

New York State Department of Environmental Conservation Division of
Environmental Remediation

Periodic Review Report 2019

Keywell L.L.C. Vac-Air Division Site
300 Falconer Road, Frewsburg, NY
NYSDEC Site No. 907016

July 30, 2020



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300 Falconer Road
Frewsburg, NY 14738

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Acronyms

AWQS	Ambient Water Quality Standards
CCU	Catalytic Combustion Unit
Class GA	Groundwater class
DER	Division of Environmental Remediation
DTP	Depth to Product
DTW	Depth to Water
EC	engineering controls
FAS	Fluorinated Alkyl Substances
GES	Groundwater & Environmental Services, Inc.
gpm	gallons per minute
HDPE	high-density polyethylene
"Hg	inches of mercury
IC	institutional controls
Keywell	Keywell LLC
LNAPL	light non-aqueous phase liquid
µg/m ³	micrograms per cubic meter
µg/L	micrograms per liter
ng/L	nanograms per liter
NYSDEC	New York State Department of Environmental Conservation
OM&M	Post-Remedial Operation, Maintenance, & Monitoring
OWS	oil water separator
P.E.	Professional Engineer
ppt	parts per trillion
PRB	permeable reactive barrier
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SIM	selective ion monitoring
Site	Keywell L.L.C. Vac-Air Division Site
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
USEPA	United States Environmental Protection Agency
VLS	vapor/liquid separator
VOCs	Volatile Organic Compounds

Executive Summary

Keywell LLC (Keywell) Vac-Air Division (Site) is located at 300 Falconer Road 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 Frewsburg-Falconer Road 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 Ventures, 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 2019:

- Semi-annual groundwater sampling and groundwater elevation measurements.
- Analysis for 1-4 Dioxane sampling via 8270D selective ion monitoring (SIM) and Fluorinated Alkyl Substances (FAS) sampling during the spring sampling event under the direction of the New York State Department of Environmental Conservation (NYSDEC).
- Monthly system discharge sampling.
- Monthly system influent sampling.
- Sub-slab vapor and ambient indoor air study.
- Groundwater extraction treatment system upgrade, installed first quarter of 2019.
- Extraction well upgrades for groundwater treatment system.
- 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 August 22, 2019. All engineering controls (ECs) outlined in the OM&M plan were found to be in good condition with no new evidence of damage.

As outlined in the OM&M Plan, semi-annual groundwater monitoring and sampling events were conducted on April 9 through 11, 2019, and December 11 through 12, 2019. Samples were analyzed for volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method 8260C. This data was compared to the NYSDEC technical and

operations guidance series 1.1.1 (TOGS 1.1.1) groundwater (Class GA) Ambient Water Quality Standards (AWQS). General observations from the groundwater sampling events are detailed below:

- Spring 2019 results: Of the 16 samples collected, nine (9) contained AWQS exceedances for VOCs (MW-2, MW-3, MW-4, MW-6, MW-9R, MW-11R, MW-12, MW-13, and MW-14). All eight (8) samples collected and analyzed for emerging contaminants had detections of FAS with total concentrations ranging from 3.28 nanograms per liter (ng/L) at MW-5 to 89.33 ng/L at MW-6. While there is no regulatory level established for emerging contaminants, the USEPA published a health advisory level of 70 parts per trillion (ppt) for total FAS. MW-6 was the only sample that exceeded the 70 ppt threshold.
- Fall 2019 results: All seven (7) samples collected contained AWQS exceedances for VOCs (MW-2, MW-3, MW-4, MW-9R, MW-11R, MW-13, and MW-14).

Based on these concentrations, there are multiple wells that exceed NYSDEC TOGS 1.1.1 Class GA AWQS. The following action items are recommended:

- Continuance of semi-annual groundwater monitoring activities.
- Continue use of 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 Road 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 of Falconer Road. The Site lies within a fenced in manufacturing area. It is bordered to the northwest by the Conewango Creek, and across Falconer Road 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. 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 and treatment, sediment excavation, storm water controls, capping, and long term monitoring. The remedial construction was completed in 1999. SGK Ventures, LLC 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.

The Site is located in the Allegheny 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 and the Upper Sand and Gravel Unit varies in thickness from 3 feet (north) to 22 feet (south). The Confining Unit varies 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 below ground surface. 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 below ground surface flowing northward toward Conewango Creek.

1.2 Historical Site Activities

In March 1996, a ROD was made in regards to the Site. In September 1996, Keywell signed a Consent Order to conduct the RIFS. Following the ROD, remedial measures began in 1997 in accordance with the ROD and *Evaluation of North Soil Area Remedial Alternatives* dated May 1996. The majority of the remedial construction activities were completed by January 1998. The remedial measures included:

- Installation of a slurry wall along the down gradient 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 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 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 *Post-Remedial Operation, Maintenance & Monitoring 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 annual Periodic Review Reports (PRRs).

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.



1.3 Recent Project Activities

Work performed at the Site during the 2019 period included:

- During February 23 through 28, 2019 a new TPE skid and control panel were installed. Testing of the new equipment and panel took place between March 1 and 11, 2019. The new TPE skid and control panel were working normally by March 13, 2019.
- Bi-weekly OM&M events were performed to maintain the system and monitor the Site.
- Low-flow groundwater sampling was performed on April 9 through 11, 2019. Normal Site groundwater sampling wells were analyzed for VOCs. Wells MW-1, MW-4D, MW-5, MW-5D, MW-6, MW-7, MW-8, and MW-12 were also sampled for 1,4-Dioxane and FAS.
- Between September 16, 2019 and October 11, 2019, upgrades were performed on all 18 system extraction wells. New pitless adaptors, drop tubes and shutoffs were installed in all wells to allow for better maintenance and extraction performance. The extraction wells were subsequently redeveloped on October 17 and 18, 2019
- A new TPE blower was installed on the system skid (under warranty replacement) on November 7, 2019 and the system was restarted on November 15, 2019.
- , Low-flow groundwater sampling was performed at MW-2, MW-3, MW-4 MW-9R, MW-11R, MW-12, MW-13 and MW-14 on December 11 and 12, 2019. Samples were collected for VOCs. Site-wide gauging on all wells took place at this time.
- A replacement transfer pump was installed on the TPE skid on January 23, 2020 to repair the system following transfer pump failure on December 10, 2019.

2 Site Operation, Maintenance & Monitoring Plan Compliance Report

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

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

The annual engineering Site inspection was completed by GES on August 22, 2019. All ECs as outlined in the OM&M Plan were found to be in good condition and operating as designed. Inspections should be performed annually as a component of the institutional controls (ICs) as presented in the OM&M Plan. The next annual inspection will be performed in the summer of 2020.

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. During the Site inspection, no deficiencies



were noted. No Site ICs or ECs have been modified by any Site work since GES took over OM&M activities in February 2016.

Semi-annual groundwater level monitoring is conducted concurrently with the semi-annual groundwater sampling events. Gauging is performed on the 18 extraction wells and 16 monitoring wells. **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 the **Table 2.2**.

Table 2.1 Monitoring Well Network Summary

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

System influent and effluent samples are collected monthly and analyzed for the parameters listed in **Table 2.2**. Samples effluent are collected from a dedicated sample port located in the discharge piping from the air stripper effluent. System influent sampling is performed to monitor trends in influent concentrations and verify treatment system efficiency.

Table 2.2 Media Monitoring Schedule For 2019

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: 8. Target Compound List VOCs 9. 1,4-Dioxane (Non-routine / Spring Only) 10. FAS (Non-routine / Spring Only)
Treatment Effluent	Monthly	Water	Routine Field Parameters 11. pH Laboratory Analytes 12. Target Compound List VOCs 13. Oil & Grease 14. Total Aluminum, Iron, and Zinc
Treatment Influent	Monthly	Water	Laboratory Analytes 15. Target Compound List VOCs

Laboratory analysis is performed using USEPA Method 8260C, USEPA Method 200.7, USEPA Method 1664B, USEPA Method 8260C-SIM, and USEPA Method Modified 537. Samples are analyzed by TestAmerica of Amherst, NY under contract by the NYSDEC.

As outlined in the OM&M Plan, semi-annual groundwater monitoring and sampling events were conducted on April 9-11, 2019 and December 11-12, 2019. 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 2019 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-6, 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-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.



- 1,4-Dioxane in the shallow and deep zones are summarized below:
 - In the shallow zone, MW-1, MW-5, MW-6, MW-7, MW-8, and MW-12, were all below detection limits.
 - In the deep zone, MW-4D, and MW-5D were below detection limits.
- FAS in the shallow and deep zones are summarized below:
 - In the shallow zone, all six (6) monitoring wells samples MW-1, MW-5, MW-6, MW-7, MW-8, and MW-12 had detections of FAS. Concentrations ranged from 3.28 ng/L at MW-5 to 89.33 ng/L at MW-6.
 - In the deep zone, MW-4D, and MW-5D both had detections: 13.29 ng/L in MW-4D and 29.3 ng/L in MW-5D.

Fall 2019 Groundwater Sampling Summary

- VOCs in the shallow and deep zones are summarized below:
 - In the shallow zone, seven (7) monitoring well samples, MW-2, MW-3, MW-4, MW-9R, MW-11R, 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.

Groundwater sampling activities conducted since 2019 indicate that current groundwater conditions do not meet the NYSDEC TOGS 1.1.1 Class GA AWQS in multiple monitoring wells.

Results of the 2019 monitoring activities are summarized in **Tables 2** and **3**. Figures showing groundwater contouring for the sampling 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 the 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 annually by a licensed Professional Engineer (P.E.) or the P.E.'s designee.

The Site cover system is in good condition and operating as designed. The Site access road, fence, and gate are in good condition and working as designed. Additionally, there was no evidence of Site security issues including vandalism, cover system intrusion, or human encroachment.

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.

All 18 extraction well pads and road boxes were replaced as part of the well upgrade work performed during 2019.

3.2 Groundwater Quality Monitoring

As outlined in the OM&M Plan, semi-annual groundwater monitoring and sampling was conducted by GES on April 9 through 11, 2019 and November 11 and 12, 2019. Emerging contaminant data is shown in **Table 3**, VOC data in **Table 3.1**, and laboratory analytical reports are included in **Appendix B**.

Groundwater monitoring results are summarized below:

Spring 2019 Groundwater Quality Results

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

- MW-2 at 230 micrograms per liter (µg/L)

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

- MW-2 at 4.2 µg/L

Benzene had exceedances in the following monitoring well samples:

- MW-2 at 5.7 µg/L

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

- MW-2 at 86,000 µg/L
- MW-3 at 820 µg/L
- MW-4 at 680 µg/L
- MW-9R at 4,600 µg/L
- MW-11R at 420 µg/L
- MW-12 at 130 µg/L
- MW-13 at 890 µg/L
- MW-14 at 2,200 µg/L

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

- MW-2 at 140 µg/L

Trichloroethene had exceedances in the following monitoring well samples:

- MW-2 at 110 µg/L
- MW-3 at 1,500 µg/L

- MW-4 at 13,000 µg/L
- MW-9R at 7,800 µg/L
- MW-11R at 1,500 µg/L
- MW-12 at 5,200 µg/L
- MW-13 at 3,800 µg/L
- MW-14 at 5,100 µg/L

Vinyl Chloride had exceedances in the following monitoring well samples:

- MW-2 at 32,000 µg/L
- MW-6 at 2.9 µg/L
- MW-9R at 560 µg/L

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

Fall 2019 Groundwater Quality Results

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

- MW-2 at 55,000 µg/L
- MW-3 at 200 µg/L
- MW-9R at 3,200 µg/L
- MW-11R at 890 µg/L
- MW-13 at 780 µg/L
- MW-14 at 910 µg/L

Methylene chloride had exceedances in the following monitoring well samples:

- MW-2 at 1,000 µg/L
- MW-3 at 18 µg/L
- MW-4 at 260 µg/L
- MW-9R at 47 µg/L
- MW-11R at 22 µg/L
- MW-13 at 45 µg/L
- MW-14 at 54 µg/L

Trichloroethene had exceedances in the following monitoring well samples:

- MW-3 at 520 µg/L
- MW-4 at 11,000 µg/L

- MW-9R at 3,900 µg/L
- MW-11R at 8,300 µg/L
- MW-13 at 5,300 µg/L
- MW-14 at 3,200 µg/L

Vinyl Chloride had exceedances in the following monitoring well samples:

- MW-2 at 39,000 µg/L
- MW-9R at 240 µg/L

2019 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. 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 2019 (**Figure 3**) and fall 2019 (**Figure 4**) water level data. Variations in flow direction are observed across the Site between the semi-annual monitoring events. However, as has been consistently observed, the Site groundwater flow direction is primarily to the north, towards the barrier wall and the extraction wells. The groundwater elevation of the Conewango Creek, measured from a surveyed point on the bridge where Falconer Street crosses adjacent to the site, was lower than adjacent wells during the spring and fall gauging events. The spring 2019 gauging event was performed prior to the system upgrade completion and the system was down during the fall 2019 event which prevented an accurate determination of the ability of the upgraded system to create an inward hydraulic gradient between Conewango Creek and the Site.

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

3.3 Remedial System Summary

During the first quarter of 2019 the remedial System received a major upgrade. A new 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 new TPE skid consists of a 140 gallon vapor/liquid separator (VLS), a high efficiency vacuum pump, inlet vacuum filters, pulse meter (skid totalizer), and transfer pump. The new 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. The initial results are showing 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) 25 micron bag filters, where smaller sediments



are removed. From the bag filters the water then moves to an oil water separator (OWS) where additional particulates settle out before going through an air stripper before discharge.

Prior to the installation of the new skid, the average flow rate from January 3, 2019 to February 22, 2019 was approximately 1.10 gallons per minute (gpm). The system up-time between January 3, 2019 and February 22, 2019 was approximately 100%.

From January 3, 2019 through December 10, 2019 the system treated 2,827,266 gallons with an average flow rate of approximately 7.9 gpm. The system up-time for the reporting period was approximately 71%, which takes system downtime into account due to standard system maintenance, repairs, and upgrades. From February 22, 2019 through March 11, 2019 the system was down for the installation, start-up, and testing of the new system skid and control panel. From September 17, 2019 to November 15, 2019 the system was shut down due to the installation of new pitless adaptors and drop tubes in all 18 extraction wells, as well as the replacement of the vacuum pump. The system was shut down on December 10, 2019 due to a transfer pump failure that caused the system to remain shut down for the remainder of 2019.

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

2019 System Water Quality Results

System effluent samples are collected monthly for Target Compound List (TCL) VOCs, oil and grease, and total aluminum, iron, and zinc. **Table 5** presents a summary of the monthly effluent results for 2019 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.

System effluent water results were below effluent limits with the exception of:

- Acetone was above the individual VOC limit of 5 µg/L on 2/12/19 (14 µg/L).
- Total VOCs were above the total discharge limit of 10 µg/L on 2/12/19 (20.2 µg/L) and 11/9/19 (13.0 µg/L).

3.4 Remedial Evaluation

Although the Site remedies and ECs are still in place and functional, an evaluation of the Site 2019 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 has since been discovered 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 in order to evaluate plans for remediation.



- o 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).
- o Modification of the Site ECs to address groundwater impacts at monitoring well MW-2 should be evaluated.
 - With the 2019 upgrades to the groundwater treatment system, higher system groundwater recovery rates were observed. However, high VOC concentrations persist at MW-2.
 - Because VOC concentrations at MW-2 have not been affected by the upgraded TPE system, it is recommended test pits be dug on the down gradient side of MW-2 where the drum field is located.
 - Due to the location of the drum field in relation to Conewango Creek, measures must be taken to ensure disturbing the drum field will not send potential impacts into the creek.
- 2. Elevated groundwater VOC concentrations are observed at monitoring wells 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.
 - o Operation of the upgraded groundwater recovery system in 2019 does show small results in decreasing groundwater VOC concentration trends at these wells; however, operation of the TPE system at the Site in 2019 is not adequately capturing dissolved-phase VOCs from migrating past the line of extraction wells located to the west of the barrier wall.
 - o Continued groundwater monitoring in 2020 is recommended to observe if longer-term operation of the upgraded TPE system continues to reduce groundwater VOC concentrations at monitoring wells MW-13 and MW-14. If VOC concentrations at these wells do not decrease in 2020, an extension of the groundwater recovery system to these monitoring wells or an alternate remedial solution to address groundwater VOCs in the vicinity of monitoring wells MW-13 and MW-14 should be 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.
 - o 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.
 - o 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.

Along with the 2019 groundwater sampling, additional sampling has taken place to better investigate Site-wide contamination. A soil vapor study was conducted in September of 2019. The study focused on the main industrial building on-Site. Six (6) sub slab 24 hour vapor samples were taken at locations selected by the NYDEC to determine VOC concentrations under the building. In addition, two (2) indoor ambient air samples were taken at locations determined by

the NYSDEC. Of the six (6) sub slab samples collected, all six (6) contained measurable concentrations of VOCs. Concentrations ranged from 0.11 µg/m³ (micrograms per cubic meter) in SS-03, to 37,000 µg/m³ in SS-02. The vapor study data will be included under separate cover as requested by the NYSDEC.

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 modified by any Site work since GES took over OM&M activities in February 2016.

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). 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

- From January 3, 2019 through December 10, 2019 the system treated 2,827,266 gallons with an average flow rate of approximately 7.9 gallons per minute (gpm). In comparison, during 2018 the system treated 491,726 gallons at an average rate of 1.01 gpm.



- The groundwater treatment system uptime was 71% for the 2019 reporting period. The uptime in 2019 was affected by system inoperation related to: system upgrades to a new TPE skid, vacuum pump failure and warranty repair, and the transfer pump failure and warranty replacement.
 - o In 2019, GES completed a full extraction well upgrade to compliment the new TPE system equipment. All 18 extraction wells were upgraded with new pitless adaptors, drop tubes, check valves, and shutoffs. This work has already shown increased system groundwater recovery and improved performance.
 - o Site groundwater concentration trends in 2020 should continue to be evaluated to determine if reductions in the groundwater VOC concentrations at monitoring wells MW-2, MW-12, MW-13, and MW-14 are observed following operation of the enhanced groundwater treatment system at a higher groundwater extraction flow rate for an entire year.
- The upgrades to all 18 extraction wells 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. Recent gauging data during system operation has shown DTW ranging from 16 feet below grade to 24 feet below grade across all 18 extraction wells.
 - o Site wide groundwater level measurements in 2019 were not measured while the system was operational, which would have allowed for better determination of hydraulic gradients during system operation. Site wide gauging events will be conducted during 2020 while the system is operating normally to determine the effectiveness of groundwater depression.
 - o Increased pumping rates from the extraction wells in 2020 should create a larger groundwater depression zone downgradient of the barrier wall which should mitigate migration of Site VOCs towards Conewango Creek.
- VOC concentrations remain elevated at monitoring well MW-12 (to the west of Falconer Street in the direction of Municipal Supply Well 2A), monitoring wells 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.
 - o Therefore, the System ECs of the barrier wall and groundwater extraction system are not adequately mitigating off-Site migration of impacted groundwater.
 - o After an additional year of higher groundwater recovery from the enhanced TPE system, evaluation of additional remedial measures to address these groundwater impacts should be completed.

5.3 Upcoming work

GES will conduct additional Site repairs and upgrades in 2020. This work has already been scheduled or is in the process of being scheduled and will take place throughout 2020.

- o Bedding pump replacement – The sewer bedding pump that transfers water from the annular space around the storm sewer pipe failed in 2017. The historic inability of the groundwater treatment system to handle larger amounts of water (prior to the 2019 upgrades) made the bedding pump replacement a low priority. However, the 2019 system upgrades have increased the system capacity and will allow the additional water produced by the bedding pump to be treated. The bedding pump will tie into the new system and control panel, which will allow for better monitoring of that part of the system.
- o Treatment building roof replacement – The treatment plant roof has degraded in several spots and allows for rainwater and snow melt to leak down onto several system components. A new rubber roof will be installed to alleviate the issues.
- o Waterline trenching and installation – Installation of a potable water service line to the treatment building is scheduled to take place during the second quarter of 2020. A new HDPE waterline will tie into an existing deactivated waterline that feeds the treatment building. Potable water will allow for cleaning and maintenance of key system components.
- o Groundwater level monitoring - Data loggers are expected to be installed at Site monitoring and extraction wells EW-1, EW-3, and MW-13 in the summer of 2020, to compare data from the previous study performed prior to the system and well upgrades in 2017. The data loggers will be placed in a series of wells located across the Site to allow for monitoring and evaluation of the TPE system's effect on the water table.

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:
 - o Air stripper effectiveness evaluation – The system groundwater influent VOC concentrations showed an increase in 2019 following the treatment system upgrades. Analytical data will be tracked monthly throughout 2020 to determine whether or not the trend continues. GES will also work with QED, the manufacturer of the stripper, to determine if the current unit is optimized for the influent concentrations and volume of water being treated.



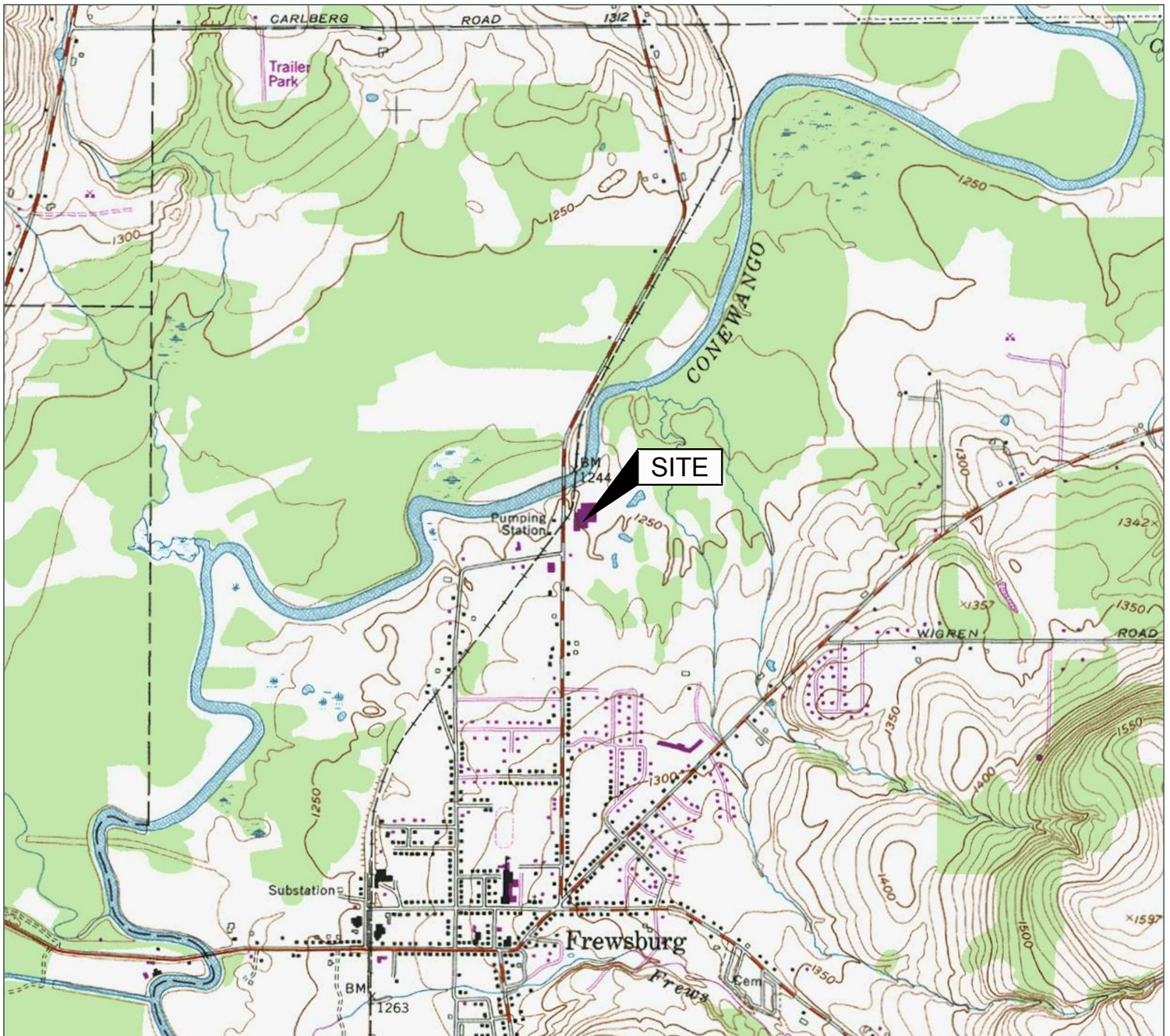
- o Bio-fouling of wells – Bio-fouling of the extraction wells and subsequently the remediation system has begun to add to the maintenance needs of the system. GES will work with vendors on treatment options to prevent the bio-fouling from causing system issues moving forward.
 - o OWS Evaluation – The OWS is starting to rust through in a few places and will need to be repaired or replaced if it remains part of the system treatment train. GES will bypass and clean the OWS while monitoring the system for the presence of product and monitor system water analytical data for any changes related to the removal of the OWS. If monitoring determines that the OWS is no longer required to maintain water treatment, the OWS will be removed from the system.
- Investigation Activities:
 - o Water level study – To better evaluate the effect of the treatment system on the groundwater elevation, Site wide gauging will be performed while the system has been operational for at least one week.
 - o Subsurface investigation continuation – Soil sampling of the subsurface will be performed in 2020 to investigate the extent and distribution of contaminants across the Site. A separate report will be issued to the NYSDEC reporting the findings and potentially suggesting further targeted investigation to address areas of concern.
- Additional Remediation Evaluation:
 - o Remedial option evaluations: northwest portion of the Site – In order to address groundwater VOC impacts at monitoring wells 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.
 - Upgrades to the Site groundwater recovery system in 2019 may have an effect of more adequately capturing dissolved-phase VOCs in the northwest portion of the Site (in the vicinity of monitoring wells MW-13 and MW-14). Continued sampling and data evaluation in 2020 should assist in determination of system effectiveness in that area of the Site.
 - An extension of the existing groundwater treatment system (including installation of additional extraction wells in the northwestern portion of the Site) may be a viable remedial option to address VOC impacts in the vicinity of monitoring wells MW-13 and MW-14.
 - Alternately, the installation of a permeable reactive barrier (PRB) in the northwestern portion of the Site may be a viable remedial option to mitigate off-Site migration of VOC impacts. A PRB would likely need to extend from the western end of the vibrating beam wall to the west along the northern boundary of the Site (in the vicinity of existing extraction wells), along the



northwest property boundary (between approximately monitoring wells MW-13 and MW-4), and south along the western boundary of the Site. A barrier along the western property boundary could also mitigate contamination migration off-Site towards the Municipal Supply Well located across Falconer Street.

- PRB technologies including in-situ carbon application (such as PlumeStop or PetroFix from Regenesys) could provide an effective barrier with less cost than a slurry wall or driven wall extension.
- o Remedial option evaluation: MW-2 – Monitoring well MW-2 has the highest groundwater VOC concentration at the Site and is located downgradient of the extraction system and the barrier wall, between the barrier wall and the Creek.
 - During Geoprobe investigation in early 2020 it was determined that there are waste drums in the area adjacent to MW-2. Further soil/drum disposal area investigation is required and a work plan should be developed and approved by the NYSEC prior to proceeding with additional investigation in this area.
 - Results of a soil investigation near monitoring well MW-2 would allow for evaluation of remedial options to mitigate VOC impacts at MW-2. Remedial options may include groundwater system recovery enhancement (connection of MW-2 to the existing TPE system), installation of a PRB, source soil removal (excavation), or an alternate form of in-situ soil remediation.

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

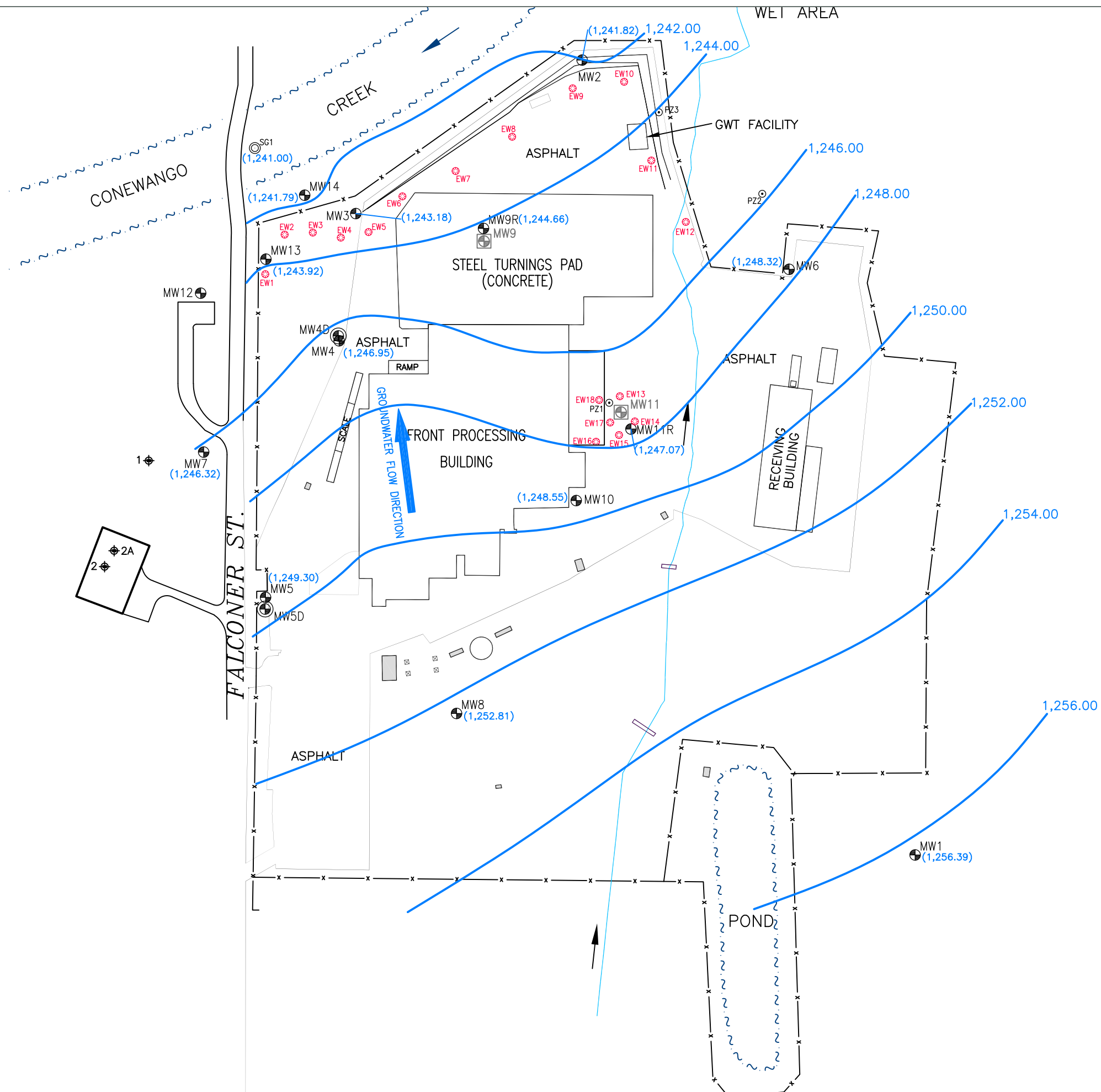
Scale In Feet

0 2000



Groundwater & Environmental Services, Inc.

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LEGEND

- x — FENCE
- BARRIER WALL
- SWALE/CULVERT
- ⊕ SHALLOW MONITORING WELL
- ⊗ DESTROYED/ABANDONED WELL
- ⊕ DEEP MONITORING WELL
- ⊗ EXTRACTION WELL
- ⊙ PIEZOMETER
- ⊙ SURFACE WATER/STAFF GAUGE LOCATION
- (1,256.39) GROUNDWATER ELEVATION (feet)
- GW EL GROUNDWATER ELEVATION (feet)

Groundwater Contour Map December 2019	
NYSDEC Vac-Air Alloys Site #907016 300 Falconer Street Frewsburg, New York	
Drawn W.G.S. Designed Approved	Date 2/21/20 Figure 4
 Scale In Feet Groundwater & Environmental Services, Inc.	

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)	
			4/4/2019	12/12/2019	4/4/2019	12/12/2019
EW-1	1246.00	4	15.41	1.40	1230.59	1244.60
EW-2	1246.48	4	14.86	3.66	1231.62	1242.82
EW-3	1247.85	4	19.13	5.26	1228.72	1242.59
EW-4	1248.93	4	6.17	6.35	1242.76	1242.58
EW-5	1249.35	4	10.97	5.32	1238.38	1244.03
EW-6	1249.93	4	23.39	NM	1226.54	NA
EW-7	1249.60	4	18.66	6.49	1230.94	NA
EW-8	1249.10	4	18.05	6.65	1231.05	1242.45
EW-9	1250.10	4	17.55	6.80	1232.55	1243.30
EW-10	1249.10	4	24.21	6.35	1224.89	1242.75
EW-11	1249.35	4	5.88	6.05	1243.47	1243.30
EW-12	1251.00	4	5.20	Artesian	1245.80	NA
EW-13	1251.60	4	5.91	5.00	1245.69	1246.60
EW-14	1251.35	4	11.38	3.80	1239.97	1247.55
EW-15	1251.27	4	3.93	3.20	1247.34	1248.07
EW-16	1251.00	4	3.85	3.50	1247.15	1247.50
EW-17	1251.27	4	14.12	3.96	1237.15	1247.31
EW-18	1250.93	4	11.51	4.76	1239.42	1246.17
MW-1	1260.60	2	4.11	4.21	1256.49	1256.39
MW-2	1251.60	2	10.78	9.78	1240.82	1241.82
MW-3	1252.30	2	9.58	9.12	NA	1243.18
MW-4	1250.10	2	3.06	3.15	1247.04	1246.95
MW-4D	1249.37	2	4.93	5.27	1244.44	1244.10
MW-5	1256.50	2	6.94	7.20	1249.56	1249.30
MW-5D	1255.14	2	13.34	10.41	1241.80	1244.73
MW-6	1253.70	2	6.16	5.38	1247.54	1248.32
MW-7	1253.76	2	7.23	7.44	1246.53	1246.32
MW-8	1256.65	2	3.69	3.84	1252.96	1252.81
MW-9R	1249.88	2	4.39	5.62	1245.49	1244.26
MW-10	1253.50	2	4.65	4.95	1248.85	1248.55
MW-11R	1250.80	2	3.56	3.73	1247.24	1247.07
MW-12	1243.08	2	Artesian	NM	NA	NA
MW-13	1246.04	2	3.21	2.12	1242.83	1243.92
MW-14	1247.46	2	5.97	5.72	1241.49	1241.74
PZ-1	1250.22	2	5.71	NM	1244.51	NA
PZ-2	1247.43	2	3.59	NM	1243.84	NA
PZ-3	1250.82	2	6.47	NM	1244.35	NA
SG-1	1253.91	2	12.65	12.91	1241.26	1241.00

Note:

ft btoc - feet below top of casing

ft amsl - feet above mean sea level

NM - Not measured

NA - Not applicable

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

Table 3
Emergent Contaminants Analytical Data
April 2019



Grouping		Well ID	MW-1	MW-4D	MW-5	MW-5D	MW-6	MW-6	MW-7	MW-8	MW-12
		Sample type	N	N	N	N	FD	N	N	N	N
		Sample Date	4/11/2019	4/10/2019	4/10/2019	4/10/2019	4/9/2019	4/9/2019	4/11/2019	4/11/2019	4/11/2019
	Fluorinated Alkyl Substances (FAS)										
Perfluoroalkyl carboxylates	Perfluoroundecanoic acid (PFUnA)	ng/L	2.9	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	1.0 J	ND < 1.7 U	ND < 1.7 U
	Perfluoropentanoic acid (PFPA)	ng/L	ND < 1.8 U	1.5 J	ND < 1.8 U	2.9	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U
	Perfluorohexanoic acid (PFHxA)	ng/L	ND < 1.8 U	1.4 J	ND < 1.8 U	3.6	ND < 2.6 U	ND < 3.3 U	ND < 1.7 U	ND < 1.7 U	0.89 J
	Perfluorododecanoic acid (PFDoA)	ng/L	20	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	6.3	ND < 1.7 U	ND < 1.7 U
	Perfluorooctanoic acid (PFOA)	ng/L	ND < 1.8 U	1.9	ND < 1.8 U	6.7	53	54	ND < 1.7 U	0.79 J	2.7
	Perfluorodecanoic acid (PFDA)	ng/L	0.28 J	0.61 J	ND < 1.8 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U
	Perfluorobutanoic acid (PFBA)	ng/L	0.66 BJ	1.6 BJ	1.7 BJ	2.1 B	ND < 30 U	ND < 13 U	1.0 BJ	3.2 B	ND < 3.0 U
	Perfluorotridecanoic Acid (PFTrIA)	ng/L	15	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	11	ND < 1.7 U	ND < 1.7 U
	Perfluoroheptanoic acid (PFHpA)	ng/L	ND < 1.8 U	0.80 J	ND < 1.8 U	2.2	3.2	2.5	ND < 1.7 U	ND < 1.7 U	0.93 J
	Perfluorononanoic acid (PFNA)	ng/L	0.28 J	0.95 J	ND < 1.8 U	4.3	1.7	1.9	ND < 1.7 U	ND < 1.7 U	0.26 J
	Perfluorotetradecanoic acid (PFTeA)	ng/L	4.6 B	0.33 BJ	ND < 1.8 U	0.40 BJ	ND < 1.7 U	0.38 BJ	5.3 B	0.31 BJ	0.40 BJ
Perfluoroalkyl sulfonates	PERFLUORODECANE SULFONIC ACID	ng/L	ND < 1.8 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U
	Perfluorooctane sulphonic acid	ng/L	ND < 1.8 U	1.0 J	ND < 1.8 U	3.1	22	23	ND < 1.7 U	ND < 1.7 U	1.0 J
	Perfluorohexane sulfonate	ng/L	0.39 BJ	1.2 BJ	0.48 BJ	1.4 BJ	3.7 B	2.9 B	0.36 BJ	0.64 BJ	0.59 BJ
	Perfluorobutane Sulfonate	ng/L	0.97 J	2.0	1.1 J	2.6	ND < 1.7 U	ND < 1.7 U	0.57 J	0.87 J	0.83 J
	PERFLUOROHEPTANESULFONIC ACID	ng/L	ND < 1.8 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	0.40 J	0.65 J	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U
	PERFLUOROHEPTANESULFONIC ACID	ng/L	ND < 1.8 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	0.40 J	0.65 J	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U
Perfluorooctane-sulfonamides	Perfluorooctane Sulfonamide (FOSA)	ng/L	ND < 1.8 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U
Perfluorooctane-sulfonamidoacetic acids	N-methyl Perfluorooctane Sulfonamidoacetic Acid (NMeFOSAA)	ng/L	ND < 1.8 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U
	N-ethyl Perfluorooctane Sulfonamidoacetic Acid (NEtFOSSA)	ng/L	ND < 1.8 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U
Fluorinated Telomer Sulfonates	6:2 FTS	ng/L	ND < 1.8 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	3.3 J	4.0 J	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U
	8:2 FTS	ng/L	ND < 1.8 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U	ND < 1.7 U
Total FAS	70 parts per trillion*	ng/L	45.08	13.29	3.28	29.3	87.3	89.33	25.53	4.23	7.6
CAS No.123-91-1	1,4-Dioxane	ug/l	ND < 0.20 U	ND < 0.20 U	ND < 0.20 U	ND < 0.20 U	ND < 0.20 U	ND < 0.20 U	ND < 0.20 U	ND < 0.20 U	ND < 0.20 U

Notes:

ng/L = nanograms per liter

ug/L = micrograms per liter

U = Compound was not detected at or above laboratory reporting limit (RL)

J = Result is less than the reporting limit (RL) but greater than or equal to the MDL and the concentration is an approximate value

B = Compound found in blank and sample

G = The reported quantitation limit has been raised due to an exhibited elevated noise or matrix interference

*USEPA Health Advisory Level for Drinking Water November 2016 (Not a regulatory standard)

