug/L			07/22/24 14:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/22/24 14:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/22/24 14:33	1
Trichloroethene	ND		1.0	0.46	ug/L			07/22/24 14:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/22/24 14:33	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/22/24 14:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/22/24 14:33	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-719137/11
Matrix: Water
Analysis Batch: 719137

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*94*		*80 - 120*		*07/22/24 14:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*07/22/24 14:33*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*07/22/24 14:33*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*07/22/24 14:33*	*1*

Lab Sample ID: LCS 480-719137/8
Matrix: Water
Analysis Batch: 719137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	25.0		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.1		ug/L		100	76 - 120
1,1,2-Trichloroethane	25.0	24.5		ug/L		98	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.1		ug/L		97	61 - 148
1,1-Dichloroethane	25.0	25.5		ug/L		102	77 - 120
1,1-Dichloroethene	25.0	25.0		ug/L		100	66 - 127
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		95	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	29.0		ug/L		116	56 - 134
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 124
1,2-Dichloroethane	25.0	23.7		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	24.4		ug/L		98	76 - 120
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 120
2-Butanone (MEK)	125	227	*+	ug/L		181	57 - 140
2-Hexanone	125	134		ug/L		107	65 - 127
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	71 - 125
Acetone	125	136		ug/L		109	56 - 142
Benzene	25.0	23.5		ug/L		94	71 - 124
Bromodichloromethane	25.0	24.4		ug/L		98	80 - 122
Bromoform	25.0	27.4		ug/L		109	61 - 132
Bromomethane	25.0	23.7		ug/L		95	55 - 144
Carbon disulfide	25.0	24.2		ug/L		97	59 - 134
Carbon tetrachloride	25.0	26.9		ug/L		108	72 - 134
Chlorobenzene	25.0	23.5		ug/L		94	80 - 120
Dibromochloromethane	25.0	26.1		ug/L		104	75 - 125
Chloroethane	25.0	25.7		ug/L		103	69 - 136
Chloroform	25.0	21.8		ug/L		87	73 - 127
Chloromethane	25.0	26.8		ug/L		107	68 - 124
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	74 - 124
cis-1,3-Dichloropropene	25.0	25.6		ug/L		102	74 - 124
Cyclohexane	25.0	27.2		ug/L		109	59 - 135
Dichlorodifluoromethane	25.0	28.4		ug/L		114	59 - 135
Ethylbenzene	25.0	24.3		ug/L		97	77 - 123
1,2-Dibromoethane	25.0	24.4		ug/L		98	77 - 120
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 122
Methyl acetate	50.0	51.1		ug/L		102	74 - 133
Methyl tert-butyl ether	25.0	23.1		ug/L		92	77 - 120
Methylcyclohexane	25.0	26.1		ug/L		104	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-719137/8
Matrix: Water
Analysis Batch: 719137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	23.8		ug/L		95	75 - 124
Styrene	25.0	24.2		ug/L		97	80 - 120
Tetrachloroethene	25.0	24.1		ug/L		96	74 - 122
Toluene	25.0	23.3		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	23.9		ug/L		95	73 - 127
trans-1,3-Dichloropropene	25.0	26.2		ug/L		105	80 - 120
Trichloroethene	25.0	23.6		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	25.6		ug/L		102	62 - 150
Vinyl chloride	25.0	27.4		ug/L		110	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*92*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*
Dibromofluoromethane (Surr)	*90*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-718911/1-A
Matrix: Water
Analysis Batch: 719053

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 718911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		07/19/24 08:56	07/19/24 14:01	1
Iron	ND		0.050	0.026	mg/L		07/19/24 08:56	07/19/24 14:01	1
Zinc	ND		0.010	0.0068	mg/L		07/19/24 08:56	07/19/24 14:01	1

Lab Sample ID: LCS 480-718911/2-A
Matrix: Water
Analysis Batch: 719053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 718911

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	5.03		mg/L		99	85 - 115
Iron	5.10	5.48		mg/L		108	85 - 115
Zinc	0.500	0.542		mg/L		108	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-719072/1-A
Matrix: Water
Analysis Batch: 719079

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 719072

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		07/20/24 08:56	07/20/24 10:15	1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 480-719072/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 719079
Prep Batch: 719072

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.0	33.50		mg/L		84	78 - 114

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-719375/1
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 719375

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			07/23/24 16:30	1

Lab Sample ID: LCS 480-719375/2
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 719375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	245	241.2		mg/L		99	88 - 110

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

GC/MS VOA

Analysis Batch: 719137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221755-1	OUTFALL 001	Total/NA	Water	8260C	
480-221755-2	TRIP BLANK	Total/NA	Water	8260C	
MB 480-719137/11	Method Blank	Total/NA	Water	8260C	
LCS 480-719137/8	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 718911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221755-1	OUTFALL 001	Total/NA	Water	200.7	
MB 480-718911/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-718911/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 719053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221755-1	OUTFALL 001	Total/NA	Water	200.7 Rev 4.4	718911
MB 480-718911/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	718911
LCS 480-718911/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	718911

General Chemistry

Prep Batch: 719072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221755-1	OUTFALL 001	Total/NA	Water	1664B	
MB 480-719072/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-719072/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 719079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221755-1	OUTFALL 001	Total/NA	Water	1664B	719072
MB 480-719072/1-A	Method Blank	Total/NA	Water	1664B	719072
LCS 480-719072/2-A	Lab Control Sample	Total/NA	Water	1664B	719072

Analysis Batch: 719375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-221755-1	OUTFALL 001	Total/NA	Water	SM 2540D	
MB 480-719375/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-719375/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-221755-1
Date Collected: 07/16/24 10:15
Matrix: Water
Date Received: 07/17/24 15:16

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	719137	ERS	EET BUF	07/22/24 20:52
Total/NA	Prep	200.7			718911	ET	EET BUF	07/19/24 08:56
Total/NA	Analysis	200.7 Rev 4.4		1	719053	NZG	EET BUF	07/19/24 14:33
Total/NA	Prep	1664B			719072	KM	EET BUF	07/20/24 08:56
Total/NA	Analysis	1664B		1	719079	KM	EET BUF	07/20/24 10:15
Total/NA	Analysis	SM 2540D		1	719375	AB	EET BUF	07/23/24 16:30

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-221755-2
Date Collected: 07/16/24 00:00
Matrix: Water
Date Received: 07/17/24 15:16

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	719137	ERS	EET BUF	07/22/24 21:16

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-221755-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-221755-1	OUTFALL 001	Water	07/16/24 10:15	07/17/24 15:16
480-221755-2	TRIP BLANK	Water	07/16/24 00:00	07/17/24 15:16

CHAIN OF CUSTODY

Client: New York State Dept. of Environm

7/16/24

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax #N/A **866-902-2187**	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name:	Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	2540D - Total Suspended Solids	LAB USE ONLY
	Outfall 001	NA	7/16	1015	MR	WG	7	3		1	2	1					X	X	X	X	
	Trip Blank	NA	7/16			WG	2	2									X				

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days _____/_____
- [ ] 1 day RUSH _____/_____
- [ ] Other _____ _____/_____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	[signature] to fedex	7/16 1630	[signature]
2	Relinquished By :	Date / Time:	Received By: 7/17/24 1516
3	Relinquished By :	Date / Time:	Received By:

Custody Seal Number: ☐ Intact ☐ Not Intact ☐ Preserved where applicable ☐ On Ice **Cooler Temp** 7.4 #1 ICE



N:\Buffalo\Projects\Projects\NYSDEC Contract\PROJECTS\Frewsburg, Former Vac-Air Specialty Alloys\Old Data Tables\Archive\Ogiony\Frewsburg PSID with COC

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-221755-1

Login Number: 221755
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 8/26/2024 1:20:57 PM

JOB DESCRIPTION

Frewsburg Site - Monthly Outfall Analysis

JOB NUMBER

480-222732-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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8/26/2024 1:20:57 PM

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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 16
Lab Chronicle 17
Certification Summary 18
Method Summary 19
Sample Summary 20
Chain of Custody 21
Receipt Checklists 22

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-222732-1 Eurofins Buffalo

Job Narrative
480-222732-1

Receipt
The samples were received on 8/21/2024 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.1º C.

GC/MS VOA
Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: Outfall 001 (480-222732-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-722566 recovered outside control limits for the following analytes: Acetone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: Outfall 001 (480-222732-1) and Trip Blank (480-222732-2).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-722566 recovered above the upper control limit for Acetone and Carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: Outfall 001 (480-222732-1) and Trip Blank (480-222732-2).

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 480-722566 recovered outside control limits for the following analytes: Acetone. The associated samples are impacted: Outfall 001 (480-222732-1) and Trip Blank (480-222732-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: Outfall 001
Lab Sample ID: 480-222732-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.88		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA
Oil & Grease	5.7		4.8	1.3	mg/L	1		1664B	Total/NA

Client Sample ID: Trip Blank
Lab Sample ID: 480-222732-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: Outfall 001
Lab Sample ID: 480-222732-1
Date Collected: 08/20/24 10:15
Matrix: Water
Date Received: 08/21/24 09:55

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			08/21/24 16:16	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			08/21/24 16:16	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			08/21/24 16:16	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			08/21/24 16:16	5
1,1-Dichloroethane	ND		5.0	1.9	ug/L			08/21/24 16:16	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			08/21/24 16:16	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			08/21/24 16:16	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			08/21/24 16:16	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			08/21/24 16:16	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			08/21/24 16:16	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			08/21/24 16:16	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			08/21/24 16:16	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			08/21/24 16:16	5
2-Butanone (MEK)	ND		50	6.6	ug/L			08/21/24 16:16	5
2-Hexanone	ND		25	6.2	ug/L			08/21/24 16:16	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			08/21/24 16:16	5
Acetone	ND	*+ *1	50	15	ug/L			08/21/24 16:16	5
Benzene	ND		5.0	2.1	ug/L			08/21/24 16:16	5
Bromodichloromethane	ND		5.0	2.0	ug/L			08/21/24 16:16	5
Bromoform	ND		5.0	1.3	ug/L			08/21/24 16:16	5
Bromomethane	ND		5.0	3.5	ug/L			08/21/24 16:16	5
Carbon disulfide	ND		5.0	0.95	ug/L			08/21/24 16:16	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			08/21/24 16:16	5
Chlorobenzene	ND		5.0	3.8	ug/L			08/21/24 16:16	5
Dibromochloromethane	ND		5.0	1.6	ug/L			08/21/24 16:16	5
Chloroethane	ND		5.0	1.6	ug/L			08/21/24 16:16	5
Chloroform	ND		5.0	1.7	ug/L			08/21/24 16:16	5
Chloromethane	ND		5.0	1.8	ug/L			08/21/24 16:16	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			08/21/24 16:16	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			08/21/24 16:16	5
Cyclohexane	ND		5.0	0.90	ug/L			08/21/24 16:16	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			08/21/24 16:16	5
Ethylbenzene	ND		5.0	3.7	ug/L			08/21/24 16:16	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			08/21/24 16:16	5
Isopropylbenzene	ND		5.0	4.0	ug/L			08/21/24 16:16	5
Methyl acetate	ND		13	6.5	ug/L			08/21/24 16:16	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			08/21/24 16:16	5
Methylcyclohexane	ND		5.0	0.80	ug/L			08/21/24 16:16	5
Methylene Chloride	ND		5.0	2.2	ug/L			08/21/24 16:16	5
Styrene	ND		5.0	3.7	ug/L			08/21/24 16:16	5
Tetrachloroethene	ND		5.0	1.8	ug/L			08/21/24 16:16	5
Toluene	ND		5.0	2.6	ug/L			08/21/24 16:16	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			08/21/24 16:16	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			08/21/24 16:16	5
Trichloroethene	ND		5.0	2.3	ug/L			08/21/24 16:16	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			08/21/24 16:16	5
Vinyl chloride	ND		5.0	4.5	ug/L			08/21/24 16:16	5
Xylenes, Total	ND		10	3.3	ug/L			08/21/24 16:16	5

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: Outfall 001
Lab Sample ID: 480-222732-1
Date Collected: 08/20/24 10:15
Matrix: Water
Date Received: 08/21/24 09:55

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/21/24 16:16*	*5*
1,2-Dichloroethane-d4 (Surr)	*113*		*77 - 120*		*08/21/24 16:16*	*5*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*08/21/24 16:16*	*5*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*08/21/24 16:16*	*5*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		08/22/24 08:25	08/22/24 22:07	1
Iron	**0.88**		0.050	0.026	mg/L		08/22/24 08:25	08/22/24 22:07	1
Zinc	ND		0.010	0.0068	mg/L		08/22/24 08:25	08/22/24 22:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	**5.7**		4.8	1.3	mg/L		08/22/24 08:56	08/22/24 09:52	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			08/23/24 16:23	1

Client Sample ID: Trip Blank
Lab Sample ID: 480-222732-2
Date Collected: 08/20/24 00:00
Matrix: Water
Date Received: 08/21/24 09:55

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/21/24 16:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/21/24 16:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/21/24 16:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/21/24 16:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/21/24 16:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/21/24 16:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/21/24 16:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/21/24 16:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/21/24 16:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/21/24 16:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/21/24 16:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/21/24 16:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/21/24 16:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/21/24 16:39	1
2-Hexanone	ND		5.0	1.2	ug/L			08/21/24 16:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/21/24 16:39	1
Acetone	ND	*+ *1	10	3.0	ug/L			08/21/24 16:39	1
Benzene	ND		1.0	0.41	ug/L			08/21/24 16:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/21/24 16:39	1
Bromoform	ND		1.0	0.26	ug/L			08/21/24 16:39	1
Bromomethane	ND		1.0	0.69	ug/L			08/21/24 16:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/21/24 16:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/21/24 16:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/21/24 16:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/21/24 16:39	1
Chloroethane	ND		1.0	0.32	ug/L			08/21/24 16:39	1
Chloroform	ND		1.0	0.34	ug/L			08/21/24 16:39	1
Chloromethane	ND		1.0	0.35	ug/L			08/21/24 16:39	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: Trip Blank
Lab Sample ID: 480-222732-2
Date Collected: 08/20/24 00:00
Matrix: Water
Date Received: 08/21/24 09:55

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/21/24 16:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/21/24 16:39	1
Cyclohexane	ND		1.0	0.18	ug/L			08/21/24 16:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/21/24 16:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/21/24 16:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/21/24 16:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/21/24 16:39	1
Methyl acetate	ND		2.5	1.3	ug/L			08/21/24 16:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/21/24 16:39	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/21/24 16:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/21/24 16:39	1
Styrene	ND		1.0	0.73	ug/L			08/21/24 16:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/21/24 16:39	1
Toluene	ND		1.0	0.51	ug/L			08/21/24 16:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/21/24 16:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/21/24 16:39	1
Trichloroethene	ND		1.0	0.46	ug/L			08/21/24 16:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/21/24 16:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/21/24 16:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/21/24 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/21/24 16:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*08/21/24 16:39*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*08/21/24 16:39*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*08/21/24 16:39*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-222732-1	Outfall 001	100	113	101	104
480-222732-2	Trip Blank	99	107	93	102
LCS 480-722566/6	Lab Control Sample	101	110	100	106
LCSD 480-722566/15	Lab Control Sample Dup	103	111	105	107
MB 480-722566/8	Method Blank	102	103	97	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-722566/8
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/21/24 12:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/21/24 12:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/21/24 12:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/21/24 12:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/21/24 12:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/21/24 12:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/21/24 12:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/21/24 12:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/21/24 12:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/21/24 12:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/21/24 12:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/21/24 12:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/21/24 12:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/21/24 12:26	1
2-Hexanone	ND		5.0	1.2	ug/L			08/21/24 12:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/21/24 12:26	1
Acetone	ND		10	3.0	ug/L			08/21/24 12:26	1
Benzene	ND		1.0	0.41	ug/L			08/21/24 12:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/21/24 12:26	1
Bromoform	ND		1.0	0.26	ug/L			08/21/24 12:26	1
Bromomethane	ND		1.0	0.69	ug/L			08/21/24 12:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/21/24 12:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/21/24 12:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/21/24 12:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/21/24 12:26	1
Chloroethane	ND		1.0	0.32	ug/L			08/21/24 12:26	1
Chloroform	ND		1.0	0.34	ug/L			08/21/24 12:26	1
Chloromethane	ND		1.0	0.35	ug/L			08/21/24 12:26	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/21/24 12:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/21/24 12:26	1
Cyclohexane	ND		1.0	0.18	ug/L			08/21/24 12:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/21/24 12:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/21/24 12:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/21/24 12:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/21/24 12:26	1
Methyl acetate	ND		2.5	1.3	ug/L			08/21/24 12:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/21/24 12:26	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/21/24 12:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/21/24 12:26	1
Styrene	ND		1.0	0.73	ug/L			08/21/24 12:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/21/24 12:26	1
Toluene	ND		1.0	0.51	ug/L			08/21/24 12:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/21/24 12:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/21/24 12:26	1
Trichloroethene	ND		1.0	0.46	ug/L			08/21/24 12:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/21/24 12:26	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/21/24 12:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/21/24 12:26	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-722566/8
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*102*		*80 - 120*		*08/21/24 12:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*08/21/24 12:26*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*08/21/24 12:26*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*08/21/24 12:26*	*1*

Lab Sample ID: LCS 480-722566/6
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	29.6		ug/L		118	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.2		ug/L		101	76 - 120
1,1,2-Trichloroethane	25.0	25.7		ug/L		103	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.6		ug/L		110	61 - 148
1,1-Dichloroethane	25.0	25.2		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	25.8		ug/L		103	66 - 127
1,2,4-Trichlorobenzene	25.0	26.4		ug/L		106	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	27.1		ug/L		109	56 - 134
1,2-Dichlorobenzene	25.0	25.9		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	26.9		ug/L		108	75 - 120
1,2-Dichloropropane	25.0	24.7		ug/L		99	76 - 120
1,3-Dichlorobenzene	25.0	25.7		ug/L		103	77 - 120
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 120
2-Butanone (MEK)	125	145		ug/L		116	57 - 140
2-Hexanone	125	136		ug/L		109	65 - 127
4-Methyl-2-pentanone (MIBK)	125	127		ug/L		101	71 - 125
Acetone	125	193	*+	ug/L		154	56 - 142
Benzene	25.0	25.0		ug/L		100	71 - 124
Bromodichloromethane	25.0	26.7		ug/L		107	80 - 122
Bromoform	25.0	22.9		ug/L		92	61 - 132
Bromomethane	25.0	25.6		ug/L		102	55 - 144
Carbon disulfide	25.0	24.4		ug/L		98	59 - 134
Carbon tetrachloride	25.0	32.5		ug/L		130	72 - 134
Chlorobenzene	25.0	25.3		ug/L		101	80 - 120
Dibromochloromethane	25.0	27.7		ug/L		111	75 - 125
Chloroethane	25.0	23.9		ug/L		96	69 - 136
Chloroform	25.0	25.2		ug/L		101	73 - 127
Chloromethane	25.0	23.0		ug/L		92	68 - 124
cis-1,2-Dichloroethene	25.0	25.6		ug/L		103	74 - 124
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	74 - 124
Cyclohexane	25.0	25.1		ug/L		101	59 - 135
Dichlorodifluoromethane	25.0	30.6		ug/L		122	59 - 135
Ethylbenzene	25.0	25.9		ug/L		103	77 - 123
1,2-Dibromoethane	25.0	26.3		ug/L		105	77 - 120
Isopropylbenzene	25.0	26.0		ug/L		104	77 - 122
Methyl acetate	50.0	51.1		ug/L		102	74 - 133
Methyl tert-butyl ether	25.0	28.3		ug/L		113	77 - 120
Methylcyclohexane	25.0	26.7		ug/L		107	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-722566/6
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	27.5		ug/L		110	75 - 124
Styrene	25.0	27.1		ug/L		108	80 - 120
Tetrachloroethene	25.0	26.3		ug/L		105	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	26.2		ug/L		105	73 - 127
trans-1,3-Dichloropropene	25.0	25.4		ug/L		102	80 - 120
Trichloroethene	25.0	25.9		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	25.3		ug/L		101	62 - 150
Vinyl chloride	25.0	25.4		ug/L		102	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*106*		*75 - 123*

Lab Sample ID: LCSD 480-722566/15
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	25.0	29.7		ug/L		119	73 - 126	0	15
1,1,2,2-Tetrachloroethane	25.0	25.2		ug/L		101	76 - 120	0	15
1,1,2-Trichloroethane	25.0	25.6		ug/L		103	76 - 122	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.1		ug/L		108	61 - 148	2	20
1,1-Dichloroethane	25.0	25.0		ug/L		100	77 - 120	0	20
1,1-Dichloroethene	25.0	25.3		ug/L		101	66 - 127	2	16
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	79 - 122	13	20
1,2-Dibromo-3-Chloropropane	25.0	24.9		ug/L		100	56 - 134	9	15
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 124	3	20
1,2-Dichloroethane	25.0	25.7		ug/L		103	75 - 120	5	20
1,2-Dichloropropane	25.0	25.3		ug/L		101	76 - 120	3	20
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	77 - 120	1	20
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	80 - 120	1	20
2-Butanone (MEK)	125	138		ug/L		111	57 - 140	4	20
2-Hexanone	125	131		ug/L		105	65 - 127	4	15
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		97	71 - 125	4	35
Acetone	125	161	*1	ug/L		128	56 - 142	18	15
Benzene	25.0	24.9		ug/L		100	71 - 124	0	13
Bromodichloromethane	25.0	26.5		ug/L		106	80 - 122	1	15
Bromoform	25.0	21.9		ug/L		88	61 - 132	4	15
Bromomethane	25.0	26.4		ug/L		106	55 - 144	3	15
Carbon disulfide	25.0	24.0		ug/L		96	59 - 134	2	15
Carbon tetrachloride	25.0	32.0		ug/L		128	72 - 134	2	15
Chlorobenzene	25.0	25.0		ug/L		100	80 - 120	1	25
Dibromochloromethane	25.0	27.3		ug/L		109	75 - 125	1	15
Chloroethane	25.0	25.4		ug/L		102	69 - 136	6	15
Chloroform	25.0	24.7		ug/L		99	73 - 127	2	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-722566/15
Matrix: Water
Analysis Batch: 722566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloromethane			25.0	22.9		ug/L		92	68 - 124	0	15
cis-1,2-Dichloroethene			25.0	25.5		ug/L		102	74 - 124	1	15
cis-1,3-Dichloropropene			25.0	25.1		ug/L		100	74 - 124	2	15
Cyclohexane			25.0	25.0		ug/L		100	59 - 135	0	20
Dichlorodifluoromethane			25.0	29.6		ug/L		118	59 - 135	3	20
Ethylbenzene			25.0	25.4		ug/L		101	77 - 123	2	15
1,2-Dibromoethane			25.0	25.4		ug/L		101	77 - 120	4	15
Isopropylbenzene			25.0	25.5		ug/L		102	77 - 122	2	20
Methyl acetate			50.0	49.2		ug/L		98	74 - 133	4	20
Methyl tert-butyl ether			25.0	25.8		ug/L		103	77 - 120	9	37
Methylcyclohexane			25.0	26.2		ug/L		105	68 - 134	2	20
Methylene Chloride			25.0	26.3		ug/L		105	75 - 124	4	15
Styrene			25.0	26.5		ug/L		106	80 - 120	2	20
Tetrachloroethene			25.0	25.8		ug/L		103	74 - 122	2	20
Toluene			25.0	24.2		ug/L		97	80 - 122	2	15
trans-1,2-Dichloroethene			25.0	26.1		ug/L		104	73 - 127	0	20
trans-1,3-Dichloropropene			25.0	24.5		ug/L		98	80 - 120	4	15
Trichloroethene			25.0	26.0		ug/L		104	74 - 123	0	16
Trichlorofluoromethane			25.0	26.2		ug/L		105	62 - 150	4	20
Vinyl chloride			25.0	25.5		ug/L		102	65 - 133	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-722648/1-A
Matrix: Water
Analysis Batch: 722859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 722648

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		08/22/24 08:25	08/22/24 21:43	1
Iron	ND		0.050	0.026	mg/L		08/22/24 08:25	08/22/24 21:43	1
Zinc	ND		0.010	0.0068	mg/L		08/22/24 08:25	08/22/24 21:43	1

Lab Sample ID: LCS 480-722648/2-A
Matrix: Water
Analysis Batch: 722859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 722648

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Aluminum			5.10	4.91		mg/L		96	85 - 115		
Iron			5.10	5.38		mg/L		105	85 - 115		
Zinc			0.500	0.545		mg/L		109	85 - 115		

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-722699/1-A
Matrix: Water
Analysis Batch: 722714

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 722699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		08/22/24 08:56	08/22/24 09:52	1

Lab Sample ID: LCS 480-722699/2-A
Matrix: Water
Analysis Batch: 722714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 722699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.0	31.30		mg/L		78	78 - 114

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-722980/1
Matrix: Water
Analysis Batch: 722980

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			08/23/24 16:23	1

Lab Sample ID: LCS 480-722980/2
Matrix: Water
Analysis Batch: 722980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	250	245.2		mg/L		98	88 - 110

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

GC/MS VOA

Analysis Batch: 722566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222732-1	Outfall 001	Total/NA	Water	8260C	
480-222732-2	Trip Blank	Total/NA	Water	8260C	
MB 480-722566/8	Method Blank	Total/NA	Water	8260C	
LCS 480-722566/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-722566/15	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 722648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222732-1	Outfall 001	Total/NA	Water	200.7	
MB 480-722648/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-722648/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 722859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222732-1	Outfall 001	Total/NA	Water	200.7 Rev 4.4	722648
MB 480-722648/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	722648
LCS 480-722648/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	722648

General Chemistry

Prep Batch: 722699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222732-1	Outfall 001	Total/NA	Water	1664B	
MB 480-722699/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-722699/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 722714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222732-1	Outfall 001	Total/NA	Water	1664B	722699
MB 480-722699/1-A	Method Blank	Total/NA	Water	1664B	722699
LCS 480-722699/2-A	Lab Control Sample	Total/NA	Water	1664B	722699

Analysis Batch: 722980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-222732-1	Outfall 001	Total/NA	Water	SM 2540D	
MB 480-722980/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-722980/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Client Sample ID: Outfall 001
Lab Sample ID: 480-222732-1
Date Collected: 08/20/24 10:15
Matrix: Water
Date Received: 08/21/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		5	722566	ERS	EET BUF	08/21/24 16:16
Total/NA	Prep	200.7			722648	EMO	EET BUF	08/22/24 08:25
Total/NA	Analysis	200.7 Rev 4.4		1	722859	BMB	EET BUF	08/22/24 22:07
Total/NA	Prep	1664B			722699	KM	EET BUF	08/22/24 08:56
Total/NA	Analysis	1664B		1	722714	KM	EET BUF	08/22/24 09:52
Total/NA	Analysis	SM 2540D		1	722980	KO	EET BUF	08/23/24 16:23

Client Sample ID: Trip Blank
Lab Sample ID: 480-222732-2
Date Collected: 08/20/24 00:00
Matrix: Water
Date Received: 08/21/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	722566	ERS	EET BUF	08/21/24 16:39

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-222732-1
Project/Site: Frewsburg Site - Monthly Outfall Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-222732-1	Outfall 001	Water	08/20/24 10:15	08/21/24 09:55
480-222732-2	Trip Blank	Water	08/20/24 00:00	08/21/24 09:55

CHAIN OF CUSTODY

Client: New York State Dept. of Environmental Conservation

8/20/24

DEC Site #: 907016

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 415 Lawrence Bell Drive, Williamsville, NY 14221 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com **fax** GESInbox@GESOnline.com **866-902-2187**	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:**	**DEC Lab Callout ID: 142802** **DEC PM: Daminaos Skaros** **Invoice Instructions (Project #/ Phase / Task / Altorg)** **NYSDEC Site No.** 907016 **Lab Project Manager:** Michel Buttrick

Sampler(s) Name:

Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260 - TCLVOCs OLM04.2 list	1664A_calc - oil & grease	200.7 - Total Al, Fe, Zn	2540D - total suspended solids	LAB USE ONLY
	Outfall 001		8/20	1015	MC	WG		3		1	2	1					X	X	X	X	
	Trip Blank		8/20			WG	2	2									X				

480-222732 Chain of Custody

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days _____/_____
- [ ] 1 day RUSH _____/_____
- [ ] Other _____ _____/_____

Laboratory Information

Lab: Pace Analytical Services
Address: 39 Spruce St, East Longmeadow, MA 01028
Phone: 518-608-1036
Lab PM: Michael Buttrick
Lab PM Email:

Please Email the EQ EDD Package to ges@equisonline.com
EQEDD Name: NYSDEC/Buffalo/NY/MainSt/2929-2939_LabReport#.30987.EQEDD.zip

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B" (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [ ] EDD Format _____
- [x] Other NYSDEC EDD FOR NYSDEC EQUIS

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	[signature] to Suzy	8/20 1630	
2	[signature]	8/21 0955	2 [signature] 8/21/24 9955
3	Relinquished By :	Date / Time:	Received By:

Custody Seal Number: [ ] Intact [ ] Preserved where applicable

Temp 4.1 # 1 ICE

8/26/2024

C:\Users\oogiony\Documents\Frewsburg Outfall COC

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-222732-1

Login Number: 222732
List Number: 1
Creator: Stapleton, Kaitlyn

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1 #1 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Groundwater & Environmental Services
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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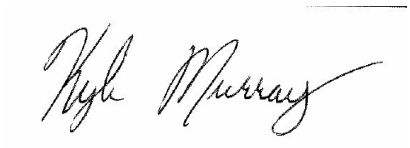
October 22, 2024

Steven Moeller
NYDEC_GES - Amherst, NY
6010 North Bailey Ave., Suite 1
Amherst, NY 14226

Project Location: 300 Falconer Street, Frewsburg, NY
Client Job Number:
Project Number: 907016
Laboratory Work Order Number: 24I4060

Enclosed are results of analyses for samples as received by the laboratory on September 26, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

Table of Contents

Sample Summary 3

Case Narrative 4

Sample Results 6

24I4060-01 6

24I4060-02 10

Sample Preparation Information 12

QC Data 13

Volatile Organic Compounds by GC/MS 13

B387821 13

Metals Analyses (Total) 17

B387663 17

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) 18

B387849 18

B389902 18

Flag/Qualifier Summary 19

Certifications 20

Chain of Custody/Sample Receipt 22

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NYDEC_GES - Amherst, NY
6010 North Bailey Ave., Suite 1
Amherst, NY 14226
ATTN: Steven Moeller

REPORT DATE: 10/22/2024

PURCHASE ORDER NUMBER: 151686

PROJECT NUMBER: 907016

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24I4060

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: 300 Falconer Street, Frewsburg, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Outfall 001	24I4060-01	Ground Water		EPA 1664B	
				EPA 200.7	
				SM21-23 2540D	
				SW-846 8260D	
Trip Blank	24I4060-02	Trip Blank Water		SW-846 8260D	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA 1664B

Qualifications:

H-01

Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Analyte & Samples(s) Qualified:

Oil & Grease (HEM)
24I4060-01[Outfall 001]

SM21-23 2540D

Qualifications:

DL-16

Test results of sample did not achieve the method required minimum yield of 2.5mg of dried residue and for which less than 1L of sample was filtered.