N = Normal

FD = Field Duplicate



Table 3.1
Volatile Organic Compounds Analytical Data
2019

CAS No.	Chemical Name	NYSDEC TOGS 1.1.1 GWQS	Well ID	MW-1	MW-2	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4	MW-4D	MW-5	MW-5D	MW-6	MW-6	MW-7	MW-8
			Sample Type	N	N	N	FD	N	N	N	N	N	N	N	FD	N	N	N
			Sample Date	4/11/2019	4/9/2019	12/11/2019	12/11/2019	4/9/2019	12/11/2019	4/10/2019	12/12/2019	4/10/2019	4/10/2019	4/10/2019	4/9/2019	4/9/2019	4/11/2019	4/11/2019
71-55-6	1,1,1-Trichloroethane	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
79-00-5	1,1,2-Trichloroethane	1	µg/L	ND < 1.0 U	0.49 J	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
75-34-3	1,1-Dichloroethane	5	µg/L	ND < 1.0 U	0.38 J	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
75-35-4	1,1-Dichloroethene	5	µg/L	ND < 1.0 U	230 E	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	0.04	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
106-93-4	1,2-Dibromoethane	0.0006	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
95-50-1	1,2-Dichlorobenzene	3	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
107-06-2	1,2-Dichloroethane	0.6	µg/L	ND < 1.0 U	4.2	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
78-87-5	1,2-Dichloropropane	1	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
541-73-1	1,3-Dichlorobenzene	3	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
106-46-7	1,4-Dichlorobenzene	3	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
78-93-3	2-Butanone	50	µg/L	ND < 10 U	ND < 10 UT	ND < 20000 U	ND < 20000 U	ND < 400 U	ND < 200 U	ND < 5000 U	ND < 5000 U	ND < 10 U	ND < 10 U	ND < 10 U	ND < 20 U	ND < 20 U	ND < 10 U	ND < 10 U
591-78-6	2-Hexanone	50	µg/L	ND < 5.0 U	ND < 5.0 U	ND < 10000 U	ND < 10000 U	ND < 200 U	ND < 100 U	ND < 2500 U	ND < 2500 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U	ND < 10 U	ND < 10 U	ND < 5.0 U	ND < 5.0 U
108-10-1	4-Methyl-2-pentanone	NS	µg/L	ND < 5.0 U	ND < 5.0 U	ND < 10000 U	ND < 10000 U	ND < 200 U	ND < 100 U	ND < 2500 U	ND < 2500 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U	ND < 10 U	ND < 10 U	ND < 5.0 U	ND < 5.0 U
67-64-1	Acetone	50	µg/L	ND < 10 U	3.8 J	ND < 20000 U	ND < 20000 U	ND < 400 U	ND < 200 U	ND < 5000 U	ND < 5000 U	ND < 10 U	ND < 10 U	ND < 10 U	ND < 20 U	ND < 20 U	ND < 10 U	ND < 10 U
71-43-2	Benzene	1	µg/L	ND < 1.0 U	5.7	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
75-27-4	Bromodichloromethane	50	µg/L	ND < 1.0 U	ND < 1.0 UT	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
75-25-2	Bromoform	50	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
74-83-9	Bromomethane	50	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
75-15-0	Carbon Disulfide	60	µg/L	ND < 1.0 U	0.86 J	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
56-23-5	Carbon tetrachloride	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
108-90-7	Chlorobenzene	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
75-00-3	Chloroethane	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
67-66-3	Chloroform	7	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
74-87-3	Chloromethane	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
156-59-2	cis-1,2-Dichloroethene	5	µg/L	ND < 1.0 U	86,000	55,000	50,000	820	200	680	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
10061-01-5	cis-1,3-Dichloropropene	0.4	µg/L	ND < 1.0 U	ND < 1.0 UT	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
110-82-7	Cyclohexane	NS	µg/L	ND < 1.0 U	0.51 J	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
124-48-1	Dibromochloromethane	50	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
75-71-8	Dichlorodifluoromethane	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
100-41-4	Ethylbenzene	5	µg/L	ND < 1.0 U	1.1	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
98-82-8	Isopropylbenzene	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
79-20-9	Methyl acetate	NS	µg/L	ND < 2.5 U	ND < 2.5 U	ND < 5000 U	ND < 5000 U	ND < 100 U	ND < 50 U	ND < 1300 U	ND < 1300 U	ND < 2.5 U	ND < 2.5 U	ND < 2.5 U	ND < 5.0 U	ND < 5.0 U	ND < 2.5 U	ND < 2.5 U
1634-04-4	Methyl tert-butyl ether	10	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
108-87-2	Methylcyclohexane	NS	µg/L	ND < 1.0 U	1.1	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
75-09-2	Methylene chloride	5	µg/L	ND < 1.0 U	ND < 1.0 U	1,000 J	1,100 J	ND < 40 U	18 J	ND < 500 U	260 J	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
100-42-5	Styrene	50	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
127-18-4	Tetrachloroethene	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
108-88-3	Toluene	5	µg/L	ND < 1.0 U	2.3	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
156-60-5	trans-1,2-Dichloroethene	5	µg/L	ND < 1.0 U	140 E	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
10061-02-6	trans-1,3-Dichloropropene	0.4	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
79-01-6	Trichloroethene	5	µg/L	ND < 1.0 U	110 E	ND < 2000 U	ND < 2000 U	1500	520	13,000	11,000	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
75-69-4	Trichlorofluoromethane	5	µg/L	ND < 1.0 U	ND < 1.0 U	ND < 2000 U	ND < 2000 U	ND < 40 U	ND < 20 U	ND < 500 U	ND < 500 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 2.0 U	ND < 2.0 U	ND < 1.0 U	ND < 1.0 U
75-01-4	Vinyl Chloride	2	µg/L	ND < 1.0 U	32,000	39,000	32,000	ND < 40 U	ND < 20 U									



Table 3.1
Volatile Organic Compounds Analytical Data
2019

CAS No.	Chemical Name	NYSDEC TOGS 1.1.1 GWQS	Well ID	MW-9R	MW-9R	MW-10	MW-11R	MW-11R	MW-12	MW-13	MW-13	MW-14	MW-14
			Sample	N	N	N	N	N	N	N	N	N	N
			Type Sample Date	4/10/2019	12/11/2019	4/10/2019	4/10/2019	12/11/2019	4/11/2019	4/11/2019	12/12/2019	4/10/2019	12/12/2019
71-55-6	1,1,1-Trichloroethane	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
79-34-5	1,1,2,2-Tetrachloroethane	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
79-00-5	1,1,2-Trichloroethane	1	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
75-34-3	1,1-Dichloroethane	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
75-35-4	1,1-Dichloroethene	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
120-82-1	1,2,4-Trichlorobenzene	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
96-12-8	1,2-Dibromo-3-chloropropane	0.04	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
106-93-4	1,2-Dibromoethane	0.0006	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
95-50-1	1,2-Dichlorobenzene	3	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
107-06-2	1,2-Dichloroethane	0.6	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
78-87-5	1,2-Dichloropropane	1	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
541-73-1	1,3-Dichlorobenzene	3	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
106-46-7	1,4-Dichlorobenzene	3	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
78-93-3	2-Butanone	50	µg/L	ND < 2000 U	ND < 1000 U	ND < 10 U	ND < 400 U	ND < 400 U	ND < 1000 U	ND < 800 U	ND < 800 U	ND < 1000 U	ND < 1000 U
591-78-6	2-Hexanone	50	µg/L	ND < 1000 U	ND < 500 U	ND < 5.0 U	ND < 200 U	ND < 200 U	ND < 500 U	ND < 400 U	ND < 400 U	ND < 500 U	ND < 500 U
108-10-1	4-Methyl-2-pentanone	NS	µg/L	ND < 1000 U	ND < 500 U	ND < 5.0 U	ND < 200 U	ND < 200 U	ND < 500 U	ND < 400 U	ND < 400 U	ND < 500 U	ND < 500 U
67-64-1	Acetone	50	µg/L	ND < 2000 U	ND < 1000 U	ND < 10 U	ND < 400 U	ND < 400 U	ND < 1000 U	ND < 800 U	ND < 800 U	ND < 1000 U	ND < 1000 U
71-43-2	Benzene	1	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
75-27-4	Bromodichloromethane	50	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
75-25-2	Bromoform	50	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
74-83-9	Bromomethane	50	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
75-15-0	Carbon Disulfide	60	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
56-23-5	Carbon tetrachloride	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
108-90-7	Chlorobenzene	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
75-00-3	Chloroethane	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
67-66-3	Chloroform	7	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
74-87-3	Chloromethane	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
156-59-2	cis-1,2-Dichloroethene	5	µg/L	4,600	3,200	ND < 1.0 U	420	890	130	890	780	2,200	910
10061-01-5	cis-1,3-Dichloropropene	0.4	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
110-82-7	Cyclohexane	NS	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
124-48-1	Dibromochloromethane	50	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
75-71-8	Dichlorodifluoromethane	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
100-41-4	Ethylbenzene	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
98-82-8	Isopropylbenzene	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
79-20-9	Methyl acetate	NS	µg/L	ND < 500 U	ND < 250 U	ND < 2.5 U	ND < 100 U	ND < 100 U	ND < 250 U	ND < 200 U	ND < 200 U	ND < 250 U	ND < 250 U
1634-04-4	Methyl tert-butyl ether	10	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
108-87-2	Methylcyclohexane	NS	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
75-09-2	Methylene chloride	5	µg/L	ND < 200 U	47 J	ND < 1.0 U	ND < 40 U	22 J	ND < 100 U	ND < 80 U	45 J	ND < 100 U	54 J
100-42-5	Styrene	50	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
127-18-4	Tetrachloroethene	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
108-88-3	Toluene	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
156-60-5	trans-1,2-Dichloroethene	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
10061-02-6	trans-1,3-Dichloropropene	0.4	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
79-01-6	Trichloroethene	5	µg/L	7,800	3,900 T	ND < 1.0 U	1,500	8,300	5,200	3,800	5,300	5,100	3,200
75-69-4	Trichlorofluoromethane	5	µg/L	ND < 200 U	ND < 100 U	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
75-01-4	Vinyl Chloride	2	µg/L	560	240	ND < 1.0 U	ND < 40 U	ND < 40 U	ND < 100 U	ND < 80 U	ND < 80 U	ND < 100 U	ND < 100 U
1330-20-7	Xylenes, Total	5	µg/L	ND < 400 U	ND < 200 U	ND < 2.0 U	ND < 80 U	ND < 80 U	ND < 200 U	ND < 160 U	ND < 160 U	ND < 200 U	ND < 200 U

Notes:

µg/L = micrograms per liter

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.

Bold values exceed the NYSDEC TOGS 1.1.1 GWQS.

NS = No Standard

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.

U = Compound was not detected at or above laboratory reporting limit (RL)

T = MS/MSD recovery is outside acceptance limits.



Table 4

Remedial System Operation Data 2019

Date	Hourmeter	Total hours since last visit	Totalizer	Bypass Totalizer	Total Volume Discharged	GPM	Operational Status
			Gallons	Gallons	Gallons		
1/3/2019	21,404.0	166.1	888,159.20	269,546.00	7,895.10	0.8	Operating Normally
1/9/2019	21,544.3	140.3	891,699.30	272,616.00	6,610.10	0.8	Operating Normally
1/15/2019	21,688.3	144.0	895,205.60	275,810.00	6,700.30	0.8	Operating Normally
1/17/2019	21,736.1	47.8	896,467.10	275,826.00	1,277.50	0.4	Operating Normally
1/24/2019	21,903.2	167.1	900,463.40	280,457.00	8,627.30	0.9	Operating Normally
1/29/2019	22,022.9	119.7	903,387.50	283,108.00	5,575.10	0.8	Operating Normally
2/5/2019	22,191.3	168.4	908,878.80	286,408.00	8,791.30	0.9	Operating Normally
2/7/2019	22,237.8	46.5	909,985.30	287,662.00	2,360.50	0.8	Operating Normally
2/14/2019	22,368.4	130.6	913,001.40	292,359.00	7,713.10	1.0	Operating Normally
2/22/2019	22,570.0	201.6	915,804.30	298,353.00	8,796.90	0.7	Shut down for upgrade
3/1/2019							System Start-up / testing
3/5/2019							System Start-up / testing
3/6/2019							System Start-up / testing
3/7/2019							System Started
3/11/2019							Operating Normally
3/13/2019	123.3	123.3	921,392.80		14,009.00	5.3	Operating Normally
3/15/2019	168.7	45.4	941,218.60		13,727.60	5.0	Operating Normally
3/18/2019	241.5	72.8	955,227.60		23,042.90	5.3	Operating Normally
3/20/2019	287.3	45.8	968,955.20		14,368.50	5.2	Operating Normally
3/22/2019	333.6	46.3	991,998.10		14,697.20	5.3	Operating Normally
3/26/2019	428.6	95.0	1,006,366.60		29,040.90	5.1	Operating Normally
3/28/2019	482.1	53.5	1,021,063.80		15,130.60	4.7	Operating Normally
4/2/2019	600.5	118.4	281,100.00		53,500.00	7.5	Operating Normally
4/4/2019	649.2	48.7	302,400.00		21,300.00	7.3	Operating Normally
4/9/2019	769.6	120.4	351,866.50		49,466.50	6.8	Operating Normally
4/11/2019	814.4	44.8	370,749.10		18,882.60	7.0	Operating Normally
4/16/2019	933.7	119.3	431,060.80		60,311.70	8.4	Operating Normally
4/18/2019	980.3	46.6	454,000.00		22,939.20	8.2	Operating Normally
4/23/2019	1,100.5	120.2	513,655.00		59,655.00	8.3	Operating Normally
4/25/2019	1,140.1	39.6	534,884.00		21,229.00	8.9	Operating Normally
4/30/2019	1,262.6	122.5	589,402.00		54,518.00	7.4	Operating Normally
5/2/2019	1,314.7	52.1	611,241.00		21,839.00	7.0	Operating Normally
5/7/2019	1,430.0	115.3	666,465.00		55,224.00	8.0	Operating Normally
5/9/2019	1,481.4	51.4	687,075.00		20,610.00	6.7	Operating Normally
5/14/2019	1,598.5	117.1	742,959.00		55,884.00	8.0	Operating Normally
5/16/2019	1,645.2	46.7	764,371.00		21,412.00	7.6	Operating Normally
5/21/2019	1,761.3	116.1	817,444.00		53,073.00	7.6	Operating Normally
5/23/2019	1,812.4	51.1	838,251.00		20,807.00	6.8	Operating Normally
5/25/2019	1,861.4	49.0	862,333.00		24,082.00	8.2	Down due to KO High 10 minute limit. Restarted.
5/28/2019	1,931.2	69.8	897,754.00		35,421.00	7.7	Operating Normally
5/30/2019	1,978.5	47.3	922,174.80		24,419.40	7.8	Operating Normally
6/4/2019	2,093.7	115.2	989,853.00		67,678.20	9.8	Operating Normally
6/6/2019	2,146.0	52.3	1,006,827.00		16,974.00	5.4	Operating Normally
6/13/2019	2,309.2	163.2	1,094,639.00		87,812.00	9.0	Operating Normally
6/18/2019	2,426.4	117.2	1,166,845.00		72,206.00	10.3	Operating Normally
6/20/2019	2,478.4	52.0	1,196,428.00		29,583.00	9.5	Operating Normally
6/25/2019	2,695.5	217.1	1,275,662.00		79,234.00	6.1	Operating Normally
7/2/2019	2,760.8	65.3	1,377,721.00		102,059.00	26.0	Operating Normally
7/5/2019	2,829.6	68.8	1,418,305.10		40,584.10	9.8	Down due to KO High 10 minute limit. Restarted.
7/9/2019	2,924.7	95.1	1,477,401.00		59,095.90	10.4	Operating Normally



Table 4

Remedial System Operation Data 2019

Date	Hourmeter	Total hours since last visit	Totalizer	Bypass Totalizer	Total Volume Discharged	GPM	Operational Status
			Gallons	Gallons	Gallons		
7/11/2019	2,971.4	46.7	1,505,064.00		27,663.00	9.9	Operating Normally
7/16/2019	3,090.3	118.9	1,574,454.00		69,390.00	9.7	Operating Normally
7/18/2019	3,134.2	43.9	1,600,064.00		25,610.00	9.7	Operating Normally
7/23/2019	3,258.7	124.5	1,671,087.00		71,023.00	9.5	Operating Normally
7/25/2019	3,302.1	43.4	1,696,018.00		24,931.00	9.6	Operating Normally
7/30/2019	3,426.2	124.1	1,765,024.00		69,006.00	9.3	Operating Normally
8/1/2019	3,470.4	44.2	1,789,185.00		24,161.00	9.1	Operating Normally
8/6/2019	3,595.3	124.9	1,851,614.00		62,429.00	8.3	Operating Normally
8/8/2019	3,637.9	42.6	1,882,267.00		30,653.00	12.0	Operating Normally
8/13/2019	3,762.7	124.8	1,952,947.00		70,680.00	9.4	Operating Normally
8/15/2019	3,803.8	41.1	1,976,584.00		23,637.00	9.6	Operating Normally
8/20/2019	3,924.2	120.4	2,042,940.00		66,356.00	9.2	Operating Normally
8/22/2019	3,967.3	43.1	2,065,978.00		23,038.00	8.9	Operating Normally
8/27/2019	4,087.9	120.6	2,130,971.00		64,993.00	9.0	Operating Normally
8/29/2019	4,141.2	53.3	2,160,789.00		29,818.00	9.3	Operating Normally
9/3/2019	4,260.0	118.8	2,225,557.80		64,768.80	9.1	Operating Normally
9/5/2019	4,305.3	45.3	2,250,476.00		24,918.20	9.2	Operating Normally
9/10/2019	4,426.2	120.9	2,315,815.60		65,339.60	9.0	Operating Normally
9/12/2019	4,476.0	49.8	2,342,329.60		26,514.00	8.9	Operating Normally
9/17/2019 - 11/7/2019	System Down						System Down (Vacuum Pump Failure)
11/15/2019	4,606.5	130.5	2,421,690.00		79,360.40	10.1	Operating Normally
11/19/2019	4,700.3	93.8	2,494,420.00		72,730.00	12.9	Operating Normally
11/21/2019	4,746.6	46.3	2,530,181.00		35,761.00	12.9	Operating Normally
11/25/2019	4,844.5	97.9	2,606,210.00		76,029.00	12.9	Operating Normally
11/27/2019	4,895.0	50.5	2,643,632.10		37,422.10	12.4	Operating Normally
12/3/2019	5,036.0	141.0	2,749,548.00		105,915.90	12.5	Operating Normally
12/5/2019	5,087.8	51.8	2,784,618.00		35,070.00	11.3	Operating Normally
12/10/2019	5,193.4	105.6	2,866,502.00		81,884.00	12.9	Operating Normally
12/12/2019-12/26/2019	System Down						System Down (Transfer Pump Failure)

Table 5
Monthly Treatment Data
Effluent 2019

Parameter	Units	Measurement Frequency	Effluent Limits (Daily Max.)	1/24/2019	2/12/2019	3/11/2019	3/20/2019	4/23/2019	5/23/2019	6/20/2019	7/19/2019	8/22/2019	9/9/2019	10/9/2019	11/9/2019	12/9/2019
VOCs	ug/L	Monthly	10	2.1	20.2J	9.9 J	ND	ND	ND	ND	2.1 J	2.1 J	System down	System down	13	System down
Oil & Grease	mg/L	Monthly	15	13 B	5.2 B	ND<4.8	2.7 JB	4.2JB	ND<4.8	2.0 JB	ND<4.8	1.3 JB	System down	System down	2.4 J	System down
Aluminum	ug/L	Monthly	2,700	ND<200	ND<200	81	ND<200	ND<200	ND<200	ND<200	ND<200	ND<200	System down	System down	ND<200	System down
Iron	ug/L	Monthly	2,000	440	170	7900	3300	2700	1700	1500	1600	1800	System down	System down	2000 B	System down
Zinc	ug/L	Monthly	400	26	35	75	76	35	9.3	18	12 B	27 B	System down	System down	26 B	System down

Notes:

mg/L = milligrams per litre

ug/L = micrograms per liter

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.

Bold values exceed the NYSDEC TOGS 1.1.1 GWQS.

NS = No Standard

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 = Analyte also detected in method or trip blank

Table 6
System VOC Summary
2019



Sample Date	Concentration (ug/L)				
	TCE	cis-1,2-DCE	Vinyl Chloride	Acetone	Total VOCs
Influent					
3/11/2019	2,000	760	ND<40	ND<400	2,760
3/20/2019	1,600	770	ND<4	ND<40	2,370
4/23/2019	2,000	1,300	51	ND<400	3,300
5/23/2019	3,100	2,800	130	ND<400	6,030
6/20/2019	3,100	3,100	110	ND<400	6,310
7/19/2019	3,700	2,900	110	ND<400	6,710
8/22/2019	3,600	3,800	130	ND<400	7,556
9/9/2019	NS	NS	NS	NS	NS
10/9/2019	NS	NS	NS	NS	NS
11/21/2019	140	190	ND<4	ND<40	334.6
12/9/2019	NS	NS	NS	NS	NS
Effluent					
1/24/2019	2.1	ND<1	ND<1	ND<10	2.1
2/12/2019	3	ND<1	ND<1	14	20.2 J
3/11/2019	2.5 J	4.4	ND<1	ND<10	8.9 J
3/20/2019	ND<4	ND<4	ND<4	ND<40	ND
4/23/2019	ND<4	ND<4	ND<4	ND<40	ND
5/23/2019	ND<4	ND<4	ND<4	ND<40	ND
6/20/2019	ND<4	ND<4	ND<4	ND<40	ND
7/19/2019	ND<4	ND<4	ND<4	ND<40	ND
8/22/2019	ND<4	ND<4	ND<4	ND<40	2.1 J
9/9/2019	NS	NS	NS	NS	NS
10/9/2019	NS	NS	NS	NS	NS
11/21/2019	ND	ND<4	ND<4	ND<40	13
12/9/2019	NS	NS	NS	NS	NS

Notes:

mg/L = milligrams per liter

ug/L = micrograms per liter

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.

Bold values exceed the NYSDEC TOGS 1.1.1 GWQS.

NS = Not Sampled (System was down during September, October, and December preventing sample collection).

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 = Analyte also detected in method or trip blank

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

TCE = Trichloroethene

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

VOCs = Volatile Organic Compounds

Appendix A – Groundwater Sampling Logs

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	3.72
Date:	4/11/2019	Depth to Bottom of Well (ft, TOC)	19.98
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-1	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
10:30	4.51	6.80	8.47	0.51	117.40	3.75	1.40
10:35	4.51	6.80	7.86	0.500	105.50	1.68	-0.9
10:40	4.51	6.80	7.82	0.500	103.30	1.61	-0.5
10:45	4.51	6.80	7.81	0.499	102.40	1.49	-1.2
10:50	4.51	6.80	7.80	0.498	101.70	1.42	-1.40
10:55	4.51	6.80	7.78	0.499	98.60	1.33	-0.90
11:00	4.51	6.90	7.76	0.498	95.00	1.21	-1.10
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	10:30	Notes:	11:00	Sample Time	3	gal purged
Purge End Time:	11:00					
Weather:	35° Cloudy					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	10.91
Date:	4/9/2019	Depth to Bottom of Well (ft, TOC)	15.26
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-2	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
12:55	10.41	9.70	7.04	3.02	-40.10	1.32	402.10
13:00	10.45	9.10	6.60	1.678	-96.60	0.58	596.2
13:05	10.45	9.10	6.55	1.683	-116.40	0.54	101.0
13:10	10.51	9.10	6.58	1.510	-132.50	0.45	88.4
13:15	10.51	9.00	6.59	1.494	-138.00	0.43	101.90
13:20	10.51	9.00	6.59	1.459	-143.60	0.41	17.90
13:25	10.56	8.90	6.59	1.439	-148.10	0.39	25.80
13:30	10.61	8.90	6.60	1.421	-151.80	0.38	43.50
13:35	10.61	8.90	6.61	1.408	-156.70	0.37	23.40
13:40	10.61	8.90	6.61	1.405	-157.20	0.37	29.50
13:45	10.61	9.00	6.61	1.391	-159.60	0.36	68.90
13:50	10.66	8.90	6.61	1.379	-162.00	0.35	175.10
13:55	10.66	8.90	6.62	1.349	-163.20	0.35	239.10
13:57	10.66	8.90	6.62	1.348	-163.50	0.35	251.20
13:59	10.66	8.90	6.62	1.360	-164	0.34	261.20
14:01	10.66	8.90	6.62	1.358	-164.4	0.34	247.40
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	12:55	Notes:	14:05	Sample Time	6	gal purged
Purge End Time:	14:01					
Weather:	55° Sunny					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	10.01
Date:	4/9/2019	Depth to Bottom of Well (ft, TOC)	24.96
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-3	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
14:45	24.96	9.80	8.51	0.70	29.90	1.43	226.80
14:50	13.61	9.10	7.98	0.696	26.10	0.73	456.9
14:55	13.61	9.40	7.85	0.693	9.70	0.63	284.4
15:00	Air bubbles in cell took apart and resealed						
15:10	17.66	10.60	7.78	0.693	74.50	2.72	26.40
15:15	17.66	10.50	7.75	0.688	68.60	1.92	24.70
15:20	17.66	11.20	7.76	0.683	84.70	6.04	83.20
15:25	17.83	11.50	7.11	0.683	108.30	7.12	228.30
15:30	17.83	11.30	7.78	0.673	117.90	7.45	4.80
15:35	17.83	11.50	7.72	0.690	79.30	0.89	258.10
15:40	19.21	10.50	7.62	0.679	60.30	1.06	39.20
15:45	19.27	10.60	7.63	0.682	67.20	1.07	4.21
15:50	20.32	10.50	7.62	0.681	61.70	1.21	4.11
15:52	20.57	10.50	7.62	0.678	66.40	1.31	3.11
15:54	20.91	10.50	7.62	0.680	63.2	1.1	3.21
15:56	20.91	10.60	7.62	0.687	64.2	1.1	3.27
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	14:45	Notes:	16:10	Sample Time	6	gal purged
Purge End Time:	15:56					
Weather:	55° Sunny					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	3.06
Date:	4/10/2019	Depth to Bottom of Well (ft, TOC)	20.28
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-4	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
15:00	4.27	9.60	7.76	1.11	133.40	1.48	11.00
15:05	4.57	9.50	7.56	1.065	13.00	0.50	11.0
15:10	4.24	9.50	7.54	1.049	-40.50	4.10	9.0
15:15	4.24	9.40	7.55	1.02	-47.20	0.43	6.30
15:20	4.24	9.40	7.54	1.030	-43.90	0.40	6.70
15:25	4.24	9.40	7.54	1.031	-43.60	0.40	3.10
15:30	4.24	9.40	7.55	0.984	-40.10	0.38	2.90
15:35	4.24	9.40	7.55	0.987	-40.20	0.37	2.90
15:40	4.24	9.40	7.54	0.984	-40.10	0.39	2.80
15:45	4.24	9.40	7.55	0.987	-40.20	0.39	3.10
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	15:00	Notes:	15:45	Sample Time	5	gal purged
Purge End Time:	15:45					
Weather:	40° Cloudy					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	12.28
Date:	4/10/2019	Depth to Bottom of Well (ft, TOC)	41.70
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-4D	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
16:00	12.28	10.20	8.66	0.04	-101.40	6.81	84.10
16:05	12.94	11.40	7.73	0.037	69.80	6.59	12.6
16:10	12.72	11.50	7.43	0.040	92.60	7.09	6.7
16:15	11.78	11.40	7.27	0.053	104.90	6.56	8.4
16:20	11.78	11.40	7.06	0.20	124.70	6.15	10.70
16:25	11.78	11.30	7.18	0.583	137.60	5.73	25.70
16:30	11.78	10.80	7.47	0.694	147.70	6.34	66.90
16:35	11.78	10.40	7.55	0.721	158.60	6.90	66.10
16:40	11.78	10.30	7.55	0.722	159.10	6.97	66.40
16:45	11.78	10.30	7.55	0.723	159.20	6.97	66.50
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	16:00	Notes:	16:45	Sample Time	5	gal purged
Purge End Time:	16:45					
Weather:	40° Cloudy					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	7.29
Date:	4/10/2019	Depth to Bottom of Well (ft, TOC)	19.76
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-5	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
14:00	7.29	8.90	7.77	0.624	118.90	1.47	453.90
14:05	7.41	8.90	7.71	0.624	97.50	1.33	302.1
14:10	7.35	8.90	7.62	0.625	107.30	1.15	64.7
14:15	7.35	8.90	7.61	0.625	107.10	1.14	62.3
14:20	7.35	8.90	7.60	0.625	104.30	1.11	61.70
14:25	7.35	8.90	7.60	0.623	101.80	1.11	62.70
14:30	7.35	8.90	7.60	0.622	100.40	1.11	61.90
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	14:00	Notes:	14:30	Sample Time	5	gal purged
Purge End Time:	14:30					
Weather:	40° Cloudy					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	9.31
Date:	4/10/2019	Depth to Bottom of Well (ft, TOC)	45.48
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-5D	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
11:30	9.31	9.20	7.93	0.736	101.70	9.19	3.50
11:35	9.23	9.90	7.84	0.742	111.00	8.73	3.3
11:40	9.23	10.20	7.86	0.743	121.10	8.53	3.2
11:45	9.23	10.20	7.86	0.743	121.10	8.55	3.7
11:50	9.23	10.20	7.86	0.743	121.70	8.56	3.40
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	11:30	Notes:	12:00	Sample Time	3.5	gal purged
Purge End Time:	11:50					
Weather:	40° Cloudy					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	6.20
Date:	4/9/2019	Depth to Bottom of Well (ft, TOC)	14.71
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-6	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
16:55	6.20	8.90	7.79	0.767	-22.20	2.95	208.60
17:00	6.63	8.40	7.22	0.766	-12.10	1.62	40.2
17:05	6.79	8.00	6.96	0.775	-14.40	1.10	8.1
17:10	6.79	7.90	6.90	0.778	-20.30	0.91	1.5
17:15	6.79	7.80	6.89	0.779	-23.40	0.85	0.70
17:20	6.79	7.80	6.89	0.779	-26.50	0.78	3.70
17:25	6.79	7.80	6.88	0.779	-28.70	0.75	0.40
17:30	6.79	7.70	6.87	0.779	-29.60	0.68	0.00
17:35	6.79	7.70	6.87	0.779	-29.70	0.66	0.00
17:40	6.79	7.70	6.85	0.778	-31.90	0.62	0.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	16:55	Notes:	17:45	Sample Time	4.5	gal purged
Purge End Time:	17:40			Dup Collected		
Weather:	40° Cloudy					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	7.23
Date:	4/11/2019	Depth to Bottom of Well (ft, TOC)	24.21
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-7	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
11:55	7.23	11.40	7.88	0.797	191.50	1.10	15791.00
12:00	8.17	11.40	7.80	0.784	184.40	1.71	520.9
12:05	8.17	11.40	7.70	0.787	171.80	0.49	368.1
12:10	8.17	11.40	7.68	0.786	162.90	0.45	353.7
12:15	8.17	11.40	7.65	0.785	149.20	0.41	353.50
12:20	8.17	11.50	7.65	0.785	139.20	0.37	352.10
12:25	8.17	11.50	7.64	0.785	138.10	0.37	351.10
12:30	8.17	11.50	7.64	0.786	134.10	0.35	352.10
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	11:55	Notes:	12:30	Sample Time	3	gal purged
Purge End Time:	12:30					
Weather:	40° Cloudy					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	3.78
Date:	4/11/2019	Depth to Bottom of Well (ft, TOC)	19.09
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-8	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
7:45	3.78	7.00	8.77	0.491	158.00	1.23	12.50
7:50	3.78	6.70	8.30	0.498	165.00	0.74	8.5
7:55		6.70	8.11	0.491	169.10	0.61	4.4
8:00		6.60	7.94	0.504	172.00	0.52	3.1
8:05		6.50	7.86	0.516	173.30	0.49	2.30
8:10		6.40	7.75	0.531	174.60	0.46	1.40
8:15		6.50	7.68	0.540	174.80	0.44	1.70
8:20		6.20	7.69	0.551	174.60	0.45	1.50
8:25		6.20	7.68	0.551	174.50	0.45	1.70
8:30		6.20	7.68	0.550	174.40	0.45	1.20
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	7:45	Notes:	8:30	Sample Time	3.5	gal purged
Purge End Time:	8:30					
Weather:	40° Snow					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	4.32
Date:	4/10/2019	Depth to Bottom of Well (ft, TOC)	21.71
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-9R	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
7:55	4.32	10.90	8.53	1.363	3.71	3.71	608.20
8:00	6.32	9.20	7.88	1.362	5.91	5.91	47.8
8:05	6.32	10.40	7.89	1.375	2.81	2.81	25.2
8:10	6.32	10.90	7.57	1.365	0.58	0.58	6.3
8:15	6.71	11.00	7.53	1.358	0.53	0.53	7.00
8:20	6.71	10.90	7.49	1.231	0.58	0.58	10.30
8:25	6.71	10.70	7.42	1.120	0.93	0.93	9.40
8:30	6.71	10.70	7.34	1.168	0.77	0.77	15.00
8:35	6.71	10.80	7.31	1.183	0.67	0.67	19.40
8:40	6.71	10.70	7.27	1.215	0.54	0.54	25.70
8:45	6.71	10.70	7.28	1.202	0.47	0.47	25.30
8:50	6.71	10.70	7.27	1.207	0.42	0.42	25.20
8:55	6.71	10.70	7.27	1.206	0.47	0.42	25.20
8:57	6.71	10.70	7.28	1.206	0.47	0.47	25.20
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	7:55	Notes:	9:00	Sample Time	6	gal purged
Purge End Time:	8:57					
Weather:	40° Snow					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	6.15
Date:	4/10/2019	Depth to Bottom of Well (ft, TOC)	21.45
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-10	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
10:25	6.15	10.70	8.21	0.351	-127.40	0.87	22.80
10:30	6.98	10.60	8.14	0.348	-159.90	0.49	11.6
10:35	6.98	10.50	8.14	0.349	-170.80	0.43	20.6
10:40	7.80	10.60	8.15	0.349	-186.60	0.37	43.0
10:45	7.80	10.50	8.15	0.350	-186.80	0.37	43.70
10:50	7.80	10.50	8.15	0.349	-186.70	0.37	42.90
10:55	7.80	10.50	8.15	0.350	-186.10	0.37	43.20
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	10:25	Notes:	11:00	Sample Time	2.5	gal purged
Purge End Time:	10:55					
Weather:	40° Snow					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	4.24
Date:	4/10/2019	Depth to Bottom of Well (ft, TOC)	14.68
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-11R	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
9:30	4.24	9.40	8.26	0.663	-57.80	2.52	787.00
9:35	5.67	8.90	7.60	0.662	-1.60	2.15	184.7
9:40	5.38	8.80	7.45	0.661	-7.50	0.66	34.7
9:45	5.17	8.70	7.37	0.661	2.70	0.47	38.9
9:50	5.17	8.70	7.34	0.661	3.70	0.43	21.30
9:55	5.17	8.70	7.33	0.661	1.10	0.42	49.30
10:00	5.17	8.70	7.32	0.660	2.30	0.40	50.10
10:05	5.17	8.70	7.33	0.660	1.90	0.40	49.70
10:10	5.17	8.70	7.33	0.661	2.40	0.38	49.20
10:15	5.17	8.70	7.33	0.664	1.90	0.37	50.10
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	9:30	Notes:	10:15	Sample Time	3.5	gal purged
Purge End Time:	10:15					
Weather:	35° Overcast					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	Artesan
Date:	4/11/2019	Depth to Bottom of Well (ft, TOC)	15.10
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-12	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
14:00	0.41	7.47	7.54	1.050	-251.90	5.72	58.91
14:05	1.47	7.61	6.97	1.021	-247.80	0.78	10.8
14:10	1.69	7.63	6.97	1.022	-236.50	0.42	5.4
14:15	1.74	7.62	6.96	1.017	-233.20	0.47	2.7
14:20	1.72	7.62	6.96	1.020	-228.70	0.41	0.00
14:25	1.81	7.62	6.97	1.022	-226.40	0.43	0.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	14:00	Notes:	14:30	Sample Time	3	gal purged
Purge End Time:	14:25					
Weather:	35° Overcast					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	4.01
Date:	4/11/2019	Depth to Bottom of Well (ft, TOC)	18.61
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-13	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
9:10	4.01	9.00	7.77	1.035	-110.90	1.67	426.20
9:15	6.10	8.60	7.73	1.041	-135.10	0.51	90.1
9:20	6.10	8.60	7.72	1.040	-134.40	0.51	130.1
9:25	6.10	8.80	7.68	1.043	-128.60	0.47	434.3
9:30	6.10	8.80	7.63	1.047	-121.20	0.45	480.10
9:35	6.10	8.90	7.62	1.051	-77.20	1.80	37.60
9:40	6.10	8.80	7.60	1.049	-80.60	1.30	37.70
9:45	6.10	8.70	7.54	1.047	-92.70	0.45	26.90
9:50	6.10	8.70	7.53	1.045	-93.70	0.45	26.10
9:55	6.10	8.80	7.51	1.044	-91.90	0.41	26.70
10:00	6.10	8.80	7.51	1.044	-91.30	0.41	27.10
10:05	6.10	8.90	7.50	1.046	-91.20	0.41	26.80
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	9:10	Notes:	10:05	Sample Time	3.5	gal purged
Purge End Time:	10:05					
Weather:	35° Overcast					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	5.97
Date:	4/10/2019	Depth to Bottom of Well (ft, TOC)	20.14
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-14	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
17:30	7.46	8.40	7.59	1.032	-120.40	2.82	40.20
17:35	7.46	8.40	7.58	1.031	-119.50	2.56	40.3
17:40	7.46	8.40	7.59	1.023	-117.50	2.74	39.9
17:45	7.46	8.40	7.56	1.022	-117.50	2.48	39.7
17:50	7.46	8.40	7.56	1.021	-117.50	2.47	39.80
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <5NTU

Purge Start Time:	17:30	Notes:	18:00	Sample Time	3	gal purged
Purge End Time:	17:50					
Weather:	35° Overcast					
Purge/Sampled by:	PC					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	9.78
Date:	12/11/2019	Depth to Bottom of Well (ft, TOC)	
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-2	Volume of Water in Well (gal)	

Meter(s):

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1235	9.78	9.40	6.58	2.235	-113.30	3.14	6.30
1240	10.00	10.70	6.47	1.525	-129.20	0.77	4.10
1245	10.09	11.20	6.48	1.425	-132.40	0.41	3.85
1250	10.10	11.10	6.49	1.368	-133.50	0.36	6.92
1255	10.10	11.30	6.49	1.350	-133.00	0.34	8.32
1300	10.10	11.50	6.50	1.316	-131.70	0.32	12.50
1305	10.10	11.50	6.50	1.317	-131.80	0.32	12.35
1310	10.10	11.40	6.50	1.307	-128.50	0.34	21.86
1315	10.10	11.20	6.50	1.292	-128.90	0.33	21.87
1320	10.10	11.50	6.50	1.294	-128.60	0.31	21.87
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	12:35	Notes:	13:30	Sample Time	3.5 gal purged
Purge End Time:	13:20				
Weather:	Snow, 20°			DUP collected	
Purge/Sampled by	P. Colern				

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg Tubing Diameter (ID): 1/4"
 Project #: 0901650 Initial Depth to Water (ft, TOC) 9.12
 Date: 12/11/2019 Depth to Bottom of Well (ft, TOC) _____
 Sampling Device: Peristaltic Pump Feet of Water in Well (ft) _____
 Well ID: MW-3 Volume of Water in Well (gal) _____

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1500	9.12	13.1	7.49	0.616	17.8	1.11	5.81
1505	12.30	13.0	7.39	0.617	17.0	0.76	22.70
1510	13.15	12.7	7.38	0.615	14.9	0.64	25.99
1515	14.32	12.6	7.38	0.616	13.3	0.58	24.10
1520	14.76	12.3	7.39	0.613	13.1	0.64	23.90
1525	14.76	11.4	7.47	0.607	34.4	3.76	24.64
1530	14.76	11.3	7.43	0.600	40.6	2.44	32.78
1535	14.76	11.4	7.43	0.600	40.8	2.51	33.26
1540	14.46	11.4	7.43	0.600	41.0	2.50	33.80
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 1500 Notes: 16:00 Sample Time 3 gal purged _____
 Purge End Time: 1540 _____
 Weather: 20° Snow _____
 Purge/Sampled by: P.Colern _____