Analyte & Samples(s) Qualified:

Total Suspended Solids
24I4060-01[Outfall 001]

SW-846 8260D

Qualifications:

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

2-Hexanone (MBK)
24I4060-01[Outfall 001], 24I4060-02[Trip Blank], B387821-BLK1, B387821-BS1, B387821-BSD1, S111437-CCV1

Bromoform
24I4060-01[Outfall 001], 24I4060-02[Trip Blank], B387821-BLK1, B387821-BS1, B387821-BSD1, S111437-CCV1

Naphthalene
24I4060-01[Outfall 001], 24I4060-02[Trip Blank], B387821-BLK1, B387821-BS1, B387821-BSD1, S111437-CCV1

V-20

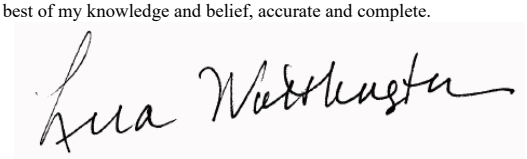
Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Bromomethane
B387821-BS1, B387821-BSD1, S111437-CCV1

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The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 300 Falconer Street, Frewsburg, N Sample Description: Work Order: 24I4060

Date Received: 9/26/2024

Field Sample #: Outfall 001 Sampled: 9/24/2024 10:45

Sample ID: 24I4060-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Bromoform	ND	1.0	0.30	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
2-Hexanone (MBK)	ND	10	1.3	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Methyl Acetate	ND	1.0	0.48	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Naphthalene	ND	2.0	0.25	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 15:23	MFF
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF

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Project Location: 300 Falconer Street, Frewsburg, N Sample Description: Work Order: 24I4060

Date Received: 9/26/2024

Field Sample #: Outfall 001 Sampled: 9/24/2024 10:45

Sample ID: 24I4060-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Vinyl Chloride	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	10/1/24	10/1/24 15:23	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	93.9	70-130		10/1/24 15:23
Toluene-d8	95.3	70-130		10/1/24 15:23
4-Bromofluorobenzene	81.2	70-130		10/1/24 15:23

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 300 Falconer Street, Frewsburg, N Sample Description: Work Order: 24I4060

Date Received: 9/26/2024

Field Sample #: Outfall 001 Sampled: 9/24/2024 10:45

Sample ID: 24I4060-01

Sample Matrix: Ground Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	0.023	mg/L	1		EPA 200.7	10/1/24	10/2/24 18:59	HNN
Iron	0.55	0.050	0.014	mg/L	1		EPA 200.7	10/1/24	10/2/24 18:59	HNN
Zinc	ND	0.010	0.0085	mg/L	1		EPA 200.7	10/1/24	10/2/24 18:59	HNN

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Project Location: 300 Falconer Street, Frewsburg, N Sample Description: Work Order: 24I4060

Date Received: 9/26/2024

Field Sample #: Outfall 001 Sampled: 9/24/2024 10:45

Sample ID: 24I4060-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	5.0	5.0	mg/L	1	DL-16	SM21-23 2540D	10/1/24	10/1/24 19:04	EMF
Oil & Grease (HEM)	1.1	5.0	0.87	mg/L	1	H-01, J	EPA 1664B	10/22/24	10/22/24 11:38	LL

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Project Location: 300 Falconer Street, Frewsburg, N Sample Description: Work Order: 24I4060

Date Received: 9/26/2024

Field Sample #: Trip Blank Sampled: 9/24/2024 00:00

Sample ID: 24I4060-02

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Benzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Bromochloromethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Bromodichloromethane	ND	0.50	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Bromoform	ND	1.0	0.30	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
2-Butanone (MEK)	ND	20	1.4	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
n-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
sec-Butylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
tert-Butylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Carbon Disulfide	ND	5.0	1.5	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Carbon Tetrachloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Chlorobenzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Chlorodibromomethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Chloroethane	ND	2.0	0.46	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Chloroform	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.63	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,2-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,3-Dichlorobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,4-Dichlorobenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.20	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,1-Dichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,2-Dichloroethane	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,1-Dichloroethylene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.20	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,2-Dichloropropane	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
cis-1,3-Dichloropropene	ND	0.50	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Ethylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
2-Hexanone (MBK)	ND	10	1.3	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Methyl Acetate	ND	1.0	0.48	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Methyl Cyclohexane	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Methylene Chloride	ND	5.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.4	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Naphthalene	ND	2.0	0.25	µg/L	1	V-05	SW-846 8260D	10/1/24	10/1/24 12:16	MFF
n-Propylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Styrene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF

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Project Location: 300 Falconer Street, Frewsburg, N Sample Description: Work Order: 24I4060

Date Received: 9/26/2024

Field Sample #: Trip Blank Sampled: 9/24/2024 00:00

Sample ID: 24I4060-02

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.50	0.10	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Toluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.22	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,1,1-Trichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.14	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,2,3-Trichloropropane	ND	2.0	0.27	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Vinyl Chloride	ND	2.0	0.19	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
m+p Xylene	ND	2.0	0.25	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
o-Xylene	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	10/1/24	10/1/24 12:16	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	103	70-130		10/1/24 12:16
Toluene-d8	90.4	70-130		10/1/24 12:16
4-Bromofluorobenzene	86.4	70-130		10/1/24 12:16

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Sample Extraction Data

EPA 1664B

Lab Number [Field ID]	Batch	Initial [mL]	Date
24I4060-01 [Outfall 001]	B389902	1000	10/22/24

Prep Method:EPA 200.7 **Analytical Method:EPA 200.7**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I4060-01 [Outfall 001]	B387663	50.0	50.0	10/01/24

SM21-23 2540D

Lab Number [Field ID]	Batch	Initial [mL]	Date
24I4060-01 [Outfall 001]	B387849	500	10/01/24

Prep Method:SW-846 5030B **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24I4060-01 [Outfall 001]	B387821	5	5.00	10/01/24
24I4060-02 [Trip Blank]	B387821	5	5.00	10/01/24

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B387821 - SW-846 5030B										
Blank (B387821-BLK1)				Prepared & Analyzed: 10/01/24						
Acetone	ND	50	µg/L							
Benzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							V-05
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							V-05
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							V-05
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B387821 - SW-846 5030B											
Blank (B387821-BLK1)				Prepared & Analyzed: 10/01/24							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L								
1,2,3-Trichloropropane	ND	2.0	µg/L								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L								
1,2,4-Trimethylbenzene	ND	1.0	µg/L								
1,3,5-Trimethylbenzene	ND	1.0	µg/L								
Vinyl Chloride	ND	2.0	µg/L								
m+p Xylene	ND	2.0	µg/L								
o-Xylene	ND	1.0	µg/L								
Xylenes (total)	ND	1.0	µg/L								
Surrogate: 1,2-Dichloroethane-d4	*23.8*		µg/L	25.00		95.1	70-130				
Surrogate: Toluene-d8	*23.6*		µg/L	25.00		94.4	70-130				
Surrogate: 4-Bromofluorobenzene	*21.5*		µg/L	25.00		86.1	70-130				
LCS (B387821-BS1)				Prepared & Analyzed: 10/01/24							
Acetone	90.7	50	µg/L	100.0		90.7	70-160				†
Benzene	11.4	1.0	µg/L	10.00		114	70-130				
Bromochloromethane	11.5	1.0	µg/L	10.00		115	70-130				
Bromodichloromethane	10.5	0.50	µg/L	10.00		105	70-130				
Bromoform	8.52	1.0	µg/L	10.00		85.2	70-130			V-05	
Bromomethane	14.7	2.0	µg/L	10.00		147	40-160			V-20	†
2-Butanone (MEK)	98.4	20	µg/L	100.0		98.4	40-160				†
n-Butylbenzene	9.16	1.0	µg/L	10.00		91.6	70-130				
sec-Butylbenzene	9.21	1.0	µg/L	10.00		92.1	70-130				
tert-Butylbenzene	8.78	1.0	µg/L	10.00		87.8	70-130				
Carbon Disulfide	108	5.0	µg/L	100.0		108	70-130				
Carbon Tetrachloride	9.64	5.0	µg/L	10.00		96.4	70-130				
Chlorobenzene	11.4	1.0	µg/L	10.00		114	70-130				
Chlorodibromomethane	9.79	0.50	µg/L	10.00		97.9	70-130				
Chloroethane	10.3	2.0	µg/L	10.00		103	70-130				
Chloroform	11.1	2.0	µg/L	10.00		111	70-130				
Chloromethane	8.75	2.0	µg/L	10.00		87.5	40-160				†
Cyclohexane	10.7	5.0	µg/L	10.00		107	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	8.18	5.0	µg/L	10.00		81.8	70-130				
1,2-Dibromoethane (EDB)	9.77	0.50	µg/L	10.00		97.7	70-130				
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.00		104	70-130				
1,3-Dichlorobenzene	10.6	1.0	µg/L	10.00		106	70-130				
1,4-Dichlorobenzene	9.92	1.0	µg/L	10.00		99.2	70-130				
Dichlorodifluoromethane (Freon 12)	9.41	2.0	µg/L	10.00		94.1	40-160				†
1,1-Dichloroethane	10.3	1.0	µg/L	10.00		103	70-130				
1,2-Dichloroethane	11.5	1.0	µg/L	10.00		115	70-130				
1,1-Dichloroethylene	10.2	1.0	µg/L	10.00		102	70-130				
cis-1,2-Dichloroethylene	10.7	1.0	µg/L	10.00		107	70-130				
trans-1,2-Dichloroethylene	10.0	1.0	µg/L	10.00		100	70-130				
1,2-Dichloropropane	10.3	1.0	µg/L	10.00		103	70-130				
cis-1,3-Dichloropropene	9.41	0.50	µg/L	10.00		94.1	70-130				
trans-1,3-Dichloropropene	9.06	0.50	µg/L	10.00		90.6	70-130				
Ethylbenzene	10.6	1.0	µg/L	10.00		106	70-130				
2-Hexanone (MBK)	80.2	10	µg/L	100.0		80.2	70-160			V-05	†
Isopropylbenzene (Cumene)	9.69	1.0	µg/L	10.00		96.9	70-130				
p-Isopropyltoluene (p-Cymene)	9.29	1.0	µg/L	10.00		92.9	70-130				
Methyl Acetate	9.39	1.0	µg/L	10.00		93.9	70-130				
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	µg/L	10.00		101	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B387821 - SW-846 5030B											
LCS (B387821-BS1)				Prepared & Analyzed: 10/01/24							
Methyl Cyclohexane	10.8	1.0	µg/L	10.00		108	70-130				
Methylene Chloride	10.1	5.0	µg/L	10.00		101	70-130				
4-Methyl-2-pentanone (MIBK)	85.3	10	µg/L	100.0		85.3	70-160				†
Naphthalene	5.88	2.0	µg/L	10.00		58.8	40-130			V-05	†
n-Propylbenzene	10.2	1.0	µg/L	10.00		102	70-130				
Styrene	10.1	1.0	µg/L	10.00		101	70-130				
1,1,2,2-Tetrachloroethane	10.5	0.50	µg/L	10.00		105	70-130				
Tetrachloroethylene	10.4	1.0	µg/L	10.00		104	70-130				
Toluene	10.4	1.0	µg/L	10.00		104	70-130				
1,2,3-Trichlorobenzene	8.66	5.0	µg/L	10.00		86.6	70-130				
1,2,4-Trichlorobenzene	7.96	1.0	µg/L	10.00		79.6	70-130				
1,1,1-Trichloroethane	10.5	1.0	µg/L	10.00		105	70-130				
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.00		108	70-130				
Trichloroethylene	10.2	1.0	µg/L	10.00		102	70-130				
Trichlorofluoromethane (Freon 11)	10.6	2.0	µg/L	10.00		106	70-130				
1,2,3-Trichloropropane	11.8	2.0	µg/L	10.00		118	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.9	1.0	µg/L	10.00		109	70-130				
1,2,4-Trimethylbenzene	9.33	1.0	µg/L	10.00		93.3	70-130				
1,3,5-Trimethylbenzene	10.4	1.0	µg/L	10.00		104	70-130				
Vinyl Chloride	9.96	2.0	µg/L	10.00		99.6	40-160				†
m+p Xylene	21.1	2.0	µg/L	20.00		106	70-130				
o-Xylene	10.0	1.0	µg/L	10.00		100	70-130				
Xylenes (total)	31.1	1.0	µg/L	30.00		104	0-200				
Surrogate: 1,2-Dichloroethane-d4	*25.9*		µg/L	25.00		104	70-130				
Surrogate: Toluene-d8	*25.0*		µg/L	25.00		100	70-130				
Surrogate: 4-Bromofluorobenzene	*25.3*		µg/L	25.00		101	70-130				
LCS Dup (B387821-BSD1)				Prepared & Analyzed: 10/01/24							
Acetone	102	50	µg/L	100.0		102	70-160	11.6	25		†
Benzene	11.1	1.0	µg/L	10.00		111	70-130	3.28	25		
Bromochloromethane	12.1	1.0	µg/L	10.00		121	70-130	4.74	25		
Bromodichloromethane	10.9	0.50	µg/L	10.00		109	70-130	2.99	25		
Bromoform	8.01	1.0	µg/L	10.00		80.1	70-130	6.17	25	V-05	
Bromomethane	14.9	2.0	µg/L	10.00		149	40-160	1.49	25	V-20	†
2-Butanone (MEK)	108	20	µg/L	100.0		108	40-160	9.32	25		†
n-Butylbenzene	9.15	1.0	µg/L	10.00		91.5	70-130	0.109	25		
sec-Butylbenzene	9.56	1.0	µg/L	10.00		95.6	70-130	3.73	25		
tert-Butylbenzene	9.25	1.0	µg/L	10.00		92.5	70-130	5.21	25		
Carbon Disulfide	116	5.0	µg/L	100.0		116	70-130	7.13	25		
Carbon Tetrachloride	9.80	5.0	µg/L	10.00		98.0	70-130	1.65	25		
Chlorobenzene	11.0	1.0	µg/L	10.00		110	70-130	3.47	25		
Chlorodibromomethane	10.1	0.50	µg/L	10.00		101	70-130	3.41	25		
Chloroethane	11.0	2.0	µg/L	10.00		110	70-130	6.20	25		
Chloroform	11.1	2.0	µg/L	10.00		111	70-130	0.00	25		
Chloromethane	8.86	2.0	µg/L	10.00		88.6	40-160	1.25	25		†
Cyclohexane	10.1	5.0	µg/L	10.00		101	70-130	6.05	25		
1,2-Dibromo-3-chloropropane (DBCP)	8.33	5.0	µg/L	10.00		83.3	70-130	1.82	25		
1,2-Dibromoethane (EDB)	10.0	0.50	µg/L	10.00		100	70-130	2.63	25		
1,2-Dichlorobenzene	10.7	1.0	µg/L	10.00		107	70-130	2.55	25		
1,3-Dichlorobenzene	10.7	1.0	µg/L	10.00		107	70-130	0.941	25		
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.00		101	70-130	1.50	25		
Dichlorodifluoromethane (Freon 12)	10.0	2.0	µg/L	10.00		100	40-160	6.28	25		†

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B387821 - SW-846 5030B											
LCS Dup (B387821-BSD1)				Prepared & Analyzed: 10/01/24							
1,1-Dichloroethane	11.3	1.0	µg/L	10.00		113	70-130	9.14	25		
1,2-Dichloroethane	10.5	1.0	µg/L	10.00		105	70-130	9.20	25		
1,1-Dichloroethylene	11.0	1.0	µg/L	10.00		110	70-130	7.67	25		
cis-1,2-Dichloroethylene	11.7	1.0	µg/L	10.00		117	70-130	9.29	25		
trans-1,2-Dichloroethylene	10.6	1.0	µg/L	10.00		106	70-130	4.95	25		
1,2-Dichloropropane	10.5	1.0	µg/L	10.00		105	70-130	1.92	25		
cis-1,3-Dichloropropene	9.77	0.50	µg/L	10.00		97.7	70-130	3.75	25		
trans-1,3-Dichloropropene	8.82	0.50	µg/L	10.00		88.2	70-130	2.68	25		
Ethylbenzene	10.0	1.0	µg/L	10.00		100	70-130	5.81	25		
2-Hexanone (MBK)	85.0	10	µg/L	100.0		85.0	70-160	5.81	25	V-05	†
Isopropylbenzene (Cumene)	9.32	1.0	µg/L	10.00		93.2	70-130	3.89	25		
p-Isopropyltoluene (p-Cymene)	9.53	1.0	µg/L	10.00		95.3	70-130	2.55	25		
Methyl Acetate	10.2	1.0	µg/L	10.00		102	70-130	7.88	25		
Methyl tert-Butyl Ether (MTBE)	10.6	1.0	µg/L	10.00		106	70-130	4.66	25		
Methyl Cyclohexane	10.6	1.0	µg/L	10.00		106	70-130	1.40	25		
Methylene Chloride	10.7	5.0	µg/L	10.00		107	70-130	5.29	25		
4-Methyl-2-pentanone (MIBK)	88.7	10	µg/L	100.0		88.7	70-160	3.95	25		†
Naphthalene	5.62	2.0	µg/L	10.00		56.2	40-130	4.52	25	V-05	†
n-Propylbenzene	9.90	1.0	µg/L	10.00		99.0	70-130	3.47	25		
Styrene	9.31	1.0	µg/L	10.00		93.1	70-130	8.53	25		
1,1,2,2-Tetrachloroethane	9.90	0.50	µg/L	10.00		99.0	70-130	6.17	25		
Tetrachloroethylene	10.9	1.0	µg/L	10.00		109	70-130	4.49	25		
Toluene	10.9	1.0	µg/L	10.00		109	70-130	4.59	25		
1,2,3-Trichlorobenzene	9.06	5.0	µg/L	10.00		90.6	70-130	4.51	25		
1,2,4-Trichlorobenzene	8.19	1.0	µg/L	10.00		81.9	70-130	2.85	25		
1,1,1-Trichloroethane	10.4	1.0	µg/L	10.00		104	70-130	1.63	25		
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.00		110	70-130	2.38	25		
Trichloroethylene	10.7	1.0	µg/L	10.00		107	70-130	4.51	25		
Trichlorofluoromethane (Freon 11)	11.6	2.0	µg/L	10.00		116	70-130	8.19	25		
1,2,3-Trichloropropane	11.7	2.0	µg/L	10.00		117	70-130	0.511	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.8	1.0	µg/L	10.00		118	70-130	7.56	25		
1,2,4-Trimethylbenzene	9.62	1.0	µg/L	10.00		96.2	70-130	3.06	25		
1,3,5-Trimethylbenzene	9.76	1.0	µg/L	10.00		97.6	70-130	5.96	25		
Vinyl Chloride	10.6	2.0	µg/L	10.00		106	40-160	6.70	25		†
m+p Xylene	20.2	2.0	µg/L	20.00		101	70-130	4.26	25		
o-Xylene	9.33	1.0	µg/L	10.00		93.3	70-130	7.03	25		
Xylenes (total)	29.6	1.0	µg/L	30.00		98.5	0-200	5.14			
Surrogate: 1,2-Dichloroethane-d4	*25.5*		µg/L	25.00		102	70-130				
Surrogate: Toluene-d8	*26.7*		µg/L	25.00		107	70-130				
Surrogate: 4-Bromofluorobenzene	*24.1*		µg/L	25.00		96.5	70-130				

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B387663 - EPA 200.7										
Blank (B387663-BLK1)				Prepared: 10/01/24 Analyzed: 10/02/24						
Aluminum	ND	0.050	mg/L							
Iron	0.016	0.050	mg/L							J
Blank (B387663-BLK2)				Prepared: 10/01/24 Analyzed: 10/03/24						
Zinc	ND	0.010	mg/L							
LCS (B387663-BS1)				Prepared: 10/01/24 Analyzed: 10/02/24						
Aluminum	4.41	0.050	mg/L	4.500		98.0	85-115			
Iron	4.75	0.050	mg/L	4.500		106	85-115			
Zinc	0.535	0.010	mg/L	0.5000		107	85-115			
LCS Dup (B387663-BSD1)				Prepared: 10/01/24 Analyzed: 10/02/24						
Aluminum	4.40	0.050	mg/L	4.500		97.7	85-115	0.360	20	
Iron	4.92	0.050	mg/L	4.500		109	85-115	3.57	20	
Zinc	0.521	0.010	mg/L	0.5000		104	85-115	2.68	20	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B387849 - SM21-23 2540D										
Blank (B387849-BLK1)				Prepared & Analyzed: 10/01/24						
Total Suspended Solids	ND	2.5	mg/L							
LCS (B387849-BS1)				Prepared & Analyzed: 10/01/24						
Total Suspended Solids	208	25	mg/L	200.0		104	51.5-130			
Batch B389902 - EPA 1664B										
Blank (B389902-BLK1)				Prepared & Analyzed: 10/22/24						
Oil & Grease (HEM)	ND	5.0	mg/L							
Blank (B389902-BLK2)				Prepared & Analyzed: 10/22/24						
Oil & Grease (HEM)	ND	91	mg/L							
LCS (B389902-BS1)				Prepared & Analyzed: 10/22/24						
Oil & Grease (HEM)	20	5.0	mg/L	20.00		99.0	78-114			
LCS (B389902-BS2)				Prepared & Analyzed: 10/22/24						
Oil & Grease (HEM)	280	91	mg/L	363.6		78.0	78-114			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
DL-16	Test results of sample did not achieve the method required minimum yield of 2.5mg of dried residue and for which less than 1L of sample was filtered.
H-01	Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 1664B in Water	
Oil & Grease (HEM)	CT,MA,NH,NY,RI,NC,ME,VA
EPA 200.7 in Water	
Aluminum	CT,NY,MA,NH,RI,NC,ME,VA
Iron	CT,MA,NH,NY,RI,NC,ME,VA
Zinc	CT,MA,NH,NY,RI,NC,ME,VA
SM21-23 2540D in Water	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
Cyclohexane	ME,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Ethylbenzene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2025
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2025
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2025
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024

24I4060 KAM 9/24/24

CHAIN OF CUSTODY

Client: New York State Dept. of Environmental Conservation

DEC Site #: 907016

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 415 Lawrence Bell Drive, Williamsville, NY 14221 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax GESInbox@GESOnline.com 866-902-2187	**Project Name:** NYSDEC/Frewsburg/NY/Falcone St/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:**	**DEC Lab Callout ID:** ~~142802~~-- 151686 **DEC PM:** Daminaos Skaros **Invoice Instructions (Project #/ Phase / Task / Altorg)** **NYSDEC Site No.** 907016 **Lab Project Manager:** Michel Buttrick

Sampler(s) Name:

Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260 - TCLVOCs OLM04.2 list	1664A_calc - oil & grease	200.7 - Total Al, Fe, Zn	2540D - total suspended solids	LAB USE ONLY
1	Outfall 001		9/24	1045	WR	WG	7	3		1	2	1					X	X	X	X	
2	Trip Blank		9/24			WG	2	2									X				

Turnaround Time (Business Days) **Approved By (Lab PM) / Date**

- ☑ Standard 14 Days
- ☐ 1 day RUSH
- ☐ Other _____

Laboratory Information

Lab: Pace Analytical Services
Address: 39 Spruce St, East Longmeadow, MA 01028
Phone: 518-608-1036
Lab PM: Michael Buttrick
Lab PM Email:

Data Deliverable Information

- ☐ Commercial 'A' (Level 1) = Results Only
- ☐ Commercial 'B' (Level 2) = Results + QC Summary
- ☐ FULLT1 (Level 3 & 4)
- ☐ NJ Reduced = Results + QC Summary + Partial Raw Data
- ☐ Commercial 'C'
- ☐ *NJ Data of Known Quality Protocol Reporting*
- ☐ NYASP Category A
- ☑ NYASP Category B
- ☐ State Forms
- ☐ EDD Format _____
- ☑ Other NYSDEC EDD FOR NYSDEC EQUIS

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Buffalo/NY/MainSt/2929-2939_LabReport#.30987.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	[illegible] to fedex	9/24 1630	B. M. Kolen / GES 9/25/200
2	B. Mikolin / GES	9/25 1240	Jocelyn Flory (PACE) 9/25/24 12:40
3	Jocelyn Flory (PACE)	9/25/24 12:40	Buffalo Service Center 9/25/24 12:40

Custody Seal Number: ☐ Intact ☐ Preserved where applicable

Russell B Bixby 9-25-24 1603 Temp: 1.8/2.0 9/26/24 13:17

Table of Contents

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist
	Effective Date: 06/11/2024

Log In Back-Sheet

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

Client Ground water & Environmental Services, Inc.

Project NYSDEC / Frewsburg / NY / Falconer St / 300

MCP/RCP Required N/A

Deliverable Package Requirement Cat. B NYSDEC EDD Equis

Location 300 Falconer Street, Frewsburg, NY

PWSID# (When Applicable) N/A

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐ _____

Received By / Date / Time RL / 9-26 / 24 / 13:17

Back-Sheet By / Date / Time RL / 9-27-24 / 15:06

Temperature Method gun # 6

WV samples: Yes (see note*) / No (follow normal procedure)

Temp < 6° C Actual Temperature 1.8 / 2.0

Rush Samples: Yes / No Notify _____

Short Hold: Yes / No Notify _____

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☑	☑ RL
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client ☑ Analysis ☑ Sampler Name ☐

Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: N/A ☑ ☐

Notes regarding Samples/COC outside of SOP:

Additional Container Notes

**Note: West Virginia requires all samples to have their temperature taken. Note any outliers.*

Qualtrax ID: 120836

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-ELON-0001 v08_Sample Receiving Checklist

Effective Date: 06/11/2024

Sample	Soils Jars (Circle Amb/Clear)				Ambers							Plastics										VOA Vials					Other / Fill in					
					1 Liter			250ml			100mL	1 Liter		500mL		250mL																
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Sulfuric	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric	NaOH	Ammonium Acetate	NaOH/Zinc	Unpreserved	HCl	MeOH	D.I. Water	BiSulfate	Col/Bact					
1							2					1							1					3								
2																								3								
3																																
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Page 2 of 2

Qualtrax ID: 120836

Table of Contents

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 10/23/2024 8:18:10 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-224434-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Eurofins Buffalo

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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10/23/2024 8:18:10 AM

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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 15
Lab Chronicle 16
Certification Summary 17
Method Summary 18
Sample Summary 19
Chain of Custody 20
Receipt Checklists 21

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-224434-1 Eurofins Buffalo

Job Narrative
480-224434-1

Receipt
The samples were received on 10/16/2024 2:23 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-728728 recovered outside acceptance criteria, low biased, for Vinyl Chloride and Chloromethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported. The associated samples are impacted: OUTFALL 001 (480-224434-1) and TRIP BLANK (480-224434-2).

Method 8260C: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for analytical batch 480-728728 recovered outside control limits for the following analyte(s): Dichlorodifluoromethane. Dichlorodifluoromethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The associated samples are impacted: OUTFALL 001 (480-224434-1) and TRIP BLANK (480-224434-2).

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: OUTFALL 001 (480-224434-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-224434-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.20		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA
Oil & Grease	1.6	J	4.8	1.3	mg/L	1		1664B	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224434-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-224434-1
Date Collected: 10/15/24 13:45
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			10/18/24 07:27	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			10/18/24 07:27	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			10/18/24 07:27	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			10/18/24 07:27	5
1,1-Dichloroethane	ND		5.0	1.9	ug/L			10/18/24 07:27	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			10/18/24 07:27	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			10/18/24 07:27	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			10/18/24 07:27	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			10/18/24 07:27	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			10/18/24 07:27	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			10/18/24 07:27	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			10/18/24 07:27	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			10/18/24 07:27	5
2-Butanone (MEK)	ND		50	6.6	ug/L			10/18/24 07:27	5
2-Hexanone	ND		25	6.2	ug/L			10/18/24 07:27	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			10/18/24 07:27	5
Acetone	ND		50	15	ug/L			10/18/24 07:27	5
Benzene	ND		5.0	2.1	ug/L			10/18/24 07:27	5
Bromodichloromethane	ND		5.0	2.0	ug/L			10/18/24 07:27	5
Bromoform	ND		5.0	1.3	ug/L			10/18/24 07:27	5
Bromomethane	ND		5.0	3.5	ug/L			10/18/24 07:27	5
Carbon disulfide	ND		5.0	0.95	ug/L			10/18/24 07:27	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			10/18/24 07:27	5
Chlorobenzene	ND		5.0	3.8	ug/L			10/18/24 07:27	5
Dibromochloromethane	ND		5.0	1.6	ug/L			10/18/24 07:27	5
Chloroethane	ND		5.0	1.6	ug/L			10/18/24 07:27	5
Chloroform	ND		5.0	1.7	ug/L			10/18/24 07:27	5
Chloromethane	ND		5.0	1.8	ug/L			10/18/24 07:27	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			10/18/24 07:27	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			10/18/24 07:27	5
Cyclohexane	ND		5.0	0.90	ug/L			10/18/24 07:27	5
Dichlorodifluoromethane	ND	*-	5.0	3.4	ug/L			10/18/24 07:27	5
Ethylbenzene	ND		5.0	3.7	ug/L			10/18/24 07:27	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			10/18/24 07:27	5
Isopropylbenzene	ND		5.0	4.0	ug/L			10/18/24 07:27	5
Methyl acetate	ND		13	6.5	ug/L			10/18/24 07:27	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			10/18/24 07:27	5
Methylcyclohexane	ND		5.0	0.80	ug/L			10/18/24 07:27	5
Methylene Chloride	ND		5.0	2.2	ug/L			10/18/24 07:27	5
Styrene	ND		5.0	3.7	ug/L			10/18/24 07:27	5
Tetrachloroethene	ND		5.0	1.8	ug/L			10/18/24 07:27	5
Toluene	ND		5.0	2.6	ug/L			10/18/24 07:27	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			10/18/24 07:27	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			10/18/24 07:27	5
Trichloroethene	ND		5.0	2.3	ug/L			10/18/24 07:27	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			10/18/24 07:27	5
Vinyl chloride	ND		5.0	4.5	ug/L			10/18/24 07:27	5
Xylenes, Total	ND		10	3.3	ug/L			10/18/24 07:27	5

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-224434-1
Date Collected: 10/15/24 13:45
Matrix: Water
Date Received: 10/16/24 14:23

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*111*		*80 - 120*		*10/18/24 07:27*	*5*
1,2-Dichloroethane-d4 (Surr)	*119*		*77 - 120*		*10/18/24 07:27*	*5*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*10/18/24 07:27*	*5*
Dibromofluoromethane (Surr)	*116*		*75 - 123*		*10/18/24 07:27*	*5*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		10/18/24 09:09	10/18/24 20:07	1
Iron	**0.20**		0.050	0.026	mg/L		10/18/24 09:09	10/18/24 20:07	1
Zinc	ND		0.010	0.0068	mg/L		10/18/24 09:09	10/18/24 20:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	**1.6**	**J**	4.8	1.3	mg/L		10/19/24 08:24	10/19/24 09:59	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			10/19/24 16:21	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224434-2
Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/18/24 07:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/18/24 07:49	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/18/24 07:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/18/24 07:49	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/18/24 07:49	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/18/24 07:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 07:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/18/24 07:49	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/18/24 07:49	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/18/24 07:49	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/18/24 07:49	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/18/24 07:49	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/18/24 07:49	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/18/24 07:49	1
2-Hexanone	ND		5.0	1.2	ug/L			10/18/24 07:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/18/24 07:49	1
Acetone	ND		10	3.0	ug/L			10/18/24 07:49	1
Benzene	ND		1.0	0.41	ug/L			10/18/24 07:49	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/18/24 07:49	1
Bromoform	ND		1.0	0.26	ug/L			10/18/24 07:49	1
Bromomethane	ND		1.0	0.69	ug/L			10/18/24 07:49	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/18/24 07:49	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/18/24 07:49	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/18/24 07:49	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/18/24 07:49	1
Chloroethane	ND		1.0	0.32	ug/L			10/18/24 07:49	1
Chloroform	ND		1.0	0.34	ug/L			10/18/24 07:49	1
Chloromethane	ND		1.0	0.35	ug/L			10/18/24 07:49	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224434-2
Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 14:23

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/18/24 07:49	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/18/24 07:49	1
Cyclohexane	ND		1.0	0.18	ug/L			10/18/24 07:49	1
Dichlorodifluoromethane	ND	*-	1.0	0.68	ug/L			10/18/24 07:49	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/18/24 07:49	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/18/24 07:49	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/18/24 07:49	1
Methyl acetate	ND		2.5	1.3	ug/L			10/18/24 07:49	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/18/24 07:49	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/18/24 07:49	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/18/24 07:49	1
Styrene	ND		1.0	0.73	ug/L			10/18/24 07:49	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/18/24 07:49	1
Toluene	ND		1.0	0.51	ug/L			10/18/24 07:49	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/18/24 07:49	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/18/24 07:49	1
Trichloroethene	ND		1.0	0.46	ug/L			10/18/24 07:49	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/18/24 07:49	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/18/24 07:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/18/24 07:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*80 - 120*		*10/18/24 07:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*77 - 120*		*10/18/24 07:49*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*10/18/24 07:49*	*1*
Dibromofluoromethane (Surr)	*111*		*75 - 123*		*10/18/24 07:49*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-224434-1	OUTFALL 001	111	119	99	116
480-224434-2	TRIP BLANK	110	116	102	111
LCS 480-728728/6	Lab Control Sample	109	110	100	107
MB 480-728728/8	Method Blank	112	118	99	111

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-728728/8
Matrix: Water
Analysis Batch: 728728