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	3.13
Date:	12/12/2019	Depth to Bottom of Well (ft, TOC)	
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-4	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1020	4.16	12.50	7.58	0.835	15.10	0.42	1.81
1025	4.18	12.90	7.56	0.825	10.10	0.53	0.32
1030	4.19	12.80	7.55	0.817	6.60	0.44	0.00
1035	4.15	13.30	7.53	0.811	-5.60	0.28	0.00
1040	4.15	13.30	7.53	0.813	-6.30	0.28	0.00
1045	4.15	13.30	7.55	0.812	-6.70	0.28	0.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	10:20	Notes:	10:50	Sample Time	2.5 gal purged
Purge End Time:	10:50				
Weather:	Clear 11°				
Purge/Sampled by	P.Colern				

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	5.62
Date:	12/11/2019	Depth to Bottom of Well (ft, TOC)	
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-9R	Volume of Water in Well (gal)	

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1055	5.62	12.2	7.16	1.400	-53.3	1.67	77.21
1100	6.31	11.6	7.11	1.398	-38.0	0.63	13.21
1105	6.31	12.0	7.08	1.315	-61.7	0.54	12.63
1110	6.31	11.7	7.07	1.270	-62.5	0.50	12.72
1115	6.31	11.5	7.06	1.232	-62.8	0.49	14.21
1120	6.31	12.3	7.04	1.157	-65.5	0.45	3.27
1125	6.31	12.4	7.02	1.118	-67.3	0.42	14.67
1130	6.31	1.2	7.02	1.121	-67.2	0.42	13.33
1135	6.31	12.5	7.02	1.131	-68.1	0.40	11.80
1140	6.31	12.6	7.02	1.131	-68.8	0.40	11.72
1145	6.31	12.6	7.02	1.131	-68.8	0.41	11.91
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	1055	Notes:	12:00	Sample Time	4	gal purged
Purge End Time:	1145					
Weather:	20° Snow					
Purge/Sampled by	P. Colern					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg Tubing Diameter (ID): 1/4"
 Project #: 0901650 Initial Depth to Water (ft, TOC) 3.73
 Date: 12/11/2019 Depth to Bottom of Well (ft, TOC) _____
 Sampling Device: Peristaltic Pump Feet of Water in Well (ft) _____
 Well ID: MW-11R Volume of Water in Well (gal) _____

Meter(s):

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1350	3.73	10.40	7.39	0.615	-103.60	3.72	13.45
1355	4.20	13.10	7.26	0.606	-63.90	0.75	10.1
1400	4.94	13.20	7.21	0.620	-36.40	0.54	8.5
1405	4.90	13.30	7.20	0.630	-28.50	0.40	8.2
1410	4.90	13.20	7.20	0.636	-24.30	0.38	10.75
1415	4.90	13.40	7.20	0.640	-21.20	0.38	15.20
1420	4.90	13.00	7.20	0.648	-17.40	0.37	23.18
1425	4.90	13.20	7.19	0.648	.15.5	0.34	25.17
1430	4.90	12.90	7.19	0.649	-13.00	0.33	33.04
1435	4.90	13.00	7.19	0.650	-20.40	0.32	47.02
1440	4.90	13.20	7.19	0.652	-17.50	0.32	46.61
1445	4.90	13.20	7.19	0.651	-17.60	0.32	46.62
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 13:50 Notes: 14:50 Sample Time 5 gal purged
 Purge End Time: 14:45
 Weather: Snow 20°
 Purge/Sampled by P.Colern

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg Tubing Diameter (ID): 1/4"
 Project #: 0901650 Initial Depth to Water (ft, TOC) Artisian
 Date: 12/12/2019 Depth to Bottom of Well (ft, TOC) _____
 Sampling Device: Peristaltic Pump Feet of Water in Well (ft) _____
 Well ID: MW-12 Volume of Water in Well (gal) _____

Meter(s):

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
1220	0.30	9.6	7.79	1.05	37.3	2.21	16.02
1225	1.25	9.7	7.67	1.045	29.1	1.61	15.22
1230	2.25	10.3	7.66	1.046	13.3	1.23	7.63
1235	2.96	10.4	7.64	1.045	3.0	1.01	4.07
1240	3.17	10.7	7.62	1.043	-0.9	0.80	3.29
1245	3.17	10.8	7.60	1.043	-4.0	0.67	51.17
1250	3.17	10.9	7.60	1.043	-5.2	0.63	52.17
1255	3.17	10.7	7.60	1.043	-5.7	0.63	53.72
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 1220 Notes: 13:00 Sample Time 4.5 gal purged
 Purge End Time: 1255
 Weather: 15° Clear
 Purge/Sampled by P.Colern

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg Tubing Diameter (ID): 1/4"
 Project #: 0901650 Initial Depth to Water (ft, TOC) 2.12
 Date: 12/12/2019 Depth to Bottom of Well (ft, TOC) _____
 Sampling Device: Peristaltic Pump Feet of Water in Well (ft) _____
 Well ID: MW-13 Volume of Water in Well (gal) _____

Meter(s):

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
825	4.64	12.0	7.82	0.685	-73.5	0.61	72.81
830	4.64	12.0	7.80	0.686	-80.3	0.51	70.9
835	6.82	12.0	7.73	0.694	-85.6	0.36	70.9
840	6.82	12.1	7.63	0.710	-66.5	0.31	47.2
845	6.82	12.2	7.54	0.727	-61.9	0.30	25.16
850	6.82	12.3	7.54	0.728	-40.3	0.30	27.04
855	6.82	12.4	7.54	0.729	-40.2	0.28	26.92
900	6.82	12.4	7.54	0.729	-40.7	0.29	27.07
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 825 Notes: 9:00 Sample Time 4.5 gal purged
 Purge End Time: 900 _____
 Weather: 10° Clear _____
 Purge/Sampled by P. Colern _____

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg Tubing Diameter (ID): 1/4"
 Project #: 0901650 Initial Depth to Water (ft, TOC) 5.72
 Date: 12/12/2019 Depth to Bottom of Well (ft, TOC) _____
 Sampling Device: Peristaltic Pump Feet of Water in Well (ft) _____
 Well ID: MW-14 Volume of Water in Well (gal) _____

Meter(s):							
Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
915	5.72	13.7	7.91	1.172	-97.2	2.72	67.92
920	6.42	12.2	7.29	1.172	-91.7	2.19	42.71
925	6.23	12.1	7.34	1.921	-82.4	1.39	35.47
930	6.23	12.1	7.17	1.167	-72.4	1.17	29.72
935	6.23	12.2	7.24	1.168	-62.5	1.02	22.71
940	6.23	12.1	7.17	1.167	-61.1	0.97	20.10
945	6.23	12.4	7.24	1.172	-79.7	0.92	20.17
Water in tubing froze, remove from well to thaw and restart sampling.							
1100	6.23	12.4	7.27	1.191	-72.7	0.81	42.91
1105	6.23	12.2	7.29	1.178	-78.9	0.72	20.72
1110	6.23	12.2	7.24	1.172	-72.4	0.84	15.41
1115	6.23	12.2	7.24	1.172	-71.9	0.85	15.37
1120	6.23	12.2	7.24	1.172	-71.8	0.85	15.49
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 915 Notes: 11:30 Sample Time 5 gal purged
 Purge End Time: 1120
 Weather: Clear 10°
 Purge/Sampled by P.Colern

Appendix B – Laboratory Analytical Reports

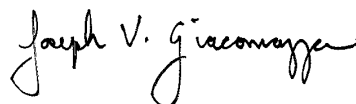
ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-151873-1
Client Project/Site: Frewsburg Site #907016

For:
New York State D.E.C.
270 Michigan Avenue
Buffalo, New York 14203

Attn: Mr. Maurice Moore



Authorized for release by:
4/26/2019 2:30:34 PM

Joe Giacomazza, Project Management Assistant II
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Designee for

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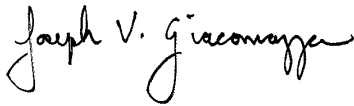
The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Joe Giacomazza
Project Management Assistant II
4/26/2019 2:30:34 PM

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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

LCMS

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.
G	The reported quantitation limit has been raised due to an exhibited elevated noise or matrix interference
I	Value is EMPC (estimated maximum possible concentration).
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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Case Narrative

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Job ID: 480-151873-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative 480-151873-1

Comments

No additional comments.

Receipt

The samples were received on 4/12/2019 12:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.3° C and 2.6° C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): MW-5 (480-151873-6). The 480 lab labels list 1930, while the COC lists time as 1430.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-468520 recovered above the upper control limit for cis-1,3-Dichloropropene. The samples associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported. The following sample is impacted: MW-2 (480-151873-2).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-468520 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: MW-2 (480-151873-2).

Method(s) 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) associated with batch 480-468520. The following sample was affected : MW-2 (480-151873-2).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-468520 recovered outside control limits for the following analytes: Dichlorobromomethane and cis-1,3-Dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following sample is impacted: MW-2 (480-151873-2).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-2 (480-151873-2), MW-2 (480-151873-2[MS]), MW-2 (480-151873-2[MSD]), MW-4 (480-151873-4), MW-9R (480-151873-11), MW-11R (480-151873-13), MW-12 (480-151873-14) and MW-14 (480-151873-16). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-6 (480-151873-8) and DUP-040919 (480-151873-17). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Surrogate recovery for the following sample was outside the upper control limit: MW-1 (480-151873-1). This sample did not contain any target analytes; therefore, re-analysis was not performed.

Method(s) 8260C: The following analytes were detected in sample MW-2 (480-151873-2) at a concentration above the linear range of the initial calibration curve: 1,1-Dichloroethene, trans-1,2-Dichloroethene and Trichloroethene. Due to the high dilution dictated by other target compounds, these analytes were diluted out in the re-analysis of the sample. Therefore, the value being reported is from the original analysis and is qualified as estimated with an E flag.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-3 (480-151873-3) and MW-13 (480-151873-15). 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.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Case Narrative

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Job ID: 480-151873-1 (Continued)

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

LCMS

Method(s) 537 (modified): The following sample has chromatographic interferences that could adversely impact the identification and quantitation of Perfluorobutanoic acid (PFBA). This interference could cause false positive results.

Method(s) 537 (modified): The following sample exhibited elevated noise or matrix interferences for Perfluorobutanoic acid (PFBA) causing elevation of the reporting limit (RL): MW-12 (480-151873-14) . The reporting limit (RL) for the affected analyte has been raised to be equal to the matrix, and a "G" qualifier applied.

Method(s) 537 (modified): The following sample exhibited elevated noise or matrix interferences for Perfluorobutanoic acid (PFBA) and Perfluorohexanoic acid (PFHxA) causing elevation of the reporting limit (RL): DUP-040919 (480-151873-17) . The reporting limit (RL) for the affected analytes has been raised to be equal to the matrix, and a "G" qualifier applied.

Method(s) 537 (modified): The following sample exhibited elevated noise or matrix interferences for Perfluorobutanoic acid (PFBA) and Perfluorohexanoic acid (PFHxA) causing elevation of the reporting limit (RL): MW-6 (480-151873-8). The reporting limit (RL) for the affected analytes has been raised to be equal to the matrix, and a "G" qualifier applied.

Method(s) 537 (modified): The low level continuing calibration verification (CCVL) associated with batch 320-289451 recovered above the upper control limit of 50% difference for 13C4 PFBA with a % difference of 50.1%. The CCVs bracketing the associated samples were in control for this analyte; therefore, the results were reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3535: The following samples have non-settleable particulates which clogged the solid-phase extraction column: MW-5 (480-151873-6), MW-6 (480-151873-8), MW-7 (480-151873-9) and DUP-040919 (480-151873-17).

Method(s) 3535: The following samples had non-settleable particulates before extraction: MW-5 (480-151873-6), MW-6 (480-151873-8), MW-7 (480-151873-9) and DUP-040919 (480-151873-17).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-1

Lab Sample ID: 480-151873-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.66	J B	1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.28	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.28	J	1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	2.9		1.8	0.97	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	20		1.8	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorotridecanoic acid (PFTriA)	15		1.8	1.1	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	4.6	B	1.8	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.97	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.39	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 480-151873-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	0.49	J	1.0	0.23	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.38	J	1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	230	E	1.0	0.29	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	4.2		1.0	0.21	ug/L	1		8260C	Total/NA
Acetone	3.8	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	5.7		1.0	0.41	ug/L	1		8260C	Total/NA
Carbon disulfide	0.86	J	1.0	0.19	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	3500	E	1.0	0.81	ug/L	1		8260C	Total/NA
Cyclohexane	0.51	J	1.0	0.18	ug/L	1		8260C	Total/NA
Ethylbenzene	1.1		1.0	0.74	ug/L	1		8260C	Total/NA
Methylcyclohexane	1.1		1.0	0.16	ug/L	1		8260C	Total/NA
Toluene	2.3		1.0	0.51	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	140	E	1.0	0.90	ug/L	1		8260C	Total/NA
Trichloroethene	110	E	1.0	0.46	ug/L	1		8260C	Total/NA
Vinyl chloride	3400	E	1.0	0.90	ug/L	1		8260C	Total/NA
Xylenes, Total	3.9		2.0	0.66	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	86000		2000	1600	ug/L	2000		8260C	Total/NA
Vinyl chloride - DL	32000		2000	1800	ug/L	2000		8260C	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 480-151873-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	820		40	32	ug/L	40		8260C	Total/NA
Trichloroethene	1500		40	18	ug/L	40		8260C	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 480-151873-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	680		500	410	ug/L	500		8260C	Total/NA
Trichloroethene	13000		500	230	ug/L	500		8260C	Total/NA

Client Sample ID: MW-4D

Lab Sample ID: 480-151873-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.6	J B	1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.5	J	1.7	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.4	J	1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.80	J	1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.9		1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.95	J	1.7	0.23	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-4D (Continued)

Lab Sample ID: 480-151873-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorodecanoic acid (PFDA)	0.61	J I	1.7	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.33	J I B	1.7	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.0		1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.2	J B	1.7	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.0	J I	1.7	0.46	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 480-151873-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.7	J B	1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.48	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-5D

Lab Sample ID: 480-151873-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.1	B	1.7	0.29	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.9		1.7	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.6		1.7	0.49	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.2		1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	6.7		1.7	0.71	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	4.3		1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.40	J B	1.7	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.6		1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	1.7	0.14	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.1	I	1.7	0.45	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 480-151873-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	2.9		2.0	1.8	ug/L	2		8260C	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.5		1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	54		1.7	0.71	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.9		1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.38	J B	1.7	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.9	B	1.7	0.14	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.65	J	1.7	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	23		1.7	0.45	ng/L	1		537 (modified)	Total/NA
6:2 FTS	4.0	J	17	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 480-151873-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.0	J B	1.7	0.29	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.0	J	1.7	0.92	ng/L	1		537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	6.3		1.7	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorotridecanoic acid (PFTriA)	11		1.7	1.1	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	5.3	B	1.7	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.57	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.36	J B	1.7	0.14	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-8

Lab Sample ID: 480-151873-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.2	B	1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.79	J	1.7	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.31	J B	1.7	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.87	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.64	J I B	1.7	0.15	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-9R

Lab Sample ID: 480-151873-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4600		200	160	ug/L	200		8260C	Total/NA
Trichloroethene	7800		200	92	ug/L	200		8260C	Total/NA
Vinyl chloride	560		200	180	ug/L	200		8260C	Total/NA

Client Sample ID: MW-10

Lab Sample ID: 480-151873-12

No Detections.

Client Sample ID: MW-11R

Lab Sample ID: 480-151873-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	420		40	32	ug/L	40		8260C	Total/NA
Trichloroethene	1500		40	18	ug/L	40		8260C	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 480-151873-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	130		100	81	ug/L	100		8260C	Total/NA
Trichloroethene	5200		100	46	ug/L	100		8260C	Total/NA
Perfluorohexanoic acid (PFHxA)	0.89	J	1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.93	J	1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.7		1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.26	J	1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.40	J B	1.7	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.83	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.59	J B	1.7	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.0	J I	1.7	0.46	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 480-151873-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	890		80	65	ug/L	80		8260C	Total/NA
Trichloroethene	3800		80	37	ug/L	80		8260C	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 480-151873-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2200		100	81	ug/L	100		8260C	Total/NA
Trichloroethene	5100		100	46	ug/L	100		8260C	Total/NA

Client Sample ID: DUP-040919

Lab Sample ID: 480-151873-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	2.9		2.0	1.8	ug/L	2		8260C	Total/NA
Perfluoroheptanoic acid (PFHpA)	3.2		1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	53		1.7	0.73	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: DUP-040919 (Continued)

Lab Sample ID: 480-151873-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorononanoic acid (PFNA)	1.7		1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.7	B	1.7	0.15	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.40	J	1.7	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	22		1.7	0.46	ng/L	1		537 (modified)	Total/NA
6:2 FTS	3.3	J	17	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-151873-18

No Detections.

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 480-151873-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.3	B CI	1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.63	J	1.7	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.24	J B	1.7	0.14	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-1

Lab Sample ID: 480-151873-1

Date Collected: 04/11/19 11:00

Matrix: Water

Date Received: 04/12/19 12:10

Method: 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			04/19/19 22:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/19/19 22:50	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/19/19 22:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/19/19 22:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/19/19 22:50	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/19/19 22:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/19/19 22:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/19/19 22:50	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/19/19 22:50	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/19/19 22:50	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/19/19 22:50	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/19/19 22:50	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/19/19 22:50	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/19/19 22:50	1
2-Hexanone	ND		5.0	1.2	ug/L			04/19/19 22:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/19/19 22:50	1
Acetone	ND		10	3.0	ug/L			04/19/19 22:50	1
Benzene	ND		1.0	0.41	ug/L			04/19/19 22:50	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/19/19 22:50	1
Bromoform	ND		1.0	0.26	ug/L			04/19/19 22:50	1
Bromomethane	ND		1.0	0.69	ug/L			04/19/19 22:50	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/19/19 22:50	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/19/19 22:50	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/19/19 22:50	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/19/19 22:50	1
Chloroethane	ND		1.0	0.32	ug/L			04/19/19 22:50	1
Chloroform	ND		1.0	0.34	ug/L			04/19/19 22:50	1
Chloromethane	ND		1.0	0.35	ug/L			04/19/19 22:50	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/19/19 22:50	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/19/19 22:50	1
Cyclohexane	ND		1.0	0.18	ug/L			04/19/19 22:50	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/19/19 22:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/19/19 22:50	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/19/19 22:50	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/19/19 22:50	1
Methyl acetate	ND		2.5	1.3	ug/L			04/19/19 22:50	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/19/19 22:50	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/19/19 22:50	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/19/19 22:50	1
Styrene	ND		1.0	0.73	ug/L			04/19/19 22:50	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/19/19 22:50	1
Toluene	ND		1.0	0.51	ug/L			04/19/19 22:50	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/19/19 22:50	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/19/19 22:50	1
Trichloroethene	ND		1.0	0.46	ug/L			04/19/19 22:50	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/19/19 22:50	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/19/19 22:50	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/19/19 22:50	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-1

Lab Sample ID: 480-151873-1

Date Collected: 04/11/19 11:00

Matrix: Water

Date Received: 04/12/19 12:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	133	X	80 - 120		04/19/19 22:50	1
1,2-Dichloroethane-d4 (Surr)	151	X	77 - 120		04/19/19 22:50	1
4-Bromofluorobenzene (Surr)	139	X	73 - 120		04/19/19 22:50	1
Dibromofluoromethane (Surr)	143	X	75 - 123		04/19/19 22:50	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L	-	04/15/19 15:30	04/17/19 11:15	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	19		15 - 110				04/15/19 15:30	04/17/19 11:15	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.66	J B	1.8	0.31	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.43	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.51	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.75	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorononanoic acid (PFNA)	0.28	J	1.8	0.24	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorodecanoic acid (PFDA)	0.28	J	1.8	0.27	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluoroundecanoic acid (PFUnA)	2.9		1.8	0.97	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorododecanoic acid (PFDoA)	20		1.8	0.48	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorotridecanoic acid (PFTriA)	15		1.8	1.1	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorotetradecanoic acid (PFTeA)	4.6	B	1.8	0.26	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorobutanesulfonic acid (PFBS)	0.97	J	1.8	0.18	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorohexanesulfonic acid (PFHxS)	0.39	J B	1.8	0.15	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		04/18/19 12:05	04/20/19 07:25	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.31	ng/L		04/18/19 12:05	04/20/19 07:25	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7	ng/L		04/18/19 12:05	04/20/19 07:25	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		04/18/19 12:05	04/20/19 07:25	1
6:2 FTS	ND		18	1.8	ng/L		04/18/19 12:05	04/20/19 07:25	1
8:2 FTS	ND		18	1.8	ng/L		04/18/19 12:05	04/20/19 07:25	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	78		25 - 150				04/18/19 12:05	04/20/19 07:25	1
13C5 PFPeA	93		25 - 150				04/18/19 12:05	04/20/19 07:25	1
13C2 PFHxA	98		25 - 150				04/18/19 12:05	04/20/19 07:25	1
13C4 PFHpA	95		25 - 150				04/18/19 12:05	04/20/19 07:25	1
13C4 PFOA	94		25 - 150				04/18/19 12:05	04/20/19 07:25	1
13C5 PFNA	99		25 - 150				04/18/19 12:05	04/20/19 07:25	1
13C2 PFDA	102		25 - 150				04/18/19 12:05	04/20/19 07:25	1
13C2 PFUnA	94		25 - 150				04/18/19 12:05	04/20/19 07:25	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-1

Lab Sample ID: 480-151873-1

Date Collected: 04/11/19 11:00

Matrix: Water

Date Received: 04/12/19 12:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDoA	88		25 - 150	04/18/19 12:05	04/20/19 07:25	1
13C2 PFTeDA	93		25 - 150	04/18/19 12:05	04/20/19 07:25	1
13C3 PFBS	97		25 - 150	04/18/19 12:05	04/20/19 07:25	1
18O2 PFHxS	95		25 - 150	04/18/19 12:05	04/20/19 07:25	1
13C4 PFOS	87		25 - 150	04/18/19 12:05	04/20/19 07:25	1
13C8 FOSA	89		25 - 150	04/18/19 12:05	04/20/19 07:25	1
d3-NMeFOSAA	87		25 - 150	04/18/19 12:05	04/20/19 07:25	1
d5-NEtFOSAA	94		25 - 150	04/18/19 12:05	04/20/19 07:25	1
M2-6:2 FTS	102		25 - 150	04/18/19 12:05	04/20/19 07:25	1
M2-8:2 FTS	102		25 - 150	04/18/19 12:05	04/20/19 07:25	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-2

Lab Sample ID: 480-151873-2

Date Collected: 04/09/19 14:05

Matrix: Water

Date Received: 04/12/19 12:10

Method: 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			04/18/19 14:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/18/19 14:44	1
1,1,2-Trichloroethane	0.49	J	1.0	0.23	ug/L			04/18/19 14:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/18/19 14:44	1
1,1-Dichloroethane	0.38	J	1.0	0.38	ug/L			04/18/19 14:44	1
1,1-Dichloroethene	230	E	1.0	0.29	ug/L			04/18/19 14:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/18/19 14:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/18/19 14:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/18/19 14:44	1
1,2-Dichloroethane	4.2		1.0	0.21	ug/L			04/18/19 14:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/18/19 14:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/18/19 14:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/18/19 14:44	1
2-Butanone (MEK)	ND *		10	1.3	ug/L			04/18/19 14:44	1
2-Hexanone	ND		5.0	1.2	ug/L			04/18/19 14:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/18/19 14:44	1
Acetone	3.8	J	10	3.0	ug/L			04/18/19 14:44	1
Benzene	5.7		1.0	0.41	ug/L			04/18/19 14:44	1
Bromodichloromethane	ND *		1.0	0.39	ug/L			04/18/19 14:44	1
Bromoform	ND		1.0	0.26	ug/L			04/18/19 14:44	1
Bromomethane	ND		1.0	0.69	ug/L			04/18/19 14:44	1
Carbon disulfide	0.86	J	1.0	0.19	ug/L			04/18/19 14:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/18/19 14:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/18/19 14:44	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/18/19 14:44	1
Chloroethane	ND		1.0	0.32	ug/L			04/18/19 14:44	1
Chloroform	ND		1.0	0.34	ug/L			04/18/19 14:44	1
Chloromethane	ND		1.0	0.35	ug/L			04/18/19 14:44	1
cis-1,2-Dichloroethene	3500	E	1.0	0.81	ug/L			04/18/19 14:44	1
cis-1,3-Dichloropropene	ND *		1.0	0.36	ug/L			04/18/19 14:44	1
Cyclohexane	0.51	J	1.0	0.18	ug/L			04/18/19 14:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/18/19 14:44	1
Ethylbenzene	1.1		1.0	0.74	ug/L			04/18/19 14:44	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/18/19 14:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/18/19 14:44	1
Methyl acetate	ND		2.5	1.3	ug/L			04/18/19 14:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/18/19 14:44	1
Methylcyclohexane	1.1		1.0	0.16	ug/L			04/18/19 14:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/18/19 14:44	1
Styrene	ND		1.0	0.73	ug/L			04/18/19 14:44	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/18/19 14:44	1
Toluene	2.3		1.0	0.51	ug/L			04/18/19 14:44	1
trans-1,2-Dichloroethene	140	E	1.0	0.90	ug/L			04/18/19 14:44	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/18/19 14:44	1
Trichloroethene	110	E	1.0	0.46	ug/L			04/18/19 14:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/18/19 14:44	1
Vinyl chloride	3400	E	1.0	0.90	ug/L			04/18/19 14:44	1
Xylenes, Total	3.9		2.0	0.66	ug/L			04/18/19 14:44	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-2

Lab Sample ID: 480-151873-2

Date Collected: 04/09/19 14:05

Matrix: Water

Date Received: 04/12/19 12:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		04/18/19 14:44	1
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		04/18/19 14:44	1
4-Bromofluorobenzene (Surr)	98		73 - 120		04/18/19 14:44	1
Dibromofluoromethane (Surr)	103		75 - 123		04/18/19 14:44	1

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2000	1600	ug/L			04/19/19 23:15	2000
1,1,2,2-Tetrachloroethane	ND		2000	420	ug/L			04/19/19 23:15	2000
1,1,2-Trichloroethane	ND		2000	460	ug/L			04/19/19 23:15	2000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2000	620	ug/L			04/19/19 23:15	2000
1,1-Dichloroethane	ND		2000	760	ug/L			04/19/19 23:15	2000
1,1-Dichloroethene	ND		2000	580	ug/L			04/19/19 23:15	2000
1,2,4-Trichlorobenzene	ND		2000	820	ug/L			04/19/19 23:15	2000
1,2-Dibromo-3-Chloropropane	ND		2000	780	ug/L			04/19/19 23:15	2000
1,2-Dichlorobenzene	ND		2000	1600	ug/L			04/19/19 23:15	2000
1,2-Dichloroethane	ND		2000	420	ug/L			04/19/19 23:15	2000
1,2-Dichloropropane	ND		2000	1400	ug/L			04/19/19 23:15	2000
1,3-Dichlorobenzene	ND		2000	1600	ug/L			04/19/19 23:15	2000
1,4-Dichlorobenzene	ND		2000	1700	ug/L			04/19/19 23:15	2000
2-Butanone (MEK)	ND		20000	2600	ug/L			04/19/19 23:15	2000
2-Hexanone	ND		10000	2500	ug/L			04/19/19 23:15	2000
4-Methyl-2-pentanone (MIBK)	ND		10000	4200	ug/L			04/19/19 23:15	2000
Acetone	ND		20000	6000	ug/L			04/19/19 23:15	2000
Benzene	ND		2000	820	ug/L			04/19/19 23:15	2000
Bromodichloromethane	ND		2000	780	ug/L			04/19/19 23:15	2000
Bromoform	ND		2000	520	ug/L			04/19/19 23:15	2000
Bromomethane	ND		2000	1400	ug/L			04/19/19 23:15	2000
Carbon disulfide	ND		2000	380	ug/L			04/19/19 23:15	2000
Carbon tetrachloride	ND		2000	540	ug/L			04/19/19 23:15	2000
Chlorobenzene	ND		2000	1500	ug/L			04/19/19 23:15	2000
Dibromochloromethane	ND		2000	640	ug/L			04/19/19 23:15	2000
Chloroethane	ND		2000	640	ug/L			04/19/19 23:15	2000
Chloroform	ND		2000	680	ug/L			04/19/19 23:15	2000
Chloromethane	ND		2000	700	ug/L			04/19/19 23:15	2000
cis-1,2-Dichloroethene	86000		2000	1600	ug/L			04/19/19 23:15	2000
cis-1,3-Dichloropropene	ND		2000	720	ug/L			04/19/19 23:15	2000
Cyclohexane	ND		2000	360	ug/L			04/19/19 23:15	2000
Dichlorodifluoromethane	ND		2000	1400	ug/L			04/19/19 23:15	2000
Ethylbenzene	ND		2000	1500	ug/L			04/19/19 23:15	2000
1,2-Dibromoethane	ND		2000	1500	ug/L			04/19/19 23:15	2000
Isopropylbenzene	ND		2000	1600	ug/L			04/19/19 23:15	2000
Methyl acetate	ND		5000	2600	ug/L			04/19/19 23:15	2000
Methyl tert-butyl ether	ND		2000	320	ug/L			04/19/19 23:15	2000
Methylcyclohexane	ND		2000	320	ug/L			04/19/19 23:15	2000
Methylene Chloride	ND		2000	880	ug/L			04/19/19 23:15	2000
Styrene	ND		2000	1500	ug/L			04/19/19 23:15	2000
Tetrachloroethene	ND		2000	720	ug/L			04/19/19 23:15	2000
Toluene	ND		2000	1000	ug/L			04/19/19 23:15	2000
trans-1,2-Dichloroethene	ND		2000	1800	ug/L			04/19/19 23:15	2000

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-2

Lab Sample ID: 480-151873-2

Date Collected: 04/09/19 14:05

Matrix: Water

Date Received: 04/12/19 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		2000	740	ug/L			04/19/19 23:15	2000
Trichloroethene	ND		2000	920	ug/L			04/19/19 23:15	2000
Trichlorofluoromethane	ND		2000	1800	ug/L			04/19/19 23:15	2000
Vinyl chloride	32000		2000	1800	ug/L			04/19/19 23:15	2000
Xylenes, Total	ND		4000	1300	ug/L			04/19/19 23:15	2000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		04/19/19 23:15	2000
1,2-Dichloroethane-d4 (Surr)	115		77 - 120		04/19/19 23:15	2000
4-Bromofluorobenzene (Surr)	106		73 - 120		04/19/19 23:15	2000
Dibromofluoromethane (Surr)	110		75 - 123		04/19/19 23:15	2000

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-3

Lab Sample ID: 480-151873-3

Date Collected: 04/09/19 16:10

Matrix: Water

Date Received: 04/12/19 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		40	33	ug/L			04/20/19 15:15	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			04/20/19 15:15	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			04/20/19 15:15	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		40	12	ug/L			04/20/19 15:15	40
1,1-Dichloroethane	ND		40	15	ug/L			04/20/19 15:15	40
1,1-Dichloroethene	ND		40	12	ug/L			04/20/19 15:15	40
1,2,4-Trichlorobenzene	ND		40	16	ug/L			04/20/19 15:15	40
1,2-Dibromo-3-Chloropropane	ND		40	16	ug/L			04/20/19 15:15	40
1,2-Dichlorobenzene	ND		40	32	ug/L			04/20/19 15:15	40
1,2-Dichloroethane	ND		40	8.4	ug/L			04/20/19 15:15	40
1,2-Dichloropropane	ND		40	29	ug/L			04/20/19 15:15	40
1,3-Dichlorobenzene	ND		40	31	ug/L			04/20/19 15:15	40
1,4-Dichlorobenzene	ND		40	34	ug/L			04/20/19 15:15	40
2-Butanone (MEK)	ND		400	53	ug/L			04/20/19 15:15	40
2-Hexanone	ND		200	50	ug/L			04/20/19 15:15	40
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			04/20/19 15:15	40
Acetone	ND		400	120	ug/L			04/20/19 15:15	40
Benzene	ND		40	16	ug/L			04/20/19 15:15	40
Bromodichloromethane	ND		40	16	ug/L			04/20/19 15:15	40
Bromoform	ND		40	10	ug/L			04/20/19 15:15	40
Bromomethane	ND		40	28	ug/L			04/20/19 15:15	40
Carbon disulfide	ND		40	7.6	ug/L			04/20/19 15:15	40
Carbon tetrachloride	ND		40	11	ug/L			04/20/19 15:15	40
Chlorobenzene	ND		40	30	ug/L			04/20/19 15:15	40
Dibromochloromethane	ND		40	13	ug/L			04/20/19 15:15	40
Chloroethane	ND		40	13	ug/L			04/20/19 15:15	40
Chloroform	ND		40	14	ug/L			04/20/19 15:15	40
Chloromethane	ND		40	14	ug/L			04/20/19 15:15	40
cis-1,2-Dichloroethene	820		40	32	ug/L			04/20/19 15:15	40
cis-1,3-Dichloropropene	ND		40	14	ug/L			04/20/19 15:15	40
Cyclohexane	ND		40	7.2	ug/L			04/20/19 15:15	40
Dichlorodifluoromethane	ND		40	27	ug/L			04/20/19 15:15	40
Ethylbenzene	ND		40	30	ug/L			04/20/19 15:15	40
1,2-Dibromoethane	ND		40	29	ug/L			04/20/19 15:15	40
Isopropylbenzene	ND		40	32	ug/L			04/20/19 15:15	40
Methyl acetate	ND		100	52	ug/L			04/20/19 15:15	40
Methyl tert-butyl ether	ND		40	6.4	ug/L			04/20/19 15:15	40
Methylcyclohexane	ND		40	6.4	ug/L			04/20/19 15:15	40
Methylene Chloride	ND		40	18	ug/L			04/20/19 15:15	40
Styrene	ND		40	29	ug/L			04/20/19 15:15	40
Tetrachloroethene	ND		40	14	ug/L			04/20/19 15:15	40
Toluene	ND		40	20	ug/L			04/20/19 15:15	40
trans-1,2-Dichloroethene	ND		40	36	ug/L			04/20/19 15:15	40
trans-1,3-Dichloropropene	ND		40	15	ug/L			04/20/19 15:15	40
Trichloroethene	1500		40	18	ug/L			04/20/19 15:15	40
Trichlorofluoromethane	ND		40	35	ug/L			04/20/19 15:15	40
Vinyl chloride	ND		40	36	ug/L			04/20/19 15:15	40
Xylenes, Total	ND		80	26	ug/L			04/20/19 15:15	40

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-3

Date Collected: 04/09/19 16:10

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-3

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		80 - 120		04/20/19 15:15	40
<i>1,2-Dichloroethane-d4 (Surr)</i>	114		77 - 120		04/20/19 15:15	40
<i>4-Bromofluorobenzene (Surr)</i>	102		73 - 120		04/20/19 15:15	40
<i>Dibromofluoromethane (Surr)</i>	108		75 - 123		04/20/19 15:15	40

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-4

Lab Sample ID: 480-151873-4

Date Collected: 04/10/19 15:45

Matrix: Water

Date Received: 04/12/19 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		500	410	ug/L			04/20/19 00:03	500
1,1,2,2-Tetrachloroethane	ND		500	110	ug/L			04/20/19 00:03	500
1,1,2-Trichloroethane	ND		500	120	ug/L			04/20/19 00:03	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	160	ug/L			04/20/19 00:03	500
1,1-Dichloroethane	ND		500	190	ug/L			04/20/19 00:03	500
1,1-Dichloroethene	ND		500	150	ug/L			04/20/19 00:03	500
1,2,4-Trichlorobenzene	ND		500	210	ug/L			04/20/19 00:03	500
1,2-Dibromo-3-Chloropropane	ND		500	200	ug/L			04/20/19 00:03	500
1,2-Dichlorobenzene	ND		500	400	ug/L			04/20/19 00:03	500
1,2-Dichloroethane	ND		500	110	ug/L			04/20/19 00:03	500
1,2-Dichloropropane	ND		500	360	ug/L			04/20/19 00:03	500
1,3-Dichlorobenzene	ND		500	390	ug/L			04/20/19 00:03	500
1,4-Dichlorobenzene	ND		500	420	ug/L			04/20/19 00:03	500
2-Butanone (MEK)	ND		5000	660	ug/L			04/20/19 00:03	500
2-Hexanone	ND		2500	620	ug/L			04/20/19 00:03	500
4-Methyl-2-pentanone (MIBK)	ND		2500	1100	ug/L			04/20/19 00:03	500
Acetone	ND		5000	1500	ug/L			04/20/19 00:03	500
Benzene	ND		500	210	ug/L			04/20/19 00:03	500
Bromodichloromethane	ND		500	200	ug/L			04/20/19 00:03	500
Bromoform	ND		500	130	ug/L			04/20/19 00:03	500
Bromomethane	ND		500	350	ug/L			04/20/19 00:03	500
Carbon disulfide	ND		500	95	ug/L			04/20/19 00:03	500
Carbon tetrachloride	ND		500	140	ug/L			04/20/19 00:03	500
Chlorobenzene	ND		500	380	ug/L			04/20/19 00:03	500
Dibromochloromethane	ND		500	160	ug/L			04/20/19 00:03	500
Chloroethane	ND		500	160	ug/L			04/20/19 00:03	500
Chloroform	ND		500	170	ug/L			04/20/19 00:03	500
Chloromethane	ND		500	180	ug/L			04/20/19 00:03	500
cis-1,2-Dichloroethene	680		500	410	ug/L			04/20/19 00:03	500
cis-1,3-Dichloropropene	ND		500	180	ug/L			04/20/19 00:03	500
Cyclohexane	ND		500	90	ug/L			04/20/19 00:03	500
Dichlorodifluoromethane	ND		500	340	ug/L			04/20/19 00:03	500
Ethylbenzene	ND		500	370	ug/L			04/20/19 00:03	500
1,2-Dibromoethane	ND		500	370	ug/L			04/20/19 00:03	500
Isopropylbenzene	ND		500	400	ug/L			04/20/19 00:03	500
Methyl acetate	ND		1300	650	ug/L			04/20/19 00:03	500
Methyl tert-butyl ether	ND		500	80	ug/L			04/20/19 00:03	500
Methylcyclohexane	ND		500	80	ug/L			04/20/19 00:03	500
Methylene Chloride	ND		500	220	ug/L			04/20/19 00:03	500
Styrene	ND		500	370	ug/L			04/20/19 00:03	500
Tetrachloroethene	ND		500	180	ug/L			04/20/19 00:03	500
Toluene	ND		500	260	ug/L			04/20/19 00:03	500
trans-1,2-Dichloroethene	ND		500	450	ug/L			04/20/19 00:03	500
trans-1,3-Dichloropropene	ND		500	190	ug/L			04/20/19 00:03	500
Trichloroethene	13000		500	230	ug/L			04/20/19 00:03	500
Trichlorofluoromethane	ND		500	440	ug/L			04/20/19 00:03	500
Vinyl chloride	ND		500	450	ug/L			04/20/19 00:03	500
Xylenes, Total	ND		1000	330	ug/L			04/20/19 00:03	500

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-4

Date Collected: 04/10/19 15:45

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-4

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	99		80 - 120		04/20/19 00:03	500
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		77 - 120		04/20/19 00:03	500
<i>4-Bromofluorobenzene (Surr)</i>	107		73 - 120		04/20/19 00:03	500
<i>Dibromofluoromethane (Surr)</i>	100		75 - 123		04/20/19 00:03	500

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-4D

Lab Sample ID: 480-151873-5

Date Collected: 04/10/19 16:45

Matrix: Water

Date Received: 04/12/19 12:10

Method: 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			04/20/19 00:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/20/19 00:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/20/19 00:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/20/19 00:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/20/19 00:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/20/19 00:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/20/19 00:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/20/19 00:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/20/19 00:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/20/19 00:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/20/19 00:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/20/19 00:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/20/19 00:27	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/20/19 00:27	1
2-Hexanone	ND		5.0	1.2	ug/L			04/20/19 00:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/20/19 00:27	1
Acetone	ND		10	3.0	ug/L			04/20/19 00:27	1
Benzene	ND		1.0	0.41	ug/L			04/20/19 00:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/20/19 00:27	1
Bromoform	ND		1.0	0.26	ug/L			04/20/19 00:27	1
Bromomethane	ND		1.0	0.69	ug/L			04/20/19 00:27	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/20/19 00:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/20/19 00:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/20/19 00:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/20/19 00:27	1
Chloroethane	ND		1.0	0.32	ug/L			04/20/19 00:27	1
Chloroform	ND		1.0	0.34	ug/L			04/20/19 00:27	1
Chloromethane	ND		1.0	0.35	ug/L			04/20/19 00:27	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/20/19 00:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/20/19 00:27	1
Cyclohexane	ND		1.0	0.18	ug/L			04/20/19 00:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/20/19 00:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/20/19 00:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/20/19 00:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/20/19 00:27	1
Methyl acetate	ND		2.5	1.3	ug/L			04/20/19 00:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/20/19 00:27	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/20/19 00:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/20/19 00:27	1
Styrene	ND		1.0	0.73	ug/L			04/20/19 00:27	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/20/19 00:27	1
Toluene	ND		1.0	0.51	ug/L			04/20/19 00:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/20/19 00:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/20/19 00:27	1
Trichloroethene	ND		1.0	0.46	ug/L			04/20/19 00:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/20/19 00:27	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/20/19 00:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/20/19 00:27	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-4D

Lab Sample ID: 480-151873-5

Date Collected: 04/10/19 16:45

Matrix: Water

Date Received: 04/12/19 12:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		04/20/19 00:27	1
1,2-Dichloroethane-d4 (Surr)	113		77 - 120		04/20/19 00:27	1
4-Bromofluorobenzene (Surr)	101		73 - 120		04/20/19 00:27	1
Dibromofluoromethane (Surr)	105		75 - 123		04/20/19 00:27	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/15/19 15:30	04/17/19 17:09	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	21		15 - 110				04/15/19 15:30	04/17/19 17:09	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.6	J B	1.7	0.30	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluoropentanoic acid (PFPeA)	1.5	J	1.7	0.42	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorohexanoic acid (PFHxA)	1.4	J	1.7	0.50	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluoroheptanoic acid (PFHpA)	0.80	J	1.7	0.21	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorooctanoic acid (PFOA)	1.9		1.7	0.73	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorononanoic acid (PFNA)	0.95	J	1.7	0.23	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorodecanoic acid (PFDA)	0.61	J I	1.7	0.27	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.94	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorotetradecanoic acid (PFTeA)	0.33	J I B	1.7	0.25	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorobutanesulfonic acid (PFBS)	2.0		1.7	0.17	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorohexanesulfonic acid (PFHxS)	1.2	J B	1.7	0.15	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorooctanesulfonic acid (PFOS)	1.0	J I	1.7	0.46	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		04/18/19 12:05	04/20/19 07:35	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30	ng/L		04/18/19 12:05	04/20/19 07:35	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7	ng/L		04/18/19 12:05	04/20/19 07:35	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		04/18/19 12:05	04/20/19 07:35	1
6:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 07:35	1
8:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 07:35	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	94		25 - 150				04/18/19 12:05	04/20/19 07:35	1
13C5 PFPeA	103		25 - 150				04/18/19 12:05	04/20/19 07:35	1
13C2 PFHxA	97		25 - 150				04/18/19 12:05	04/20/19 07:35	1
13C4 PFHpA	98		25 - 150				04/18/19 12:05	04/20/19 07:35	1
13C4 PFOA	95		25 - 150				04/18/19 12:05	04/20/19 07:35	1
13C5 PFNA	100		25 - 150				04/18/19 12:05	04/20/19 07:35	1
13C2 PFDA	102		25 - 150				04/18/19 12:05	04/20/19 07:35	1
13C2 PFUnA	94		25 - 150				04/18/19 12:05	04/20/19 07:35	1
13C2 PFDoA	89		25 - 150				04/18/19 12:05	04/20/19 07:35	1
13C2 PFTeDA	92		25 - 150				04/18/19 12:05	04/20/19 07:35	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-4D

Date Collected: 04/10/19 16:45

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-5

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 PFBS	102		25 - 150	04/18/19 12:05	04/20/19 07:35	1
18O2 PFHxS	97		25 - 150	04/18/19 12:05	04/20/19 07:35	1
13C4 PFOS	92		25 - 150	04/18/19 12:05	04/20/19 07:35	1
13C8 FOSA	85		25 - 150	04/18/19 12:05	04/20/19 07:35	1
d3-NMeFOSAA	88		25 - 150	04/18/19 12:05	04/20/19 07:35	1
d5-NEtFOSAA	93		25 - 150	04/18/19 12:05	04/20/19 07:35	1
M2-6:2 FTS	114		25 - 150	04/18/19 12:05	04/20/19 07:35	1
M2-8:2 FTS	103		25 - 150	04/18/19 12:05	04/20/19 07:35	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-5

Lab Sample ID: 480-151873-6

Date Collected: 04/10/19 19:30

Matrix: Water

Date Received: 04/12/19 12:10

Method: 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			04/20/19 00:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/20/19 00:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/20/19 00:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/20/19 00:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/20/19 00:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/20/19 00:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/20/19 00:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/20/19 00:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/20/19 00:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/20/19 00:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/20/19 00:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/20/19 00:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/20/19 00:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/20/19 00:52	1
2-Hexanone	ND		5.0	1.2	ug/L			04/20/19 00:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/20/19 00:52	1
Acetone	ND		10	3.0	ug/L			04/20/19 00:52	1
Benzene	ND		1.0	0.41	ug/L			04/20/19 00:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/20/19 00:52	1
Bromoform	ND		1.0	0.26	ug/L			04/20/19 00:52	1
Bromomethane	ND		1.0	0.69	ug/L			04/20/19 00:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/20/19 00:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/20/19 00:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/20/19 00:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/20/19 00:52	1
Chloroethane	ND		1.0	0.32	ug/L			04/20/19 00:52	1
Chloroform	ND		1.0	0.34	ug/L			04/20/19 00:52	1
Chloromethane	ND		1.0	0.35	ug/L			04/20/19 00:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/20/19 00:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/20/19 00:52	1
Cyclohexane	ND		1.0	0.18	ug/L			04/20/19 00:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/20/19 00:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/20/19 00:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/20/19 00:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/20/19 00:52	1
Methyl acetate	ND		2.5	1.3	ug/L			04/20/19 00:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/20/19 00:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/20/19 00:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/20/19 00:52	1
Styrene	ND		1.0	0.73	ug/L			04/20/19 00:52	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/20/19 00:52	1
Toluene	ND		1.0	0.51	ug/L			04/20/19 00:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/20/19 00:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/20/19 00:52	1
Trichloroethene	ND		1.0	0.46	ug/L			04/20/19 00:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/20/19 00:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/20/19 00:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/20/19 00:52	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-5

Lab Sample ID: 480-151873-6

Date Collected: 04/10/19 19:30

Matrix: Water

Date Received: 04/12/19 12:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		04/20/19 00:52	1
1,2-Dichloroethane-d4 (Surr)	110		77 - 120		04/20/19 00:52	1
4-Bromofluorobenzene (Surr)	102		73 - 120		04/20/19 00:52	1
Dibromofluoromethane (Surr)	102		75 - 123		04/20/19 00:52	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/15/19 15:30	04/17/19 12:02	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	24		15 - 110				04/15/19 15:30	04/17/19 12:02	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.7	J B	1.8	0.31	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.43	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.51	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.75	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.1	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.8	0.18	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorohexanesulfonic acid (PFHxS)	0.48	J B	1.8	0.15	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.48	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		04/18/19 12:05	04/20/19 07:44	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.31	ng/L		04/18/19 12:05	04/20/19 07:44	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7	ng/L		04/18/19 12:05	04/20/19 07:44	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		04/18/19 12:05	04/20/19 07:44	1
6:2 FTS	ND		18	1.8	ng/L		04/18/19 12:05	04/20/19 07:44	1
8:2 FTS	ND		18	1.8	ng/L		04/18/19 12:05	04/20/19 07:44	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	66		25 - 150				04/18/19 12:05	04/20/19 07:44	1
13C5 PFPeA	73		25 - 150				04/18/19 12:05	04/20/19 07:44	1
13C2 PFHxA	71		25 - 150				04/18/19 12:05	04/20/19 07:44	1
13C4 PFHpA	76		25 - 150				04/18/19 12:05	04/20/19 07:44	1
13C4 PFOA	69		25 - 150				04/18/19 12:05	04/20/19 07:44	1
13C5 PFNA	72		25 - 150				04/18/19 12:05	04/20/19 07:44	1
13C2 PFDA	71		25 - 150				04/18/19 12:05	04/20/19 07:44	1
13C2 PFUnA	61		25 - 150				04/18/19 12:05	04/20/19 07:44	1
13C2 PFDoA	52		25 - 150				04/18/19 12:05	04/20/19 07:44	1
13C2 PFTeDA	60		25 - 150				04/18/19 12:05	04/20/19 07:44	1
13C3 PFBS	74		25 - 150				04/18/19 12:05	04/20/19 07:44	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-5

Date Collected: 04/10/19 19:30

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-6

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	71		25 - 150	04/18/19 12:05	04/20/19 07:44	1
13C4 PFOS	66		25 - 150	04/18/19 12:05	04/20/19 07:44	1
13C8 FOSA	62		25 - 150	04/18/19 12:05	04/20/19 07:44	1
d3-NMeFOSAA	58		25 - 150	04/18/19 12:05	04/20/19 07:44	1
d5-NEtFOSAA	54		25 - 150	04/18/19 12:05	04/20/19 07:44	1
M2-6:2 FTS	80		25 - 150	04/18/19 12:05	04/20/19 07:44	1
M2-8:2 FTS	68		25 - 150	04/18/19 12:05	04/20/19 07:44	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-5D

Lab Sample ID: 480-151873-7

Date Collected: 04/10/19 12:00

Matrix: Water

Date Received: 04/12/19 12:10

Method: 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			04/20/19 15:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/20/19 15:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/20/19 15:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/20/19 15:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/20/19 15:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/20/19 15:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/20/19 15:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/20/19 15:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/20/19 15:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/20/19 15:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/20/19 15:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/20/19 15:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/20/19 15:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/20/19 15:39	1
2-Hexanone	ND		5.0	1.2	ug/L			04/20/19 15:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/20/19 15:39	1
Acetone	ND		10	3.0	ug/L			04/20/19 15:39	1
Benzene	ND		1.0	0.41	ug/L			04/20/19 15:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/20/19 15:39	1
Bromoform	ND		1.0	0.26	ug/L			04/20/19 15:39	1
Bromomethane	ND		1.0	0.69	ug/L			04/20/19 15:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/20/19 15:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/20/19 15:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/20/19 15:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/20/19 15:39	1
Chloroethane	ND		1.0	0.32	ug/L			04/20/19 15:39	1
Chloroform	ND		1.0	0.34	ug/L			04/20/19 15:39	1
Chloromethane	ND		1.0	0.35	ug/L			04/20/19 15:39	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/20/19 15:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/20/19 15:39	1
Cyclohexane	ND		1.0	0.18	ug/L			04/20/19 15:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/20/19 15:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/20/19 15:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/20/19 15:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/20/19 15:39	1
Methyl acetate	ND		2.5	1.3	ug/L			04/20/19 15:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/20/19 15:39	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/20/19 15:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/20/19 15:39	1
Styrene	ND		1.0	0.73	ug/L			04/20/19 15:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/20/19 15:39	1
Toluene	ND		1.0	0.51	ug/L			04/20/19 15:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/20/19 15:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/20/19 15:39	1
Trichloroethene	ND		1.0	0.46	ug/L			04/20/19 15:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/20/19 15:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/20/19 15:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/20/19 15:39	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-5D

Lab Sample ID: 480-151873-7

Date Collected: 04/10/19 12:00

Matrix: Water

Date Received: 04/12/19 12:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		04/20/19 15:39	1
1,2-Dichloroethane-d4 (Surr)	114		77 - 120		04/20/19 15:39	1
4-Bromofluorobenzene (Surr)	99		73 - 120		04/20/19 15:39	1
Dibromofluoromethane (Surr)	105		75 - 123		04/20/19 15:39	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/15/19 15:30	04/17/19 09:40	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	25		15 - 110				04/15/19 15:30	04/17/19 09:40	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	2.1	B	1.7	0.29	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluoropentanoic acid (PFPeA)	2.9		1.7	0.41	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorohexanoic acid (PFHxA)	3.6		1.7	0.49	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluoroheptanoic acid (PFHpA)	2.2		1.7	0.21	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorooctanoic acid (PFOA)	6.7		1.7	0.71	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorononanoic acid (PFNA)	4.3		1.7	0.23	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.26	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.92	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorotetradecanoic acid (PFTeA)	0.40	J B	1.7	0.24	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorobutanesulfonic acid (PFBS)	2.6		1.7	0.17	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	1.7	0.14	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorooctanesulfonic acid (PFOS)	3.1	I	1.7	0.45	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		04/18/19 12:05	04/20/19 08:04	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.29	ng/L		04/18/19 12:05	04/20/19 08:04	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		04/18/19 12:05	04/20/19 08:04	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		04/18/19 12:05	04/20/19 08:04	1
6:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 08:04	1
8:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 08:04	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	85		25 - 150				04/18/19 12:05	04/20/19 08:04	1
13C5 PFPeA	99		25 - 150				04/18/19 12:05	04/20/19 08:04	1
13C2 PFHxA	97		25 - 150				04/18/19 12:05	04/20/19 08:04	1
13C4 PFHpA	91		25 - 150				04/18/19 12:05	04/20/19 08:04	1
13C4 PFOA	96		25 - 150				04/18/19 12:05	04/20/19 08:04	1
13C5 PFNA	95		25 - 150				04/18/19 12:05	04/20/19 08:04	1
13C2 PFDA	103		25 - 150				04/18/19 12:05	04/20/19 08:04	1
13C2 PFUnA	97		25 - 150				04/18/19 12:05	04/20/19 08:04	1
13C2 PFDoA	90		25 - 150				04/18/19 12:05	04/20/19 08:04	1
13C2 PFTeDA	99		25 - 150				04/18/19 12:05	04/20/19 08:04	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-5D

Date Collected: 04/10/19 12:00

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-7

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 PFBS	95		25 - 150	04/18/19 12:05	04/20/19 08:04	1
18O2 PFHxS	89		25 - 150	04/18/19 12:05	04/20/19 08:04	1
13C4 PFOS	90		25 - 150	04/18/19 12:05	04/20/19 08:04	1
13C8 FOSA	88		25 - 150	04/18/19 12:05	04/20/19 08:04	1
d3-NMeFOSAA	86		25 - 150	04/18/19 12:05	04/20/19 08:04	1
d5-NEtFOSAA	96		25 - 150	04/18/19 12:05	04/20/19 08:04	1
M2-6:2 FTS	106		25 - 150	04/18/19 12:05	04/20/19 08:04	1
M2-8:2 FTS	113		25 - 150	04/18/19 12:05	04/20/19 08:04	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-6

Lab Sample ID: 480-151873-8

Date Collected: 04/09/19 17:45

Matrix: Water

Date Received: 04/12/19 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			04/20/19 01:16	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			04/20/19 01:16	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			04/20/19 01:16	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			04/20/19 01:16	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			04/20/19 01:16	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			04/20/19 01:16	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			04/20/19 01:16	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			04/20/19 01:16	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			04/20/19 01:16	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			04/20/19 01:16	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			04/20/19 01:16	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			04/20/19 01:16	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			04/20/19 01:16	2
2-Butanone (MEK)	ND		20	2.6	ug/L			04/20/19 01:16	2
2-Hexanone	ND		10	2.5	ug/L			04/20/19 01:16	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			04/20/19 01:16	2
Acetone	ND		20	6.0	ug/L			04/20/19 01:16	2
Benzene	ND		2.0	0.82	ug/L			04/20/19 01:16	2
Bromodichloromethane	ND		2.0	0.78	ug/L			04/20/19 01:16	2
Bromoform	ND		2.0	0.52	ug/L			04/20/19 01:16	2
Bromomethane	ND		2.0	1.4	ug/L			04/20/19 01:16	2
Carbon disulfide	ND		2.0	0.38	ug/L			04/20/19 01:16	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			04/20/19 01:16	2
Chlorobenzene	ND		2.0	1.5	ug/L			04/20/19 01:16	2
Dibromochloromethane	ND		2.0	0.64	ug/L			04/20/19 01:16	2
Chloroethane	ND		2.0	0.64	ug/L			04/20/19 01:16	2
Chloroform	ND		2.0	0.68	ug/L			04/20/19 01:16	2
Chloromethane	ND		2.0	0.70	ug/L			04/20/19 01:16	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			04/20/19 01:16	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			04/20/19 01:16	2
Cyclohexane	ND		2.0	0.36	ug/L			04/20/19 01:16	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			04/20/19 01:16	2
Ethylbenzene	ND		2.0	1.5	ug/L			04/20/19 01:16	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			04/20/19 01:16	2
Isopropylbenzene	ND		2.0	1.6	ug/L			04/20/19 01:16	2
Methyl acetate	ND		5.0	2.6	ug/L			04/20/19 01:16	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			04/20/19 01:16	2
Methylcyclohexane	ND		2.0	0.32	ug/L			04/20/19 01:16	2
Methylene Chloride	ND		2.0	0.88	ug/L			04/20/19 01:16	2
Styrene	ND		2.0	1.5	ug/L			04/20/19 01:16	2
Tetrachloroethene	ND		2.0	0.72	ug/L			04/20/19 01:16	2
Toluene	ND		2.0	1.0	ug/L			04/20/19 01:16	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			04/20/19 01:16	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			04/20/19 01:16	2
Trichloroethene	ND		2.0	0.92	ug/L			04/20/19 01:16	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			04/20/19 01:16	2
Vinyl chloride	2.9		2.0	1.8	ug/L			04/20/19 01:16	2
Xylenes, Total	ND		4.0	1.3	ug/L			04/20/19 01:16	2

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-6

Lab Sample ID: 480-151873-8

Date Collected: 04/09/19 17:45

Matrix: Water

Date Received: 04/12/19 12:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93		80 - 120		04/20/19 01:16	2
1,2-Dichloroethane-d4 (Surr)	109		77 - 120		04/20/19 01:16	2
4-Bromofluorobenzene (Surr)	99		73 - 120		04/20/19 01:16	2
Dibromofluoromethane (Surr)	102		75 - 123		04/20/19 01:16	2

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/15/19 15:30	04/17/19 12:26	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane-d8	22		15 - 110				04/15/19 15:30	04/17/19 12:26	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	G	13	13	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.41	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorohexanoic acid (PFHxA)	ND	I G	3.3	3.3	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluoroheptanoic acid (PFHpA)	2.5		1.7	0.21	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorooctanoic acid (PFOA)	54		1.7	0.71	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorononanoic acid (PFNA)	1.9		1.7	0.23	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.26	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.92	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorotetradecanoic acid (PFTeA)	0.38	J B	1.7	0.24	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.17	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorohexanesulfonic acid (PFHxS)	2.9	B	1.7	0.14	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.65	J	1.7	0.16	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorooctanesulfonic acid (PFOS)	23		1.7	0.45	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		04/18/19 12:05	04/20/19 08:32	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.29	ng/L		04/18/19 12:05	04/20/19 08:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		04/18/19 12:05	04/20/19 08:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		04/18/19 12:05	04/20/19 08:32	1
6:2 FTS	4.0	J	17	1.7	ng/L		04/18/19 12:05	04/20/19 08:32	1
8:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 08:32	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	36		25 - 150				04/18/19 12:05	04/20/19 08:32	1
13C5 PFPeA	43		25 - 150				04/18/19 12:05	04/20/19 08:32	1
13C2 PFHxA	68		25 - 150				04/18/19 12:05	04/20/19 08:32	1
13C4 PFHpA	78		25 - 150				04/18/19 12:05	04/20/19 08:32	1
13C4 PFOA	80		25 - 150				04/18/19 12:05	04/20/19 08:32	1
13C5 PFNA	89		25 - 150				04/18/19 12:05	04/20/19 08:32	1
13C2 PFDA	96		25 - 150				04/18/19 12:05	04/20/19 08:32	1
13C2 PFUnA	89		25 - 150				04/18/19 12:05	04/20/19 08:32	1
13C2 PFDoA	87		25 - 150				04/18/19 12:05	04/20/19 08:32	1
13C2 PFTeDA	75		25 - 150				04/18/19 12:05	04/20/19 08:32	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-6

Lab Sample ID: 480-151873-8

Date Collected: 04/09/19 17:45

Matrix: Water

Date Received: 04/12/19 12:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 PFBS	74		25 - 150	04/18/19 12:05	04/20/19 08:32	1
18O2 PFHxS	82		25 - 150	04/18/19 12:05	04/20/19 08:32	1
13C4 PFOS	79		25 - 150	04/18/19 12:05	04/20/19 08:32	1
13C8 FOSA	76		25 - 150	04/18/19 12:05	04/20/19 08:32	1
d3-NMeFOSAA	78		25 - 150	04/18/19 12:05	04/20/19 08:32	1
d5-NEtFOSAA	88		25 - 150	04/18/19 12:05	04/20/19 08:32	1
M2-6:2 FTS	146		25 - 150	04/18/19 12:05	04/20/19 08:32	1
M2-8:2 FTS	91		25 - 150	04/18/19 12:05	04/20/19 08:32	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-7

Lab Sample ID: 480-151873-9

Date Collected: 04/11/19 12:30

Matrix: Water

Date Received: 04/12/19 12:10

Method: 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			04/20/19 01:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/20/19 01:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/20/19 01:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/20/19 01:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/20/19 01:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/20/19 01:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/20/19 01:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/20/19 01:41	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/20/19 01:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/20/19 01:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/20/19 01:41	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/20/19 01:41	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/20/19 01:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/20/19 01:41	1
2-Hexanone	ND		5.0	1.2	ug/L			04/20/19 01:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/20/19 01:41	1
Acetone	ND		10	3.0	ug/L			04/20/19 01:41	1
Benzene	ND		1.0	0.41	ug/L			04/20/19 01:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/20/19 01:41	1
Bromoform	ND		1.0	0.26	ug/L			04/20/19 01:41	1
Bromomethane	ND		1.0	0.69	ug/L			04/20/19 01:41	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/20/19 01:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/20/19 01:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/20/19 01:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/20/19 01:41	1
Chloroethane	ND		1.0	0.32	ug/L			04/20/19 01:41	1
Chloroform	ND		1.0	0.34	ug/L			04/20/19 01:41	1
Chloromethane	ND		1.0	0.35	ug/L			04/20/19 01:41	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/20/19 01:41	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/20/19 01:41	1
Cyclohexane	ND		1.0	0.18	ug/L			04/20/19 01:41	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/20/19 01:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/20/19 01:41	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/20/19 01:41	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/20/19 01:41	1
Methyl acetate	ND		2.5	1.3	ug/L			04/20/19 01:41	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/20/19 01:41	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/20/19 01:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/20/19 01:41	1
Styrene	ND		1.0	0.73	ug/L			04/20/19 01:41	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/20/19 01:41	1
Toluene	ND		1.0	0.51	ug/L			04/20/19 01:41	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/20/19 01:41	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/20/19 01:41	1
Trichloroethene	ND		1.0	0.46	ug/L			04/20/19 01:41	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/20/19 01:41	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/20/19 01:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/20/19 01:41	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-7

Lab Sample ID: 480-151873-9

Date Collected: 04/11/19 12:30

Matrix: Water

Date Received: 04/12/19 12:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		04/20/19 01:41	1
1,2-Dichloroethane-d4 (Surr)	115		77 - 120		04/20/19 01:41	1
4-Bromofluorobenzene (Surr)	105		73 - 120		04/20/19 01:41	1
Dibromofluoromethane (Surr)	107		75 - 123		04/20/19 01:41	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/15/19 15:30	04/17/19 12:49	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	23		15 - 110				04/15/19 15:30	04/17/19 12:49	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.0	J B	1.7	0.29	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.41	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.48	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.21	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorooctanoic acid (PFOA)	ND		1.7	0.71	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.26	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluoroundecanoic acid (PFUnA)	1.0	J	1.7	0.92	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorododecanoic acid (PFDoA)	6.3		1.7	0.46	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorotridecanoic acid (PFTriA)	11		1.7	1.1	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorotetradecanoic acid (PFTeA)	5.3	B	1.7	0.24	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorobutanesulfonic acid (PFBS)	0.57	J	1.7	0.17	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorohexanesulfonic acid (PFHxS)	0.36	J B	1.7	0.14	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.45	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		04/18/19 12:05	04/20/19 16:07	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.29	ng/L		04/18/19 12:05	04/20/19 16:07	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		04/18/19 12:05	04/20/19 16:07	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		04/18/19 12:05	04/20/19 16:07	1
6:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 16:07	1
8:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 16:07	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	62		25 - 150				04/18/19 12:05	04/20/19 16:07	1
13C5 PFPeA	66		25 - 150				04/18/19 12:05	04/20/19 16:07	1
13C2 PFHxA	63		25 - 150				04/18/19 12:05	04/20/19 16:07	1
13C4 PFHpA	66		25 - 150				04/18/19 12:05	04/20/19 16:07	1
13C4 PFOA	63		25 - 150				04/18/19 12:05	04/20/19 16:07	1
13C5 PFNA	70		25 - 150				04/18/19 12:05	04/20/19 16:07	1
13C2 PFDA	71		25 - 150				04/18/19 12:05	04/20/19 16:07	1
13C2 PFUnA	57		25 - 150				04/18/19 12:05	04/20/19 16:07	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-7

Lab Sample ID: 480-151873-9

Date Collected: 04/11/19 12:30

Matrix: Water

Date Received: 04/12/19 12:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDoA	57		25 - 150	04/18/19 12:05	04/20/19 16:07	1
13C2 PFTeDA	60		25 - 150	04/18/19 12:05	04/20/19 16:07	1
13C3 PFBS	66		25 - 150	04/18/19 12:05	04/20/19 16:07	1
18O2 PFHxS	65		25 - 150	04/18/19 12:05	04/20/19 16:07	1
13C4 PFOS	60		25 - 150	04/18/19 12:05	04/20/19 16:07	1
13C8 FOSA	57		25 - 150	04/18/19 12:05	04/20/19 16:07	1
d3-NMeFOSAA	50		25 - 150	04/18/19 12:05	04/20/19 16:07	1
d5-NEtFOSAA	54		25 - 150	04/18/19 12:05	04/20/19 16:07	1
M2-6:2 FTS	69		25 - 150	04/18/19 12:05	04/20/19 16:07	1
M2-8:2 FTS	71		25 - 150	04/18/19 12:05	04/20/19 16:07	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-8

Lab Sample ID: 480-151873-10

Date Collected: 04/11/19 08:30

Matrix: Water

Date Received: 04/12/19 12:10

Method: 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			04/20/19 02:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/20/19 02:05	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/20/19 02:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/20/19 02:05	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/20/19 02:05	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/20/19 02:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/20/19 02:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/20/19 02:05	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/20/19 02:05	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/20/19 02:05	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/20/19 02:05	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/20/19 02:05	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/20/19 02:05	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/20/19 02:05	1
2-Hexanone	ND		5.0	1.2	ug/L			04/20/19 02:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/20/19 02:05	1
Acetone	ND		10	3.0	ug/L			04/20/19 02:05	1
Benzene	ND		1.0	0.41	ug/L			04/20/19 02:05	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/20/19 02:05	1
Bromoform	ND		1.0	0.26	ug/L			04/20/19 02:05	1
Bromomethane	ND		1.0	0.69	ug/L			04/20/19 02:05	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/20/19 02:05	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/20/19 02:05	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/20/19 02:05	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/20/19 02:05	1
Chloroethane	ND		1.0	0.32	ug/L			04/20/19 02:05	1
Chloroform	ND		1.0	0.34	ug/L			04/20/19 02:05	1
Chloromethane	ND		1.0	0.35	ug/L			04/20/19 02:05	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/20/19 02:05	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/20/19 02:05	1
Cyclohexane	ND		1.0	0.18	ug/L			04/20/19 02:05	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/20/19 02:05	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/20/19 02:05	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/20/19 02:05	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/20/19 02:05	1
Methyl acetate	ND		2.5	1.3	ug/L			04/20/19 02:05	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/20/19 02:05	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/20/19 02:05	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/20/19 02:05	1
Styrene	ND		1.0	0.73	ug/L			04/20/19 02:05	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/20/19 02:05	1
Toluene	ND		1.0	0.51	ug/L			04/20/19 02:05	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/20/19 02:05	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/20/19 02:05	1
Trichloroethene	ND		1.0	0.46	ug/L			04/20/19 02:05	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/20/19 02:05	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/20/19 02:05	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/20/19 02:05	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-8

Lab Sample ID: 480-151873-10

Date Collected: 04/11/19 08:30

Matrix: Water

Date Received: 04/12/19 12:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		04/20/19 02:05	1
1,2-Dichloroethane-d4 (Surr)	110		77 - 120		04/20/19 02:05	1
4-Bromofluorobenzene (Surr)	100		73 - 120		04/20/19 02:05	1
Dibromofluoromethane (Surr)	102		75 - 123		04/20/19 02:05	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/15/19 15:30	04/17/19 13:13	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	22		15 - 110				04/15/19 15:30	04/17/19 13:13	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.2	B	1.7	0.30	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.43	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.50	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.22	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorooctanoic acid (PFOA)	0.79	J	1.7	0.74	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.27	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.96	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.48	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorotetradecanoic acid (PFTeA)	0.31	J B	1.7	0.25	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorobutanesulfonic acid (PFBS)	0.87	J	1.7	0.17	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorohexanesulfonic acid (PFHxS)	0.64	J I B	1.7	0.15	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.17	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.47	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.28	ng/L		04/18/19 12:05	04/20/19 16:17	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30	ng/L		04/18/19 12:05	04/20/19 16:17	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7	ng/L		04/18/19 12:05	04/20/19 16:17	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 16:17	1
6:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 16:17	1
8:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 16:17	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	91		25 - 150				04/18/19 12:05	04/20/19 16:17	1
13C5 PFPeA	98		25 - 150				04/18/19 12:05	04/20/19 16:17	1
13C2 PFHxA	99		25 - 150				04/18/19 12:05	04/20/19 16:17	1
13C4 PFHpA	100		25 - 150				04/18/19 12:05	04/20/19 16:17	1
13C4 PFOA	97		25 - 150				04/18/19 12:05	04/20/19 16:17	1
13C5 PFNA	101		25 - 150				04/18/19 12:05	04/20/19 16:17	1
13C2 PFDA	107		25 - 150				04/18/19 12:05	04/20/19 16:17	1
13C2 PFUnA	98		25 - 150				04/18/19 12:05	04/20/19 16:17	1
13C2 PFDoA	99		25 - 150				04/18/19 12:05	04/20/19 16:17	1
13C2 PFTeDA	110		25 - 150				04/18/19 12:05	04/20/19 16:17	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-8

Date Collected: 04/11/19 08:30

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-10

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 PFBS	99		25 - 150	04/18/19 12:05	04/20/19 16:17	1
18O2 PFHxS	96		25 - 150	04/18/19 12:05	04/20/19 16:17	1
13C4 PFOS	96		25 - 150	04/18/19 12:05	04/20/19 16:17	1
13C8 FOSA	96		25 - 150	04/18/19 12:05	04/20/19 16:17	1
d3-NMeFOSAA	99		25 - 150	04/18/19 12:05	04/20/19 16:17	1
d5-NEtFOSAA	101		25 - 150	04/18/19 12:05	04/20/19 16:17	1
M2-6:2 FTS	102		25 - 150	04/18/19 12:05	04/20/19 16:17	1
M2-8:2 FTS	117		25 - 150	04/18/19 12:05	04/20/19 16:17	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-9R

Lab Sample ID: 480-151873-11

Date Collected: 04/10/19 09:00

Matrix: Water

Date Received: 04/12/19 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	160	ug/L			04/20/19 02:29	200
1,1,2,2-Tetrachloroethane	ND		200	42	ug/L			04/20/19 02:29	200
1,1,2-Trichloroethane	ND		200	46	ug/L			04/20/19 02:29	200
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		200	62	ug/L			04/20/19 02:29	200
1,1-Dichloroethane	ND		200	76	ug/L			04/20/19 02:29	200
1,1-Dichloroethene	ND		200	58	ug/L			04/20/19 02:29	200
1,2,4-Trichlorobenzene	ND		200	82	ug/L			04/20/19 02:29	200
1,2-Dibromo-3-Chloropropane	ND		200	78	ug/L			04/20/19 02:29	200
1,2-Dichlorobenzene	ND		200	160	ug/L			04/20/19 02:29	200
1,2-Dichloroethane	ND		200	42	ug/L			04/20/19 02:29	200
1,2-Dichloropropane	ND		200	140	ug/L			04/20/19 02:29	200
1,3-Dichlorobenzene	ND		200	160	ug/L			04/20/19 02:29	200
1,4-Dichlorobenzene	ND		200	170	ug/L			04/20/19 02:29	200
2-Butanone (MEK)	ND		2000	260	ug/L			04/20/19 02:29	200
2-Hexanone	ND		1000	250	ug/L			04/20/19 02:29	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			04/20/19 02:29	200
Acetone	ND		2000	600	ug/L			04/20/19 02:29	200
Benzene	ND		200	82	ug/L			04/20/19 02:29	200
Bromodichloromethane	ND		200	78	ug/L			04/20/19 02:29	200
Bromoform	ND		200	52	ug/L			04/20/19 02:29	200
Bromomethane	ND		200	140	ug/L			04/20/19 02:29	200
Carbon disulfide	ND		200	38	ug/L			04/20/19 02:29	200
Carbon tetrachloride	ND		200	54	ug/L			04/20/19 02:29	200
Chlorobenzene	ND		200	150	ug/L			04/20/19 02:29	200
Dibromochloromethane	ND		200	64	ug/L			04/20/19 02:29	200
Chloroethane	ND		200	64	ug/L			04/20/19 02:29	200
Chloroform	ND		200	68	ug/L			04/20/19 02:29	200
Chloromethane	ND		200	70	ug/L			04/20/19 02:29	200
cis-1,2-Dichloroethene	4600		200	160	ug/L			04/20/19 02:29	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			04/20/19 02:29	200
Cyclohexane	ND		200	36	ug/L			04/20/19 02:29	200
Dichlorodifluoromethane	ND		200	140	ug/L			04/20/19 02:29	200
Ethylbenzene	ND		200	150	ug/L			04/20/19 02:29	200
1,2-Dibromoethane	ND		200	150	ug/L			04/20/19 02:29	200
Isopropylbenzene	ND		200	160	ug/L			04/20/19 02:29	200
Methyl acetate	ND		500	260	ug/L			04/20/19 02:29	200
Methyl tert-butyl ether	ND		200	32	ug/L			04/20/19 02:29	200
Methylcyclohexane	ND		200	32	ug/L			04/20/19 02:29	200
Methylene Chloride	ND		200	88	ug/L			04/20/19 02:29	200
Styrene	ND		200	150	ug/L			04/20/19 02:29	200
Tetrachloroethene	ND		200	72	ug/L			04/20/19 02:29	200
Toluene	ND		200	100	ug/L			04/20/19 02:29	200
trans-1,2-Dichloroethene	ND		200	180	ug/L			04/20/19 02:29	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			04/20/19 02:29	200
Trichloroethene	7800		200	92	ug/L			04/20/19 02:29	200
Trichlorofluoromethane	ND		200	180	ug/L			04/20/19 02:29	200
Vinyl chloride	560		200	180	ug/L			04/20/19 02:29	200
Xylenes, Total	ND		400	130	ug/L			04/20/19 02:29	200

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-9R

Date Collected: 04/10/19 09:00

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-11

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	96		80 - 120		04/20/19 02:29	200
<i>1,2-Dichloroethane-d4 (Surr)</i>	115		77 - 120		04/20/19 02:29	200
<i>4-Bromofluorobenzene (Surr)</i>	100		73 - 120		04/20/19 02:29	200
<i>Dibromofluoromethane (Surr)</i>	105		75 - 123		04/20/19 02:29	200

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-10

Lab Sample ID: 480-151873-12

Date Collected: 04/10/19 11:00

Matrix: Water

Date Received: 04/12/19 12:10

Method: 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			04/20/19 02:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/20/19 02:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/20/19 02:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/20/19 02:53	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/20/19 02:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/20/19 02:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/20/19 02:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/20/19 02:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/20/19 02:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/20/19 02:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/20/19 02:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/20/19 02:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/20/19 02:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/20/19 02:53	1
2-Hexanone	ND		5.0	1.2	ug/L			04/20/19 02:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/20/19 02:53	1
Acetone	ND		10	3.0	ug/L			04/20/19 02:53	1
Benzene	ND		1.0	0.41	ug/L			04/20/19 02:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/20/19 02:53	1
Bromoform	ND		1.0	0.26	ug/L			04/20/19 02:53	1
Bromomethane	ND		1.0	0.69	ug/L			04/20/19 02:53	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/20/19 02:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/20/19 02:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/20/19 02:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/20/19 02:53	1
Chloroethane	ND		1.0	0.32	ug/L			04/20/19 02:53	1
Chloroform	ND		1.0	0.34	ug/L			04/20/19 02:53	1
Chloromethane	ND		1.0	0.35	ug/L			04/20/19 02:53	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/20/19 02:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/20/19 02:53	1
Cyclohexane	ND		1.0	0.18	ug/L			04/20/19 02:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/20/19 02:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/20/19 02:53	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/20/19 02:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/20/19 02:53	1
Methyl acetate	ND		2.5	1.3	ug/L			04/20/19 02:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/20/19 02:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/20/19 02:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/20/19 02:53	1
Styrene	ND		1.0	0.73	ug/L			04/20/19 02:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/20/19 02:53	1
Toluene	ND		1.0	0.51	ug/L			04/20/19 02:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/20/19 02:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/20/19 02:53	1
Trichloroethene	ND		1.0	0.46	ug/L			04/20/19 02:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/20/19 02:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/20/19 02:53	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/20/19 02:53	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-10

Date Collected: 04/10/19 11:00

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-12

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	96		80 - 120		04/20/19 02:53	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	108		77 - 120		04/20/19 02:53	1
<i>4-Bromofluorobenzene (Surr)</i>	100		73 - 120		04/20/19 02:53	1
<i>Dibromofluoromethane (Surr)</i>	102		75 - 123		04/20/19 02:53	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-11R

Lab Sample ID: 480-151873-13

Date Collected: 04/10/19 10:15

Matrix: Water

Date Received: 04/12/19 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		40	33	ug/L			04/20/19 03:17	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			04/20/19 03:17	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			04/20/19 03:17	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		40	12	ug/L			04/20/19 03:17	40
1,1-Dichloroethane	ND		40	15	ug/L			04/20/19 03:17	40
1,1-Dichloroethene	ND		40	12	ug/L			04/20/19 03:17	40
1,2,4-Trichlorobenzene	ND		40	16	ug/L			04/20/19 03:17	40
1,2-Dibromo-3-Chloropropane	ND		40	16	ug/L			04/20/19 03:17	40
1,2-Dichlorobenzene	ND		40	32	ug/L			04/20/19 03:17	40
1,2-Dichloroethane	ND		40	8.4	ug/L			04/20/19 03:17	40
1,2-Dichloropropane	ND		40	29	ug/L			04/20/19 03:17	40
1,3-Dichlorobenzene	ND		40	31	ug/L			04/20/19 03:17	40
1,4-Dichlorobenzene	ND		40	34	ug/L			04/20/19 03:17	40
2-Butanone (MEK)	ND		400	53	ug/L			04/20/19 03:17	40
2-Hexanone	ND		200	50	ug/L			04/20/19 03:17	40
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			04/20/19 03:17	40
Acetone	ND		400	120	ug/L			04/20/19 03:17	40
Benzene	ND		40	16	ug/L			04/20/19 03:17	40
Bromodichloromethane	ND		40	16	ug/L			04/20/19 03:17	40
Bromoform	ND		40	10	ug/L			04/20/19 03:17	40
Bromomethane	ND		40	28	ug/L			04/20/19 03:17	40
Carbon disulfide	ND		40	7.6	ug/L			04/20/19 03:17	40
Carbon tetrachloride	ND		40	11	ug/L			04/20/19 03:17	40
Chlorobenzene	ND		40	30	ug/L			04/20/19 03:17	40
Dibromochloromethane	ND		40	13	ug/L			04/20/19 03:17	40
Chloroethane	ND		40	13	ug/L			04/20/19 03:17	40
Chloroform	ND		40	14	ug/L			04/20/19 03:17	40
Chloromethane	ND		40	14	ug/L			04/20/19 03:17	40
cis-1,2-Dichloroethene	420		40	32	ug/L			04/20/19 03:17	40
cis-1,3-Dichloropropene	ND		40	14	ug/L			04/20/19 03:17	40
Cyclohexane	ND		40	7.2	ug/L			04/20/19 03:17	40
Dichlorodifluoromethane	ND		40	27	ug/L			04/20/19 03:17	40
Ethylbenzene	ND		40	30	ug/L			04/20/19 03:17	40
1,2-Dibromoethane	ND		40	29	ug/L			04/20/19 03:17	40
Isopropylbenzene	ND		40	32	ug/L			04/20/19 03:17	40
Methyl acetate	ND		100	52	ug/L			04/20/19 03:17	40
Methyl tert-butyl ether	ND		40	6.4	ug/L			04/20/19 03:17	40
Methylcyclohexane	ND		40	6.4	ug/L			04/20/19 03:17	40
Methylene Chloride	ND		40	18	ug/L			04/20/19 03:17	40
Styrene	ND		40	29	ug/L			04/20/19 03:17	40
Tetrachloroethene	ND		40	14	ug/L			04/20/19 03:17	40
Toluene	ND		40	20	ug/L			04/20/19 03:17	40
trans-1,2-Dichloroethene	ND		40	36	ug/L			04/20/19 03:17	40
trans-1,3-Dichloropropene	ND		40	15	ug/L			04/20/19 03:17	40
Trichloroethene	1500		40	18	ug/L			04/20/19 03:17	40
Trichlorofluoromethane	ND		40	35	ug/L			04/20/19 03:17	40
Vinyl chloride	ND		40	36	ug/L			04/20/19 03:17	40
Xylenes, Total	ND		80	26	ug/L			04/20/19 03:17	40