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/18/24 01:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/18/24 01:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/18/24 01:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/18/24 01:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/18/24 01:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/18/24 01:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 01:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/18/24 01:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/18/24 01:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/18/24 01:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/18/24 01:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/18/24 01:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/18/24 01:27	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/18/24 01:27	1
2-Hexanone	ND		5.0	1.2	ug/L			10/18/24 01:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/18/24 01:27	1
Acetone	ND		10	3.0	ug/L			10/18/24 01:27	1
Benzene	ND		1.0	0.41	ug/L			10/18/24 01:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/18/24 01:27	1
Bromoform	ND		1.0	0.26	ug/L			10/18/24 01:27	1
Bromomethane	ND		1.0	0.69	ug/L			10/18/24 01:27	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/18/24 01:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/18/24 01:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/18/24 01:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/18/24 01:27	1
Chloroethane	ND		1.0	0.32	ug/L			10/18/24 01:27	1
Chloroform	ND		1.0	0.34	ug/L			10/18/24 01:27	1
Chloromethane	ND		1.0	0.35	ug/L			10/18/24 01:27	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/18/24 01:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/18/24 01:27	1
Cyclohexane	ND		1.0	0.18	ug/L			10/18/24 01:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/18/24 01:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/18/24 01:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/18/24 01:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/18/24 01:27	1
Methyl acetate	ND		2.5	1.3	ug/L			10/18/24 01:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/18/24 01:27	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/18/24 01:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/18/24 01:27	1
Styrene	ND		1.0	0.73	ug/L			10/18/24 01:27	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/18/24 01:27	1
Toluene	ND		1.0	0.51	ug/L			10/18/24 01:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/18/24 01:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/18/24 01:27	1
Trichloroethene	ND		1.0	0.46	ug/L			10/18/24 01:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/18/24 01:27	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/18/24 01:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/18/24 01:27	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-728728/8
Matrix: Water
Analysis Batch: 728728

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*112*		*80 - 120*		*10/18/24 01:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*77 - 120*		*10/18/24 01:27*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*10/18/24 01:27*	*1*
Dibromofluoromethane (Surr)	*111*		*75 - 123*		*10/18/24 01:27*	*1*

Lab Sample ID: LCS 480-728728/6
Matrix: Water
Analysis Batch: 728728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	23.8		ug/L		95	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.5		ug/L		106	76 - 120
1,1,2-Trichloroethane	25.0	26.2		ug/L		105	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.4		ug/L		90	61 - 148
1,1-Dichloroethane	25.0	23.2		ug/L		93	77 - 120
1,1-Dichloroethene	25.0	21.9		ug/L		88	66 - 127
1,2,4-Trichlorobenzene	25.0	28.4		ug/L		114	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.7		ug/L		103	56 - 134
1,2-Dichlorobenzene	25.0	26.8		ug/L		107	80 - 124
1,2-Dichloroethane	25.0	25.0		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	26.8		ug/L		107	76 - 120
1,3-Dichlorobenzene	25.0	26.4		ug/L		105	77 - 120
1,4-Dichlorobenzene	25.0	26.4		ug/L		105	80 - 120
2-Butanone (MEK)	125	135		ug/L		108	57 - 140
2-Hexanone	125	131		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	71 - 125
Acetone	125	116		ug/L		93	56 - 142
Benzene	25.0	25.2		ug/L		101	71 - 124
Bromodichloromethane	25.0	24.5		ug/L		98	80 - 122
Bromoform	25.0	24.3		ug/L		97	61 - 132
Bromomethane	25.0	17.6		ug/L		70	55 - 144
Carbon disulfide	25.0	21.2		ug/L		85	59 - 134
Carbon tetrachloride	25.0	24.5		ug/L		98	72 - 134
Chlorobenzene	25.0	25.8		ug/L		103	80 - 120
Dibromochloromethane	25.0	25.8		ug/L		103	75 - 125
Chloroethane	25.0	18.4		ug/L		74	69 - 136
Chloroform	25.0	21.3		ug/L		85	73 - 127
Chloromethane	25.0	17.1		ug/L		68	68 - 124
cis-1,2-Dichloroethene	25.0	24.9		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	74 - 124
Cyclohexane	25.0	22.2		ug/L		89	59 - 135
Dichlorodifluoromethane	25.0	14.4	*-	ug/L		58	59 - 135
Ethylbenzene	25.0	25.2		ug/L		101	77 - 123
1,2-Dibromoethane	25.0	27.0		ug/L		108	77 - 120
Isopropylbenzene	25.0	27.0		ug/L		108	77 - 122
Methyl acetate	50.0	52.0		ug/L		104	74 - 133
Methyl tert-butyl ether	25.0	23.2		ug/L		93	77 - 120
Methylcyclohexane	25.0	24.2		ug/L		97	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-728728/6
Matrix: Water
Analysis Batch: 728728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	22.4		ug/L		90	75 - 124
Styrene	25.0	26.1		ug/L		104	80 - 120
Tetrachloroethene	25.0	26.7		ug/L		107	74 - 122
Toluene	25.0	25.7		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	23.5		ug/L		94	73 - 127
trans-1,3-Dichloropropene	25.0	27.0		ug/L		108	80 - 120
Trichloroethene	25.0	24.3		ug/L		97	74 - 123
Trichlorofluoromethane	25.0	18.9		ug/L		76	62 - 150
Vinyl chloride	25.0	16.2		ug/L		65	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*109*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-728745/1-A
Matrix: Water
Analysis Batch: 729007

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 728745

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		10/18/24 09:09	10/18/24 19:06	1
Iron	ND		0.050	0.026	mg/L		10/18/24 09:09	10/18/24 19:06	1
Zinc	ND		0.010	0.0068	mg/L		10/18/24 09:09	10/18/24 19:06	1

Lab Sample ID: LCS 480-728745/2-A
Matrix: Water
Analysis Batch: 729007

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 728745

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	4.89		mg/L		96	85 - 115
Iron	5.10	5.43		mg/L		107	85 - 115
Zinc	0.500	0.560		mg/L		112	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-728937/1-A
Matrix: Water
Analysis Batch: 728953

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 728937

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		10/19/24 08:24	10/19/24 09:59	1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 480-728937/2-A
Matrix: Water
Analysis Batch: 728953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 728937

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Oil & Grease			40.0	34.80		mg/L		87	78 - 114		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-728995/1
Matrix: Water
Analysis Batch: 728995

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			10/19/24 16:21	1

Lab Sample ID: LCS 480-728995/2
Matrix: Water
Analysis Batch: 728995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			252	245.2		mg/L		97	88 - 110		

Lab Sample ID: 480-224434-1 DU
Matrix: Water
Analysis Batch: 728995

Client Sample ID: OUTFALL 001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 728728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224434-1	OUTFALL 001	Total/NA	Water	8260C	
480-224434-2	TRIP BLANK	Total/NA	Water	8260C	
MB 480-728728/8	Method Blank	Total/NA	Water	8260C	
LCS 480-728728/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 728745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224434-1	OUTFALL 001	Total/NA	Water	200.7	
MB 480-728745/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-728745/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 729007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224434-1	OUTFALL 001	Total/NA	Water	200.7 Rev 4.4	728745
MB 480-728745/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	728745
LCS 480-728745/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	728745

General Chemistry

Prep Batch: 728937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224434-1	OUTFALL 001	Total/NA	Water	1664B	
MB 480-728937/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-728937/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 728953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224434-1	OUTFALL 001	Total/NA	Water	1664B	728937
MB 480-728937/1-A	Method Blank	Total/NA	Water	1664B	728937
LCS 480-728937/2-A	Lab Control Sample	Total/NA	Water	1664B	728937

Analysis Batch: 728995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-224434-1	OUTFALL 001	Total/NA	Water	SM 2540D	
MB 480-728995/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-728995/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-224434-1 DU	OUTFALL 001	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-224434-1
Date Collected: 10/15/24 13:45
Matrix: Water
Date Received: 10/16/24 14:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		5	728728	AD	EET BUF	10/18/24 07:27
Total/NA	Prep	200.7			728745	EMO	EET BUF	10/18/24 09:09
Total/NA	Analysis	200.7 Rev 4.4		1	729007	BMB	EET BUF	10/18/24 20:07
Total/NA	Prep	1664B			728937	KM	EET BUF	10/19/24 08:24
Total/NA	Analysis	1664B		1	728953	KM	EET BUF	10/19/24 09:59
Total/NA	Analysis	SM 2540D		1	728995	KO	EET BUF	10/19/24 16:21

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-224434-2
Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 14:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	728728	AD	EET BUF	10/18/24 07:49

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-224434-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-224434-1	OUTFALL 001	Water	10/15/24 13:45	10/16/24 14:23
480-224434-2	TRIP BLANK	Water	10/15/24 00:00	10/16/24 14:23

CHAIN OF CUSTODY

~~10/15~~ 10/15/24

Client: New York State Dept. of Environn

PAGE 1 OF 1

FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax #N/A **866-902-2187**	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name:	Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	2540D - Total Suspended Solids	LAB USE ONLY
	Outfall 001	NA	10/15	1345	MR	WG	7	3		1	2	1					X	X	X	X	
	Trip Blank	NA	10/15	–		WG	2	2									X				

480-224434 Chain of Custody

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days _____/_____
- [ ] 1 day RUSH _____/_____
- [ ] Other _____ _____/_____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	[signature] to fridge	10/15/24 1630	
2	Relinquished By :	Date / Time:	Received By:
3	Relinquished By :	Date / Time:	Received By: [signature] 10/16/24 ~~1630~~ 1423

Custody Seal Number: [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice **Cooler Temp** _____

3.9 IR#5 ice

N:\Buffalo\Projects\Projects\NYSDEC Contract\PROJECTS\Frewsburg, Former Vac-Air Specialty Alloys\Old Data Tables\Archive\Ogiony\Frewsburg PSID with COC

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-224434-1

Login Number: 224434
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 11/13/2024 8:46:00 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-225228-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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11/13/2024 8:46:00 AM

Authorized for release by
John Beninati, Project Manager I
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 15
Lab Chronicle 16
Certification Summary 17
Method Summary 18
Sample Summary 19
Chain of Custody 20
Receipt Checklists 21

Definitions/Glossary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-225228-1 Eurofins Buffalo

Job Narrative
480-225228-1

Receipt
The samples were received on 11/5/2024 3:20 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.8º C.

GC/MS VOA
Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: Outfall 001 (480-225228-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Outfall 001
Lab Sample ID: 480-225228-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.067		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: Trip Blank
Lab Sample ID: 480-225228-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Outfall 001
Lab Sample ID: 480-225228-1
Date Collected: 11/05/24 12:45
Matrix: Water
Date Received: 11/05/24 15:20

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			11/12/24 02:02	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			11/12/24 02:02	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			11/12/24 02:02	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			11/12/24 02:02	5
1,1-Dichloroethane	ND		5.0	1.9	ug/L			11/12/24 02:02	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			11/12/24 02:02	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			11/12/24 02:02	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			11/12/24 02:02	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			11/12/24 02:02	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			11/12/24 02:02	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			11/12/24 02:02	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			11/12/24 02:02	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			11/12/24 02:02	5
2-Butanone (MEK)	ND		50	6.6	ug/L			11/12/24 02:02	5
2-Hexanone	ND		25	6.2	ug/L			11/12/24 02:02	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			11/12/24 02:02	5
Acetone	ND		50	15	ug/L			11/12/24 02:02	5
Benzene	ND		5.0	2.1	ug/L			11/12/24 02:02	5
Bromodichloromethane	ND		5.0	2.0	ug/L			11/12/24 02:02	5
Bromoform	ND		5.0	1.3	ug/L			11/12/24 02:02	5
Bromomethane	ND		5.0	3.5	ug/L			11/12/24 02:02	5
Carbon disulfide	ND		5.0	0.95	ug/L			11/12/24 02:02	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			11/12/24 02:02	5
Chlorobenzene	ND		5.0	3.8	ug/L			11/12/24 02:02	5
Dibromochloromethane	ND		5.0	1.6	ug/L			11/12/24 02:02	5
Chloroethane	ND		5.0	1.6	ug/L			11/12/24 02:02	5
Chloroform	ND		5.0	1.7	ug/L			11/12/24 02:02	5
Chloromethane	ND		5.0	1.8	ug/L			11/12/24 02:02	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			11/12/24 02:02	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			11/12/24 02:02	5
Cyclohexane	ND		5.0	0.90	ug/L			11/12/24 02:02	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			11/12/24 02:02	5
Ethylbenzene	ND		5.0	3.7	ug/L			11/12/24 02:02	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			11/12/24 02:02	5
Isopropylbenzene	ND		5.0	4.0	ug/L			11/12/24 02:02	5
Methyl acetate	ND		13	6.5	ug/L			11/12/24 02:02	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			11/12/24 02:02	5
Methylcyclohexane	ND		5.0	0.80	ug/L			11/12/24 02:02	5
Methylene Chloride	ND		5.0	2.2	ug/L			11/12/24 02:02	5
Styrene	ND		5.0	3.7	ug/L			11/12/24 02:02	5
Tetrachloroethene	ND		5.0	1.8	ug/L			11/12/24 02:02	5
Toluene	ND		5.0	2.6	ug/L			11/12/24 02:02	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			11/12/24 02:02	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			11/12/24 02:02	5
Trichloroethene	ND		5.0	2.3	ug/L			11/12/24 02:02	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			11/12/24 02:02	5
Vinyl chloride	ND		5.0	4.5	ug/L			11/12/24 02:02	5
Xylenes, Total	ND		10	3.3	ug/L			11/12/24 02:02	5

Client Sample ID: Outfall 001

Lab Sample ID: 480-225228-1

Date Collected: 11/05/24 12:45

Matrix: Water

Date Received: 11/05/24 15:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*85*		*80 - 120*		*11/12/24 02:02*	*5*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*		*11/12/24 02:02*	*5*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*11/12/24 02:02*	*5*
Dibromofluoromethane (Surr)	*87*		*75 - 123*		*11/12/24 02:02*	*5*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		11/08/24 10:55	11/08/24 16:26	1
Iron	**0.067**		0.050	0.026	mg/L		11/08/24 10:55	11/08/24 16:26	1
Zinc	ND		0.010	0.0068	mg/L		11/08/24 10:55	11/08/24 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	ND		4.7	1.3	mg/L		11/08/24 08:36	11/08/24 09:57	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/11/24 14:27	1

Client Sample ID: Trip Blank

Lab Sample ID: 480-225228-2

Date Collected: 11/05/24 00:00

Matrix: Water

Date Received: 11/05/24 15:20

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/12/24 02:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/12/24 02:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/12/24 02:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/12/24 02:24	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/12/24 02:24	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/12/24 02:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/12/24 02:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/12/24 02:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/12/24 02:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/12/24 02:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/12/24 02:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/12/24 02:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/12/24 02:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/12/24 02:24	1
2-Hexanone	ND		5.0	1.2	ug/L			11/12/24 02:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/12/24 02:24	1
Acetone	ND		10	3.0	ug/L			11/12/24 02:24	1
Benzene	ND		1.0	0.41	ug/L			11/12/24 02:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/12/24 02:24	1
Bromoform	ND		1.0	0.26	ug/L			11/12/24 02:24	1
Bromomethane	ND		1.0	0.69	ug/L			11/12/24 02:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/12/24 02:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/12/24 02:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/12/24 02:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/12/24 02:24	1
Chloroethane	ND		1.0	0.32	ug/L			11/12/24 02:24	1
Chloroform	ND		1.0	0.34	ug/L			11/12/24 02:24	1
Chloromethane	ND		1.0	0.35	ug/L			11/12/24 02:24	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Trip Blank
Lab Sample ID: 480-225228-2
Date Collected: 11/05/24 00:00
Matrix: Water
Date Received: 11/05/24 15:20

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/12/24 02:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/12/24 02:24	1
Cyclohexane	ND		1.0	0.18	ug/L			11/12/24 02:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/12/24 02:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/12/24 02:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/12/24 02:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/12/24 02:24	1
Methyl acetate	ND		2.5	1.3	ug/L			11/12/24 02:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/12/24 02:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/12/24 02:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/12/24 02:24	1
Styrene	ND		1.0	0.73	ug/L			11/12/24 02:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/12/24 02:24	1
Toluene	ND		1.0	0.51	ug/L			11/12/24 02:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/12/24 02:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/12/24 02:24	1
Trichloroethene	ND		1.0	0.46	ug/L			11/12/24 02:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/12/24 02:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/12/24 02:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/12/24 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*80 - 120*		*11/12/24 02:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*		*11/12/24 02:24*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*11/12/24 02:24*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*11/12/24 02:24*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-225228-1	Outfall 001	85	89	92	87
480-225228-2	Trip Blank	88	93	95	90
LCS 480-731971/6	Lab Control Sample	88	88	95	92
MB 480-731971/8	Method Blank	86	88	93	88

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-731971/8
Matrix: Water
Analysis Batch: 731971

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/12/24 00:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/12/24 00:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/12/24 00:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/12/24 00:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/12/24 00:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/12/24 00:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/12/24 00:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/12/24 00:10	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/12/24 00:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/12/24 00:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/12/24 00:10	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/12/24 00:10	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/12/24 00:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/12/24 00:10	1
2-Hexanone	ND		5.0	1.2	ug/L			11/12/24 00:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/12/24 00:10	1
Acetone	ND		10	3.0	ug/L			11/12/24 00:10	1
Benzene	ND		1.0	0.41	ug/L			11/12/24 00:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/12/24 00:10	1
Bromoform	ND		1.0	0.26	ug/L			11/12/24 00:10	1
Bromomethane	ND		1.0	0.69	ug/L			11/12/24 00:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/12/24 00:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/12/24 00:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/12/24 00:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/12/24 00:10	1
Chloroethane	ND		1.0	0.32	ug/L			11/12/24 00:10	1
Chloroform	ND		1.0	0.34	ug/L			11/12/24 00:10	1
Chloromethane	ND		1.0	0.35	ug/L			11/12/24 00:10	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/12/24 00:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/12/24 00:10	1
Cyclohexane	ND		1.0	0.18	ug/L			11/12/24 00:10	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/12/24 00:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/12/24 00:10	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/12/24 00:10	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/12/24 00:10	1
Methyl acetate	ND		2.5	1.3	ug/L			11/12/24 00:10	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/12/24 00:10	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/12/24 00:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/12/24 00:10	1
Styrene	ND		1.0	0.73	ug/L			11/12/24 00:10	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/12/24 00:10	1
Toluene	ND		1.0	0.51	ug/L			11/12/24 00:10	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/12/24 00:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/12/24 00:10	1
Trichloroethene	ND		1.0	0.46	ug/L			11/12/24 00:10	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/12/24 00:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/12/24 00:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/12/24 00:10	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-731971/8
Matrix: Water
Analysis Batch: 731971

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*86*		*80 - 120*		*11/12/24 00:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*77 - 120*		*11/12/24 00:10*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*11/12/24 00:10*	*1*
Dibromofluoromethane (Surr)	*88*		*75 - 123*		*11/12/24 00:10*	*1*

Lab Sample ID: LCS 480-731971/6
Matrix: Water
Analysis Batch: 731971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	22.5		ug/L		90	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.8		ug/L		99	76 - 120
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.8		ug/L		87	61 - 148
1,1-Dichloroethane	25.0	22.6		ug/L		90	77 - 120
1,1-Dichloroethene	25.0	21.0		ug/L		84	66 - 127
1,2,4-Trichlorobenzene	25.0	23.5		ug/L		94	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.8		ug/L		103	56 - 134
1,2-Dichlorobenzene	25.0	22.1		ug/L		89	80 - 124
1,2-Dichloroethane	25.0	24.2		ug/L		97	75 - 120
1,2-Dichloropropane	25.0	22.2		ug/L		89	76 - 120
1,3-Dichlorobenzene	25.0	21.6		ug/L		86	77 - 120
1,4-Dichlorobenzene	25.0	21.6		ug/L		87	80 - 120
2-Butanone (MEK)	125	129		ug/L		103	57 - 140
2-Hexanone	125	128		ug/L		102	65 - 127
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125
Acetone	125	115		ug/L		92	56 - 142
Benzene	25.0	22.1		ug/L		89	71 - 124
Bromodichloromethane	25.0	24.1		ug/L		96	80 - 122
Bromoform	25.0	25.0		ug/L		100	61 - 132
Bromomethane	25.0	21.3		ug/L		85	55 - 144
Carbon disulfide	25.0	20.9		ug/L		84	59 - 134
Carbon tetrachloride	25.0	21.6		ug/L		86	72 - 134
Chlorobenzene	25.0	23.1		ug/L		93	80 - 120
Dibromochloromethane	25.0	23.9		ug/L		95	75 - 125
Chloroethane	25.0	21.8		ug/L		87	69 - 136
Chloroform	25.0	21.1		ug/L		84	73 - 127
Chloromethane	25.0	19.6		ug/L		78	68 - 124
cis-1,2-Dichloroethene	25.0	22.9		ug/L		92	74 - 124
cis-1,3-Dichloropropene	25.0	24.5		ug/L		98	74 - 124
Cyclohexane	25.0	21.5		ug/L		86	59 - 135
Dichlorodifluoromethane	25.0	19.5		ug/L		78	59 - 135
Ethylbenzene	25.0	22.4		ug/L		90	77 - 123
1,2-Dibromoethane	25.0	24.7		ug/L		99	77 - 120
Isopropylbenzene	25.0	22.3		ug/L		89	77 - 122
Methyl acetate	50.0	49.6		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	24.1		ug/L		96	77 - 120
Methylcyclohexane	25.0	21.7		ug/L		87	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-731971/6
Matrix: Water
Analysis Batch: 731971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	23.8		ug/L		95	75 - 124
Styrene	25.0	23.8		ug/L		95	80 - 120
Tetrachloroethene	25.0	19.9		ug/L		80	74 - 122
Toluene	25.0	22.1		ug/L		88	80 - 122
trans-1,2-Dichloroethene	25.0	21.5		ug/L		86	73 - 127
trans-1,3-Dichloropropene	25.0	24.3		ug/L		97	80 - 120
Trichloroethene	25.0	23.4		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	22.8		ug/L		91	62 - 150
Vinyl chloride	25.0	22.1		ug/L		88	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*88*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*88*		*77 - 120*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*
Dibromofluoromethane (Surr)	*92*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-731679/1-A
Matrix: Water
Analysis Batch: 731766

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731679

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		11/08/24 10:55	11/08/24 16:13	1
Iron	ND		0.050	0.026	mg/L		11/08/24 10:55	11/08/24 16:13	1
Zinc	ND		0.010	0.0068	mg/L		11/08/24 10:55	11/08/24 16:13	1

Lab Sample ID: LCS 480-731679/2-A
Matrix: Water
Analysis Batch: 731766

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731679

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.10	4.96		mg/L		97	85 - 115
Iron	5.10	5.25		mg/L		103	85 - 115
Zinc	0.500	0.504		mg/L		101	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-731639/1-A
Matrix: Water
Analysis Batch: 731675

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731639

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		11/08/24 08:36	11/08/24 09:57	1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 480-731639/2-A
Matrix: Water
Analysis Batch: 731675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731639

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Oil & Grease			40.0	38.60		mg/L		96	78 - 114		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-731975/1
Matrix: Water
Analysis Batch: 731975

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			11/11/24 14:27	1

Lab Sample ID: LCS 480-731975/2
Matrix: Water
Analysis Batch: 731975

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			270	266.8		mg/L		99	88 - 110		

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 731971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225228-1	Outfall 001	Total/NA	Water	8260C	
480-225228-2	Trip Blank	Total/NA	Water	8260C	
MB 480-731971/8	Method Blank	Total/NA	Water	8260C	
LCS 480-731971/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 731679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225228-1	Outfall 001	Total/NA	Water	200.7	
MB 480-731679/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-731679/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 731766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225228-1	Outfall 001	Total/NA	Water	200.7 Rev 4.4	731679
MB 480-731679/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	731679
LCS 480-731679/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	731679

General Chemistry

Prep Batch: 731639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225228-1	Outfall 001	Total/NA	Water	1664B	
MB 480-731639/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-731639/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 731675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225228-1	Outfall 001	Total/NA	Water	1664B	731639
MB 480-731639/1-A	Method Blank	Total/NA	Water	1664B	731639
LCS 480-731639/2-A	Lab Control Sample	Total/NA	Water	1664B	731639

Analysis Batch: 731975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-225228-1	Outfall 001	Total/NA	Water	SM 2540D	
MB 480-731975/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-731975/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: Outfall 001
Lab Sample ID: 480-225228-1
Date Collected: 11/05/24 12:45
Matrix: Water
Date Received: 11/05/24 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		5	731971	AD	EET BUF	11/12/24 02:02
Total/NA	Prep	200.7			731679	ET	EET BUF	11/08/24 10:55
Total/NA	Analysis	200.7 Rev 4.4		1	731766	BMB	EET BUF	11/08/24 16:26
Total/NA	Prep	1664B			731639	KM	EET BUF	11/08/24 08:36
Total/NA	Analysis	1664B		1	731675	KM	EET BUF	11/08/24 09:57
Total/NA	Analysis	SM 2540D		1	731975	AB	EET BUF	11/11/24 14:27

Client Sample ID: Trip Blank
Lab Sample ID: 480-225228-2
Date Collected: 11/05/24 00:00
Matrix: Water
Date Received: 11/05/24 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	731971	AD	EET BUF	11/12/24 02:24

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-225228-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-225228-1	Outfall 001	Water	11/05/24 12:45	11/05/24 15:20
480-225228-2	Trip Blank	Water	11/05/24 00:00	11/05/24 15:20

CHAIN OF CUSTODY

Client: New York State Dept. of Environn

11/5/24

FED-EX Tracking # | Bottle Order Control #

Lab Quote # | Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer TPalmer@gesonline.com **Phone #:** 800-287-7857 fax #N/A **866-902-2187**	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name: | Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	REQUESTED ANALYSIS (see Test Code sheet): 8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	2540D - Total Suspended Solids	LAB USE ONLY
	Outfall 001	NA	11/5	1245	MR	WG	7	3		1	2	1					X	X	X	X	
	Trip Blank	NA	11/5		MR	WG	2	2									X				

Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days
- [ ] 1 day RUSH
- [ ] Other _____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

480-225228 Chain of Custody

- [ ] FULLT1 (Level 1) = Results Only
- [ ] "Commercial 'B'" (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip ✓

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	[signature] Fastest	11/5 1800	
2	Relinquished By :	Date / Time:	Received By:
3	Relinquished By :	Date / Time:	Received By: [signature] TMD 11/5 1520

Custody Seal Number: ☐ Intact ☐ Not Intact ☐ Preserved where applicable ☐ On Ice Cooler Temp _____

5.8 IR#SC Ice

N:\Buffalo\Projects\Projects\NYSDEC Contract\PROJECTS\Frewsburg, Former Vac-Air Specialty Alloys\Old Data Tables\Archive\Ogiony\Frewsburg PSID with COC

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-225228-1

Login Number: 225228
List Number: 1
Creator: Stapleton, Kaitlyn

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.8 IR#SC ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Owen Ogiony
Groundwater & Environmental Services Inc
6010 North Bailey Avenue
Suite 1
Amherst, New York 14226

Generated 12/27/2024 8:37:28 AM

JOB DESCRIPTION

Frewsburg Site - Monthly Analysis

JOB NUMBER

480-226420-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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12/27/2024 8:37:28 AM

Authorized for release by
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Designee for
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Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 19
Lab Chronicle 20
Certification Summary 21
Method Summary 22
Sample Summary 23
Chain of Custody 24
Receipt Checklists 25

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-226420-1 Eurofins Buffalo

Job Narrative
480-226420-1

Receipt
The samples were received on 12/18/2024 11:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1º C.

GC/MS VOA
Method 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) associated with batch 480-735828 . The following sample was affected : OUTFALL 001 (480-226420-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 200.7: The reference method requires samples to be preserved to a pH of <2. The following sample(s) was received with insufficient preservation at a pH of >2. The sample(s) was preserved to the appropriate pH in the laboratory. preserved 12/18/2024 at 1359. Second pH check 12/20/2024 at 0800.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226420-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-226420-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.18		0.050	0.026	mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.0082	J	0.010	0.0068	mg/L	1		200.7 Rev 4.4	Total/NA
Oil & Grease	1.4	J	4.8	1.3	mg/L	1		1664B	Total/NA

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-226420-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

12/27/2024

Client: Groundwater & Environmental Services Inc
Job ID: 480-226420-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-226420-1
Date Collected: 12/17/24 10:45
Matrix: Water
Date Received: 12/18/24 11:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/20/24 14:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/20/24 14:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/20/24 14:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/20/24 14:44	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/20/24 14:44	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/20/24 14:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/20/24 14:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/20/24 14:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/20/24 14:44	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/20/24 14:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/20/24 14:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/20/24 14:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/20/24 14:44	1
2-Butanone (MEK)	ND	*+	10	1.3	ug/L			12/20/24 14:44	1
2-Hexanone	ND		5.0	1.2	ug/L			12/20/24 14:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/20/24 14:44	1
Acetone	ND		10	3.0	ug/L			12/20/24 14:44	1
Benzene	ND		1.0	0.41	ug/L			12/20/24 14:44	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/20/24 14:44	1
Bromoform	ND		1.0	0.26	ug/L			12/20/24 14:44	1
Bromomethane	ND		1.0	0.69	ug/L			12/20/24 14:44	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/20/24 14:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/20/24 14:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/20/24 14:44	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/20/24 14:44	1
Chloroethane	ND		1.0	0.32	ug/L			12/20/24 14:44	1
Chloroform	ND		1.0	0.34	ug/L			12/20/24 14:44	1
Chloromethane	ND		1.0	0.35	ug/L			12/20/24 14:44	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/20/24 14:44	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/20/24 14:44	1
Cyclohexane	ND		1.0	0.18	ug/L			12/20/24 14:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/20/24 14:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/20/24 14:44	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/20/24 14:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/20/24 14:44	1
Methyl acetate	ND		2.5	1.3	ug/L			12/20/24 14:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/20/24 14:44	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/20/24 14:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/20/24 14:44	1
Styrene	ND		1.0	0.73	ug/L			12/20/24 14:44	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/20/24 14:44	1
Toluene	ND		1.0	0.51	ug/L			12/20/24 14:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/20/24 14:44	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/20/24 14:44	1
Trichloroethene	ND		1.0	0.46	ug/L			12/20/24 14:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/20/24 14:44	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/20/24 14:44	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/20/24 14:44	1

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-226420-1
Date Collected: 12/17/24 10:45
Matrix: Water
Date Received: 12/18/24 11:35

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/20/24 14:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*12/20/24 14:44*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*12/20/24 14:44*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*12/20/24 14:44*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		12/20/24 08:31	12/20/24 17:08	1
Iron	**0.18**		0.050	0.026	mg/L		12/20/24 08:31	12/20/24 17:08	1
Zinc	**0.0082**	**J**	0.010	0.0068	mg/L		12/20/24 08:31	12/20/24 17:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (1664B)	**1.4**	**J**	4.8	1.3	mg/L		12/19/24 08:26	12/19/24 10:03	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			12/20/24 10:17	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-226420-2
Date Collected: 12/17/24 00:00
Matrix: Water
Date Received: 12/18/24 11:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/20/24 02:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/20/24 02:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/20/24 02:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/20/24 02:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/20/24 02:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/20/24 02:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/20/24 02:25	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/20/24 02:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/20/24 02:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/20/24 02:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/20/24 02:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/20/24 02:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/20/24 02:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/20/24 02:25	1
2-Hexanone	ND		5.0	1.2	ug/L			12/20/24 02:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/20/24 02:25	1
Acetone	ND		10	3.0	ug/L			12/20/24 02:25	1
Benzene	ND		1.0	0.41	ug/L			12/20/24 02:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/20/24 02:25	1
Bromoform	ND		1.0	0.26	ug/L			12/20/24 02:25	1
Bromomethane	ND		1.0	0.69	ug/L			12/20/24 02:25	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/20/24 02:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/20/24 02:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/20/24 02:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/20/24 02:25	1
Chloroethane	ND		1.0	0.32	ug/L			12/20/24 02:25	1
Chloroform	ND		1.0	0.34	ug/L			12/20/24 02:25	1
Chloromethane	ND		1.0	0.35	ug/L			12/20/24 02:25	1

Client: Groundwater & Environmental Services Inc
Job ID: 480-226420-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-226420-2
Date Collected: 12/17/24 00:00
Matrix: Water
Date Received: 12/18/24 11:35

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/20/24 02:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/20/24 02:25	1
Cyclohexane	ND		1.0	0.18	ug/L			12/20/24 02:25	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/20/24 02:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/20/24 02:25	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/20/24 02:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/20/24 02:25	1
Methyl acetate	ND		2.5	1.3	ug/L			12/20/24 02:25	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/20/24 02:25	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/20/24 02:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/20/24 02:25	1
Styrene	ND		1.0	0.73	ug/L			12/20/24 02:25	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/20/24 02:25	1
Toluene	ND		1.0	0.51	ug/L			12/20/24 02:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/20/24 02:25	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/20/24 02:25	1
Trichloroethene	ND		1.0	0.46	ug/L			12/20/24 02:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/20/24 02:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/20/24 02:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/20/24 02:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/20/24 02:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*12/20/24 02:25*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*12/20/24 02:25*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*12/20/24 02:25*	*1*