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-11R

Lab Sample ID: 480-151873-13

Date Collected: 04/10/19 10:15

Matrix: Water

Date Received: 04/12/19 12:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	94		80 - 120		04/20/19 03:17	40
<i>1,2-Dichloroethane-d4 (Surr)</i>	112		77 - 120		04/20/19 03:17	40
<i>4-Bromofluorobenzene (Surr)</i>	98		73 - 120		04/20/19 03:17	40
<i>Dibromofluoromethane (Surr)</i>	103		75 - 123		04/20/19 03:17	40

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-12

Lab Sample ID: 480-151873-14

Date Collected: 04/11/19 14:30

Matrix: Water

Date Received: 04/12/19 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			04/20/19 03:42	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			04/20/19 03:42	100
1,1,2-Trichloroethane	ND		100	23	ug/L			04/20/19 03:42	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			04/20/19 03:42	100
1,1-Dichloroethane	ND		100	38	ug/L			04/20/19 03:42	100
1,1-Dichloroethene	ND		100	29	ug/L			04/20/19 03:42	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			04/20/19 03:42	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			04/20/19 03:42	100
1,2-Dichlorobenzene	ND		100	79	ug/L			04/20/19 03:42	100
1,2-Dichloroethane	ND		100	21	ug/L			04/20/19 03:42	100
1,2-Dichloropropane	ND		100	72	ug/L			04/20/19 03:42	100
1,3-Dichlorobenzene	ND		100	78	ug/L			04/20/19 03:42	100
1,4-Dichlorobenzene	ND		100	84	ug/L			04/20/19 03:42	100
2-Butanone (MEK)	ND		1000	130	ug/L			04/20/19 03:42	100
2-Hexanone	ND		500	120	ug/L			04/20/19 03:42	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			04/20/19 03:42	100
Acetone	ND		1000	300	ug/L			04/20/19 03:42	100
Benzene	ND		100	41	ug/L			04/20/19 03:42	100
Bromodichloromethane	ND		100	39	ug/L			04/20/19 03:42	100
Bromoform	ND		100	26	ug/L			04/20/19 03:42	100
Bromomethane	ND		100	69	ug/L			04/20/19 03:42	100
Carbon disulfide	ND		100	19	ug/L			04/20/19 03:42	100
Carbon tetrachloride	ND		100	27	ug/L			04/20/19 03:42	100
Chlorobenzene	ND		100	75	ug/L			04/20/19 03:42	100
Dibromochloromethane	ND		100	32	ug/L			04/20/19 03:42	100
Chloroethane	ND		100	32	ug/L			04/20/19 03:42	100
Chloroform	ND		100	34	ug/L			04/20/19 03:42	100
Chloromethane	ND		100	35	ug/L			04/20/19 03:42	100
cis-1,2-Dichloroethene	130		100	81	ug/L			04/20/19 03:42	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			04/20/19 03:42	100
Cyclohexane	ND		100	18	ug/L			04/20/19 03:42	100
Dichlorodifluoromethane	ND		100	68	ug/L			04/20/19 03:42	100
Ethylbenzene	ND		100	74	ug/L			04/20/19 03:42	100
1,2-Dibromoethane	ND		100	73	ug/L			04/20/19 03:42	100
Isopropylbenzene	ND		100	79	ug/L			04/20/19 03:42	100
Methyl acetate	ND		250	130	ug/L			04/20/19 03:42	100
Methyl tert-butyl ether	ND		100	16	ug/L			04/20/19 03:42	100
Methylcyclohexane	ND		100	16	ug/L			04/20/19 03:42	100
Methylene Chloride	ND		100	44	ug/L			04/20/19 03:42	100
Styrene	ND		100	73	ug/L			04/20/19 03:42	100
Tetrachloroethene	ND		100	36	ug/L			04/20/19 03:42	100
Toluene	ND		100	51	ug/L			04/20/19 03:42	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			04/20/19 03:42	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			04/20/19 03:42	100
Trichloroethene	5200		100	46	ug/L			04/20/19 03:42	100
Trichlorofluoromethane	ND		100	88	ug/L			04/20/19 03:42	100
Vinyl chloride	ND		100	90	ug/L			04/20/19 03:42	100
Xylenes, Total	ND		200	66	ug/L			04/20/19 03:42	100

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-12

Date Collected: 04/11/19 14:30

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-14

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		04/20/19 03:42	100
1,2-Dichloroethane-d4 (Surr)	112		77 - 120		04/20/19 03:42	100
4-Bromofluorobenzene (Surr)	99		73 - 120		04/20/19 03:42	100
Dibromofluoromethane (Surr)	103		75 - 123		04/20/19 03:42	100

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/15/19 15:30	04/17/19 13:36	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	49		15 - 110				04/15/19 15:30	04/17/19 13:36	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	G	3.0	3.0	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.42	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorohexanoic acid (PFHxA)	0.89	J	1.7	0.50	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluoroheptanoic acid (PFHpA)	0.93	J	1.7	0.21	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorooctanoic acid (PFOA)	2.7		1.7	0.73	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorononanoic acid (PFNA)	0.26	J	1.7	0.23	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.27	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.94	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorotetradecanoic acid (PFTeA)	0.40	J B	1.7	0.25	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorobutanesulfonic acid (PFBS)	0.83	J	1.7	0.17	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorohexanesulfonic acid (PFHxS)	0.59	J B	1.7	0.15	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorooctanesulfonic acid (PFOS)	1.0	J I	1.7	0.46	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		04/18/19 12:05	04/20/19 16:26	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30	ng/L		04/18/19 12:05	04/20/19 16:26	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7	ng/L		04/18/19 12:05	04/20/19 16:26	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		04/18/19 12:05	04/20/19 16:26	1
6:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 16:26	1
8:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 16:26	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	78		25 - 150				04/18/19 12:05	04/20/19 16:26	1
13C5 PFPeA	84		25 - 150				04/18/19 12:05	04/20/19 16:26	1
13C2 PFHxA	94		25 - 150				04/18/19 12:05	04/20/19 16:26	1
13C4 PFHpA	97		25 - 150				04/18/19 12:05	04/20/19 16:26	1
13C4 PFOA	93		25 - 150				04/18/19 12:05	04/20/19 16:26	1
13C5 PFNA	95		25 - 150				04/18/19 12:05	04/20/19 16:26	1
13C2 PFDA	99		25 - 150				04/18/19 12:05	04/20/19 16:26	1
13C2 PFUnA	90		25 - 150				04/18/19 12:05	04/20/19 16:26	1
13C2 PFDoA	91		25 - 150				04/18/19 12:05	04/20/19 16:26	1
13C2 PFTeDA	101		25 - 150				04/18/19 12:05	04/20/19 16:26	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-12

Date Collected: 04/11/19 14:30

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-14

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 PFBS	92		25 - 150	04/18/19 12:05	04/20/19 16:26	1
18O2 PFHxS	96		25 - 150	04/18/19 12:05	04/20/19 16:26	1
13C4 PFOS	87		25 - 150	04/18/19 12:05	04/20/19 16:26	1
13C8 FOSA	89		25 - 150	04/18/19 12:05	04/20/19 16:26	1
d3-NMeFOSAA	86		25 - 150	04/18/19 12:05	04/20/19 16:26	1
d5-NEtFOSAA	95		25 - 150	04/18/19 12:05	04/20/19 16:26	1
M2-6:2 FTS	105		25 - 150	04/18/19 12:05	04/20/19 16:26	1
M2-8:2 FTS	111		25 - 150	04/18/19 12:05	04/20/19 16:26	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-13

Lab Sample ID: 480-151873-15

Date Collected: 04/11/19 10:05

Matrix: Water

Date Received: 04/12/19 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		80	66	ug/L			04/20/19 16:02	80
1,1,2,2-Tetrachloroethane	ND		80	17	ug/L			04/20/19 16:02	80
1,1,2-Trichloroethane	ND		80	18	ug/L			04/20/19 16:02	80
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		80	25	ug/L			04/20/19 16:02	80
1,1-Dichloroethane	ND		80	30	ug/L			04/20/19 16:02	80
1,1-Dichloroethene	ND		80	23	ug/L			04/20/19 16:02	80
1,2,4-Trichlorobenzene	ND		80	33	ug/L			04/20/19 16:02	80
1,2-Dibromo-3-Chloropropane	ND		80	31	ug/L			04/20/19 16:02	80
1,2-Dichlorobenzene	ND		80	63	ug/L			04/20/19 16:02	80
1,2-Dichloroethane	ND		80	17	ug/L			04/20/19 16:02	80
1,2-Dichloropropane	ND		80	58	ug/L			04/20/19 16:02	80
1,3-Dichlorobenzene	ND		80	62	ug/L			04/20/19 16:02	80
1,4-Dichlorobenzene	ND		80	67	ug/L			04/20/19 16:02	80
2-Butanone (MEK)	ND		800	110	ug/L			04/20/19 16:02	80
2-Hexanone	ND		400	99	ug/L			04/20/19 16:02	80
4-Methyl-2-pentanone (MIBK)	ND		400	170	ug/L			04/20/19 16:02	80
Acetone	ND		800	240	ug/L			04/20/19 16:02	80
Benzene	ND		80	33	ug/L			04/20/19 16:02	80
Bromodichloromethane	ND		80	31	ug/L			04/20/19 16:02	80
Bromoform	ND		80	21	ug/L			04/20/19 16:02	80
Bromomethane	ND		80	55	ug/L			04/20/19 16:02	80
Carbon disulfide	ND		80	15	ug/L			04/20/19 16:02	80
Carbon tetrachloride	ND		80	22	ug/L			04/20/19 16:02	80
Chlorobenzene	ND		80	60	ug/L			04/20/19 16:02	80
Dibromochloromethane	ND		80	26	ug/L			04/20/19 16:02	80
Chloroethane	ND		80	26	ug/L			04/20/19 16:02	80
Chloroform	ND		80	27	ug/L			04/20/19 16:02	80
Chloromethane	ND		80	28	ug/L			04/20/19 16:02	80
cis-1,2-Dichloroethene	890		80	65	ug/L			04/20/19 16:02	80
cis-1,3-Dichloropropene	ND		80	29	ug/L			04/20/19 16:02	80
Cyclohexane	ND		80	14	ug/L			04/20/19 16:02	80
Dichlorodifluoromethane	ND		80	54	ug/L			04/20/19 16:02	80
Ethylbenzene	ND		80	59	ug/L			04/20/19 16:02	80
1,2-Dibromoethane	ND		80	58	ug/L			04/20/19 16:02	80
Isopropylbenzene	ND		80	63	ug/L			04/20/19 16:02	80
Methyl acetate	ND		200	100	ug/L			04/20/19 16:02	80
Methyl tert-butyl ether	ND		80	13	ug/L			04/20/19 16:02	80
Methylcyclohexane	ND		80	13	ug/L			04/20/19 16:02	80
Methylene Chloride	ND		80	35	ug/L			04/20/19 16:02	80
Styrene	ND		80	58	ug/L			04/20/19 16:02	80
Tetrachloroethene	ND		80	29	ug/L			04/20/19 16:02	80
Toluene	ND		80	41	ug/L			04/20/19 16:02	80
trans-1,2-Dichloroethene	ND		80	72	ug/L			04/20/19 16:02	80
trans-1,3-Dichloropropene	ND		80	30	ug/L			04/20/19 16:02	80
Trichloroethene	3800		80	37	ug/L			04/20/19 16:02	80
Trichlorofluoromethane	ND		80	70	ug/L			04/20/19 16:02	80
Vinyl chloride	ND		80	72	ug/L			04/20/19 16:02	80
Xylenes, Total	ND		160	53	ug/L			04/20/19 16:02	80

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-13

Date Collected: 04/11/19 10:05

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-15

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		80 - 120		04/20/19 16:02	80
<i>1,2-Dichloroethane-d4 (Surr)</i>	112		77 - 120		04/20/19 16:02	80
<i>4-Bromofluorobenzene (Surr)</i>	100		73 - 120		04/20/19 16:02	80
<i>Dibromofluoromethane (Surr)</i>	102		75 - 123		04/20/19 16:02	80

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-14

Lab Sample ID: 480-151873-16

Date Collected: 04/10/19 18:00

Matrix: Water

Date Received: 04/12/19 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			04/20/19 04:30	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			04/20/19 04:30	100
1,1,2-Trichloroethane	ND		100	23	ug/L			04/20/19 04:30	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			04/20/19 04:30	100
1,1-Dichloroethane	ND		100	38	ug/L			04/20/19 04:30	100
1,1-Dichloroethene	ND		100	29	ug/L			04/20/19 04:30	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			04/20/19 04:30	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			04/20/19 04:30	100
1,2-Dichlorobenzene	ND		100	79	ug/L			04/20/19 04:30	100
1,2-Dichloroethane	ND		100	21	ug/L			04/20/19 04:30	100
1,2-Dichloropropane	ND		100	72	ug/L			04/20/19 04:30	100
1,3-Dichlorobenzene	ND		100	78	ug/L			04/20/19 04:30	100
1,4-Dichlorobenzene	ND		100	84	ug/L			04/20/19 04:30	100
2-Butanone (MEK)	ND		1000	130	ug/L			04/20/19 04:30	100
2-Hexanone	ND		500	120	ug/L			04/20/19 04:30	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			04/20/19 04:30	100
Acetone	ND		1000	300	ug/L			04/20/19 04:30	100
Benzene	ND		100	41	ug/L			04/20/19 04:30	100
Bromodichloromethane	ND		100	39	ug/L			04/20/19 04:30	100
Bromoform	ND		100	26	ug/L			04/20/19 04:30	100
Bromomethane	ND		100	69	ug/L			04/20/19 04:30	100
Carbon disulfide	ND		100	19	ug/L			04/20/19 04:30	100
Carbon tetrachloride	ND		100	27	ug/L			04/20/19 04:30	100
Chlorobenzene	ND		100	75	ug/L			04/20/19 04:30	100
Dibromochloromethane	ND		100	32	ug/L			04/20/19 04:30	100
Chloroethane	ND		100	32	ug/L			04/20/19 04:30	100
Chloroform	ND		100	34	ug/L			04/20/19 04:30	100
Chloromethane	ND		100	35	ug/L			04/20/19 04:30	100
cis-1,2-Dichloroethene	2200		100	81	ug/L			04/20/19 04:30	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			04/20/19 04:30	100
Cyclohexane	ND		100	18	ug/L			04/20/19 04:30	100
Dichlorodifluoromethane	ND		100	68	ug/L			04/20/19 04:30	100
Ethylbenzene	ND		100	74	ug/L			04/20/19 04:30	100
1,2-Dibromoethane	ND		100	73	ug/L			04/20/19 04:30	100
Isopropylbenzene	ND		100	79	ug/L			04/20/19 04:30	100
Methyl acetate	ND		250	130	ug/L			04/20/19 04:30	100
Methyl tert-butyl ether	ND		100	16	ug/L			04/20/19 04:30	100
Methylcyclohexane	ND		100	16	ug/L			04/20/19 04:30	100
Methylene Chloride	ND		100	44	ug/L			04/20/19 04:30	100
Styrene	ND		100	73	ug/L			04/20/19 04:30	100
Tetrachloroethene	ND		100	36	ug/L			04/20/19 04:30	100
Toluene	ND		100	51	ug/L			04/20/19 04:30	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			04/20/19 04:30	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			04/20/19 04:30	100
Trichloroethene	5100		100	46	ug/L			04/20/19 04:30	100
Trichlorofluoromethane	ND		100	88	ug/L			04/20/19 04:30	100
Vinyl chloride	ND		100	90	ug/L			04/20/19 04:30	100
Xylenes, Total	ND		200	66	ug/L			04/20/19 04:30	100

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-14

Date Collected: 04/10/19 18:00

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-16

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	96		80 - 120		04/20/19 04:30	100
<i>1,2-Dichloroethane-d4 (Surr)</i>	117		77 - 120		04/20/19 04:30	100
<i>4-Bromofluorobenzene (Surr)</i>	96		73 - 120		04/20/19 04:30	100
<i>Dibromofluoromethane (Surr)</i>	105		75 - 123		04/20/19 04:30	100

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: DUP-040919

Lab Sample ID: 480-151873-17

Date Collected: 04/09/19 17:45

Matrix: Water

Date Received: 04/12/19 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			04/20/19 04:54	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			04/20/19 04:54	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			04/20/19 04:54	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			04/20/19 04:54	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			04/20/19 04:54	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			04/20/19 04:54	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			04/20/19 04:54	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			04/20/19 04:54	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			04/20/19 04:54	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			04/20/19 04:54	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			04/20/19 04:54	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			04/20/19 04:54	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			04/20/19 04:54	2
2-Butanone (MEK)	ND		20	2.6	ug/L			04/20/19 04:54	2
2-Hexanone	ND		10	2.5	ug/L			04/20/19 04:54	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			04/20/19 04:54	2
Acetone	ND		20	6.0	ug/L			04/20/19 04:54	2
Benzene	ND		2.0	0.82	ug/L			04/20/19 04:54	2
Bromodichloromethane	ND		2.0	0.78	ug/L			04/20/19 04:54	2
Bromoform	ND		2.0	0.52	ug/L			04/20/19 04:54	2
Bromomethane	ND		2.0	1.4	ug/L			04/20/19 04:54	2
Carbon disulfide	ND		2.0	0.38	ug/L			04/20/19 04:54	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			04/20/19 04:54	2
Chlorobenzene	ND		2.0	1.5	ug/L			04/20/19 04:54	2
Dibromochloromethane	ND		2.0	0.64	ug/L			04/20/19 04:54	2
Chloroethane	ND		2.0	0.64	ug/L			04/20/19 04:54	2
Chloroform	ND		2.0	0.68	ug/L			04/20/19 04:54	2
Chloromethane	ND		2.0	0.70	ug/L			04/20/19 04:54	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			04/20/19 04:54	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			04/20/19 04:54	2
Cyclohexane	ND		2.0	0.36	ug/L			04/20/19 04:54	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			04/20/19 04:54	2
Ethylbenzene	ND		2.0	1.5	ug/L			04/20/19 04:54	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			04/20/19 04:54	2
Isopropylbenzene	ND		2.0	1.6	ug/L			04/20/19 04:54	2
Methyl acetate	ND		5.0	2.6	ug/L			04/20/19 04:54	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			04/20/19 04:54	2
Methylcyclohexane	ND		2.0	0.32	ug/L			04/20/19 04:54	2
Methylene Chloride	ND		2.0	0.88	ug/L			04/20/19 04:54	2
Styrene	ND		2.0	1.5	ug/L			04/20/19 04:54	2
Tetrachloroethene	ND		2.0	0.72	ug/L			04/20/19 04:54	2
Toluene	ND		2.0	1.0	ug/L			04/20/19 04:54	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			04/20/19 04:54	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			04/20/19 04:54	2
Trichloroethene	ND		2.0	0.92	ug/L			04/20/19 04:54	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			04/20/19 04:54	2
Vinyl chloride	2.9		2.0	1.8	ug/L			04/20/19 04:54	2
Xylenes, Total	ND		4.0	1.3	ug/L			04/20/19 04:54	2

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: DUP-040919

Lab Sample ID: 480-151873-17

Date Collected: 04/09/19 17:45

Matrix: Water

Date Received: 04/12/19 12:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		04/20/19 04:54	2
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		04/20/19 04:54	2
4-Bromofluorobenzene (Surr)	101		73 - 120		04/20/19 04:54	2
Dibromofluoromethane (Surr)	103		75 - 123		04/20/19 04:54	2

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/15/19 15:30	04/17/19 14:00	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	22		15 - 110				04/15/19 15:30	04/17/19 14:00	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	G	30	30	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.42	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorohexanoic acid (PFHxA)	ND	G	2.6	2.6	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluoroheptanoic acid (PFHpA)	3.2		1.7	0.21	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorooctanoic acid (PFOA)	53		1.7	0.73	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorononanoic acid (PFNA)	1.7		1.7	0.23	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.27	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.94	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.17	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorohexanesulfonic acid (PFHxS)	3.7	B	1.7	0.15	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.40	J	1.7	0.16	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorooctanesulfonic acid (PFOS)	22		1.7	0.46	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		04/18/19 12:05	04/20/19 16:36	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30	ng/L		04/18/19 12:05	04/20/19 16:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7	ng/L		04/18/19 12:05	04/20/19 16:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		04/18/19 12:05	04/20/19 16:36	1
6:2 FTS	3.3	J	17	1.7	ng/L		04/18/19 12:05	04/20/19 16:36	1
8:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 16:36	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	34		25 - 150				04/18/19 12:05	04/20/19 16:36	1
13C5 PFPeA	40		25 - 150				04/18/19 12:05	04/20/19 16:36	1
13C2 PFHxA	52		25 - 150				04/18/19 12:05	04/20/19 16:36	1
13C4 PFHpA	65		25 - 150				04/18/19 12:05	04/20/19 16:36	1
13C4 PFOA	64		25 - 150				04/18/19 12:05	04/20/19 16:36	1
13C5 PFNA	76		25 - 150				04/18/19 12:05	04/20/19 16:36	1
13C2 PFDA	72		25 - 150				04/18/19 12:05	04/20/19 16:36	1
13C2 PFUnA	69		25 - 150				04/18/19 12:05	04/20/19 16:36	1
13C2 PFDoA	60		25 - 150				04/18/19 12:05	04/20/19 16:36	1
13C2 PFTeDA	56		25 - 150				04/18/19 12:05	04/20/19 16:36	1
13C3 PFBS	56		25 - 150				04/18/19 12:05	04/20/19 16:36	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: DUP-040919

Lab Sample ID: 480-151873-17

Date Collected: 04/09/19 17:45

Matrix: Water

Date Received: 04/12/19 12:10

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
18O2 PFHxS	66		25 - 150	04/18/19 12:05	04/20/19 16:36	1
13C4 PFOS	71		25 - 150	04/18/19 12:05	04/20/19 16:36	1
13C8 FOSA	60		25 - 150	04/18/19 12:05	04/20/19 16:36	1
d3-NMeFOSAA	59		25 - 150	04/18/19 12:05	04/20/19 16:36	1
d5-NEtFOSAA	62		25 - 150	04/18/19 12:05	04/20/19 16:36	1
M2-6:2 FTS	111		25 - 150	04/18/19 12:05	04/20/19 16:36	1
M2-8:2 FTS	77		25 - 150	04/18/19 12:05	04/20/19 16:36	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-151873-18

Date Collected: 04/09/19 00:00

Matrix: Water

Date Received: 04/12/19 12:10

Method: 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			04/20/19 05:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/20/19 05:18	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/20/19 05:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/20/19 05:18	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/20/19 05:18	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/20/19 05:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/20/19 05:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/20/19 05:18	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/20/19 05:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/20/19 05:18	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/20/19 05:18	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/20/19 05:18	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/20/19 05:18	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/20/19 05:18	1
2-Hexanone	ND		5.0	1.2	ug/L			04/20/19 05:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/20/19 05:18	1
Acetone	ND		10	3.0	ug/L			04/20/19 05:18	1
Benzene	ND		1.0	0.41	ug/L			04/20/19 05:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/20/19 05:18	1
Bromoform	ND		1.0	0.26	ug/L			04/20/19 05:18	1
Bromomethane	ND		1.0	0.69	ug/L			04/20/19 05:18	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/20/19 05:18	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/20/19 05:18	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/20/19 05:18	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/20/19 05:18	1
Chloroethane	ND		1.0	0.32	ug/L			04/20/19 05:18	1
Chloroform	ND		1.0	0.34	ug/L			04/20/19 05:18	1
Chloromethane	ND		1.0	0.35	ug/L			04/20/19 05:18	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/20/19 05:18	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/20/19 05:18	1
Cyclohexane	ND		1.0	0.18	ug/L			04/20/19 05:18	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/20/19 05:18	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/20/19 05:18	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/20/19 05:18	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/20/19 05:18	1
Methyl acetate	ND		2.5	1.3	ug/L			04/20/19 05:18	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/20/19 05:18	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/20/19 05:18	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/20/19 05:18	1
Styrene	ND		1.0	0.73	ug/L			04/20/19 05:18	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/20/19 05:18	1
Toluene	ND		1.0	0.51	ug/L			04/20/19 05:18	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/20/19 05:18	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/20/19 05:18	1
Trichloroethene	ND		1.0	0.46	ug/L			04/20/19 05:18	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/20/19 05:18	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/20/19 05:18	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/20/19 05:18	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-151873-18

Date Collected: 04/09/19 00:00

Matrix: Water

Date Received: 04/12/19 12:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	95		80 - 120		04/20/19 05:18	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	112		77 - 120		04/20/19 05:18	1
<i>4-Bromofluorobenzene (Surr)</i>	98		73 - 120		04/20/19 05:18	1
<i>Dibromofluoromethane (Surr)</i>	105		75 - 123		04/20/19 05:18	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 480-151873-19

Date Collected: 04/10/19 18:30

Matrix: Water

Date Received: 04/12/19 12:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.3	B CI	1.7	0.30	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.41	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorohexanoic acid (PFHxA)	0.63	J	1.7	0.49	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.21	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorooctanoic acid (PFOA)	ND		1.7	0.72	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.26	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.93	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.17	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorohexanesulfonic acid (PFHxS)	0.24	J B	1.7	0.14	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.46	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		04/18/19 12:05	04/20/19 16:45	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30	ng/L		04/18/19 12:05	04/20/19 16:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		04/18/19 12:05	04/20/19 16:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		04/18/19 12:05	04/20/19 16:45	1
6:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 16:45	1
8:2 FTS	ND		17	1.7	ng/L		04/18/19 12:05	04/20/19 16:45	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	92		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C5 PFPeA	100		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C2 PFHxA	96		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C4 PFHpA	100		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C4 PFOA	97		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C5 PFNA	104		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C2 PFDA	101		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C2 PFUnA	98		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C2 PFDoA	95		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C2 PFTeDA	99		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C3 PFBS	98		25 - 150				04/18/19 12:05	04/20/19 16:45	1
18O2 PFHxS	96		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C4 PFOS	95		25 - 150				04/18/19 12:05	04/20/19 16:45	1
13C8 FOSA	87		25 - 150				04/18/19 12:05	04/20/19 16:45	1
d3-NMeFOSAA	84		25 - 150				04/18/19 12:05	04/20/19 16:45	1
d5-NEtFOSAA	88		25 - 150				04/18/19 12:05	04/20/19 16:45	1
M2-6:2 FTS	104		25 - 150				04/18/19 12:05	04/20/19 16:45	1
M2-8:2 FTS	108		25 - 150				04/18/19 12:05	04/20/19 16:45	1

Eurofins TestAmerica, Buffalo

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (80-120)	DCA (77-120)	BFB (73-120)	DBFM (75-123)
480-151873-1	MW-1	133 X	151 X	139 X	143 X
480-151873-2	MW-2	97	107	98	103
480-151873-2 - DL	MW-2	101	115	106	110
480-151873-2 MS	MW-2	95	111	102	105
480-151873-2 MSD	MW-2	96	109	100	102
480-151873-3	MW-3	98	114	102	108
480-151873-4	MW-4	99	107	107	100
480-151873-5	MW-4D	98	113	101	105
480-151873-6	MW-5	96	110	102	102
480-151873-7	MW-5D	99	114	99	105
480-151873-8	MW-6	93	109	99	102
480-151873-9	MW-7	98	115	105	107
480-151873-10	MW-8	100	110	100	102
480-151873-11	MW-9R	96	115	100	105
480-151873-12	MW-10	96	108	100	102
480-151873-13	MW-11R	94	112	98	103
480-151873-14	MW-12	97	112	99	103
480-151873-15	MW-13	97	112	100	102
480-151873-16	MW-14	96	117	96	105
480-151873-17	DUP-040919	97	108	101	103
480-151873-18	TRIP BLANK	95	112	98	105
LCS 480-468520/15	Lab Control Sample	96	112	101	105
LCS 480-468918/5	Lab Control Sample	99	111	105	103
LCS 480-468943/5	Lab Control Sample	100	108	105	102
MB 480-468520/8	Method Blank	98	110	97	108
MB 480-468918/7	Method Blank	96	104	99	103
MB 480-468943/7	Method Blank	96	111	98	106

Surrogate Legend

TOL = Toluene-d8 (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-468520/8

Matrix: Water

Analysis Batch: 468520

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			04/18/19 11:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/18/19 11:54	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/18/19 11:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/18/19 11:54	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/18/19 11:54	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/18/19 11:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/18/19 11:54	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/18/19 11:54	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/18/19 11:54	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/18/19 11:54	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/18/19 11:54	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/18/19 11:54	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/18/19 11:54	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/18/19 11:54	1
2-Hexanone	ND		5.0	1.2	ug/L			04/18/19 11:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/18/19 11:54	1
Acetone	ND		10	3.0	ug/L			04/18/19 11:54	1
Benzene	ND		1.0	0.41	ug/L			04/18/19 11:54	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/18/19 11:54	1
Bromoform	ND		1.0	0.26	ug/L			04/18/19 11:54	1
Bromomethane	ND		1.0	0.69	ug/L			04/18/19 11:54	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/18/19 11:54	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/18/19 11:54	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/18/19 11:54	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/18/19 11:54	1
Chloroethane	ND		1.0	0.32	ug/L			04/18/19 11:54	1
Chloroform	ND		1.0	0.34	ug/L			04/18/19 11:54	1
Chloromethane	ND		1.0	0.35	ug/L			04/18/19 11:54	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/18/19 11:54	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/18/19 11:54	1
Cyclohexane	ND		1.0	0.18	ug/L			04/18/19 11:54	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/18/19 11:54	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/18/19 11:54	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/18/19 11:54	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/18/19 11:54	1
Methyl acetate	ND		2.5	1.3	ug/L			04/18/19 11:54	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/18/19 11:54	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/18/19 11:54	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/18/19 11:54	1
Styrene	ND		1.0	0.73	ug/L			04/18/19 11:54	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/18/19 11:54	1
Toluene	ND		1.0	0.51	ug/L			04/18/19 11:54	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/18/19 11:54	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/18/19 11:54	1
Trichloroethene	ND		1.0	0.46	ug/L			04/18/19 11:54	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/18/19 11:54	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/18/19 11:54	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/18/19 11:54	1

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-468520/8

Matrix: Water

Analysis Batch: 468520

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		04/18/19 11:54	1
1,2-Dichloroethane-d4 (Surr)	110		77 - 120		04/18/19 11:54	1
4-Bromofluorobenzene (Surr)	97		73 - 120		04/18/19 11:54	1
Dibromofluoromethane (Surr)	108		75 - 123		04/18/19 11:54	1

Lab Sample ID: LCS 480-468520/15

Matrix: Water

Analysis Batch: 468520

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	25.5		ug/L		102	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.4		ug/L		106	76 - 120
1,1,2-Trichloroethane	25.0	27.3		ug/L		109	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.5		ug/L		114	61 - 148
1,1-Dichloroethane	25.0	24.0		ug/L		96	77 - 120
1,1-Dichloroethene	25.0	24.4		ug/L		98	66 - 127
1,2,4-Trichlorobenzene	25.0	23.1		ug/L		92	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.8		ug/L		99	56 - 134
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	80 - 124
1,2-Dichloroethane	25.0	25.9		ug/L		103	75 - 120
1,2-Dichloropropane	25.0	27.8		ug/L		111	76 - 120
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	77 - 120
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 120
2-Butanone (MEK)	125	245	*	ug/L		196	57 - 140
2-Hexanone	125	132		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	117		ug/L		94	71 - 125
Acetone	125	118		ug/L		95	56 - 142
Benzene	25.0	26.0		ug/L		104	71 - 124
Bromodichloromethane	25.0	30.7	*	ug/L		123	80 - 122
Bromoform	25.0	31.0		ug/L		124	61 - 132
Bromomethane	25.0	21.9		ug/L		88	55 - 144
Carbon disulfide	25.0	22.9		ug/L		91	59 - 134
Carbon tetrachloride	25.0	28.0		ug/L		112	72 - 134
Chlorobenzene	25.0	25.7		ug/L		103	80 - 120
Dibromochloromethane	25.0	29.0		ug/L		116	75 - 125
Chloroethane	25.0	21.6		ug/L		87	69 - 136
Chloroform	25.0	24.8		ug/L		99	73 - 127
Chloromethane	25.0	19.0		ug/L		76	68 - 124
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	74 - 124
cis-1,3-Dichloropropene	25.0	33.1	*	ug/L		132	74 - 124
Cyclohexane	25.0	24.9		ug/L		100	59 - 135
Dichlorodifluoromethane	25.0	24.5		ug/L		98	59 - 135
Ethylbenzene	25.0	24.0		ug/L		96	77 - 123
1,2-Dibromoethane	25.0	28.8		ug/L		115	77 - 120
Isopropylbenzene	25.0	24.8		ug/L		99	77 - 122
Methyl acetate	50.0	48.5		ug/L		97	74 - 133
Methyl tert-butyl ether	25.0	23.7		ug/L		95	77 - 120
Methylcyclohexane	25.0	28.9		ug/L		116	68 - 134

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-468520/15

Matrix: Water

Analysis Batch: 468520

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	26.1		ug/L		104	75 - 124
Styrene	25.0	25.0		ug/L		100	80 - 120
Tetrachloroethene	25.0	27.6		ug/L		111	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	73 - 127
trans-1,3-Dichloropropene	25.0	28.9		ug/L		116	80 - 120
Trichloroethene	25.0	27.7		ug/L		111	74 - 123
Trichlorofluoromethane	25.0	25.7		ug/L		103	62 - 150
Vinyl chloride	25.0	22.5		ug/L		90	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	96		80 - 120
1,2-Dichloroethane-d4 (Surr)	112		77 - 120
4-Bromofluorobenzene (Surr)	101		73 - 120
Dibromofluoromethane (Surr)	105		75 - 123

Lab Sample ID: MB 480-468918/7

Matrix: Water

Analysis Batch: 468918

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			04/19/19 22:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/19/19 22:12	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/19/19 22:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/19/19 22:12	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/19/19 22:12	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/19/19 22:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/19/19 22:12	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/19/19 22:12	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/19/19 22:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/19/19 22:12	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/19/19 22:12	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/19/19 22:12	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/19/19 22:12	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/19/19 22:12	1
2-Hexanone	ND		5.0	1.2	ug/L			04/19/19 22:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/19/19 22:12	1
Acetone	ND		10	3.0	ug/L			04/19/19 22:12	1
Benzene	ND		1.0	0.41	ug/L			04/19/19 22:12	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/19/19 22:12	1
Bromoform	ND		1.0	0.26	ug/L			04/19/19 22:12	1
Bromomethane	ND		1.0	0.69	ug/L			04/19/19 22:12	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/19/19 22:12	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/19/19 22:12	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/19/19 22:12	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/19/19 22:12	1
Chloroethane	ND		1.0	0.32	ug/L			04/19/19 22:12	1
Chloroform	ND		1.0	0.34	ug/L			04/19/19 22:12	1

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-468918/7

Matrix: Water

Analysis Batch: 468918

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			04/19/19 22:12	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/19/19 22:12	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/19/19 22:12	1
Cyclohexane	ND		1.0	0.18	ug/L			04/19/19 22:12	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/19/19 22:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/19/19 22:12	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/19/19 22:12	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/19/19 22:12	1
Methyl acetate	ND		2.5	1.3	ug/L			04/19/19 22:12	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/19/19 22:12	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/19/19 22:12	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/19/19 22:12	1
Styrene	ND		1.0	0.73	ug/L			04/19/19 22:12	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/19/19 22:12	1
Toluene	ND		1.0	0.51	ug/L			04/19/19 22:12	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/19/19 22:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/19/19 22:12	1
Trichloroethene	ND		1.0	0.46	ug/L			04/19/19 22:12	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/19/19 22:12	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/19/19 22:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/19/19 22:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120					04/19/19 22:12	1
1,2-Dichloroethane-d4 (Surr)	104		77 - 120					04/19/19 22:12	1
4-Bromofluorobenzene (Surr)	99		73 - 120					04/19/19 22:12	1
Dibromofluoromethane (Surr)	103		75 - 123					04/19/19 22:12	1

Lab Sample ID: LCS 480-468918/5

Matrix: Water

Analysis Batch: 468918

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	28.8		ug/L		115	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	76 - 120
1,1,2-Trichloroethane	25.0	23.7		ug/L		95	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.9		ug/L		112	61 - 148
1,1-Dichloroethane	25.0	25.4		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	25.5		ug/L		102	66 - 127
1,2,4-Trichlorobenzene	25.0	25.8		ug/L		103	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.0		ug/L		92	56 - 134
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	27.0		ug/L		108	75 - 120
1,2-Dichloropropane	25.0	26.1		ug/L		104	76 - 120
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	77 - 120
1,4-Dichlorobenzene	25.0	25.1		ug/L		101	80 - 120
2-Butanone (MEK)	125	134		ug/L		107	57 - 140
2-Hexanone	125	130		ug/L		104	65 - 127

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-468918/5

Matrix: Water

Analysis Batch: 468918

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	130		ug/L		104	56 - 142
Benzene	25.0	25.2		ug/L		101	71 - 124
Bromodichloromethane	25.0	27.0		ug/L		108	80 - 122
Bromoform	25.0	27.9		ug/L		112	61 - 132
Bromomethane	25.0	23.5		ug/L		94	55 - 144
Carbon disulfide	25.0	25.9		ug/L		104	59 - 134
Carbon tetrachloride	25.0	29.2		ug/L		117	72 - 134
Chlorobenzene	25.0	25.9		ug/L		103	80 - 120
Dibromochloromethane	25.0	26.4		ug/L		106	75 - 125
Chloroethane	25.0	24.7		ug/L		99	69 - 136
Chloroform	25.0	24.9		ug/L		100	73 - 127
Chloromethane	25.0	23.8		ug/L		95	68 - 124
cis-1,2-Dichloroethene	25.0	24.9		ug/L		100	74 - 124
cis-1,3-Dichloropropene	25.0	24.9		ug/L		100	74 - 124
Cyclohexane	25.0	29.2		ug/L		117	59 - 135
Dichlorodifluoromethane	25.0	24.7		ug/L		99	59 - 135
Ethylbenzene	25.0	26.6		ug/L		106	77 - 123
1,2-Dibromoethane	25.0	24.7		ug/L		99	77 - 120
Isopropylbenzene	25.0	25.7		ug/L		103	77 - 122
Methyl acetate	50.0	48.8		ug/L		98	74 - 133
Methyl tert-butyl ether	25.0	24.4		ug/L		98	77 - 120
Methylcyclohexane	25.0	26.5		ug/L		106	68 - 134
Methylene Chloride	25.0	25.1		ug/L		100	75 - 124
Styrene	25.0	25.5		ug/L		102	80 - 120
Tetrachloroethene	25.0	26.0		ug/L		104	74 - 122
Toluene	25.0	25.6		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	25.3		ug/L		101	73 - 127
trans-1,3-Dichloropropene	25.0	25.9		ug/L		104	80 - 120
Trichloroethene	25.0	26.2		ug/L		105	74 - 123
Trichlorofluoromethane	25.0	26.3		ug/L		105	62 - 150
Vinyl chloride	25.0	23.8		ug/L		95	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	111		77 - 120
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	103		75 - 123

Lab Sample ID: 480-151873-2 MS

Matrix: Water

Analysis Batch: 468918

Client Sample ID: MW-2

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		50000	55300		ug/L		111	73 - 126
1,1,2,2-Tetrachloroethane	ND		50000	47200		ug/L		94	76 - 120
1,1,2-Trichloroethane	ND		50000	47800		ug/L		96	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50000	53900		ug/L		108	61 - 148

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-151873-2 MS

Matrix: Water

Analysis Batch: 468918

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	ND		50000	51000		ug/L		102	77 - 120
1,1-Dichloroethene	ND		50000	50000		ug/L		100	66 - 127
1,2,4-Trichlorobenzene	ND		50000	48100		ug/L		96	79 - 122
1,2-Dibromo-3-Chloropropane	ND		50000	48100		ug/L		96	56 - 134
1,2-Dichlorobenzene	ND		50000	48100		ug/L		96	80 - 124
1,2-Dichloroethane	ND		50000	54400		ug/L		109	75 - 120
1,2-Dichloropropane	ND		50000	50700		ug/L		101	76 - 120
1,3-Dichlorobenzene	ND		50000	47900		ug/L		96	77 - 120
1,4-Dichlorobenzene	ND		50000	48300		ug/L		97	78 - 124
2-Butanone (MEK)	ND		250000	268000		ug/L		107	57 - 140
2-Hexanone	ND		250000	264000		ug/L		106	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		250000	253000		ug/L		101	71 - 125
Acetone	ND		250000	263000		ug/L		105	56 - 142
Benzene	ND		50000	48500		ug/L		97	71 - 124
Bromodichloromethane	ND		50000	51400		ug/L		103	80 - 122
Bromoform	ND		50000	54000		ug/L		108	61 - 132
Bromomethane	ND		50000	43300		ug/L		87	55 - 144
Carbon disulfide	ND		50000	49300		ug/L		99	59 - 134
Carbon tetrachloride	ND		50000	56800		ug/L		114	72 - 134
Chlorobenzene	ND		50000	48000		ug/L		96	80 - 120
Dibromochloromethane	ND		50000	49500		ug/L		99	75 - 125
Chloroethane	ND		50000	47700		ug/L		95	69 - 136
Chloroform	ND		50000	49000		ug/L		98	73 - 127
Chloromethane	ND		50000	46700		ug/L		93	68 - 124
cis-1,2-Dichloroethene	86000		50000	124000		ug/L		77	74 - 124
cis-1,3-Dichloropropene	ND		50000	48500		ug/L		97	74 - 124
Cyclohexane	ND		50000	56000		ug/L		112	59 - 135
Dichlorodifluoromethane	ND		50000	47100		ug/L		94	59 - 135
Ethylbenzene	ND		50000	50600		ug/L		101	77 - 123
1,2-Dibromoethane	ND		50000	46900		ug/L		94	77 - 120
Isopropylbenzene	ND		50000	48700		ug/L		97	77 - 122
Methyl acetate	ND		100000	103000		ug/L		103	74 - 133
Methyl tert-butyl ether	ND		50000	49100		ug/L		98	77 - 120
Methylcyclohexane	ND		50000	50600		ug/L		101	68 - 134
Methylene Chloride	ND		50000	48300		ug/L		97	75 - 124
Styrene	ND		50000	47500		ug/L		95	80 - 120
Tetrachloroethene	ND		50000	48800		ug/L		98	74 - 122
Toluene	ND		50000	48600		ug/L		97	80 - 122
trans-1,2-Dichloroethene	ND		50000	48800		ug/L		98	73 - 127
trans-1,3-Dichloropropene	ND		50000	46800		ug/L		94	80 - 120
Trichloroethene	ND		50000	50800		ug/L		102	74 - 123
Trichlorofluoromethane	ND		50000	51800		ug/L		104	62 - 150
Vinyl chloride	32000		50000	70500		ug/L		78	65 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	95		80 - 120
1,2-Dichloroethane-d4 (Surr)	111		77 - 120
4-Bromofluorobenzene (Surr)	102		73 - 120

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-151873-2 MS

Matrix: Water

Analysis Batch: 468918

Client Sample ID: MW-2

Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	105		75 - 123

Lab Sample ID: 480-151873-2 MSD

Matrix: Water

Analysis Batch: 468918

Client Sample ID: MW-2

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		50000	55100		ug/L		110	73 - 126	0	15
1,1,2,2-Tetrachloroethane	ND		50000	46800		ug/L		94	76 - 120	1	15
1,1,2-Trichloroethane	ND		50000	49000		ug/L		98	76 - 122	3	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50000	53200		ug/L		106	61 - 148	1	20
1,1-Dichloroethane	ND		50000	51300		ug/L		103	77 - 120	1	20
1,1-Dichloroethene	ND		50000	49400		ug/L		99	66 - 127	1	16
1,2,4-Trichlorobenzene	ND		50000	48200		ug/L		96	79 - 122	0	20
1,2-Dibromo-3-Chloropropane	ND		50000	45000		ug/L		90	56 - 134	7	15
1,2-Dichlorobenzene	ND		50000	49000		ug/L		98	80 - 124	2	20
1,2-Dichloroethane	ND		50000	53400		ug/L		107	75 - 120	2	20
1,2-Dichloropropane	ND		50000	50900		ug/L		102	76 - 120	1	20
1,3-Dichlorobenzene	ND		50000	47700		ug/L		95	77 - 120	1	20
1,4-Dichlorobenzene	ND		50000	47900		ug/L		96	78 - 124	1	20
2-Butanone (MEK)	ND		250000	267000		ug/L		107	57 - 140	0	20
2-Hexanone	ND		250000	273000		ug/L		109	65 - 127	3	15
4-Methyl-2-pentanone (MIBK)	ND		250000	258000		ug/L		103	71 - 125	2	35
Acetone	ND		250000	266000		ug/L		107	56 - 142	1	15
Benzene	ND		50000	48900		ug/L		98	71 - 124	1	13
Bromodichloromethane	ND		50000	50800		ug/L		102	80 - 122	1	15
Bromoform	ND		50000	53600		ug/L		107	61 - 132	1	15
Bromomethane	ND		50000	46000		ug/L		92	55 - 144	6	15
Carbon disulfide	ND		50000	49300		ug/L		99	59 - 134	0	15
Carbon tetrachloride	ND		50000	57500		ug/L		115	72 - 134	1	15
Chlorobenzene	ND		50000	50000		ug/L		100	80 - 120	4	25
Dibromochloromethane	ND		50000	50600		ug/L		101	75 - 125	2	15
Chloroethane	ND		50000	47900		ug/L		96	69 - 136	0	15
Chloroform	ND		50000	48900		ug/L		98	73 - 127	0	20
Chloromethane	ND		50000	44900		ug/L		90	68 - 124	4	15
cis-1,2-Dichloroethene	86000		50000	123000		ug/L		75	74 - 124	1	15
cis-1,3-Dichloropropene	ND		50000	48800		ug/L		98	74 - 124	1	15
Cyclohexane	ND		50000	55700		ug/L		111	59 - 135	1	20
Dichlorodifluoromethane	ND		50000	48000		ug/L		96	59 - 135	2	20
Ethylbenzene	ND		50000	50400		ug/L		101	77 - 123	0	15
1,2-Dibromoethane	ND		50000	46700		ug/L		93	77 - 120	0	15
Isopropylbenzene	ND		50000	48300		ug/L		97	77 - 122	1	20
Methyl acetate	ND		100000	102000		ug/L		102	74 - 133	0	20
Methyl tert-butyl ether	ND		50000	49100		ug/L		98	77 - 120	0	37
Methylcyclohexane	ND		50000	51400		ug/L		103	68 - 134	2	20
Methylene Chloride	ND		50000	48000		ug/L		96	75 - 124	1	15
Styrene	ND		50000	50000		ug/L		100	80 - 120	5	20
Tetrachloroethene	ND		50000	50800		ug/L		102	74 - 122	4	20

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-151873-2 MSD

Matrix: Water

Analysis Batch: 468918

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	ND		50000	50200		ug/L		100	80 - 122	3	15
trans-1,2-Dichloroethene	ND		50000	47700		ug/L		95	73 - 127	2	20
trans-1,3-Dichloropropene	ND		50000	47800		ug/L		96	80 - 120	2	15
Trichloroethene	ND		50000	49600		ug/L		99	74 - 123	2	16
Trichlorofluoromethane	ND		50000	50800		ug/L		102	62 - 150	2	20
Vinyl chloride	32000		50000	71200		ug/L		79	65 - 133	1	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	96		80 - 120
1,2-Dichloroethane-d4 (Surr)	109		77 - 120
4-Bromofluorobenzene (Surr)	100		73 - 120
Dibromofluoromethane (Surr)	102		75 - 123

Lab Sample ID: MB 480-468943/7

Matrix: Water

Analysis Batch: 468943

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			04/20/19 12:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/20/19 12:58	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/20/19 12:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/20/19 12:58	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/20/19 12:58	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/20/19 12:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/20/19 12:58	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/20/19 12:58	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/20/19 12:58	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/20/19 12:58	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/20/19 12:58	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/20/19 12:58	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/20/19 12:58	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/20/19 12:58	1
2-Hexanone	ND		5.0	1.2	ug/L			04/20/19 12:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/20/19 12:58	1
Acetone	ND		10	3.0	ug/L			04/20/19 12:58	1
Benzene	ND		1.0	0.41	ug/L			04/20/19 12:58	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/20/19 12:58	1
Bromoform	ND		1.0	0.26	ug/L			04/20/19 12:58	1
Bromomethane	ND		1.0	0.69	ug/L			04/20/19 12:58	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/20/19 12:58	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/20/19 12:58	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/20/19 12:58	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/20/19 12:58	1
Chloroethane	ND		1.0	0.32	ug/L			04/20/19 12:58	1
Chloroform	ND		1.0	0.34	ug/L			04/20/19 12:58	1
Chloromethane	ND		1.0	0.35	ug/L			04/20/19 12:58	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/20/19 12:58	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/20/19 12:58	1

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-468943/7

Matrix: Water

Analysis Batch: 468943

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0	0.18	ug/L			04/20/19 12:58	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/20/19 12:58	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/20/19 12:58	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/20/19 12:58	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/20/19 12:58	1
Methyl acetate	ND		2.5	1.3	ug/L			04/20/19 12:58	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/20/19 12:58	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/20/19 12:58	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/20/19 12:58	1
Styrene	ND		1.0	0.73	ug/L			04/20/19 12:58	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/20/19 12:58	1
Toluene	ND		1.0	0.51	ug/L			04/20/19 12:58	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/20/19 12:58	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/20/19 12:58	1
Trichloroethene	ND		1.0	0.46	ug/L			04/20/19 12:58	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/20/19 12:58	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/20/19 12:58	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/20/19 12:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		04/20/19 12:58	1
1,2-Dichloroethane-d4 (Surr)	111		77 - 120		04/20/19 12:58	1
4-Bromofluorobenzene (Surr)	98		73 - 120		04/20/19 12:58	1
Dibromofluoromethane (Surr)	106		75 - 123		04/20/19 12:58	1

Lab Sample ID: LCS 480-468943/5

Matrix: Water

Analysis Batch: 468943

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	27.0		ug/L		108	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	76 - 120
1,1,2-Trichloroethane	25.0	23.6		ug/L		94	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.1		ug/L		112	61 - 148
1,1-Dichloroethane	25.0	25.6		ug/L		102	77 - 120
1,1-Dichloroethene	25.0	25.5		ug/L		102	66 - 127
1,2,4-Trichlorobenzene	25.0	24.9		ug/L		100	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.2		ug/L		97	56 - 134
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	26.5		ug/L		106	75 - 120
1,2-Dichloropropane	25.0	25.1		ug/L		100	76 - 120
1,3-Dichlorobenzene	25.0	24.2		ug/L		97	77 - 120
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 120
2-Butanone (MEK)	125	127		ug/L		102	57 - 140
2-Hexanone	125	130		ug/L		104	65 - 127
4-Methyl-2-pentanone (MIBK)	125	127		ug/L		102	71 - 125
Acetone	125	130		ug/L		104	56 - 142
Benzene	25.0	24.3		ug/L		97	71 - 124

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-468943/5

Matrix: Water

Analysis Batch: 468943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	25.0	26.0		ug/L		104	80 - 122
Bromoform	25.0	28.8		ug/L		115	61 - 132
Bromomethane	25.0	24.1		ug/L		96	55 - 144
Carbon disulfide	25.0	25.7		ug/L		103	59 - 134
Carbon tetrachloride	25.0	27.9		ug/L		112	72 - 134
Chlorobenzene	25.0	24.8		ug/L		99	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	24.0		ug/L		96	73 - 127
Chloromethane	25.0	22.8		ug/L		91	68 - 124
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	74 - 124
cis-1,3-Dichloropropene	25.0	24.2		ug/L		97	74 - 124
Cyclohexane	25.0	27.7		ug/L		111	59 - 135
Dichlorodifluoromethane	25.0	23.7		ug/L		95	59 - 135
Ethylbenzene	25.0	25.7		ug/L		103	77 - 123
1,2-Dibromoethane	25.0	22.8		ug/L		91	77 - 120
Isopropylbenzene	25.0	24.9		ug/L		99	77 - 122
Methyl acetate	50.0	49.3		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	24.6		ug/L		99	77 - 120
Methylcyclohexane	25.0	26.3		ug/L		105	68 - 134
Methylene Chloride	25.0	24.4		ug/L		98	75 - 124
Styrene	25.0	25.0		ug/L		100	80 - 120
Tetrachloroethene	25.0	24.7		ug/L		99	74 - 122
Toluene	25.0	25.2		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	24.1		ug/L		96	73 - 127
trans-1,3-Dichloropropene	25.0	25.5		ug/L		102	80 - 120
Trichloroethene	25.0	26.0		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	26.3		ug/L		105	62 - 150
Vinyl chloride	25.0	23.4		ug/L		93	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	108		77 - 120
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	102		75 - 123

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-468017/1-A

Matrix: Water

Analysis Batch: 468235

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 468017

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		04/15/19 15:30	04/17/19 06:53	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	31		15 - 110				04/15/19 15:30	04/17/19 06:53	1

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: LCS 480-468017/2-A
Matrix: Water
Analysis Batch: 468235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468017

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane			1.00	1.05		ug/L		105	40 - 140
	LCS	LCS							
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	31		15 - 110						

Lab Sample ID: 480-151873-7 MS
Matrix: Water
Analysis Batch: 468235

Client Sample ID: MW-5D
Prep Type: Total/NA
Prep Batch: 468017

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	ND		1.00	1.06		ug/L		106	40 - 140
	MS	MS							
Isotope Dilution	%Recovery	Qualifier	Limits						
1,4-Dioxane-d8	25		15 - 110						

Lab Sample ID: 480-151873-7 MSD
Matrix: Water
Analysis Batch: 468235

Client Sample ID: MW-5D
Prep Type: Total/NA
Prep Batch: 468017

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		1.00	1.04		ug/L		104	40 - 140	2	20
	MSD	MSD									
Isotope Dilution	%Recovery	Qualifier	Limits								
1,4-Dioxane-d8	24		15 - 110								

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-289123/1-A
Matrix: Water
Analysis Batch: 289504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 289123

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.776	J	2.0	0.35	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorotetradecanoic acid (PFTeA)	0.442	J	2.0	0.29	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorohexanesulfonic acid (PFHxS)	0.293	J	2.0	0.17	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		04/18/19 12:05	04/20/19 06:19	1

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-289123/1-A

Matrix: Water

Analysis Batch: 289504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 289123

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		04/18/19 12:05	04/20/19 06:19	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.35	ng/L		04/18/19 12:05	04/20/19 06:19	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		04/18/19 12:05	04/20/19 06:19	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		04/18/19 12:05	04/20/19 06:19	1
6:2 FTS	ND		20	2.0	ng/L		04/18/19 12:05	04/20/19 06:19	1
8:2 FTS	ND		20	2.0	ng/L		04/18/19 12:05	04/20/19 06:19	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	88		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C5 PFPeA	94		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C2 PFHxA	87		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C4 PFHpA	87		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C4 PFOA	90		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C5 PFNA	91		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C2 PFDA	99		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C2 PFUnA	86		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C2 PFDoA	72		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C2 PFTeDA	77		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C3 PFBS	88		25 - 150				04/18/19 12:05	04/20/19 06:19	1
18O2 PFHxS	84		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C4 PFOS	80		25 - 150				04/18/19 12:05	04/20/19 06:19	1
13C8 FOSA	72		25 - 150				04/18/19 12:05	04/20/19 06:19	1
d3-NMeFOSAA	86		25 - 150				04/18/19 12:05	04/20/19 06:19	1
d5-NEtFOSAA	84		25 - 150				04/18/19 12:05	04/20/19 06:19	1
M2-6:2 FTS	81		25 - 150				04/18/19 12:05	04/20/19 06:19	1
M2-8:2 FTS	93		25 - 150				04/18/19 12:05	04/20/19 06:19	1

Lab Sample ID: LCS 320-289123/2-A

Matrix: Water

Analysis Batch: 289504

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 289123

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	43.3		ng/L		108	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	41.4		ng/L		104	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	40.6		ng/L		102	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	42.2		ng/L		105	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	38.4		ng/L		96	64 - 124
Perfluorononanoic acid (PFNA)	40.0	40.0		ng/L		100	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	38.4		ng/L		96	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	38.5		ng/L		96	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	39.6		ng/L		99	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	40.9		ng/L		102	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	41.6		ng/L		104	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	37.3		ng/L		106	73 - 133

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-289123/2-A

Matrix: Water

Analysis Batch: 289504

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 289123

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.0		ng/L		96	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	39.8		ng/L		105	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	37.4		ng/L		101	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	38.0		ng/L		99	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	47.6		ng/L		119	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	38.8		ng/L		97	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	37.4		ng/L		94	65 - 125
6:2 FTS	37.9	37.5		ng/L		99	66 - 126
8:2 FTS	38.3	40.2		ng/L		105	67 - 127

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	92		25 - 150
13C5 PFPeA	93		25 - 150
13C2 PFHxA	91		25 - 150
13C4 PFHpA	98		25 - 150
13C4 PFOA	94		25 - 150
13C5 PFNA	98		25 - 150
13C2 PFDA	107		25 - 150
13C2 PFUnA	99		25 - 150
13C2 PFDoA	96		25 - 150
13C2 PFTeDA	103		25 - 150
13C3 PFBS	93		25 - 150
18O2 PFHxS	91		25 - 150
13C4 PFOS	90		25 - 150
13C8 FOSA	81		25 - 150
d3-NMeFOSAA	99		25 - 150
d5-NEtFOSAA	99		25 - 150
M2-6:2 FTS	103		25 - 150
M2-8:2 FTS	104		25 - 150

Lab Sample ID: 480-151873-7 MS

Matrix: Water

Analysis Batch: 289504

Client Sample ID: MW-5D

Prep Type: Total/NA

Prep Batch: 289123

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	2.1	B	33.2	37.6		ng/L		107	70 - 130
Perfluoropentanoic acid (PFPeA)	2.9		33.2	36.1		ng/L		100	66 - 126
Perfluorohexanoic acid (PFHxA)	3.6		33.2	36.4		ng/L		99	66 - 126
Perfluoroheptanoic acid (PFHpA)	2.2		33.2	37.9		ng/L		107	66 - 126
Perfluorooctanoic acid (PFOA)	6.7		33.2	38.8		ng/L		97	64 - 124
Perfluorononanoic acid (PFNA)	4.3		33.2	36.5		ng/L		97	68 - 128
Perfluorodecanoic acid (PFDA)	ND		33.2	34.2		ng/L		103	69 - 129
Perfluoroundecanoic acid (PFUnA)	ND		33.2	33.7		ng/L		101	60 - 120

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 480-151873-7 MS

Matrix: Water

Analysis Batch: 289504

Client Sample ID: MW-5D

Prep Type: Total/NA

Prep Batch: 289123

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorododecanoic acid (PFDoA)	ND		33.2	34.7		ng/L		104	71 - 131
Perfluorotridecanoic acid (PFTriA)	ND		33.2	40.6		ng/L		122	72 - 132
Perfluorotetradecanoic acid (PFTeA)	0.40	J B	33.2	34.2		ng/L		102	68 - 128
Perfluorobutanesulfonic acid (PFBS)	2.6		29.4	35.4		ng/L		111	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	30.2	29.8		ng/L		94	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	ND		31.6	34.1		ng/L		108	68 - 128
Perfluorooctanesulfonic acid (PFOS)	3.1	I	30.8	35.2		ng/L		104	67 - 127
Perfluorodecanesulfonic acid (PFDS)	ND		32.0	32.1		ng/L		100	68 - 128
Perfluorooctanesulfonamide (FOSA)	ND		33.2	36.7		ng/L		111	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		33.2	34.0		ng/L		102	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		33.2	30.7		ng/L		92	65 - 125
6:2 FTS	ND		31.5	32.9		ng/L		105	66 - 126
8:2 FTS	ND		31.8	36.7		ng/L		115	67 - 127

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFBA	95		25 - 150
13C5 PFPeA	105		25 - 150
13C2 PFHxA	103		25 - 150
13C4 PFHpA	98		25 - 150
13C4 PFOA	97		25 - 150
13C5 PFNA	104		25 - 150
13C2 PFDA	104		25 - 150
13C2 PFUnA	99		25 - 150
13C2 PFDoA	97		25 - 150
13C2 PFTeDA	104		25 - 150
13C3 PFBS	99		25 - 150
18O2 PFHxS	96		25 - 150
13C4 PFOS	90		25 - 150
13C8 FOSA	89		25 - 150
d3-NMeFOSAA	96		25 - 150
d5-NEtFOSAA	102		25 - 150
M2-6:2 FTS	102		25 - 150
M2-8:2 FTS	117		25 - 150

Lab Sample ID: 480-151873-7 MSD

Matrix: Water

Analysis Batch: 289504

Client Sample ID: MW-5D

Prep Type: Total/NA

Prep Batch: 289123

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Perfluorobutanoic acid (PFBA)	2.1	B	33.4	37.0		ng/L		105	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	2.9		33.4	36.1		ng/L		99	66 - 126	0	30

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 480-151873-7 MSD

Matrix: Water

Analysis Batch: 289504

Client Sample ID: MW-5D

Prep Type: Total/NA

Prep Batch: 289123

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorohexanoic acid (PFHxA)	3.6		33.4	36.4		ng/L		98	66 - 126	0	30
Perfluoroheptanoic acid (PFHpA)	2.2		33.4	38.3		ng/L		108	66 - 126	1	30
Perfluorooctanoic acid (PFOA)	6.7		33.4	38.7		ng/L		96	64 - 124	0	30
Perfluorononanoic acid (PFNA)	4.3		33.4	36.9		ng/L		98	68 - 128	1	30
Perfluorodecanoic acid (PFDA)	ND		33.4	34.8		ng/L		104	69 - 129	1	30
Perfluoroundecanoic acid (PFUnA)	ND		33.4	33.9		ng/L		102	60 - 120	1	30
Perfluorododecanoic acid (PFDoA)	ND		33.4	31.6		ng/L		95	71 - 131	9	30
Perfluorotridecanoic acid (PFTriA)	ND		33.4	35.1		ng/L		105	72 - 132	14	30
Perfluorotetradecanoic acid (PFTeA)	0.40	J B	33.4	33.5		ng/L		99	68 - 128	2	30
Perfluorobutanesulfonic acid (PFBS)	2.6		29.5	33.7		ng/L		105	73 - 133	5	30
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	30.4	29.7		ng/L		93	63 - 123	0	30
Perfluoroheptanesulfonic Acid (PFHpS)	ND		31.8	34.2		ng/L		108	68 - 128	0	30
Perfluorooctanesulfonic acid (PFOS)	3.1	I	31.0	35.2		ng/L		104	67 - 127	0	30
Perfluorodecanesulfonic acid (PFDS)	ND		32.2	32.1		ng/L		100	68 - 128	0	30
Perfluorooctanesulfonamide (FOSA)	ND		33.4	38.9		ng/L		117	70 - 130	6	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		33.4	33.6		ng/L		101	67 - 127	1	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		33.4	34.1		ng/L		102	65 - 125	10	30
6:2 FTS	ND		31.7	32.0		ng/L		101	66 - 126	3	30
8:2 FTS	ND		32.0	34.1		ng/L		106	67 - 127	7	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	MSD Limits
13C4 PFBA	90		25 - 150
13C5 PFPeA	99		25 - 150
13C2 PFHxA	95		25 - 150
13C4 PFHpA	93		25 - 150
13C4 PFOA	96		25 - 150
13C5 PFNA	98		25 - 150
13C2 PFDA	102		25 - 150
13C2 PFUnA	91		25 - 150
13C2 PFDoA	93		25 - 150
13C2 PFTeDA	100		25 - 150
13C3 PFBS	96		25 - 150
18O2 PFHxS	92		25 - 150
13C4 PFOS	86		25 - 150
13C8 FOSA	87		25 - 150
d3-NMeFOSAA	89		25 - 150
d5-NEtFOSAA	95		25 - 150
M2-6:2 FTS	101		25 - 150
M2-8:2 FTS	115		25 - 150

Eurofins TestAmerica, Buffalo

QC Association Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

GC/MS VOA

Analysis Batch: 468520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151873-2	MW-2	Total/NA	Water	8260C	
MB 480-468520/8	Method Blank	Total/NA	Water	8260C	
LCS 480-468520/15	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 468918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151873-1	MW-1	Total/NA	Water	8260C	
480-151873-2 - DL	MW-2	Total/NA	Water	8260C	
480-151873-4	MW-4	Total/NA	Water	8260C	
480-151873-5	MW-4D	Total/NA	Water	8260C	
480-151873-6	MW-5	Total/NA	Water	8260C	
480-151873-8	MW-6	Total/NA	Water	8260C	
480-151873-9	MW-7	Total/NA	Water	8260C	
480-151873-10	MW-8	Total/NA	Water	8260C	
480-151873-11	MW-9R	Total/NA	Water	8260C	
480-151873-12	MW-10	Total/NA	Water	8260C	
480-151873-13	MW-11R	Total/NA	Water	8260C	
480-151873-14	MW-12	Total/NA	Water	8260C	
480-151873-16	MW-14	Total/NA	Water	8260C	
480-151873-17	DUP-040919	Total/NA	Water	8260C	
480-151873-18	TRIP BLANK	Total/NA	Water	8260C	
MB 480-468918/7	Method Blank	Total/NA	Water	8260C	
LCS 480-468918/5	Lab Control Sample	Total/NA	Water	8260C	
480-151873-2 MS	MW-2	Total/NA	Water	8260C	
480-151873-2 MSD	MW-2	Total/NA	Water	8260C	

Analysis Batch: 468943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151873-3	MW-3	Total/NA	Water	8260C	
480-151873-7	MW-5D	Total/NA	Water	8260C	
480-151873-15	MW-13	Total/NA	Water	8260C	
MB 480-468943/7	Method Blank	Total/NA	Water	8260C	
LCS 480-468943/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 468017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151873-1	MW-1	Total/NA	Water	3510C	
480-151873-5	MW-4D	Total/NA	Water	3510C	
480-151873-6	MW-5	Total/NA	Water	3510C	
480-151873-7	MW-5D	Total/NA	Water	3510C	
480-151873-8	MW-6	Total/NA	Water	3510C	
480-151873-9	MW-7	Total/NA	Water	3510C	
480-151873-10	MW-8	Total/NA	Water	3510C	
480-151873-14	MW-12	Total/NA	Water	3510C	
480-151873-17	DUP-040919	Total/NA	Water	3510C	
MB 480-468017/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-468017/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-151873-7 MS	MW-5D	Total/NA	Water	3510C	
480-151873-7 MSD	MW-5D	Total/NA	Water	3510C	

Eurofins TestAmerica, Buffalo

QC Association Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

GC/MS Semi VOA

Analysis Batch: 468235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151873-1	MW-1	Total/NA	Water	8270D SIM ID	468017
480-151873-5	MW-4D	Total/NA	Water	8270D SIM ID	468017
480-151873-6	MW-5	Total/NA	Water	8270D SIM ID	468017
480-151873-7	MW-5D	Total/NA	Water	8270D SIM ID	468017
480-151873-8	MW-6	Total/NA	Water	8270D SIM ID	468017
480-151873-9	MW-7	Total/NA	Water	8270D SIM ID	468017
480-151873-10	MW-8	Total/NA	Water	8270D SIM ID	468017
480-151873-14	MW-12	Total/NA	Water	8270D SIM ID	468017
480-151873-17	DUP-040919	Total/NA	Water	8270D SIM ID	468017
MB 480-468017/1-A	Method Blank	Total/NA	Water	8270D SIM ID	468017
LCS 480-468017/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	468017
480-151873-7 MS	MW-5D	Total/NA	Water	8270D SIM ID	468017
480-151873-7 MSD	MW-5D	Total/NA	Water	8270D SIM ID	468017

LCMS

Prep Batch: 289123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151873-1	MW-1	Total/NA	Water	3535	
480-151873-5	MW-4D	Total/NA	Water	3535	
480-151873-6	MW-5	Total/NA	Water	3535	
480-151873-7	MW-5D	Total/NA	Water	3535	
480-151873-8	MW-6	Total/NA	Water	3535	
480-151873-9	MW-7	Total/NA	Water	3535	
480-151873-10	MW-8	Total/NA	Water	3535	
480-151873-14	MW-12	Total/NA	Water	3535	
480-151873-17	DUP-040919	Total/NA	Water	3535	
480-151873-19	EQUIPMENT BLANK	Total/NA	Water	3535	
MB 320-289123/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-289123/2-A	Lab Control Sample	Total/NA	Water	3535	
480-151873-7 MS	MW-5D	Total/NA	Water	3535	
480-151873-7 MSD	MW-5D	Total/NA	Water	3535	

Analysis Batch: 289504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151873-1	MW-1	Total/NA	Water	537 (modified)	289123
480-151873-5	MW-4D	Total/NA	Water	537 (modified)	289123
480-151873-6	MW-5	Total/NA	Water	537 (modified)	289123
480-151873-7	MW-5D	Total/NA	Water	537 (modified)	289123
480-151873-8	MW-6	Total/NA	Water	537 (modified)	289123
MB 320-289123/1-A	Method Blank	Total/NA	Water	537 (modified)	289123
LCS 320-289123/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	289123
480-151873-7 MS	MW-5D	Total/NA	Water	537 (modified)	289123
480-151873-7 MSD	MW-5D	Total/NA	Water	537 (modified)	289123

Analysis Batch: 289560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151873-9	MW-7	Total/NA	Water	537 (modified)	289123
480-151873-10	MW-8	Total/NA	Water	537 (modified)	289123
480-151873-14	MW-12	Total/NA	Water	537 (modified)	289123
480-151873-17	DUP-040919	Total/NA	Water	537 (modified)	289123

Eurofins TestAmerica, Buffalo

QC Association Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

LCMS (Continued)

Analysis Batch: 289560 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151873-19	EQUIPMENT BLANK	Total/NA	Water	537 (modified)	289123

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-1

Lab Sample ID: 480-151873-1

Date Collected: 04/11/19 11:00

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	468918	04/19/19 22:50	AEM	TAL BUF
Total/NA	Prep	3510C			468017	04/15/19 15:30	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	468235	04/17/19 11:15	DMR	TAL BUF
Total/NA	Prep	3535			289123	04/18/19 12:05	JRM	TAL SAC
Total/NA	Analysis	537 (modified)		1	289504	04/20/19 07:25	S1M	TAL SAC

Client Sample ID: MW-2

Lab Sample ID: 480-151873-2

Date Collected: 04/09/19 14:05

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	468520	04/18/19 14:44	AEM	TAL BUF
Total/NA	Analysis	8260C	DL	2000	468918	04/19/19 23:15	AEM	TAL BUF

Client Sample ID: MW-3

Lab Sample ID: 480-151873-3

Date Collected: 04/09/19 16:10

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		40	468943	04/20/19 15:15	AMM	TAL BUF

Client Sample ID: MW-4

Lab Sample ID: 480-151873-4

Date Collected: 04/10/19 15:45

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	468918	04/20/19 00:03	AEM	TAL BUF

Client Sample ID: MW-4D

Lab Sample ID: 480-151873-5

Date Collected: 04/10/19 16:45

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	468918	04/20/19 00:27	AEM	TAL BUF
Total/NA	Prep	3510C			468017	04/15/19 15:30	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	468235	04/17/19 17:09	DMR	TAL BUF
Total/NA	Prep	3535			289123	04/18/19 12:05	JRM	TAL SAC
Total/NA	Analysis	537 (modified)		1	289504	04/20/19 07:35	S1M	TAL SAC

Client Sample ID: MW-5

Lab Sample ID: 480-151873-6

Date Collected: 04/10/19 19:30

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	468918	04/20/19 00:52	AEM	TAL BUF

Eurofins TestAmerica, Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-5

Date Collected: 04/10/19 19:30

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			468017	04/15/19 15:30	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	468235	04/17/19 12:02	DMR	TAL BUF
Total/NA	Prep	3535			289123	04/18/19 12:05	JRM	TAL SAC
Total/NA	Analysis	537 (modified)		1	289504	04/20/19 07:44	S1M	TAL SAC

Client Sample ID: MW-5D

Date Collected: 04/10/19 12:00

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	468943	04/20/19 15:39	AMM	TAL BUF
Total/NA	Prep	3510C			468017	04/15/19 15:30	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	468235	04/17/19 09:40	DMR	TAL BUF
Total/NA	Prep	3535			289123	04/18/19 12:05	JRM	TAL SAC
Total/NA	Analysis	537 (modified)		1	289504	04/20/19 08:04	S1M	TAL SAC

Client Sample ID: MW-6

Date Collected: 04/09/19 17:45

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	468918	04/20/19 01:16	AEM	TAL BUF
Total/NA	Prep	3510C			468017	04/15/19 15:30	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	468235	04/17/19 12:26	DMR	TAL BUF
Total/NA	Prep	3535			289123	04/18/19 12:05	JRM	TAL SAC
Total/NA	Analysis	537 (modified)		1	289504	04/20/19 08:32	S1M	TAL SAC

Client Sample ID: MW-7

Date Collected: 04/11/19 12:30

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	468918	04/20/19 01:41	AEM	TAL BUF
Total/NA	Prep	3510C			468017	04/15/19 15:30	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	468235	04/17/19 12:49	DMR	TAL BUF
Total/NA	Prep	3535			289123	04/18/19 12:05	JRM	TAL SAC
Total/NA	Analysis	537 (modified)		1	289560	04/20/19 16:07	S1M	TAL SAC

Client Sample ID: MW-8

Date Collected: 04/11/19 08:30

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	468918	04/20/19 02:05	AEM	TAL BUF

Eurofins TestAmerica, Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-8

Lab Sample ID: 480-151873-10

Date Collected: 04/11/19 08:30

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			468017	04/15/19 15:30	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	468235	04/17/19 13:13	DMR	TAL BUF
Total/NA	Prep	3535			289123	04/18/19 12:05	JRM	TAL SAC
Total/NA	Analysis	537 (modified)		1	289560	04/20/19 16:17	S1M	TAL SAC

Client Sample ID: MW-9R

Lab Sample ID: 480-151873-11

Date Collected: 04/10/19 09:00

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	468918	04/20/19 02:29	AEM	TAL BUF

Client Sample ID: MW-10

Lab Sample ID: 480-151873-12

Date Collected: 04/10/19 11:00

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	468918	04/20/19 02:53	AEM	TAL BUF

Client Sample ID: MW-11R

Lab Sample ID: 480-151873-13

Date Collected: 04/10/19 10:15

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		40	468918	04/20/19 03:17	AEM	TAL BUF

Client Sample ID: MW-12

Lab Sample ID: 480-151873-14

Date Collected: 04/11/19 14:30

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	468918	04/20/19 03:42	AEM	TAL BUF
Total/NA	Prep	3510C			468017	04/15/19 15:30	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	468235	04/17/19 13:36	DMR	TAL BUF
Total/NA	Prep	3535			289123	04/18/19 12:05	JRM	TAL SAC
Total/NA	Analysis	537 (modified)		1	289560	04/20/19 16:26	S1M	TAL SAC

Client Sample ID: MW-13

Lab Sample ID: 480-151873-15

Date Collected: 04/11/19 10:05

Matrix: Water

Date Received: 04/12/19 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		80	468943	04/20/19 16:02	AMM	TAL BUF

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Client Sample ID: MW-14

Date Collected: 04/10/19 18:00

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	468918	04/20/19 04:30	AEM	TAL BUF

Client Sample ID: DUP-040919

Date Collected: 04/09/19 17:45

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	468918	04/20/19 04:54	AEM	TAL BUF
Total/NA	Prep	3510C			468017	04/15/19 15:30	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	468235	04/17/19 14:00	DMR	TAL BUF
Total/NA	Prep	3535			289123	04/18/19 12:05	JRM	TAL SAC
Total/NA	Analysis	537 (modified)		1	289560	04/20/19 16:36	S1M	TAL SAC

Client Sample ID: TRIP BLANK

Date Collected: 04/09/19 00:00

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	468918	04/20/19 05:18	AEM	TAL BUF

Client Sample ID: EQUIPMENT BLANK

Date Collected: 04/10/19 18:30

Date Received: 04/12/19 12:10

Lab Sample ID: 480-151873-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			289123	04/18/19 12:05	JRM	TAL SAC
Total/NA	Analysis	537 (modified)		1	289560	04/20/19 16:45	S1M	TAL SAC

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-20

Laboratory: Eurofins TestAmerica, Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD / DOE		L2468	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-20
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19 *
Hawaii	State Program	9	N/A	01-29-20
Illinois	NELAP	5	200060	03-17-19 *
Kansas	NELAP	7	E-10375	10-31-19
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	04-01-20
Oregon	NELAP	10	4040	01-29-20
Pennsylvania	NELAP	3	68-01272	03-31-20
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-19
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	12-31-20
Utah	NELAP	8	CA00044	02-29-20
Vermont	State Program	1	VT-4040	04-16-20
Virginia	NELAP	3	460278	03-14-20 *
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-19
Wyoming	State Program	8	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Buffalo

Method Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL BUF
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-151873-1	MW-1	Water	04/11/19 11:00	04/12/19 12:10
480-151873-2	MW-2	Water	04/09/19 14:05	04/12/19 12:10
480-151873-3	MW-3	Water	04/09/19 16:10	04/12/19 12:10
480-151873-4	MW-4	Water	04/10/19 15:45	04/12/19 12:10
480-151873-5	MW-4D	Water	04/10/19 16:45	04/12/19 12:10
480-151873-6	MW-5	Water	04/10/19 19:30	04/12/19 12:10
480-151873-7	MW-5D	Water	04/10/19 12:00	04/12/19 12:10
480-151873-8	MW-6	Water	04/09/19 17:45	04/12/19 12:10
480-151873-9	MW-7	Water	04/11/19 12:30	04/12/19 12:10
480-151873-10	MW-8	Water	04/11/19 08:30	04/12/19 12:10
480-151873-11	MW-9R	Water	04/10/19 09:00	04/12/19 12:10
480-151873-12	MW-10	Water	04/10/19 11:00	04/12/19 12:10
480-151873-13	MW-11R	Water	04/10/19 10:15	04/12/19 12:10
480-151873-14	MW-12	Water	04/11/19 14:30	04/12/19 12:10
480-151873-15	MW-13	Water	04/11/19 10:05	04/12/19 12:10
480-151873-16	MW-14	Water	04/10/19 18:00	04/12/19 12:10
480-151873-17	DUP-040919	Water	04/09/19 17:45	04/12/19 12:10
480-151873-18	TRIP BLANK	Water	04/09/19 00:00	04/12/19 12:10
480-151873-19	EQUIPMENT BLANK	Water	04/10/19 18:30	04/12/19 12:10

TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14228-2223
phone 716.691.2600 fax 716.691.7991

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact		Maurice Moore		Site Contact: Tom Palmer (GES)		Date:		COC No:	
NYSDEC-Region 9		Tel/Fax: (716) 851-7220		Lab Contact: Oriette Johnson		Carrier:		1 of 2 COCs	
270 Michigan Avenue		Analysis Turnaround Time						Sampler:	
Buffalo, NY 14203		☐ CALENDAR DAYS ☒ WORKING DAYS						For Lab Use Only:	
716-851-7220		Custom TAT: 10 days 2 weeks 1 week 2 days 1 day						Walk-in Client:	
Phone								Lab Sampling:	
FAX									
Project Name: DEC Frewsburg, 300 Falconer Street									
Site No.: 907016 (GES Project #0901685)									
Contract #:									



480-151873 Chain of Custody

MS/MSD

PFAS

1, 4 Dioxane (8270-SIM)

8260C - TCLVOCs OLMO4.2 list

Perform MS / MSD (Y / N)

Filtered Sample (Y / N)

of Cont.