Surrogate Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226420-1
Project/Site: Frewsburg Site - Monthly Analysis

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-226420-1	OUTFALL 001	93	96	101	97
480-226420-2	TRIP BLANK	94	96	102	94
LCS 480-735771/6	Lab Control Sample	94	97	105	98
LCS 480-735828/6	Lab Control Sample	95	105	106	96
LCSD 480-735828/7	Lab Control Sample Dup	94	94	105	97
MB 480-735771/8	Method Blank	96	99	106	96
MB 480-735828/9	Method Blank	93	94	102	96

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-735771/8
Matrix: Water
Analysis Batch: 735771

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/20/24 01:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/20/24 01:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/20/24 01:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/20/24 01:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/20/24 01:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/20/24 01:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/20/24 01:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/20/24 01:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/20/24 01:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/20/24 01:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/20/24 01:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/20/24 01:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/20/24 01:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/20/24 01:36	1
2-Hexanone	ND		5.0	1.2	ug/L			12/20/24 01:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/20/24 01:36	1
Acetone	ND		10	3.0	ug/L			12/20/24 01:36	1
Benzene	ND		1.0	0.41	ug/L			12/20/24 01:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/20/24 01:36	1
Bromoform	ND		1.0	0.26	ug/L			12/20/24 01:36	1
Bromomethane	ND		1.0	0.69	ug/L			12/20/24 01:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/20/24 01:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/20/24 01:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/20/24 01:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/20/24 01:36	1
Chloroethane	ND		1.0	0.32	ug/L			12/20/24 01:36	1
Chloroform	ND		1.0	0.34	ug/L			12/20/24 01:36	1
Chloromethane	ND		1.0	0.35	ug/L			12/20/24 01:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/20/24 01:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/20/24 01:36	1
Cyclohexane	ND		1.0	0.18	ug/L			12/20/24 01:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/20/24 01:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/20/24 01:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/20/24 01:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/20/24 01:36	1
Methyl acetate	ND		2.5	1.3	ug/L			12/20/24 01:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/20/24 01:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/20/24 01:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/20/24 01:36	1
Styrene	ND		1.0	0.73	ug/L			12/20/24 01:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/20/24 01:36	1
Toluene	ND		1.0	0.51	ug/L			12/20/24 01:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/20/24 01:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/20/24 01:36	1
Trichloroethene	ND		1.0	0.46	ug/L			12/20/24 01:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/20/24 01:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/20/24 01:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/20/24 01:36	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-735771/8
Matrix: Water
Analysis Batch: 735771

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/20/24 01:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*12/20/24 01:36*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*12/20/24 01:36*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*12/20/24 01:36*	*1*

Lab Sample ID: LCS 480-735771/6
Matrix: Water
Analysis Batch: 735771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	23.6		ug/L		94	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.8		ug/L		91	76 - 120
1,1,2-Trichloroethane	25.0	22.3		ug/L		89	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.5		ug/L		86	61 - 148
1,1-Dichloroethane	25.0	21.0		ug/L		84	77 - 120
1,1-Dichloroethene	25.0	21.2		ug/L		85	66 - 127
1,2,4-Trichlorobenzene	25.0	23.3		ug/L		93	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.0		ug/L		88	56 - 134
1,2-Dichlorobenzene	25.0	22.4		ug/L		90	80 - 124
1,2-Dichloroethane	25.0	21.8		ug/L		87	75 - 120
1,2-Dichloropropane	25.0	23.9		ug/L		96	76 - 120
1,3-Dichlorobenzene	25.0	23.0		ug/L		92	77 - 120
1,4-Dichlorobenzene	25.0	22.3		ug/L		89	80 - 120
2-Butanone (MEK)	125	108		ug/L		87	57 - 140
2-Hexanone	125	106		ug/L		85	65 - 127
4-Methyl-2-pentanone (MIBK)	125	107		ug/L		85	71 - 125
Acetone	125	104		ug/L		83	56 - 142
Benzene	25.0	22.7		ug/L		91	71 - 124
Bromodichloromethane	25.0	23.7		ug/L		95	80 - 122
Bromoform	25.0	22.0		ug/L		88	61 - 132
Bromomethane	25.0	20.2		ug/L		81	55 - 144
Carbon disulfide	25.0	20.8		ug/L		83	59 - 134
Carbon tetrachloride	25.0	23.3		ug/L		93	72 - 134
Chlorobenzene	25.0	23.0		ug/L		92	80 - 120
Dibromochloromethane	25.0	22.1		ug/L		88	75 - 125
Chloroethane	25.0	21.8		ug/L		87	69 - 136
Chloroform	25.0	21.8		ug/L		87	73 - 127
Chloromethane	25.0	19.7		ug/L		79	68 - 124
cis-1,2-Dichloroethene	25.0	22.7		ug/L		91	74 - 124
cis-1,3-Dichloropropene	25.0	24.3		ug/L		97	74 - 124
Cyclohexane	25.0	22.3		ug/L		89	59 - 135
Dichlorodifluoromethane	25.0	19.0		ug/L		76	59 - 135
Ethylbenzene	25.0	23.5		ug/L		94	77 - 123
1,2-Dibromoethane	25.0	23.3		ug/L		93	77 - 120
Isopropylbenzene	25.0	22.3		ug/L		89	77 - 122
Methyl acetate	50.0	37.8		ug/L		76	74 - 133
Methyl tert-butyl ether	25.0	20.5		ug/L		82	77 - 120
Methylcyclohexane	25.0	23.7		ug/L		95	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-735771/6
Matrix: Water
Analysis Batch: 735771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	25.0	22.5		ug/L		90	75 - 124
Styrene	25.0	23.1		ug/L		92	80 - 120
Tetrachloroethene	25.0	23.4		ug/L		93	74 - 122
Toluene	25.0	21.6		ug/L		86	80 - 122
trans-1,2-Dichloroethene	25.0	20.5		ug/L		82	73 - 127
trans-1,3-Dichloropropene	25.0	22.4		ug/L		89	80 - 120
Trichloroethene	25.0	23.5		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	22.9		ug/L		92	62 - 150
Vinyl chloride	25.0	20.3		ug/L		81	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*

Lab Sample ID: MB 480-735828/9
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/20/24 14:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/20/24 14:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/20/24 14:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/20/24 14:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/20/24 14:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/20/24 14:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/20/24 14:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/20/24 14:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/20/24 14:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/20/24 14:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/20/24 14:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/20/24 14:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/20/24 14:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/20/24 14:20	1
2-Hexanone	ND		5.0	1.2	ug/L			12/20/24 14:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/20/24 14:20	1
Acetone	ND		10	3.0	ug/L			12/20/24 14:20	1
Benzene	ND		1.0	0.41	ug/L			12/20/24 14:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/20/24 14:20	1
Bromoform	ND		1.0	0.26	ug/L			12/20/24 14:20	1
Bromomethane	ND		1.0	0.69	ug/L			12/20/24 14:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/20/24 14:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/20/24 14:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/20/24 14:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/20/24 14:20	1
Chloroethane	ND		1.0	0.32	ug/L			12/20/24 14:20	1
Chloroform	ND		1.0	0.34	ug/L			12/20/24 14:20	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-735828/9
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.35	ug/L			12/20/24 14:20	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/20/24 14:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/20/24 14:20	1
Cyclohexane	ND		1.0	0.18	ug/L			12/20/24 14:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/20/24 14:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/20/24 14:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/20/24 14:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/20/24 14:20	1
Methyl acetate	ND		2.5	1.3	ug/L			12/20/24 14:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/20/24 14:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/20/24 14:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/20/24 14:20	1
Styrene	ND		1.0	0.73	ug/L			12/20/24 14:20	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/20/24 14:20	1
Toluene	ND		1.0	0.51	ug/L			12/20/24 14:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/20/24 14:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/20/24 14:20	1
Trichloroethene	ND		1.0	0.46	ug/L			12/20/24 14:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/20/24 14:20	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/20/24 14:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/20/24 14:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/20/24 14:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*12/20/24 14:20*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*12/20/24 14:20*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*12/20/24 14:20*	*1*

Lab Sample ID: LCS 480-735828/6
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	25.0	24.1		ug/L		96	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.3		ug/L		93	76 - 120
1,1,2-Trichloroethane	25.0	22.6		ug/L		90	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.3		ug/L		89	61 - 148
1,1-Dichloroethane	25.0	23.1		ug/L		93	77 - 120
1,1-Dichloroethene	25.0	22.9		ug/L		92	66 - 127
1,2,4-Trichlorobenzene	25.0	24.8		ug/L		99	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.6		ug/L		94	56 - 134
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 124
1,2-Dichloroethane	25.0	22.3		ug/L		89	75 - 120
1,2-Dichloropropane	25.0	23.3		ug/L		93	76 - 120
1,3-Dichlorobenzene	25.0	23.9		ug/L		95	77 - 120
1,4-Dichlorobenzene	25.0	22.9		ug/L		91	80 - 120
2-Butanone (MEK)	125	201	*+	ug/L		161	57 - 140
2-Hexanone	125	105		ug/L		84	65 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-735828/6
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Methyl-2-pentanone (MIBK)	125	102		ug/L		82	71 - 125
Acetone	125	108		ug/L		86	56 - 142
Benzene	25.0	23.0		ug/L		92	71 - 124
Bromodichloromethane	25.0	24.3		ug/L		97	80 - 122
Bromoform	25.0	22.7		ug/L		91	61 - 132
Bromomethane	25.0	24.1		ug/L		96	55 - 144
Carbon disulfide	25.0	21.0		ug/L		84	59 - 134
Carbon tetrachloride	25.0	23.8		ug/L		95	72 - 134
Chlorobenzene	25.0	23.1		ug/L		92	80 - 120
Dibromochloromethane	25.0	23.1		ug/L		92	75 - 125
Chloroethane	25.0	23.6		ug/L		94	69 - 136
Chloroform	25.0	21.7		ug/L		87	73 - 127
Chloromethane	25.0	23.0		ug/L		92	68 - 124
cis-1,2-Dichloroethene	25.0	23.1		ug/L		92	74 - 124
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124
Cyclohexane	25.0	22.2		ug/L		89	59 - 135
Dichlorodifluoromethane	25.0	25.5		ug/L		102	59 - 135
Ethylbenzene	25.0	23.6		ug/L		94	77 - 123
1,2-Dibromoethane	25.0	23.6		ug/L		95	77 - 120
Isopropylbenzene	25.0	23.4		ug/L		93	77 - 122
Methyl acetate	50.0	37.7		ug/L		75	74 - 133
Methyl tert-butyl ether	25.0	20.6		ug/L		83	77 - 120
Methylcyclohexane	25.0	24.3		ug/L		97	68 - 134
Methylene Chloride	25.0	23.5		ug/L		94	75 - 124
Styrene	25.0	23.8		ug/L		95	80 - 120
Tetrachloroethene	25.0	24.8		ug/L		99	74 - 122
Toluene	25.0	22.1		ug/L		89	80 - 122
trans-1,2-Dichloroethene	25.0	21.6		ug/L		86	73 - 127
trans-1,3-Dichloropropene	25.0	23.2		ug/L		93	80 - 120
Trichloroethene	25.0	25.0		ug/L		100	74 - 123
Trichlorofluoromethane	25.0	24.7		ug/L		99	62 - 150
Vinyl chloride	25.0	24.0		ug/L		96	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*
Dibromofluoromethane (Surr)	*96*		*75 - 123*

Lab Sample ID: LCSD 480-735828/7
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	25.0	23.8		ug/L		95	73 - 126	1	15
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	76 - 120	0	15
1,1,2-Trichloroethane	25.0	22.2		ug/L		89	76 - 122	2	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.2		ug/L		97	61 - 148	8	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-735828/7
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethane			25.0	23.0		ug/L		92	77 - 120	0	20
1,1-Dichloroethene			25.0	22.6		ug/L		90	66 - 127	1	16
1,2,4-Trichlorobenzene			25.0	24.4		ug/L		98	79 - 122	2	20
1,2-Dibromo-3-Chloropropane			25.0	24.4		ug/L		97	56 - 134	3	15
1,2-Dichlorobenzene			25.0	22.5		ug/L		90	80 - 124	3	20
1,2-Dichloroethane			25.0	22.1		ug/L		89	75 - 120	1	20
1,2-Dichloropropane			25.0	23.1		ug/L		92	76 - 120	1	20
1,3-Dichlorobenzene			25.0	23.6		ug/L		94	77 - 120	1	20
1,4-Dichlorobenzene			25.0	22.5		ug/L		90	80 - 120	1	20
2-Butanone (MEK)			125	189	*+	ug/L		152	57 - 140	6	20
2-Hexanone			125	110		ug/L		88	65 - 127	5	15
4-Methyl-2-pentanone (MIBK)			125	106		ug/L		85	71 - 125	4	35
Acetone			125	117		ug/L		94	56 - 142	8	15
Benzene			25.0	22.9		ug/L		92	71 - 124	0	13
Bromodichloromethane			25.0	24.1		ug/L		96	80 - 122	1	15
Bromoform			25.0	23.3		ug/L		93	61 - 132	3	15
Bromomethane			25.0	24.1		ug/L		96	55 - 144	0	15
Carbon disulfide			25.0	21.4		ug/L		85	59 - 134	2	15
Carbon tetrachloride			25.0	24.1		ug/L		96	72 - 134	1	15
Chlorobenzene			25.0	22.8		ug/L		91	80 - 120	1	25
Dibromochloromethane			25.0	23.1		ug/L		93	75 - 125	0	15
Chloroethane			25.0	24.2		ug/L		97	69 - 136	3	15
Chloroform			25.0	21.7		ug/L		87	73 - 127	0	20
Chloromethane			25.0	23.3		ug/L		93	68 - 124	1	15
cis-1,2-Dichloroethene			25.0	23.0		ug/L		92	74 - 124	1	15
cis-1,3-Dichloropropene			25.0	25.0		ug/L		100	74 - 124	3	15
Cyclohexane			25.0	21.4		ug/L		85	59 - 135	4	20
Dichlorodifluoromethane			25.0	25.9		ug/L		104	59 - 135	2	20
Ethylbenzene			25.0	23.7		ug/L		95	77 - 123	1	15
1,2-Dibromoethane			25.0	23.6		ug/L		94	77 - 120	0	15
Isopropylbenzene			25.0	23.0		ug/L		92	77 - 122	2	20
Methyl acetate			50.0	42.1		ug/L		84	74 - 133	11	20
Methyl tert-butyl ether			25.0	20.5		ug/L		82	77 - 120	1	37
Methylcyclohexane			25.0	23.9		ug/L		96	68 - 134	2	20
Methylene Chloride			25.0	23.0		ug/L		92	75 - 124	2	15
Styrene			25.0	24.0		ug/L		96	80 - 120	1	20
Tetrachloroethene			25.0	25.4		ug/L		101	74 - 122	2	20
Toluene			25.0	21.7		ug/L		87	80 - 122	2	15
trans-1,2-Dichloroethene			25.0	21.2		ug/L		85	73 - 127	2	20
trans-1,3-Dichloropropene			25.0	23.4		ug/L		93	80 - 120	1	15
Trichloroethene			25.0	24.1		ug/L		96	74 - 123	4	16
Trichlorofluoromethane			25.0	25.1		ug/L		100	62 - 150	1	20
Vinyl chloride			25.0	23.9		ug/L		96	65 - 133	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-735828/7
Matrix: Water
Analysis Batch: 735828

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*97*		*75 - 123*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-735784/1-A
Matrix: Water
Analysis Batch: 735964

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 735784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.088	mg/L		12/20/24 08:31	12/20/24 16:11	1
Iron	ND		0.050	0.026	mg/L		12/20/24 08:31	12/20/24 16:11	1
Zinc	ND		0.010	0.0068	mg/L		12/20/24 08:31	12/20/24 16:11	1

Lab Sample ID: LCS 480-735784/2-A
Matrix: Water
Analysis Batch: 735964

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 735784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.11	5.02		mg/L		98	85 - 115
Iron	5.12	5.62		mg/L		110	85 - 115
Zinc	0.500	0.503		mg/L		101	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-735700/1-A
Matrix: Water
Analysis Batch: 735730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 735700

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		12/19/24 08:26	12/19/24 10:03	1

Lab Sample ID: LCS 480-735700/2-A
Matrix: Water
Analysis Batch: 735730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 735700