Matrix

Sample Type

(G=Comp, G=Grab)

Sample Time

Sample Date

Sample Identification

MW-1

MW-2

MW-3

MW-4

MW-4D

MW-5

MW-5D

MW-6

MW-7

MW-8

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[illegible]

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-151873-1

Login Number: 151873

List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Harper, Marcus D

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: New York State D.E.C.

Job Number: 480-151873-1

Login Number: 151873

List Number: 2

Creator: Rosas, Jaime

List Source: Eurofins TestAmerica, Sacramento

List Creation: 04/17/19 05:38 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	610206
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	1.1C
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?	False	Received project as a subcontract.
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Isotope Dilution Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	DXE (15-110)
480-151873-1	MW-1	19
480-151873-5	MW-4D	21
480-151873-6	MW-5	24
480-151873-7	MW-5D	25
480-151873-7 MS	MW-5D	25
480-151873-7 MSD	MW-5D	24
480-151873-8	MW-6	22
480-151873-9	MW-7	23
480-151873-10	MW-8	22
480-151873-14	MW-12	49
480-151873-17	DUP-040919	22
LCS 480-468017/2-A	Lab Control Sample	31
MB 480-468017/1-A	Method Blank	31
Surrogate Legend		
DXE = 1,4-Dioxane-d8		

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
480-151873-1	MW-1	78	93	98	95	94	99	102	94
480-151873-5	MW-4D	94	103	97	98	95	100	102	94
480-151873-6	MW-5	66	73	71	76	69	72	71	61
480-151873-7	MW-5D	85	99	97	91	96	95	103	97
480-151873-7 MS	MW-5D	95	105	103	98	97	104	104	99
480-151873-7 MSD	MW-5D	90	99	95	93	96	98	102	91
480-151873-8	MW-6	36	43	68	78	80	89	96	89
480-151873-9	MW-7	62	66	63	66	63	70	71	57
480-151873-10	MW-8	91	98	99	100	97	101	107	98
480-151873-14	MW-12	78	84	94	97	93	95	99	90
480-151873-17	DUP-040919	34	40	52	65	64	76	72	69
480-151873-19	EQUIPMENT BLANK	92	100	96	100	97	104	101	98
LCS 320-289123/2-A	Lab Control Sample	92	93	91	98	94	98	107	99
MB 320-289123/1-A	Method Blank	88	94	87	87	90	91	99	86
Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	3C3-PFBz (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOS/ (25-150)	-NEtFOS/ (25-150)
480-151873-1	MW-1	88	93	97	95	87	89	87	94
480-151873-5	MW-4D	89	92	102	97	92	85	88	93
480-151873-6	MW-5	52	60	74	71	66	62	58	54
480-151873-7	MW-5D	90	99	95	89	90	88	86	96
480-151873-7 MS	MW-5D	97	104	99	96	90	89	96	102
480-151873-7 MSD	MW-5D	93	100	96	92	86	87	89	95
480-151873-8	MW-6	87	75	74	82	79	76	78	88
480-151873-9	MW-7	57	60	66	65	60	57	50	54
480-151873-10	MW-8	99	110	99	96	96	96	99	101
480-151873-14	MW-12	91	101	92	96	87	89	86	95

Eurofins TestAmerica, Buffalo

Isotope Dilution Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-151873-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	3C3-PFB (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	d3-NMeFOS (25-150)	d5-NEtFOS (25-150)
480-151873-17	DUP-040919	60	56	56	66	71	60	59	62
480-151873-19	EQUIPMENT BLANK	95	99	98	96	95	87	84	88
LCS 320-289123/2-A	Lab Control Sample	96	103	93	91	90	81	99	99
MB 320-289123/1-A	Method Blank	72	77	88	84	80	72	86	84

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
480-151873-1	MW-1	102	102
480-151873-5	MW-4D	114	103
480-151873-6	MW-5	80	68
480-151873-7	MW-5D	106	113
480-151873-7 MS	MW-5D	102	117
480-151873-7 MSD	MW-5D	101	115
480-151873-8	MW-6	146	91
480-151873-9	MW-7	69	71
480-151873-10	MW-8	102	117
480-151873-14	MW-12	105	111
480-151873-17	DUP-040919	111	77
480-151873-19	EQUIPMENT BLANK	104	108
LCS 320-289123/2-A	Lab Control Sample	103	104
MB 320-289123/1-A	Method Blank	81	93

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
PFHpA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDaA = 13C2 PFDaA
PFTDA = 13C2 PFTeDA
13C3-PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3-NMeFOSAA = d3-NMeFOSAA
d5-NEtFOSAA = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sacramento



480-151873 Field Sheet

Job: _____

Tracking # 4276 0719 4380 SO / PO / FO / 2-Day / SAT / Ground / UPS / Courier /
Drop Off / GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Notes: AK-2

Therm. ID: AK-2 / AK-3 / AK-5 / AK-7 / HACCP / Other _____
(-1.0°C)

Ice _____ Wet _____ Gel _____ Other _____

Cooler Custody Seal: 640206

Sample Custody Seal: _____

Cooler ID: _____

Temp: Observed 1.1°C Corrected 1.1°C

From: Temp Blank ☐ Sample ☒

NCM Filed: Yes ☐ No ☐

	Yes	No	NA
Perchlorate has headspace(1/3 bottle ¹)?	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
CoC is complete w/o discrepancies?	☒	☐	☐
Samples received within holding time?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Cooler compromised/tampered with?	☐	☒	☐
Samples compromised/tampered with?	☐	☒	☐
Samples w/o discrepancies?	☒	☐	☐
Sample containers have legible labels?	☒	☐	☐
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided.	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Zero headspace? ²	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐
Sample temp OK?	☒	☐	☐
Sample out of temp?	☐	☒	☐

Initials: [Signature]

Date: 16 Apr 19

¹For a 250mL polyethylene container, filled no higher than the 200mL mark on the bottle.
²Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4").

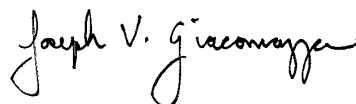
ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-164105-1
Client Project/Site: Frewsburg Site #907016

For:
New York State D.E.C.
270 Michigan Avenue
Buffalo, New York 14203

Attn: Mr. Maurice Moore



Authorized for release by:
12/19/2019 12:15:17 PM
Joe Giacomazza, Project Management Assistant II
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Designee for
Orlette Johnson, Senior Project Manager
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orlette.johnson@testamericainc.com

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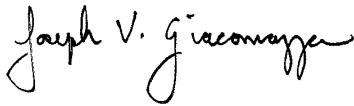
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Joe Giacomazza
Project Management Assistant II
12/19/2019 12:15:17 PM

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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance 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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Case Narrative

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Job ID: 480-164105-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative 480-164105-1

Comments

No additional comments.

Receipt

The samples were received on 12/12/2019 1:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-2 (480-164105-1), MW-4 (480-164105-3), MW-11R (480-164105-5), MW-13 (480-164105-7), MW-14 (480-164105-8) and DUP (480-164105-9). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-3 (480-164105-2), MW-9R (480-164105-4), MW-9R (480-164105-4[MS]), MW-9R (480-164105-4[MSD]) and MW-11R (480-164105-5). 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.

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-2

Lab Sample ID: 480-164105-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	55000		2000	1600	ug/L	2000		8260C	Total/NA
Methylene Chloride	1000	J	2000	880	ug/L	2000		8260C	Total/NA
Vinyl chloride	39000		2000	1800	ug/L	2000		8260C	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 480-164105-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	200		20	16	ug/L	20		8260C	Total/NA
Methylene Chloride	18	J	20	8.8	ug/L	20		8260C	Total/NA
Trichloroethene	520		20	9.2	ug/L	20		8260C	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 480-164105-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	260	J	500	220	ug/L	500		8260C	Total/NA
Trichloroethene	11000		500	230	ug/L	500		8260C	Total/NA

Client Sample ID: MW-9R

Lab Sample ID: 480-164105-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3200		100	81	ug/L	100		8260C	Total/NA
Methylene Chloride	47	J	100	44	ug/L	100		8260C	Total/NA
Trichloroethene	3900	F1	100	46	ug/L	100		8260C	Total/NA
Vinyl chloride	240		100	90	ug/L	100		8260C	Total/NA

Client Sample ID: MW-11R

Lab Sample ID: 480-164105-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	890		40	32	ug/L	40		8260C	Total/NA
Methylene Chloride	22	J	40	18	ug/L	40		8260C	Total/NA
Trichloroethene - DL	8300		200	92	ug/L	200		8260C	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 480-164105-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	780		80	65	ug/L	80		8260C	Total/NA
Methylene Chloride	45	J	80	35	ug/L	80		8260C	Total/NA
Trichloroethene	5300		80	37	ug/L	80		8260C	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 480-164105-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	910		100	81	ug/L	100		8260C	Total/NA
Methylene Chloride	54	J	100	44	ug/L	100		8260C	Total/NA
Trichloroethene	3200		100	46	ug/L	100		8260C	Total/NA

Client Sample ID: DUP

Lab Sample ID: 480-164105-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	50000		2000	1600	ug/L	2000		8260C	Total/NA
Methylene Chloride	1100	J	2000	880	ug/L	2000		8260C	Total/NA
Vinyl chloride	32000		2000	1800	ug/L	2000		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-164105-10

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-2

Lab Sample ID: 480-164105-1

Date Collected: 12/11/19 13:30

Matrix: Water

Date Received: 12/12/19 13:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2000	1600	ug/L			12/16/19 13:18	2000
1,1,2,2-Tetrachloroethane	ND		2000	420	ug/L			12/16/19 13:18	2000
1,1,2-Trichloroethane	ND		2000	460	ug/L			12/16/19 13:18	2000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2000	620	ug/L			12/16/19 13:18	2000
1,1-Dichloroethane	ND		2000	760	ug/L			12/16/19 13:18	2000
1,1-Dichloroethene	ND		2000	580	ug/L			12/16/19 13:18	2000
1,2,4-Trichlorobenzene	ND		2000	820	ug/L			12/16/19 13:18	2000
1,2-Dibromo-3-Chloropropane	ND		2000	780	ug/L			12/16/19 13:18	2000
1,2-Dichlorobenzene	ND		2000	1600	ug/L			12/16/19 13:18	2000
1,2-Dichloroethane	ND		2000	420	ug/L			12/16/19 13:18	2000
1,2-Dichloropropane	ND		2000	1400	ug/L			12/16/19 13:18	2000
1,3-Dichlorobenzene	ND		2000	1600	ug/L			12/16/19 13:18	2000
1,4-Dichlorobenzene	ND		2000	1700	ug/L			12/16/19 13:18	2000
2-Butanone (MEK)	ND		20000	2600	ug/L			12/16/19 13:18	2000
2-Hexanone	ND		10000	2500	ug/L			12/16/19 13:18	2000
4-Methyl-2-pentanone (MIBK)	ND		10000	4200	ug/L			12/16/19 13:18	2000
Acetone	ND		20000	6000	ug/L			12/16/19 13:18	2000
Benzene	ND		2000	820	ug/L			12/16/19 13:18	2000
Bromodichloromethane	ND		2000	780	ug/L			12/16/19 13:18	2000
Bromoform	ND		2000	520	ug/L			12/16/19 13:18	2000
Bromomethane	ND		2000	1400	ug/L			12/16/19 13:18	2000
Carbon disulfide	ND		2000	380	ug/L			12/16/19 13:18	2000
Carbon tetrachloride	ND		2000	540	ug/L			12/16/19 13:18	2000
Chlorobenzene	ND		2000	1500	ug/L			12/16/19 13:18	2000
Dibromochloromethane	ND		2000	640	ug/L			12/16/19 13:18	2000
Chloroethane	ND		2000	640	ug/L			12/16/19 13:18	2000
Chloroform	ND		2000	680	ug/L			12/16/19 13:18	2000
Chloromethane	ND		2000	700	ug/L			12/16/19 13:18	2000
cis-1,2-Dichloroethene	55000		2000	1600	ug/L			12/16/19 13:18	2000
cis-1,3-Dichloropropene	ND		2000	720	ug/L			12/16/19 13:18	2000
Cyclohexane	ND		2000	360	ug/L			12/16/19 13:18	2000
Dichlorodifluoromethane	ND		2000	1400	ug/L			12/16/19 13:18	2000
Ethylbenzene	ND		2000	1500	ug/L			12/16/19 13:18	2000
1,2-Dibromoethane	ND		2000	1500	ug/L			12/16/19 13:18	2000
Isopropylbenzene	ND		2000	1600	ug/L			12/16/19 13:18	2000
Methyl acetate	ND		5000	2600	ug/L			12/16/19 13:18	2000
Methyl tert-butyl ether	ND		2000	320	ug/L			12/16/19 13:18	2000
Methylcyclohexane	ND		2000	320	ug/L			12/16/19 13:18	2000
Methylene Chloride	1000	J	2000	880	ug/L			12/16/19 13:18	2000
Styrene	ND		2000	1500	ug/L			12/16/19 13:18	2000
Tetrachloroethene	ND		2000	720	ug/L			12/16/19 13:18	2000
Toluene	ND		2000	1000	ug/L			12/16/19 13:18	2000
trans-1,2-Dichloroethene	ND		2000	1800	ug/L			12/16/19 13:18	2000
trans-1,3-Dichloropropene	ND		2000	740	ug/L			12/16/19 13:18	2000
Trichloroethene	ND		2000	920	ug/L			12/16/19 13:18	2000
Trichlorofluoromethane	ND		2000	1800	ug/L			12/16/19 13:18	2000
Vinyl chloride	39000		2000	1800	ug/L			12/16/19 13:18	2000
Xylenes, Total	ND		4000	1300	ug/L			12/16/19 13:18	2000

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-2

Lab Sample ID: 480-164105-1

Date Collected: 12/11/19 13:30

Matrix: Water

Date Received: 12/12/19 13:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		80 - 120		12/16/19 13:18	2000
<i>1,2-Dichloroethane-d4 (Surr)</i>	108		77 - 120		12/16/19 13:18	2000
<i>4-Bromofluorobenzene (Surr)</i>	101		73 - 120		12/16/19 13:18	2000
<i>Dibromofluoromethane (Surr)</i>	105		75 - 123		12/16/19 13:18	2000

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-3

Lab Sample ID: 480-164105-2

Date Collected: 12/11/19 16:00

Matrix: Water

Date Received: 12/12/19 13:10

Method: 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			12/17/19 14:31	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			12/17/19 14:31	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			12/17/19 14:31	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			12/17/19 14:31	20
1,1-Dichloroethane	ND		20	7.6	ug/L			12/17/19 14:31	20
1,1-Dichloroethene	ND		20	5.8	ug/L			12/17/19 14:31	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			12/17/19 14:31	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			12/17/19 14:31	20
1,2-Dichlorobenzene	ND		20	16	ug/L			12/17/19 14:31	20
1,2-Dichloroethane	ND		20	4.2	ug/L			12/17/19 14:31	20
1,2-Dichloropropane	ND		20	14	ug/L			12/17/19 14:31	20
1,3-Dichlorobenzene	ND		20	16	ug/L			12/17/19 14:31	20
1,4-Dichlorobenzene	ND		20	17	ug/L			12/17/19 14:31	20
2-Butanone (MEK)	ND		200	26	ug/L			12/17/19 14:31	20
2-Hexanone	ND		100	25	ug/L			12/17/19 14:31	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			12/17/19 14:31	20
Acetone	ND		200	60	ug/L			12/17/19 14:31	20
Benzene	ND		20	8.2	ug/L			12/17/19 14:31	20
Bromodichloromethane	ND		20	7.8	ug/L			12/17/19 14:31	20
Bromoform	ND		20	5.2	ug/L			12/17/19 14:31	20
Bromomethane	ND		20	14	ug/L			12/17/19 14:31	20
Carbon disulfide	ND		20	3.8	ug/L			12/17/19 14:31	20
Carbon tetrachloride	ND		20	5.4	ug/L			12/17/19 14:31	20
Chlorobenzene	ND		20	15	ug/L			12/17/19 14:31	20
Dibromochloromethane	ND		20	6.4	ug/L			12/17/19 14:31	20
Chloroethane	ND		20	6.4	ug/L			12/17/19 14:31	20
Chloroform	ND		20	6.8	ug/L			12/17/19 14:31	20
Chloromethane	ND		20	7.0	ug/L			12/17/19 14:31	20
cis-1,2-Dichloroethene	200		20	16	ug/L			12/17/19 14:31	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			12/17/19 14:31	20
Cyclohexane	ND		20	3.6	ug/L			12/17/19 14:31	20
Dichlorodifluoromethane	ND		20	14	ug/L			12/17/19 14:31	20
Ethylbenzene	ND		20	15	ug/L			12/17/19 14:31	20
1,2-Dibromoethane	ND		20	15	ug/L			12/17/19 14:31	20
Isopropylbenzene	ND		20	16	ug/L			12/17/19 14:31	20
Methyl acetate	ND		50	26	ug/L			12/17/19 14:31	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			12/17/19 14:31	20
Methylcyclohexane	ND		20	3.2	ug/L			12/17/19 14:31	20
Methylene Chloride	18 J		20	8.8	ug/L			12/17/19 14:31	20
Styrene	ND		20	15	ug/L			12/17/19 14:31	20
Tetrachloroethene	ND		20	7.2	ug/L			12/17/19 14:31	20
Toluene	ND		20	10	ug/L			12/17/19 14:31	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			12/17/19 14:31	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			12/17/19 14:31	20
Trichloroethene	520		20	9.2	ug/L			12/17/19 14:31	20
Trichlorofluoromethane	ND		20	18	ug/L			12/17/19 14:31	20
Vinyl chloride	ND		20	18	ug/L			12/17/19 14:31	20
Xylenes, Total	ND		40	13	ug/L			12/17/19 14:31	20

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-3

Lab Sample ID: 480-164105-2

Date Collected: 12/11/19 16:00

Matrix: Water

Date Received: 12/12/19 13:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		80 - 120		12/17/19 14:31	20
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		77 - 120		12/17/19 14:31	20
<i>4-Bromofluorobenzene (Surr)</i>	98		73 - 120		12/17/19 14:31	20
<i>Dibromofluoromethane (Surr)</i>	104		75 - 123		12/17/19 14:31	20

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-4

Lab Sample ID: 480-164105-3

Date Collected: 12/12/19 10:50

Matrix: Water

Date Received: 12/12/19 13:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		500	410	ug/L			12/16/19 14:04	500
1,1,2,2-Tetrachloroethane	ND		500	110	ug/L			12/16/19 14:04	500
1,1,2-Trichloroethane	ND		500	120	ug/L			12/16/19 14:04	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	160	ug/L			12/16/19 14:04	500
1,1-Dichloroethane	ND		500	190	ug/L			12/16/19 14:04	500
1,1-Dichloroethene	ND		500	150	ug/L			12/16/19 14:04	500
1,2,4-Trichlorobenzene	ND		500	210	ug/L			12/16/19 14:04	500
1,2-Dibromo-3-Chloropropane	ND		500	200	ug/L			12/16/19 14:04	500
1,2-Dichlorobenzene	ND		500	400	ug/L			12/16/19 14:04	500
1,2-Dichloroethane	ND		500	110	ug/L			12/16/19 14:04	500
1,2-Dichloropropane	ND		500	360	ug/L			12/16/19 14:04	500
1,3-Dichlorobenzene	ND		500	390	ug/L			12/16/19 14:04	500
1,4-Dichlorobenzene	ND		500	420	ug/L			12/16/19 14:04	500
2-Butanone (MEK)	ND		5000	660	ug/L			12/16/19 14:04	500
2-Hexanone	ND		2500	620	ug/L			12/16/19 14:04	500
4-Methyl-2-pentanone (MIBK)	ND		2500	1100	ug/L			12/16/19 14:04	500
Acetone	ND		5000	1500	ug/L			12/16/19 14:04	500
Benzene	ND		500	210	ug/L			12/16/19 14:04	500
Bromodichloromethane	ND		500	200	ug/L			12/16/19 14:04	500
Bromoform	ND		500	130	ug/L			12/16/19 14:04	500
Bromomethane	ND		500	350	ug/L			12/16/19 14:04	500
Carbon disulfide	ND		500	95	ug/L			12/16/19 14:04	500
Carbon tetrachloride	ND		500	140	ug/L			12/16/19 14:04	500
Chlorobenzene	ND		500	380	ug/L			12/16/19 14:04	500
Dibromochloromethane	ND		500	160	ug/L			12/16/19 14:04	500
Chloroethane	ND		500	160	ug/L			12/16/19 14:04	500
Chloroform	ND		500	170	ug/L			12/16/19 14:04	500
Chloromethane	ND		500	180	ug/L			12/16/19 14:04	500
cis-1,2-Dichloroethene	ND		500	410	ug/L			12/16/19 14:04	500
cis-1,3-Dichloropropene	ND		500	180	ug/L			12/16/19 14:04	500
Cyclohexane	ND		500	90	ug/L			12/16/19 14:04	500
Dichlorodifluoromethane	ND		500	340	ug/L			12/16/19 14:04	500
Ethylbenzene	ND		500	370	ug/L			12/16/19 14:04	500
1,2-Dibromoethane	ND		500	370	ug/L			12/16/19 14:04	500
Isopropylbenzene	ND		500	400	ug/L			12/16/19 14:04	500
Methyl acetate	ND		1300	650	ug/L			12/16/19 14:04	500
Methyl tert-butyl ether	ND		500	80	ug/L			12/16/19 14:04	500
Methylcyclohexane	ND		500	80	ug/L			12/16/19 14:04	500
Methylene Chloride	260	J	500	220	ug/L			12/16/19 14:04	500
Styrene	ND		500	370	ug/L			12/16/19 14:04	500
Tetrachloroethene	ND		500	180	ug/L			12/16/19 14:04	500
Toluene	ND		500	260	ug/L			12/16/19 14:04	500
trans-1,2-Dichloroethene	ND		500	450	ug/L			12/16/19 14:04	500
trans-1,3-Dichloropropene	ND		500	190	ug/L			12/16/19 14:04	500
Trichloroethene	11000		500	230	ug/L			12/16/19 14:04	500
Trichlorofluoromethane	ND		500	440	ug/L			12/16/19 14:04	500
Vinyl chloride	ND		500	450	ug/L			12/16/19 14:04	500
Xylenes, Total	ND		1000	330	ug/L			12/16/19 14:04	500

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-4

Lab Sample ID: 480-164105-3

Date Collected: 12/12/19 10:50

Matrix: Water

Date Received: 12/12/19 13:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		80 - 120		12/16/19 14:04	500
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		77 - 120		12/16/19 14:04	500
<i>4-Bromofluorobenzene (Surr)</i>	100		73 - 120		12/16/19 14:04	500
<i>Dibromofluoromethane (Surr)</i>	101		75 - 123		12/16/19 14:04	500

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-9R

Lab Sample ID: 480-164105-4

Date Collected: 12/11/19 12:00

Matrix: Water

Date Received: 12/12/19 13:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			12/17/19 14:54	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			12/17/19 14:54	100
1,1,2-Trichloroethane	ND		100	23	ug/L			12/17/19 14:54	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			12/17/19 14:54	100
1,1-Dichloroethane	ND		100	38	ug/L			12/17/19 14:54	100
1,1-Dichloroethene	ND		100	29	ug/L			12/17/19 14:54	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			12/17/19 14:54	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			12/17/19 14:54	100
1,2-Dichlorobenzene	ND		100	79	ug/L			12/17/19 14:54	100
1,2-Dichloroethane	ND		100	21	ug/L			12/17/19 14:54	100
1,2-Dichloropropane	ND		100	72	ug/L			12/17/19 14:54	100
1,3-Dichlorobenzene	ND		100	78	ug/L			12/17/19 14:54	100
1,4-Dichlorobenzene	ND		100	84	ug/L			12/17/19 14:54	100
2-Butanone (MEK)	ND		1000	130	ug/L			12/17/19 14:54	100
2-Hexanone	ND		500	120	ug/L			12/17/19 14:54	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			12/17/19 14:54	100
Acetone	ND		1000	300	ug/L			12/17/19 14:54	100
Benzene	ND		100	41	ug/L			12/17/19 14:54	100
Bromodichloromethane	ND		100	39	ug/L			12/17/19 14:54	100
Bromoform	ND		100	26	ug/L			12/17/19 14:54	100
Bromomethane	ND		100	69	ug/L			12/17/19 14:54	100
Carbon disulfide	ND		100	19	ug/L			12/17/19 14:54	100
Carbon tetrachloride	ND		100	27	ug/L			12/17/19 14:54	100
Chlorobenzene	ND		100	75	ug/L			12/17/19 14:54	100
Dibromochloromethane	ND		100	32	ug/L			12/17/19 14:54	100
Chloroethane	ND		100	32	ug/L			12/17/19 14:54	100
Chloroform	ND		100	34	ug/L			12/17/19 14:54	100
Chloromethane	ND		100	35	ug/L			12/17/19 14:54	100
cis-1,2-Dichloroethene	3200		100	81	ug/L			12/17/19 14:54	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			12/17/19 14:54	100
Cyclohexane	ND		100	18	ug/L			12/17/19 14:54	100
Dichlorodifluoromethane	ND		100	68	ug/L			12/17/19 14:54	100
Ethylbenzene	ND		100	74	ug/L			12/17/19 14:54	100
1,2-Dibromoethane	ND		100	73	ug/L			12/17/19 14:54	100
Isopropylbenzene	ND		100	79	ug/L			12/17/19 14:54	100
Methyl acetate	ND		250	130	ug/L			12/17/19 14:54	100
Methyl tert-butyl ether	ND		100	16	ug/L			12/17/19 14:54	100
Methylcyclohexane	ND		100	16	ug/L			12/17/19 14:54	100
Methylene Chloride	47 J		100	44	ug/L			12/17/19 14:54	100
Styrene	ND		100	73	ug/L			12/17/19 14:54	100
Tetrachloroethene	ND		100	36	ug/L			12/17/19 14:54	100
Toluene	ND		100	51	ug/L			12/17/19 14:54	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			12/17/19 14:54	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			12/17/19 14:54	100
Trichloroethene	3900 F1		100	46	ug/L			12/17/19 14:54	100
Trichlorofluoromethane	ND		100	88	ug/L			12/17/19 14:54	100
Vinyl chloride	240		100	90	ug/L			12/17/19 14:54	100
Xylenes, Total	ND		200	66	ug/L			12/17/19 14:54	100

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-9R

Lab Sample ID: 480-164105-4

Date Collected: 12/11/19 12:00

Matrix: Water

Date Received: 12/12/19 13:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		80 - 120		12/17/19 14:54	100
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		77 - 120		12/17/19 14:54	100
<i>4-Bromofluorobenzene (Surr)</i>	99		73 - 120		12/17/19 14:54	100
<i>Dibromofluoromethane (Surr)</i>	102		75 - 123		12/17/19 14:54	100

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-11R

Lab Sample ID: 480-164105-5

Date Collected: 12/11/19 14:50

Matrix: Water

Date Received: 12/12/19 13:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		40	33	ug/L			12/16/19 14:50	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			12/16/19 14:50	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			12/16/19 14:50	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		40	12	ug/L			12/16/19 14:50	40
1,1-Dichloroethane	ND		40	15	ug/L			12/16/19 14:50	40
1,1-Dichloroethene	ND		40	12	ug/L			12/16/19 14:50	40
1,2,4-Trichlorobenzene	ND		40	16	ug/L			12/16/19 14:50	40
1,2-Dibromo-3-Chloropropane	ND		40	16	ug/L			12/16/19 14:50	40
1,2-Dichlorobenzene	ND		40	32	ug/L			12/16/19 14:50	40
1,2-Dichloroethane	ND		40	8.4	ug/L			12/16/19 14:50	40
1,2-Dichloropropane	ND		40	29	ug/L			12/16/19 14:50	40
1,3-Dichlorobenzene	ND		40	31	ug/L			12/16/19 14:50	40
1,4-Dichlorobenzene	ND		40	34	ug/L			12/16/19 14:50	40
2-Butanone (MEK)	ND		400	53	ug/L			12/16/19 14:50	40
2-Hexanone	ND		200	50	ug/L			12/16/19 14:50	40
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			12/16/19 14:50	40
Acetone	ND		400	120	ug/L			12/16/19 14:50	40
Benzene	ND		40	16	ug/L			12/16/19 14:50	40
Bromodichloromethane	ND		40	16	ug/L			12/16/19 14:50	40
Bromoform	ND		40	10	ug/L			12/16/19 14:50	40
Bromomethane	ND		40	28	ug/L			12/16/19 14:50	40
Carbon disulfide	ND		40	7.6	ug/L			12/16/19 14:50	40
Carbon tetrachloride	ND		40	11	ug/L			12/16/19 14:50	40
Chlorobenzene	ND		40	30	ug/L			12/16/19 14:50	40
Dibromochloromethane	ND		40	13	ug/L			12/16/19 14:50	40
Chloroethane	ND		40	13	ug/L			12/16/19 14:50	40
Chloroform	ND		40	14	ug/L			12/16/19 14:50	40
Chloromethane	ND		40	14	ug/L			12/16/19 14:50	40
cis-1,2-Dichloroethene	890		40	32	ug/L			12/16/19 14:50	40
cis-1,3-Dichloropropene	ND		40	14	ug/L			12/16/19 14:50	40
Cyclohexane	ND		40	7.2	ug/L			12/16/19 14:50	40
Dichlorodifluoromethane	ND		40	27	ug/L			12/16/19 14:50	40
Ethylbenzene	ND		40	30	ug/L			12/16/19 14:50	40
1,2-Dibromoethane	ND		40	29	ug/L			12/16/19 14:50	40
Isopropylbenzene	ND		40	32	ug/L			12/16/19 14:50	40
Methyl acetate	ND		100	52	ug/L			12/16/19 14:50	40
Methyl tert-butyl ether	ND		40	6.4	ug/L			12/16/19 14:50	40
Methylcyclohexane	ND		40	6.4	ug/L			12/16/19 14:50	40
Methylene Chloride	22 J		40	18	ug/L			12/16/19 14:50	40
Styrene	ND		40	29	ug/L			12/16/19 14:50	40
Tetrachloroethene	ND		40	14	ug/L			12/16/19 14:50	40
Toluene	ND		40	20	ug/L			12/16/19 14:50	40
trans-1,2-Dichloroethene	ND		40	36	ug/L			12/16/19 14:50	40
trans-1,3-Dichloropropene	ND		40	15	ug/L			12/16/19 14:50	40
Trichlorofluoromethane	ND		40	35	ug/L			12/16/19 14:50	40
Vinyl chloride	ND		40	36	ug/L			12/16/19 14:50	40
Xylenes, Total	ND		80	26	ug/L			12/16/19 14:50	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		12/16/19 14:50	40

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-11R

Lab Sample ID: 480-164105-5

Date Collected: 12/11/19 14:50

Matrix: Water

Date Received: 12/12/19 13:10

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		12/16/19 14:50	40
4-Bromofluorobenzene (Surr)	101		73 - 120		12/16/19 14:50	40
Dibromofluoromethane (Surr)	103		75 - 123		12/16/19 14:50	40

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	8300		200	92	ug/L			12/17/19 15:17	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		12/17/19 15:17	200
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		12/17/19 15:17	200
4-Bromofluorobenzene (Surr)	100		73 - 120		12/17/19 15:17	200
Dibromofluoromethane (Surr)	105		75 - 123		12/17/19 15:17	200

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-13

Lab Sample ID: 480-164105-7

Date Collected: 12/12/19 09:00

Matrix: Water

Date Received: 12/12/19 13:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		80	66	ug/L			12/16/19 15:12	80
1,1,2,2-Tetrachloroethane	ND		80	17	ug/L			12/16/19 15:12	80
1,1,2-Trichloroethane	ND		80	18	ug/L			12/16/19 15:12	80
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		80	25	ug/L			12/16/19 15:12	80
1,1-Dichloroethane	ND		80	30	ug/L			12/16/19 15:12	80
1,1-Dichloroethene	ND		80	23	ug/L			12/16/19 15:12	80
1,2,4-Trichlorobenzene	ND		80	33	ug/L			12/16/19 15:12	80
1,2-Dibromo-3-Chloropropane	ND		80	31	ug/L			12/16/19 15:12	80
1,2-Dichlorobenzene	ND		80	63	ug/L			12/16/19 15:12	80
1,2-Dichloroethane	ND		80	17	ug/L			12/16/19 15:12	80
1,2-Dichloropropane	ND		80	58	ug/L			12/16/19 15:12	80
1,3-Dichlorobenzene	ND		80	62	ug/L			12/16/19 15:12	80
1,4-Dichlorobenzene	ND		80	67	ug/L			12/16/19 15:12	80
2-Butanone (MEK)	ND		800	110	ug/L			12/16/19 15:12	80
2-Hexanone	ND		400	99	ug/L			12/16/19 15:12	80
4-Methyl-2-pentanone (MIBK)	ND		400	170	ug/L			12/16/19 15:12	80
Acetone	ND		800	240	ug/L			12/16/19 15:12	80
Benzene	ND		80	33	ug/L			12/16/19 15:12	80
Bromodichloromethane	ND		80	31	ug/L			12/16/19 15:12	80
Bromoform	ND		80	21	ug/L			12/16/19 15:12	80
Bromomethane	ND		80	55	ug/L			12/16/19 15:12	80
Carbon disulfide	ND		80	15	ug/L			12/16/19 15:12	80
Carbon tetrachloride	ND		80	22	ug/L			12/16/19 15:12	80
Chlorobenzene	ND		80	60	ug/L			12/16/19 15:12	80
Dibromochloromethane	ND		80	26	ug/L			12/16/19 15:12	80
Chloroethane	ND		80	26	ug/L			12/16/19 15:12	80
Chloroform	ND		80	27	ug/L			12/16/19 15:12	80
Chloromethane	ND		80	28	ug/L			12/16/19 15:12	80
cis-1,2-Dichloroethene	780		80	65	ug/L			12/16/19 15:12	80
cis-1,3-Dichloropropene	ND		80	29	ug/L			12/16/19 15:12	80
Cyclohexane	ND		80	14	ug/L			12/16/19 15:12	80
Dichlorodifluoromethane	ND		80	54	ug/L			12/16/19 15:12	80
Ethylbenzene	ND		80	59	ug/L			12/16/19 15:12	80
1,2-Dibromoethane	ND		80	58	ug/L			12/16/19 15:12	80
Isopropylbenzene	ND		80	63	ug/L			12/16/19 15:12	80
Methyl acetate	ND		200	100	ug/L			12/16/19 15:12	80
Methyl tert-butyl ether	ND		80	13	ug/L			12/16/19 15:12	80
Methylcyclohexane	ND		80	13	ug/L			12/16/19 15:12	80
Methylene Chloride	45 J		80	35	ug/L			12/16/19 15:12	80
Styrene	ND		80	58	ug/L			12/16/19 15:12	80
Tetrachloroethene	ND		80	29	ug/L			12/16/19 15:12	80
Toluene	ND		80	41	ug/L			12/16/19 15:12	80
trans-1,2-Dichloroethene	ND		80	72	ug/L			12/16/19 15:12	80
trans-1,3-Dichloropropene	ND		80	30	ug/L			12/16/19 15:12	80
Trichloroethene	5300		80	37	ug/L			12/16/19 15:12	80
Trichlorofluoromethane	ND		80	70	ug/L			12/16/19 15:12	80
Vinyl chloride	ND		80	72	ug/L			12/16/19 15:12	80
Xylenes, Total	ND		160	53	ug/L			12/16/19 15:12	80

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-13

Lab Sample ID: 480-164105-7

Date Collected: 12/12/19 09:00

Matrix: Water

Date Received: 12/12/19 13:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		80 - 120		12/16/19 15:12	80
<i>1,2-Dichloroethane-d4 (Surr)</i>	104		77 - 120		12/16/19 15:12	80
<i>4-Bromofluorobenzene (Surr)</i>	100		73 - 120		12/16/19 15:12	80
<i>Dibromofluoromethane (Surr)</i>	103		75 - 123		12/16/19 15:12	80

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-14

Lab Sample ID: 480-164105-8

Date Collected: 12/12/19 11:30

Matrix: Water

Date Received: 12/12/19 13:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			12/16/19 15:35	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			12/16/19 15:35	100
1,1,2-Trichloroethane	ND		100	23	ug/L			12/16/19 15:35	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			12/16/19 15:35	100
1,1-Dichloroethane	ND		100	38	ug/L			12/16/19 15:35	100
1,1-Dichloroethene	ND		100	29	ug/L			12/16/19 15:35	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			12/16/19 15:35	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			12/16/19 15:35	100
1,2-Dichlorobenzene	ND		100	79	ug/L			12/16/19 15:35	100
1,2-Dichloroethane	ND		100	21	ug/L			12/16/19 15:35	100
1,2-Dichloropropane	ND		100	72	ug/L			12/16/19 15:35	100
1,3-Dichlorobenzene	ND		100	78	ug/L			12/16/19 15:35	100
1,4-Dichlorobenzene	ND		100	84	ug/L			12/16/19 15:35	100
2-Butanone (MEK)	ND		1000	130	ug/L			12/16/19 15:35	100
2-Hexanone	ND		500	120	ug/L			12/16/19 15:35	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			12/16/19 15:35	100
Acetone	ND		1000	300	ug/L			12/16/19 15:35	100
Benzene	ND		100	41	ug/L			12/16/19 15:35	100
Bromodichloromethane	ND		100	39	ug/L			12/16/19 15:35	100
Bromoform	ND		100	26	ug/L			12/16/19 15:35	100
Bromomethane	ND		100	69	ug/L			12/16/19 15:35	100
Carbon disulfide	ND		100	19	ug/L			12/16/19 15:35	100
Carbon tetrachloride	ND		100	27	ug/L			12/16/19 15:35	100
Chlorobenzene	ND		100	75	ug/L			12/16/19 15:35	100
Dibromochloromethane	ND		100	32	ug/L			12/16/19 15:35	100
Chloroethane	ND		100	32	ug/L			12/16/19 15:35	100
Chloroform	ND		100	34	ug/L			12/16/19 15:35	100
Chloromethane	ND		100	35	ug/L			12/16/19 15:35	100
cis-1,2-Dichloroethene	910		100	81	ug/L			12/16/19 15:35	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			12/16/19 15:35	100
Cyclohexane	ND		100	18	ug/L			12/16/19 15:35	100
Dichlorodifluoromethane	ND		100	68	ug/L			12/16/19 15:35	100
Ethylbenzene	ND		100	74	ug/L			12/16/19 15:35	100
1,2-Dibromoethane	ND		100	73	ug/L			12/16/19 15:35	100
Isopropylbenzene	ND		100	79	ug/L			12/16/19 15:35	100
Methyl acetate	ND		250	130	ug/L			12/16/19 15:35	100
Methyl tert-butyl ether	ND		100	16	ug/L			12/16/19 15:35	100
Methylcyclohexane	ND		100	16	ug/L			12/16/19 15:35	100
Methylene Chloride	54 J		100	44	ug/L			12/16/19 15:35	100
Styrene	ND		100	73	ug/L			12/16/19 15:35	100
Tetrachloroethene	ND		100	36	ug/L			12/16/19 15:35	100
Toluene	ND		100	51	ug/L			12/16/19 15:35	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			12/16/19 15:35	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			12/16/19 15:35	100
Trichloroethene	3200		100	46	ug/L			12/16/19 15:35	100
Trichlorofluoromethane	ND		100	88	ug/L			12/16/19 15:35	100
Vinyl chloride	ND		100	90	ug/L			12/16/19 15:35	100
Xylenes, Total	ND		200	66	ug/L			12/16/19 15:35	100