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Oil & Grease	40.0	33.50		mg/L		84	78 - 114

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-735858/1
Matrix: Water
Analysis Batch: 735858

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			12/20/24 10:17	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 480-735858/2
Matrix: Water
Analysis Batch: 735858

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			250	245.6		mg/L		98	88 - 110		

QC Association Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226420-1
Project/Site: Frewsburg Site - Monthly Analysis

GC/MS VOA

Analysis Batch: 735771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226420-2	TRIP BLANK	Total/NA	Water	8260C	
MB 480-735771/8	Method Blank	Total/NA	Water	8260C	
LCS 480-735771/6	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 735828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226420-1	OUTFALL 001	Total/NA	Water	8260C	
MB 480-735828/9	Method Blank	Total/NA	Water	8260C	
LCS 480-735828/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-735828/7	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 735784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226420-1	OUTFALL 001	Total/NA	Water	200.7	
MB 480-735784/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-735784/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 735964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226420-1	OUTFALL 001	Total/NA	Water	200.7 Rev 4.4	735784
MB 480-735784/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	735784
LCS 480-735784/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	735784

General Chemistry

Prep Batch: 735700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226420-1	OUTFALL 001	Total/NA	Water	1664B	
MB 480-735700/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-735700/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 735730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226420-1	OUTFALL 001	Total/NA	Water	1664B	735700
MB 480-735700/1-A	Method Blank	Total/NA	Water	1664B	735700
LCS 480-735700/2-A	Lab Control Sample	Total/NA	Water	1664B	735700

Analysis Batch: 735858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-226420-1	OUTFALL 001	Total/NA	Water	SM 2540D	
MB 480-735858/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-735858/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: Groundwater & Environmental Services Inc
Job ID: 480-226420-1
Project/Site: Frewsburg Site - Monthly Analysis

Client Sample ID: OUTFALL 001
Lab Sample ID: 480-226420-1
Date Collected: 12/17/24 10:45
Matrix: Water
Date Received: 12/18/24 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	735828	ZN	EET BUF	12/20/24 14:44
Total/NA	Prep	200.7			735784	ET	EET BUF	12/20/24 08:31
Total/NA	Analysis	200.7 Rev 4.4		1	735964	BMB	EET BUF	12/20/24 17:08
Total/NA	Prep	1664B			735700	KM	EET BUF	12/19/24 08:26
Total/NA	Analysis	1664B		1	735730	KM	EET BUF	12/19/24 10:03
Total/NA	Analysis	SM 2540D		1	735858	AB	EET BUF	12/20/24 10:17

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-226420-2
Date Collected: 12/17/24 00:00
Matrix: Water
Date Received: 12/18/24 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	735771	ERS	EET BUF	12/20/24 02:25

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226420-1
Project/Site: Frewsburg Site - Monthly Analysis

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226420-1
Project/Site: Frewsburg Site - Monthly Analysis

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
200.7 Rev 4.4	Metals (ICP)	EPA	EET BUF
1664B	HEM and SGT-HEM	1664B	EET BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
1664B	HEM and SGT-HEM (Aqueous)	1664B	EET BUF
200.7	Preparation, Total Metals	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Groundwater & Environmental Services Inc
Job ID: 480-226420-1
Project/Site: Frewsburg Site - Monthly Analysis

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-226420-1	OUTFALL 001	Water	12/17/24 10:45	12/18/24 11:35
480-226420-2	TRIP BLANK	Water	12/17/24 00:00	12/18/24 11:35

CHAIN OF CUSTODY

12/17/24

Client: New York State Dept. of Environn

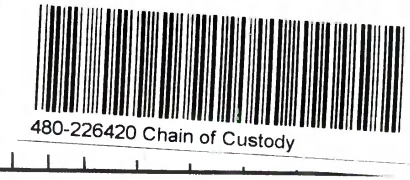
FED-EX Tracking #	Bottle Order Control #
Lab Quote #	Lab Job #

CLIENT/REPORTING INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
Groundwater & Environmental Services, Inc. 6010 N Bailey Ave #1, Amherst, NY 14226 **Project Manager:** Thomas Palmer **Phone #:** 800-287-7857 TPalmer@gesonline.com fax #N/A **866-902-2187**	**Project Name:** NYSDEC/Frewsburg/NY/FalconerSt/300 **Project Address:** 300 Falconer Street, Frewsburg, NY **Project PSID #:** NA	Groundwater & Environmental Services, Inc. ges-invoices@gesonline.com ATTN: Accounts Payable **Invoice Instructions (Project #/ Phase / Task / Altorg)** 0924003/05/220

Sampler(s) Name:

Sampler(s) Name:

Lab Sample #	Field ID / Point of Collection (Sys_loc_code)	Depth Interval (ft)	Date Sampled	Time Sampled	Sampler	Matrix	Total # Bottles	number of preserved bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Amber	8260C - TCLVOCs OLM04.2 list	1664A_Calc - Oil & Grease	200.7 - Total Al, Fe, Zn	2540D - Total Suspended Solids	LAB USE ONLY
	Outfall 001	NA	12/17	1045	WR	WG	7	3		1	2	1					X	X	X	X	
	Trip Blank	NA	12/17	-	WR	WG	2	2									X				



Turnaround Time (Business Days) — **Approved By (Lab PM) / Date**

- [x] Standard 14 Days _____/_____
- [ ] 1 day RUSH _____/_____
- [ ] Other _____ _____/_____

Laboratory Information

Lab: Eurofins - Buffalo
Address: 10 Hazelwood Drive
Phone: Amherst, NY 14228
Lab PM: John Beninati
Lab PM Email: john.beninati@ET.EurofinsUS.com

Data Deliverable Information

- [ ] Commercial 'A' (Level 1) = Results Only
- [ ] Commercial 'B' (Level 2) = Results + QC Summary
- [ ] FULLT1 (Level 3 & 4)
- [ ] NJ Reduced = Results + QC Summary + Partial Raw Data
- [ ] Commercial 'C'
- [ ] *NJ Data of Known Quality Protocol Reporting*
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format NYS DEC EDD
- [ ] Other _____

Please Email the EQ EDD Package to ges@equisonline.com

EQEDD Name: NYSDEC/Frewsburg/NY/FalconerSt/300_LabReport#.27908.EQEDD.zip

Sample Custody must be documented below each time samples change possession, including courier.

	Relinquished By Sampler:	Date / Time:	Received By:
1	GK to Lodge	12/17 1630	1
2		12/18 1135	2
3			3

Received By: 1 — 12/18/24 1135

Relinquished By: 2

Custody Seal Number: [ ] Intact [ ] Not Intact [ ] Preserved where applicable [ ] On Ice Cooler Temp _____

2.1 ICE IR#5C

Page 24 of 25

12/27/2024

Login Sample Receipt Checklist

Client: Groundwater & Environmental Services Inc

Job Number: 480-226420-1

Login Number: 226420
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Appendix C – Annual System Inspection Form

SYSTEM INSPECTION FORM

Client Name:	NYSDEC		
Site Name:	Frewsburg		
Address:	300 Falconer St		
GES PM:	T. Palmer	GES Engr:	G. Bock
Inspected By:	T. Palmer	Date:	12-24-24
Inspection:	(Routine Annual), Transition, Startup, or Recommission (*circle one*)		

The following checklist is to be completed for all OM&M system sites If the response to any item is "No," explain reasons in the comment section. *For items requiring additional explanation, use comments section to discuss findings and/or provide additional information needed to perform corrective measures. For additional comment space, use back of page.* A loss or near loss report may be required based on the findings of the inspection.

Equipment/Information needed to complete the inspection

- [x] Previously completed system inspection form
- [x] Tools to open control panel and other equipment
- [x] Tools to open manholes and well vaults
- [x] Digital Camera to document conditions (Phone)
- [ ] Multimeter/amperage clamp to check equipment amperage and voltages
- [ ] Knowledge of the IBC, NEC, fire codes, pressure vessel codes and client specific requirements

Site Health & Safety / General Site Conditions

1.	Is current Health & Safety Plan (HASP) in a conspicuous place?	☒ Yes	☐ No	
2.	Are Safety Data Sheets (SDS) in HASP?	☒ Yes	☐ No	
3.	Is GES' Emergency Sign Placard posted in a conspicuous place?	☒ Yes	☐ No	
4.	Is the site and enclosure clear of trash and debris?	☒ Yes	☐ No	
5.	Are walkways clear of trip hazards?	☒ Yes	☐ No	
6.	Are vaults/manholes/trenches in good conditions and locked?	☐ Yes	☐ No	
7.	Is vegetation (trees, vines, weeds) present that may pose trip or overhead hazards, including branches that could fall onto equipment, enclosures, or overhead utilities?	☐ Yes	☒ No	
8.	Is the log book present, protected from the elements and include all up-to-date permits, log sheets, checklists/forms and HASP?	☒ Yes	☐ No	
9.	Are on-site soil piles, if present, properly encapsulated?	☐ Yes	☐ No	☐ N/A
10.	Are there drums or storage tanks on site? (If YES, answer questions below)	☒ Yes	☐ No	
	– Do drums/tanks have secondary containment? In building	☒ Yes	☐ No	
	– Are the drums/tanks in good condition?	☒ Yes	☐ No	
	– Are the drums/tanks properly vented and grounded (product drums must be grounded)?	☒ Yes	☐ No	
	– Are the drums/tanks properly labeled, including a flammable sticker? Labeled w/ paint pen, need Non-Haz Stickers	☐ Yes	☒ No	

COMMENTS:

Enclosure/Structure/Building *(Requires knowledge of IBC to complete)*	☐ Not applicable ☐ Not checked		
1. Is the enclosure in good condition? (check doors, roof, interior/exterior walls, trailer leveling jacks, fence material and posts, stack guy wires, structural elements)	☒ Yes	☐ No	
2. Is the enclosure properly heated, if necessary?	☒ Yes	☐ No	☐ N/A
3. Is the air in the enclosure properly exhausted?	☒ Yes	☐ No	
4. Is the exhaust fan guard in place?	☒ Yes	☐ No	
5. Are there sufficient fresh air louvers?	☒ Yes	☐ No	
6. Are the louvers or exhaust vents sealed off in the winter?	☐ Yes	☐ No	☒ N/A
7. Are all sheds/compounds locked?	☒ Yes	☐ No	☐ N/A
8. Are fire extinguishers on site? (If YES, expiration date: 11 /20 24)	☒ Yes	☐ No	
9. Are combustible/flammable materials separated from sources of ignition?	☒ Yes	☐ No	

COMMENTS:
- F.E Inspections scheduld for Jan 2025

OM&M System

Describe major system components, noting any changes completed to the remedial system since the last inspection

1.	Has the system changed since the last inspection?	☐ Yes	☒ No	
2.	Was the system operating upon arrival?	☒ Yes	☐ No	☐ N/A
3.	Is an accurate copy of system trenching diagram posted?	☒ Yes	☐ No	
4.	Is the posted P&ID accurate? Not posted	☐ Yes	☒ No	
5.	Are CEs/CSDs/sample ports/manifolds/flow direction/equipment properly labeled?	☐ Yes	☒ No	
6.	Reviewed system CEs/CSDs, interlock, alarm inspection forms and procedures?	☒ Yes	☐ No	☐ N/A
7.	Are pipe, tanks, hose, etc., supported properly and in acceptable condition (including those located in areas difficult to access [behind/under equipment])? Some supports missing bolts	☐ Yes	☒ No	
8.	Are piping, hoses, tubing, valves, and other system components rated for (e.g., pressure, temperature, flow capacity, fluid type, concentration, and chemical compatibility) the service for which they are used (e.g., compressed air, high-temperature vapors)?	☒ Yes	☐ No	
9.	Are cam locks secured with pins, cable ties, or other equivalent means?	☐ Yes	☐ No	☒ N/A
10.	Is piping outside the structure properly insulated and heat traced?	☐ Yes	☐ No	☒ N/A
11.	Are buckle clamps used to connect hose to barbs?	☒ Yes	☐ No	☐ N/A
12.	Is there a floor sump (or other leak/spill detection) within the structure?	☒ Yes	☐ No	☐ N/A
13.	Is the system free of all additional hazards (e.g., confined space, ladders required)?	☒ Yes	☐ No	
14.	Is there at least 24 inches of space between equipment, control panels, and walls to	☒ Yes	☐ No	

allow OM&M to be conducted safely?

15. Are supports and braces on vibrating equipment tight? ☒ Yes ☐ No ☐ N/A
16. Is all equipment in good operating condition? ☒ Yes ☐ No

COMMENTS:

- Need CE Labels. Pipe arms
- Dual phase blower currently out for service

Electrical Elements and Code Compliance

1. Has any electrical component of this system changed since the last inspection? ☐ Yes ☒ No
   (If YES, answer section below)
   How are areas classified? (Write name of area below)
   a. ☐ Class I Div I ☒ Class I Div II ☒ Not Classified — a)
   b. ☐ Class I Div I ☐ Class I Div II ☐ Not Classified — b)
   c. ☐ Class I Div I ☐ Class I Div II ☐ Not Classified — c)
2. Is the electrical classification correct? ☒ Yes ☐ No
3. Does all of the electrical equipment (lights, heaters, pumps, blowers, etc.) comply with the classification? ☒ Yes ☐ No
4. Is the voltage and amperage to the system and components correct? ☐ Yes ☐ No
5. Are proper voltage and phase labels posted on circuit breaker panel? ☒ Yes ☐ No
6. Is the proper high voltage **(208 volts or greater)** label on the outside of the panel? ☐ Yes ☒ No
7. Are circuit breakers labeled in conjunction with equipment? ☐ Yes ☐ No
8. Are the motor starters properly sized? ☐ Yes ☐ No
9. Are the **Thermal overloads** sized and set for the proper motor amperage? ☐ Yes ☐ No
10. Are the gages of the wire correct for the equipment? ☐ Yes ☐ No
11. Is wiring in acceptable condition (no frayed, mashed, or loose wiring or burnt)? ☐ Yes ☐ No

480 V Not cleared

12. Is wiring neat and attached to walls (shed and vaults)? ☒ Yes ☐ No
13. Are seal-offs poured? ☒ Yes ☐ No ☐ N/A
14. Are lights bulbs shatterproof, fluorescent, or shielded? ☒ Yes ☐ No
15. Are GFIs and weather-proof outlets installed? ☒ Yes ☐ No
16. Is all equipment properly wired (no extension cords, etc)? ☒ Yes ☐ No
17. Has an Electrical Inspection Report been completed? ☐ Yes ☒ No

COMMENTS:

- Panel needs stickers as only in 2023 inspected

Compressed Air Systems and Pressure Vessels

1.	Are compressed air vessels used with the system? *(If no, skip this section)*	☐ Yes	☒ No
2.	According to the pressure vessel code for the applicable state, the pressurized vessel does need to be inspected? (If yes, document in the comment section when the vessel was last inspected.)	☐ Yes	☐ No
3.	Are air compressor guards and warning labels (Danger – Hot) in place?	☐ Yes	☐ No
4.	Is integrity of compressed air lines acceptable?	☐ Yes	☐ No
5.	Are compressed air lines securely connected?	☐ Yes	☐ No
6.	Is air compressor oil compatible with piping (Synthetic oil and ABS piping are not)?	☐ Yes	☐ No
7.	The compressor coalescing filter is changed on a routine schedule?	☐ Yes	☐ No
8.	Has the oil been changed with the proper type?	☐ Yes	☐ No
9.	Has it been changed within 3 months?	☐ Yes	☐ No
10.	Have the air filters been inspected and replaced for the A/C and Filter/ Regulator?	☐ Yes	☐ No

N/A

COMMENTS:

System Inspection Corrective Action Form

1.	Was a system inspection corrective action form generated from this inspection?	☒ Yes	☐ No
2.	Is the completed system inspection corrective action form attached to the checklist?	☒ Yes	☐ No

Will write with PE to complete C.A. Form

Completed inspections must be reviewed and acknowledged by the following:

	Title	*Printed Name*	*Signature*	*Date*
1.	Technician	T. Palmer		12-24-24
2.	Project Engineer			
3.	Project Manager			
4.	LHSO			
5.	Professional Engineer or Regional Engineer			

System Inspection Corrective Action Form

Task	Completed By	Date Completed	Verified By	Date Verified
Add labels to waste drums (Non-Haz)				
Get F.E. Inspector				
Post P&ID				
Add bolts to pipe hangers				
Add CE labels				
Add electrical stickers to panel				