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-14

Lab Sample ID: 480-164105-8

Date Collected: 12/12/19 11:30

Matrix: Water

Date Received: 12/12/19 13:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		80 - 120		12/16/19 15:35	100
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		77 - 120		12/16/19 15:35	100
<i>4-Bromofluorobenzene (Surr)</i>	102		73 - 120		12/16/19 15:35	100
<i>Dibromofluoromethane (Surr)</i>	104		75 - 123		12/16/19 15:35	100

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: DUP

Lab Sample ID: 480-164105-9

Date Collected: 12/11/19 00:00

Matrix: Water

Date Received: 12/12/19 13:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2000	1600	ug/L			12/16/19 15:58	2000
1,1,2,2-Tetrachloroethane	ND		2000	420	ug/L			12/16/19 15:58	2000
1,1,2-Trichloroethane	ND		2000	460	ug/L			12/16/19 15:58	2000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2000	620	ug/L			12/16/19 15:58	2000
1,1-Dichloroethane	ND		2000	760	ug/L			12/16/19 15:58	2000
1,1-Dichloroethene	ND		2000	580	ug/L			12/16/19 15:58	2000
1,2,4-Trichlorobenzene	ND		2000	820	ug/L			12/16/19 15:58	2000
1,2-Dibromo-3-Chloropropane	ND		2000	780	ug/L			12/16/19 15:58	2000
1,2-Dichlorobenzene	ND		2000	1600	ug/L			12/16/19 15:58	2000
1,2-Dichloroethane	ND		2000	420	ug/L			12/16/19 15:58	2000
1,2-Dichloropropane	ND		2000	1400	ug/L			12/16/19 15:58	2000
1,3-Dichlorobenzene	ND		2000	1600	ug/L			12/16/19 15:58	2000
1,4-Dichlorobenzene	ND		2000	1700	ug/L			12/16/19 15:58	2000
2-Butanone (MEK)	ND		20000	2600	ug/L			12/16/19 15:58	2000
2-Hexanone	ND		10000	2500	ug/L			12/16/19 15:58	2000
4-Methyl-2-pentanone (MIBK)	ND		10000	4200	ug/L			12/16/19 15:58	2000
Acetone	ND		20000	6000	ug/L			12/16/19 15:58	2000
Benzene	ND		2000	820	ug/L			12/16/19 15:58	2000
Bromodichloromethane	ND		2000	780	ug/L			12/16/19 15:58	2000
Bromoform	ND		2000	520	ug/L			12/16/19 15:58	2000
Bromomethane	ND		2000	1400	ug/L			12/16/19 15:58	2000
Carbon disulfide	ND		2000	380	ug/L			12/16/19 15:58	2000
Carbon tetrachloride	ND		2000	540	ug/L			12/16/19 15:58	2000
Chlorobenzene	ND		2000	1500	ug/L			12/16/19 15:58	2000
Dibromochloromethane	ND		2000	640	ug/L			12/16/19 15:58	2000
Chloroethane	ND		2000	640	ug/L			12/16/19 15:58	2000
Chloroform	ND		2000	680	ug/L			12/16/19 15:58	2000
Chloromethane	ND		2000	700	ug/L			12/16/19 15:58	2000
cis-1,2-Dichloroethene	50000		2000	1600	ug/L			12/16/19 15:58	2000
cis-1,3-Dichloropropene	ND		2000	720	ug/L			12/16/19 15:58	2000
Cyclohexane	ND		2000	360	ug/L			12/16/19 15:58	2000
Dichlorodifluoromethane	ND		2000	1400	ug/L			12/16/19 15:58	2000
Ethylbenzene	ND		2000	1500	ug/L			12/16/19 15:58	2000
1,2-Dibromoethane	ND		2000	1500	ug/L			12/16/19 15:58	2000
Isopropylbenzene	ND		2000	1600	ug/L			12/16/19 15:58	2000
Methyl acetate	ND		5000	2600	ug/L			12/16/19 15:58	2000
Methyl tert-butyl ether	ND		2000	320	ug/L			12/16/19 15:58	2000
Methylcyclohexane	ND		2000	320	ug/L			12/16/19 15:58	2000
Methylene Chloride	1100	J	2000	880	ug/L			12/16/19 15:58	2000
Styrene	ND		2000	1500	ug/L			12/16/19 15:58	2000
Tetrachloroethene	ND		2000	720	ug/L			12/16/19 15:58	2000
Toluene	ND		2000	1000	ug/L			12/16/19 15:58	2000
trans-1,2-Dichloroethene	ND		2000	1800	ug/L			12/16/19 15:58	2000
trans-1,3-Dichloropropene	ND		2000	740	ug/L			12/16/19 15:58	2000
Trichloroethene	ND		2000	920	ug/L			12/16/19 15:58	2000
Trichlorofluoromethane	ND		2000	1800	ug/L			12/16/19 15:58	2000
Vinyl chloride	32000		2000	1800	ug/L			12/16/19 15:58	2000
Xylenes, Total	ND		4000	1300	ug/L			12/16/19 15:58	2000

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: DUP

Lab Sample ID: 480-164105-9

Date Collected: 12/11/19 00:00

Matrix: Water

Date Received: 12/12/19 13:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		80 - 120		12/16/19 15:58	2000
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		77 - 120		12/16/19 15:58	2000
<i>4-Bromofluorobenzene (Surr)</i>	100		73 - 120		12/16/19 15:58	2000
<i>Dibromofluoromethane (Surr)</i>	103		75 - 123		12/16/19 15:58	2000

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-164105-10

Date Collected: 12/03/19 00:00

Matrix: Water

Date Received: 12/12/19 13:10

Method: 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			12/14/19 17:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/14/19 17:49	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/14/19 17:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/14/19 17:49	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/14/19 17:49	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/14/19 17:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/14/19 17:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/14/19 17:49	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/14/19 17:49	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/14/19 17:49	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/14/19 17:49	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/14/19 17:49	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/14/19 17:49	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/14/19 17:49	1
2-Hexanone	ND		5.0	1.2	ug/L			12/14/19 17:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/14/19 17:49	1
Acetone	ND		10	3.0	ug/L			12/14/19 17:49	1
Benzene	ND		1.0	0.41	ug/L			12/14/19 17:49	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/14/19 17:49	1
Bromoform	ND		1.0	0.26	ug/L			12/14/19 17:49	1
Bromomethane	ND		1.0	0.69	ug/L			12/14/19 17:49	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/14/19 17:49	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/14/19 17:49	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/14/19 17:49	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/14/19 17:49	1
Chloroethane	ND		1.0	0.32	ug/L			12/14/19 17:49	1
Chloroform	ND		1.0	0.34	ug/L			12/14/19 17:49	1
Chloromethane	ND		1.0	0.35	ug/L			12/14/19 17:49	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/14/19 17:49	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/14/19 17:49	1
Cyclohexane	ND		1.0	0.18	ug/L			12/14/19 17:49	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/14/19 17:49	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/14/19 17:49	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/14/19 17:49	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/14/19 17:49	1
Methyl acetate	ND		2.5	1.3	ug/L			12/14/19 17:49	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/14/19 17:49	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/14/19 17:49	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/14/19 17:49	1
Styrene	ND		1.0	0.73	ug/L			12/14/19 17:49	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/14/19 17:49	1
Toluene	ND		1.0	0.51	ug/L			12/14/19 17:49	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/14/19 17:49	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/14/19 17:49	1
Trichloroethene	ND		1.0	0.46	ug/L			12/14/19 17:49	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/14/19 17:49	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/14/19 17:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/14/19 17:49	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-164105-10

Date Collected: 12/03/19 00:00

Matrix: Water

Date Received: 12/12/19 13:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	96		80 - 120		12/14/19 17:49	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		77 - 120		12/14/19 17:49	1
<i>4-Bromofluorobenzene (Surr)</i>	103		73 - 120		12/14/19 17:49	1
<i>Dibromofluoromethane (Surr)</i>	105		75 - 123		12/14/19 17:49	1

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (80-120)	DCA (77-120)	BFB (73-120)	DBFM (75-123)
480-164105-1	MW-2	98	108	101	105
480-164105-2	MW-3	97	106	98	104
480-164105-3	MW-4	97	105	100	101
480-164105-4	MW-9R	98	107	99	102
480-164105-4 MS	MW-9R	98	103	99	100
480-164105-4 MSD	MW-9R	99	102	100	102
480-164105-5	MW-11R	97	107	101	103
480-164105-5 - DL	MW-11R	97	107	100	105
480-164105-7	MW-13	97	104	100	103
480-164105-8	MW-14	98	106	102	104
480-164105-9	DUP	97	106	100	103
480-164105-10	TRIP BLANK	96	107	103	105
LCS 480-509874/5	Lab Control Sample	101	101	110	99
LCS 480-510024/5	Lab Control Sample	99	103	101	101
LCS 480-510225/5	Lab Control Sample	99	106	99	104
MB 480-509874/7	Method Blank	99	98	101	98
MB 480-510024/7	Method Blank	98	103	101	100
MB 480-510225/7	Method Blank	98	105	99	103

Surrogate Legend

TOL = Toluene-d8 (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-509874/7

Matrix: Water

Analysis Batch: 509874

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			12/14/19 10:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/14/19 10:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/14/19 10:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/14/19 10:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/14/19 10:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/14/19 10:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/14/19 10:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/14/19 10:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/14/19 10:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/14/19 10:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/14/19 10:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/14/19 10:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/14/19 10:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/14/19 10:40	1
2-Hexanone	ND		5.0	1.2	ug/L			12/14/19 10:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/14/19 10:40	1
Acetone	ND		10	3.0	ug/L			12/14/19 10:40	1
Benzene	ND		1.0	0.41	ug/L			12/14/19 10:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/14/19 10:40	1
Bromoform	ND		1.0	0.26	ug/L			12/14/19 10:40	1
Bromomethane	ND		1.0	0.69	ug/L			12/14/19 10:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/14/19 10:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/14/19 10:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/14/19 10:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/14/19 10:40	1
Chloroethane	ND		1.0	0.32	ug/L			12/14/19 10:40	1
Chloroform	ND		1.0	0.34	ug/L			12/14/19 10:40	1
Chloromethane	ND		1.0	0.35	ug/L			12/14/19 10:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/14/19 10:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/14/19 10:40	1
Cyclohexane	ND		1.0	0.18	ug/L			12/14/19 10:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/14/19 10:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/14/19 10:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/14/19 10:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/14/19 10:40	1
Methyl acetate	ND		2.5	1.3	ug/L			12/14/19 10:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/14/19 10:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/14/19 10:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/14/19 10:40	1
Styrene	ND		1.0	0.73	ug/L			12/14/19 10:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/14/19 10:40	1
Toluene	ND		1.0	0.51	ug/L			12/14/19 10:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/14/19 10:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/14/19 10:40	1
Trichloroethene	ND		1.0	0.46	ug/L			12/14/19 10:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/14/19 10:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/14/19 10:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/14/19 10:40	1

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-509874/7

Matrix: Water

Analysis Batch: 509874

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		12/14/19 10:40	1
1,2-Dichloroethane-d4 (Surr)	98		77 - 120		12/14/19 10:40	1
4-Bromofluorobenzene (Surr)	101		73 - 120		12/14/19 10:40	1
Dibromofluoromethane (Surr)	98		75 - 123		12/14/19 10:40	1

Lab Sample ID: LCS 480-509874/5

Matrix: Water

Analysis Batch: 509874

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	26.8		ug/L		107	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.3		ug/L		101	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	26.3		ug/L		105	61 - 148
1,1-Dichloroethane	25.0	24.4		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	25.0		ug/L		100	66 - 127
1,2,4-Trichlorobenzene	25.0	28.6		ug/L		114	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	26.3		ug/L		105	56 - 134
1,2-Dichlorobenzene	25.0	27.3		ug/L		109	80 - 124
1,2-Dichloroethane	25.0	25.2		ug/L		101	75 - 120
1,2-Dichloropropane	25.0	23.8		ug/L		95	76 - 120
1,3-Dichlorobenzene	25.0	27.3		ug/L		109	77 - 120
1,4-Dichlorobenzene	25.0	26.7		ug/L		107	80 - 120
2-Butanone (MEK)	125	117		ug/L		93	57 - 140
2-Hexanone	125	124		ug/L		99	65 - 127
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		98	71 - 125
Acetone	125	114		ug/L		91	56 - 142
Benzene	25.0	24.5		ug/L		98	71 - 124
Bromodichloromethane	25.0	26.2		ug/L		105	80 - 122
Bromoform	25.0	28.2		ug/L		113	61 - 132
Bromomethane	25.0	24.5		ug/L		98	55 - 144
Carbon disulfide	25.0	24.5		ug/L		98	59 - 134
Carbon tetrachloride	25.0	27.1		ug/L		108	72 - 134
Chlorobenzene	25.0	26.0		ug/L		104	80 - 120
Dibromochloromethane	25.0	27.9		ug/L		112	75 - 125
Chloroethane	25.0	22.9		ug/L		91	69 - 136
Chloroform	25.0	24.9		ug/L		100	73 - 127
Chloromethane	25.0	20.8		ug/L		83	68 - 124
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	74 - 124
cis-1,3-Dichloropropene	25.0	27.0		ug/L		108	74 - 124
Cyclohexane	25.0	25.0		ug/L		100	59 - 135
Dichlorodifluoromethane	25.0	25.0		ug/L		100	59 - 135
Ethylbenzene	25.0	26.4		ug/L		105	77 - 123
1,2-Dibromoethane	25.0	26.8		ug/L		107	77 - 120
Isopropylbenzene	25.0	26.9		ug/L		108	77 - 122
Methyl acetate	50.0	44.1		ug/L		88	74 - 133
Methyl tert-butyl ether	25.0	26.0		ug/L		104	77 - 120
Methylcyclohexane	25.0	26.1		ug/L		104	68 - 134

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-509874/5

Matrix: Water

Analysis Batch: 509874

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	25.2		ug/L		101	75 - 124
Styrene	25.0	28.2		ug/L		113	80 - 120
Tetrachloroethene	25.0	27.6		ug/L		110	74 - 122
Toluene	25.0	25.6		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	25.5		ug/L		102	73 - 127
trans-1,3-Dichloropropene	25.0	26.8		ug/L		107	80 - 120
Trichloroethene	25.0	25.2		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	27.3		ug/L		109	62 - 150
Vinyl chloride	25.0	24.2		ug/L		97	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	101		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		77 - 120
4-Bromofluorobenzene (Surr)	110		73 - 120
Dibromofluoromethane (Surr)	99		75 - 123

Lab Sample ID: MB 480-510024/7

Matrix: Water

Analysis Batch: 510024

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			12/16/19 12:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/16/19 12:00	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/16/19 12:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/16/19 12:00	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/16/19 12:00	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/16/19 12:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/16/19 12:00	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/16/19 12:00	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/16/19 12:00	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/16/19 12:00	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/16/19 12:00	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/16/19 12:00	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/16/19 12:00	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/16/19 12:00	1
2-Hexanone	ND		5.0	1.2	ug/L			12/16/19 12:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/16/19 12:00	1
Acetone	ND		10	3.0	ug/L			12/16/19 12:00	1
Benzene	ND		1.0	0.41	ug/L			12/16/19 12:00	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/16/19 12:00	1
Bromoform	ND		1.0	0.26	ug/L			12/16/19 12:00	1
Bromomethane	ND		1.0	0.69	ug/L			12/16/19 12:00	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/16/19 12:00	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/16/19 12:00	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/16/19 12:00	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/16/19 12:00	1
Chloroethane	ND		1.0	0.32	ug/L			12/16/19 12:00	1
Chloroform	ND		1.0	0.34	ug/L			12/16/19 12:00	1

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-510024/7

Matrix: Water

Analysis Batch: 510024

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			12/16/19 12:00	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/16/19 12:00	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/16/19 12:00	1
Cyclohexane	ND		1.0	0.18	ug/L			12/16/19 12:00	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/16/19 12:00	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/16/19 12:00	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/16/19 12:00	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/16/19 12:00	1
Methyl acetate	ND		2.5	1.3	ug/L			12/16/19 12:00	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/16/19 12:00	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/16/19 12:00	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/16/19 12:00	1
Styrene	ND		1.0	0.73	ug/L			12/16/19 12:00	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/16/19 12:00	1
Toluene	ND		1.0	0.51	ug/L			12/16/19 12:00	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/16/19 12:00	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/16/19 12:00	1
Trichloroethene	ND		1.0	0.46	ug/L			12/16/19 12:00	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/16/19 12:00	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/16/19 12:00	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/16/19 12:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/16/19 12:00	1
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		12/16/19 12:00	1
4-Bromofluorobenzene (Surr)	101		73 - 120		12/16/19 12:00	1
Dibromofluoromethane (Surr)	100		75 - 123		12/16/19 12:00	1

Lab Sample ID: LCS 480-510024/5

Matrix: Water

Analysis Batch: 510024

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	24.4		ug/L		98	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	23.5		ug/L		94	61 - 148
1,1-Dichloroethane	25.0	23.3		ug/L		93	77 - 120
1,1-Dichloroethene	25.0	22.8		ug/L		91	66 - 127
1,2,4-Trichlorobenzene	25.0	24.8		ug/L		99	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.9		ug/L		95	56 - 134
1,2-Dichlorobenzene	25.0	24.1		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	24.7		ug/L		99	75 - 120
1,2-Dichloropropane	25.0	23.1		ug/L		92	76 - 120
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	77 - 120
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	80 - 120
2-Butanone (MEK)	125	121		ug/L		97	57 - 140
2-Hexanone	125	123		ug/L		99	65 - 127

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-510024/5

Matrix: Water

Analysis Batch: 510024

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	122		ug/L		97	71 - 125
Acetone	125	118		ug/L		94	56 - 142
Benzene	25.0	22.7		ug/L		91	71 - 124
Bromodichloromethane	25.0	26.1		ug/L		105	80 - 122
Bromoform	25.0	24.4		ug/L		97	61 - 132
Bromomethane	25.0	24.7		ug/L		99	55 - 144
Carbon disulfide	25.0	21.7		ug/L		87	59 - 134
Carbon tetrachloride	25.0	25.7		ug/L		103	72 - 134
Chlorobenzene	25.0	23.3		ug/L		93	80 - 120
Dibromochloromethane	25.0	27.0		ug/L		108	75 - 125
Chloroethane	25.0	23.0		ug/L		92	69 - 136
Chloroform	25.0	23.6		ug/L		94	73 - 127
Chloromethane	25.0	22.3		ug/L		89	68 - 124
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	74 - 124
cis-1,3-Dichloropropene	25.0	24.2		ug/L		97	74 - 124
Cyclohexane	25.0	22.7		ug/L		91	59 - 135
Dichlorodifluoromethane	25.0	24.9		ug/L		100	59 - 135
Ethylbenzene	25.0	23.4		ug/L		93	77 - 123
1,2-Dibromoethane	25.0	24.9		ug/L		100	77 - 120
Isopropylbenzene	25.0	23.7		ug/L		95	77 - 122
Methyl acetate	50.0	48.8		ug/L		98	74 - 133
Methyl tert-butyl ether	25.0	24.4		ug/L		97	77 - 120
Methylcyclohexane	25.0	22.4		ug/L		89	68 - 134
Methylene Chloride	25.0	21.3		ug/L		85	75 - 124
Styrene	25.0	23.5		ug/L		94	80 - 120
Tetrachloroethene	25.0	23.8		ug/L		95	74 - 122
Toluene	25.0	23.3		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	73 - 127
trans-1,3-Dichloropropene	25.0	25.9		ug/L		103	80 - 120
Trichloroethene	25.0	23.7		ug/L		95	74 - 123
Trichlorofluoromethane	25.0	26.4		ug/L		106	62 - 150
Vinyl chloride	25.0	23.6		ug/L		94	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		77 - 120
4-Bromofluorobenzene (Surr)	101		73 - 120
Dibromofluoromethane (Surr)	101		75 - 123

Lab Sample ID: MB 480-510225/7

Matrix: Water

Analysis Batch: 510225

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			12/17/19 12:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/17/19 12:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/17/19 12:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/17/19 12:24	1

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-510225/7

Matrix: Water

Analysis Batch: 510225

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			12/17/19 12:24	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/17/19 12:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/17/19 12:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/17/19 12:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/17/19 12:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/17/19 12:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/17/19 12:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/17/19 12:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/17/19 12:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/17/19 12:24	1
2-Hexanone	ND		5.0	1.2	ug/L			12/17/19 12:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/17/19 12:24	1
Acetone	ND		10	3.0	ug/L			12/17/19 12:24	1
Benzene	ND		1.0	0.41	ug/L			12/17/19 12:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/17/19 12:24	1
Bromoform	ND		1.0	0.26	ug/L			12/17/19 12:24	1
Bromomethane	ND		1.0	0.69	ug/L			12/17/19 12:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/17/19 12:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/17/19 12:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/17/19 12:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/17/19 12:24	1
Chloroethane	ND		1.0	0.32	ug/L			12/17/19 12:24	1
Chloroform	ND		1.0	0.34	ug/L			12/17/19 12:24	1
Chloromethane	ND		1.0	0.35	ug/L			12/17/19 12:24	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/17/19 12:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/17/19 12:24	1
Cyclohexane	ND		1.0	0.18	ug/L			12/17/19 12:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/17/19 12:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/17/19 12:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/17/19 12:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/17/19 12:24	1
Methyl acetate	ND		2.5	1.3	ug/L			12/17/19 12:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/17/19 12:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/17/19 12:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/17/19 12:24	1
Styrene	ND		1.0	0.73	ug/L			12/17/19 12:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/17/19 12:24	1
Toluene	ND		1.0	0.51	ug/L			12/17/19 12:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/17/19 12:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/17/19 12:24	1
Trichloroethene	ND		1.0	0.46	ug/L			12/17/19 12:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/17/19 12:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/17/19 12:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/17/19 12:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/17/19 12:24	1
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		12/17/19 12:24	1

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-510225/7

Matrix: Water

Analysis Batch: 510225

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		73 - 120		12/17/19 12:24	1
Dibromofluoromethane (Surr)	103		75 - 123		12/17/19 12:24	1

Lab Sample ID: LCS 480-510225/5

Matrix: Water

Analysis Batch: 510225

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	25.5		ug/L		102	73 - 126
1,1,1,2-Tetrachloroethane	25.0	24.5		ug/L		98	76 - 120
1,1,1,2-Trichloroethane	25.0	24.0		ug/L		96	76 - 122
1,1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.5		ug/L		94	61 - 148
1,1-Dichloroethane	25.0	23.9		ug/L		96	77 - 120
1,1-Dichloroethene	25.0	22.9		ug/L		92	66 - 127
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.3		ug/L		101	56 - 134
1,2-Dichlorobenzene	25.0	23.7		ug/L		95	80 - 124
1,2-Dichloroethane	25.0	25.5		ug/L		102	75 - 120
1,2-Dichloropropane	25.0	23.4		ug/L		94	76 - 120
1,3-Dichlorobenzene	25.0	23.4		ug/L		93	77 - 120
1,4-Dichlorobenzene	25.0	23.4		ug/L		93	80 - 120
2-Butanone (MEK)	125	130		ug/L		104	57 - 140
2-Hexanone	125	126		ug/L		101	65 - 127
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		98	71 - 125
Acetone	125	130		ug/L		104	56 - 142
Benzene	25.0	22.9		ug/L		92	71 - 124
Bromodichloromethane	25.0	26.0		ug/L		104	80 - 122
Bromoform	25.0	24.4		ug/L		98	61 - 132
Bromomethane	25.0	25.8		ug/L		103	55 - 144
Carbon disulfide	25.0	21.6		ug/L		86	59 - 134
Carbon tetrachloride	25.0	26.2		ug/L		105	72 - 134
Chlorobenzene	25.0	23.0		ug/L		92	80 - 120
Dibromochloromethane	25.0	26.5		ug/L		106	75 - 125
Chloroethane	25.0	24.6		ug/L		98	69 - 136
Chloroform	25.0	24.1		ug/L		96	73 - 127
Chloromethane	25.0	24.7		ug/L		99	68 - 124
cis-1,2-Dichloroethene	25.0	23.6		ug/L		95	74 - 124
cis-1,3-Dichloropropene	25.0	24.5		ug/L		98	74 - 124
Cyclohexane	25.0	22.7		ug/L		91	59 - 135
Dichlorodifluoromethane	25.0	27.6		ug/L		111	59 - 135
Ethylbenzene	25.0	22.8		ug/L		91	77 - 123
1,2-Dibromoethane	25.0	24.6		ug/L		98	77 - 120
Isopropylbenzene	25.0	23.3		ug/L		93	77 - 122
Methyl acetate	50.0	51.0		ug/L		102	74 - 133
Methyl tert-butyl ether	25.0	25.2		ug/L		101	77 - 120
Methylcyclohexane	25.0	22.1		ug/L		88	68 - 134
Methylene Chloride	25.0	21.7		ug/L		87	75 - 124
Styrene	25.0	23.1		ug/L		92	80 - 120

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-510225/5

Matrix: Water

Analysis Batch: 510225

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	23.3		ug/L		93	74 - 122
Toluene	25.0	22.6		ug/L		90	80 - 122
trans-1,2-Dichloroethene	25.0	23.6		ug/L		94	73 - 127
trans-1,3-Dichloropropene	25.0	25.4		ug/L		101	80 - 120
Trichloroethene	25.0	24.0		ug/L		96	74 - 123
Trichlorofluoromethane	25.0	26.7		ug/L		107	62 - 150
Vinyl chloride	25.0	24.4		ug/L		98	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
4-Bromofluorobenzene (Surr)	99		73 - 120
Dibromofluoromethane (Surr)	104		75 - 123

Lab Sample ID: 480-164105-4 MS

Matrix: Water

Analysis Batch: 510225

Client Sample ID: MW-9R

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		2500	2590		ug/L		104	73 - 126
1,1,2,2-Tetrachloroethane	ND		2500	2450		ug/L		98	76 - 120
1,1,2-Trichloroethane	ND		2500	2430		ug/L		97	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2500	2370		ug/L		95	61 - 148
1,1-Dichloroethane	ND		2500	2420		ug/L		97	77 - 120
1,1-Dichloroethene	ND		2500	2380		ug/L		95	66 - 127
1,2,4-Trichlorobenzene	ND		2500	2510		ug/L		100	79 - 122
1,2-Dibromo-3-Chloropropane	ND		2500	2430		ug/L		97	56 - 134
1,2-Dichlorobenzene	ND		2500	2480		ug/L		99	80 - 124
1,2-Dichloroethane	ND		2500	2590		ug/L		104	75 - 120
1,2-Dichloropropane	ND		2500	2380		ug/L		95	76 - 120
1,3-Dichlorobenzene	ND		2500	2450		ug/L		98	77 - 120
1,4-Dichlorobenzene	ND		2500	2450		ug/L		98	78 - 124
2-Butanone (MEK)	ND		12500	11900		ug/L		95	57 - 140
2-Hexanone	ND		12500	12300		ug/L		99	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		12500	12200		ug/L		97	71 - 125
Acetone	ND		12500	11000		ug/L		88	56 - 142
Benzene	ND		2500	2340		ug/L		94	71 - 124
Bromodichloromethane	ND		2500	2630		ug/L		105	80 - 122
Bromoform	ND		2500	2330		ug/L		93	61 - 132
Bromomethane	ND		2500	2350		ug/L		94	55 - 144
Carbon disulfide	ND		2500	2450		ug/L		98	59 - 134
Carbon tetrachloride	ND		2500	2580		ug/L		103	72 - 134
Chlorobenzene	ND		2500	2400		ug/L		96	80 - 120
Dibromochloromethane	ND		2500	2660		ug/L		106	75 - 125
Chloroethane	ND		2500	2390		ug/L		96	69 - 136
Chloroform	ND		2500	2470		ug/L		99	73 - 127
Chloromethane	ND		2500	2310		ug/L		92	68 - 124
cis-1,2-Dichloroethene	3200		2500	5340		ug/L		87	74 - 124

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-164105-4 MS

Matrix: Water

Analysis Batch: 510225

Client Sample ID: MW-9R

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	ND		2500	2380		ug/L		95	74 - 124
Cyclohexane	ND		2500	2310		ug/L		92	59 - 135
Dichlorodifluoromethane	ND		2500	2790		ug/L		112	59 - 135
Ethylbenzene	ND		2500	2410		ug/L		96	77 - 123
1,2-Dibromoethane	ND		2500	2460		ug/L		98	77 - 120
Isopropylbenzene	ND		2500	2480		ug/L		99	77 - 122
Methyl acetate	ND		5000	4740		ug/L		95	74 - 133
Methyl tert-butyl ether	ND		2500	2440		ug/L		98	77 - 120
Methylcyclohexane	ND		2500	2240		ug/L		90	68 - 134
Methylene Chloride	47	J	2500	2200		ug/L		86	75 - 124
Styrene	ND		2500	2440		ug/L		98	80 - 120
Tetrachloroethene	ND		2500	2370		ug/L		95	74 - 122
Toluene	ND		2500	2400		ug/L		96	80 - 122
trans-1,2-Dichloroethene	ND		2500	2410		ug/L		97	73 - 127
trans-1,3-Dichloropropene	ND		2500	2500		ug/L		100	80 - 120
Trichloroethene	3900	F1	2500	5860		ug/L		79	74 - 123
Trichlorofluoromethane	ND		2500	2740		ug/L		110	62 - 150
Vinyl chloride	240		2500	2550		ug/L		93	65 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		77 - 120
4-Bromofluorobenzene (Surr)	99		73 - 120
Dibromofluoromethane (Surr)	100		75 - 123

Lab Sample ID: 480-164105-4 MSD

Matrix: Water

Analysis Batch: 510225

Client Sample ID: MW-9R

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		2500	2500		ug/L		100	73 - 126	4	15
1,1,2,2-Tetrachloroethane	ND		2500	2390		ug/L		96	76 - 120	3	15
1,1,2-Trichloroethane	ND		2500	2370		ug/L		95	76 - 122	2	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2500	2200		ug/L		88	61 - 148	7	20
1,1-Dichloroethane	ND		2500	2350		ug/L		94	77 - 120	3	20
1,1-Dichloroethene	ND		2500	2200		ug/L		88	66 - 127	8	16
1,2,4-Trichlorobenzene	ND		2500	2450		ug/L		98	79 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND		2500	2440		ug/L		97	56 - 134	0	15
1,2-Dichlorobenzene	ND		2500	2390		ug/L		96	80 - 124	4	20
1,2-Dichloroethane	ND		2500	2540		ug/L		102	75 - 120	2	20
1,2-Dichloropropane	ND		2500	2330		ug/L		93	76 - 120	2	20
1,3-Dichlorobenzene	ND		2500	2380		ug/L		95	77 - 120	3	20
1,4-Dichlorobenzene	ND		2500	2370		ug/L		95	78 - 124	3	20
2-Butanone (MEK)	ND		12500	11600		ug/L		93	57 - 140	3	20
2-Hexanone	ND		12500	12100		ug/L		97	65 - 127	2	15
4-Methyl-2-pentanone (MIBK)	ND		12500	11900		ug/L		96	71 - 125	2	35
Acetone	ND		12500	11000		ug/L		88	56 - 142	0	15
Benzene	ND		2500	2240		ug/L		89	71 - 124	5	13

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-164105-4 MSD

Matrix: Water

Analysis Batch: 510225

Client Sample ID: MW-9R

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromodichloromethane	ND		2500	2580		ug/L		103	80 - 122	2	15
Bromoform	ND		2500	2300		ug/L		92	61 - 132	1	15
Bromomethane	ND		2500	2340		ug/L		93	55 - 144	1	15
Carbon disulfide	ND		2500	2470		ug/L		99	59 - 134	1	15
Carbon tetrachloride	ND		2500	2430		ug/L		97	72 - 134	6	15
Chlorobenzene	ND		2500	2340		ug/L		94	80 - 120	3	25
Dibromochloromethane	ND		2500	2640		ug/L		106	75 - 125	1	15
Chloroethane	ND		2500	2170		ug/L		87	69 - 136	10	15
Chloroform	ND		2500	2370		ug/L		95	73 - 127	4	20
Chloromethane	ND		2500	2210		ug/L		88	68 - 124	4	15
cis-1,2-Dichloroethene	3200		2500	5150		ug/L		80	74 - 124	4	15
cis-1,3-Dichloropropene	ND		2500	2330		ug/L		93	74 - 124	2	15
Cyclohexane	ND		2500	2140		ug/L		86	59 - 135	7	20
Dichlorodifluoromethane	ND		2500	2580		ug/L		103	59 - 135	8	20
Ethylbenzene	ND		2500	2290		ug/L		91	77 - 123	5	15
1,2-Dibromoethane	ND		2500	2420		ug/L		97	77 - 120	2	15
Isopropylbenzene	ND		2500	2320		ug/L		93	77 - 122	6	20
Methyl acetate	ND		5000	4740		ug/L		95	74 - 133	0	20
Methyl tert-butyl ether	ND		2500	2390		ug/L		95	77 - 120	2	37
Methylcyclohexane	ND		2500	2060		ug/L		83	68 - 134	8	20
Methylene Chloride	47 J		2500	2120		ug/L		83	75 - 124	4	15
Styrene	ND		2500	2360		ug/L		94	80 - 120	3	20
Tetrachloroethene	ND		2500	2300		ug/L		92	74 - 122	3	20
Toluene	ND		2500	2300		ug/L		92	80 - 122	4	15
trans-1,2-Dichloroethene	ND		2500	2300		ug/L		92	73 - 127	5	20
trans-1,3-Dichloropropene	ND		2500	2440		ug/L		98	80 - 120	2	15
Trichloroethene	3900	F1	2500	5550	F1	ug/L		67	74 - 123	5	16
Trichlorofluoromethane	ND		2500	2520		ug/L		101	62 - 150	8	20
Vinyl chloride	240		2500	2390		ug/L		86	65 - 133	7	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	100		73 - 120
Dibromofluoromethane (Surr)	102		75 - 123

QC Association Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

GC/MS VOA

Analysis Batch: 509874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-164105-10	TRIP BLANK	Total/NA	Water	8260C	
MB 480-509874/7	Method Blank	Total/NA	Water	8260C	
LCS 480-509874/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 510024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-164105-1	MW-2	Total/NA	Water	8260C	
480-164105-3	MW-4	Total/NA	Water	8260C	
480-164105-5	MW-11R	Total/NA	Water	8260C	
480-164105-7	MW-13	Total/NA	Water	8260C	
480-164105-8	MW-14	Total/NA	Water	8260C	
480-164105-9	DUP	Total/NA	Water	8260C	
MB 480-510024/7	Method Blank	Total/NA	Water	8260C	
LCS 480-510024/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 510225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-164105-2	MW-3	Total/NA	Water	8260C	
480-164105-4	MW-9R	Total/NA	Water	8260C	
480-164105-5 - DL	MW-11R	Total/NA	Water	8260C	
MB 480-510225/7	Method Blank	Total/NA	Water	8260C	
LCS 480-510225/5	Lab Control Sample	Total/NA	Water	8260C	
480-164105-4 MS	MW-9R	Total/NA	Water	8260C	
480-164105-4 MSD	MW-9R	Total/NA	Water	8260C	

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: MW-2

Lab Sample ID: 480-164105-1

Date Collected: 12/11/19 13:30

Matrix: Water

Date Received: 12/12/19 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2000	510024	12/16/19 13:18	S1V	TAL BUF

Client Sample ID: MW-3

Lab Sample ID: 480-164105-2

Date Collected: 12/11/19 16:00

Matrix: Water

Date Received: 12/12/19 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	510225	12/17/19 14:31	LCH	TAL BUF

Client Sample ID: MW-4

Lab Sample ID: 480-164105-3

Date Collected: 12/12/19 10:50

Matrix: Water

Date Received: 12/12/19 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	510024	12/16/19 14:04	S1V	TAL BUF

Client Sample ID: MW-9R

Lab Sample ID: 480-164105-4

Date Collected: 12/11/19 12:00

Matrix: Water

Date Received: 12/12/19 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	510225	12/17/19 14:54	LCH	TAL BUF

Client Sample ID: MW-11R

Lab Sample ID: 480-164105-5

Date Collected: 12/11/19 14:50

Matrix: Water

Date Received: 12/12/19 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		40	510024	12/16/19 14:50	S1V	TAL BUF
Total/NA	Analysis	8260C	DL	200	510225	12/17/19 15:17	LCH	TAL BUF

Client Sample ID: MW-13

Lab Sample ID: 480-164105-7

Date Collected: 12/12/19 09:00

Matrix: Water

Date Received: 12/12/19 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		80	510024	12/16/19 15:12	S1V	TAL BUF

Client Sample ID: MW-14

Lab Sample ID: 480-164105-8

Date Collected: 12/12/19 11:30

Matrix: Water

Date Received: 12/12/19 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	510024	12/16/19 15:35	S1V	TAL BUF

Eurofins TestAmerica, Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Client Sample ID: DUP

Lab Sample ID: 480-164105-9

Date Collected: 12/11/19 00:00

Matrix: Water

Date Received: 12/12/19 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2000	510024	12/16/19 15:58	S1V	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-164105-10

Date Collected: 12/03/19 00:00

Matrix: Water

Date Received: 12/12/19 13:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	509874	12/14/19 17:49	RJF	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

1

2

3

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15

Method Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

Job ID: 480-164105-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-164105-1	MW-2	Water	12/11/19 13:30	12/12/19 13:10	
480-164105-2	MW-3	Water	12/11/19 16:00	12/12/19 13:10	
480-164105-3	MW-4	Water	12/12/19 10:50	12/12/19 13:10	
480-164105-4	MW-9R	Water	12/11/19 12:00	12/12/19 13:10	
480-164105-5	MW-11R	Water	12/11/19 14:50	12/12/19 13:10	
480-164105-7	MW-13	Water	12/12/19 09:00	12/12/19 13:10	
480-164105-8	MW-14	Water	12/12/19 11:30	12/12/19 13:10	
480-164105-9	DUP	Water	12/11/19 00:00	12/12/19 13:10	
480-164105-10	TRIP BLANK	Water	12/03/19 00:00	12/12/19 13:10	

TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14228-2223
phone 716.691.2600 fax 716.691.7991

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact		Maurice Moore		Site Contact: Eric Popken (GES)		Date:		COC No:	
NYSDEC-Region 9		Tel/Fax: (716) 851-7220		Lab Contact: Orlette Johnson		Carrier:		1 of 1 COCs	
270 Michigan Avenue									
Buffalo, NY 14203									
716-851-7220									
Phone									
FAX									
Project Name: DEC Frewsburg, 300 Falconer Street									
Site No.: 907016 (GES Project #0901685)									
Contract #:									

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	8260C - TCLVOCs OL M04.2 list	1,4 Dioxane	PFAS list	MS/MSD	Sample Specific Notes:
MW-2	12-11-19	1330	G	W	3	N		X	X	X		
MW-3	12-11-19	1600	G	W	3	N		X	X	X		
MW-4	12-12-19	1050	G	W	3	N		X	X	X		
MW-9R	12-11-19	1200	G	W	4	N		X	X	X		
MW-11R	12-11-19	1450	G	W	3	N		X	X	X		
MW-12	12-12-19	1300	G	W		N		X	X	X		
MW-13	12-12-19	0900	G	W	3	N		X	X	X		
MW-14	12-12-19	1130	G	W	3	N		X	X	X		
DUP	12-11-19	-	G	W	3	N		X	X	X		
Trip Blank	12-3-19	-	G	W	2	N		X	X	X		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Special Instructions/QC Requirements & Comments:
Email report to epopken@gesonline.com, nbindner@gesonline.com, buffalolabs@gesonline.com
Category B Deliverable

Custody Seals Intact:		Custody Seal No.:	
Relinquished by: <i>lindner</i>	Company: <i>GES</i>	Received by: <i>Orlette Johnson</i>	Company: <i>TestAmerica</i>
Relinquished by:	Company:	Received by:	Company:
Relinquished by:	Company:	Received in Laboratory by:	Company:

Form No. CA-C-WI-002, Rev. 4.3, dated 12/05/2013



Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-164105-1

Login Number: 164105

List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Harper, Marcus D

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	
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	