

New York State Department of Environmental Conservation Division of
Environmental Remediation

Periodic Review Report 2018

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

May 10, 2019



Periodic Review Report 2018

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300 Falconer Road
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Acronyms

GES	Groundwater & Environmental Services, Inc.
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
gpm	gallons per minute
HDPE	high-density polyethylene
IC	institutional controls
LNAPL	light non-aqueous phase liquid
ng/L	nanograms per liter
NYSDEC	New York State Department of Environmental Conservation
OM&M	Post-Remedial Operation, Maintenance, & Monitoring
P.E.	Professional Engineer
ppt	parts per trillion
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
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

Executive Summary

Keywell LLC 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 2018:

- Semi-annual groundwater sampling and groundwater elevation measurements.
- Analysis for 1-4 Dioxane sampling via 8260C selective ion monitoring (SIM) during both the spring and fall sampling events under the direction of the New York State Department of Environmental Conservation (NYSDEC).
- Analysis for Fluorinated Alkyl Substances (FAS) during the fall 2018 sampling event under the direction of the NYSDEC.
- Monthly system discharge sampling.
- Semi-annual system influent sampling.
- 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 June 12, 2018. 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 16 through 18, 2018, and November 6 through 8, 2018. 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 2018 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).
- Fall 2018 results: All eight (8) samples collected contained AWQS exceedances for VOCs (MW-2, MW-3, MW-4, MW-9R, MW-11R, MW-12, MW-13, and MW-14). All eight (8) samples collected had detections of FAS with total concentrations ranging from 11.85 nanograms per liter (ng/L) at MW-13 to 41.23 ng/L at MW-2. While there is not regulatory level established for emerging contaminants, the USEPA published a health advisory level of 70 parts per trillion (ppt) for total FAS. None of the samples collected exceeded the 70 ppt threshold.

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.
- Installation and start-up of the new dual phase extraction skid as recommended in the 2016 *Pilot Test Summary Report*. Installation was completed and the new equipment became active in first quarter of 2019.
- 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 (RIFS) and remedial action at the Site. Based upon the RIFS 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 monitoring wells (MW-13 and MW-14) and two 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

In April 2018 the system upgrade for installation of a TPE skid was approved by the NYSDEC. System design work for the TPE skid installation was completed in 2018 which included replacement of the outdated control panel.

On April 16-18, 2018, low-flow groundwater sampling was performed at all monitoring wells. Samples were collected for VOCs and 1,4-Dioxane.

On November 6-8, 2018, low-flow groundwater sampling was performed at all monitoring wells. Samples were collected for VOCs, FAS, and 1,4-Dioxane.

Bi-weekly OM&M events were performed at the Site in 2018 to maintain the system and monitor the Site. During the fourth quarter of 2018 the system upgrade skid/control panel was solicited and ordered with delivery/installation completed in the first quarter of 2019.

2 Site Operation, Maintenance & Monitoring Plan Compliance Report

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

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

System effluent samples are collected monthly and analyzed for the parameters listed in **Table 2.2**. Samples are collected from a dedicated sample port located in the discharge piping from the air stripper effluent.

System influent samples are collected semi-annually and analyzed for the parameters listed in **Table 2.2**. System influent sampling is performed to monitor trends in influent concentrations and verify treatment system efficiency. The first half of 2018 semi-annual system influent sample was inadvertently not collected.

The annual engineering Site inspection was completed by GES on June 12, 2018. 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 2019.

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. Wells were gauged with the treatment system turned off due to the inability of the centrifugal pump to handle the increased amount of entrained air introduced to the system when opening the wells.

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.

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

Samples are tested for the parameters listed in the following table:

Table 2.2 Media Monitoring Schedule For 2018

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) 10. FAS (Non-routine / Fall 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	Semi-Annual	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 6-8, 2018 and November 16-18, 2018. 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 2018 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, monitoring well MW-14 had a detection of 1,4-Dioxane, all other sample concentrations were below detection limits.
- In the deep zone, all sample concentrations were below detection limits.

Fall 2018 Groundwater Sampling Summary

- VOCs in the shallow and deep zones are summarized below:
 - In the shallow zone, all eight (8) monitoring well samples, MW-2, MW-3, MW-4, MW-9R, MW-11R, MW-12, MW-13, and MW-14 had concentrations that exceeded NYSDEC TOGS 1.1.1 Class GA AWQS.
 - No samples were collected from the deep zone during this sampling event.
- 1,4-Dioxane in the shallow and deep zones are summarized below:
 - In the shallow zone, monitoring wells MW-2, MW-11R, and MW-13 had detections of 1,4-Dioxane, all other sample concentrations were below detection limits.
 - No samples were collected from the deep zone during this sampling event.
- FAS in the shallow and deep zones are summarized below:
 - In the shallow zone, all eight (8) monitoring well samples had detections of FAS. Total FAS concentrations ranged from 11.85 ng/L at MW-13 to 41.23 ng/L at MW-2.
 - No samples were collected from the deep zone during this sampling event.

Groundwater sampling activities conducted since 2018 indicate that current groundwater conditions do not meet the NYSDEC TOGS 1.1.1 Class GA AWQS in multiple monitoring wells.

Results of the 2018 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: 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. There was no new evidence of damage to wells/sump or surrounding areas, although existing rust and cracks are present. This should continue to be monitored and wells pads should be replaced when deteriorated to the point where damage could occur.

3.2 Groundwater Quality Monitoring

As outlined in the OM&M Plan, semi-annual groundwater monitoring and sampling was conducted by GES on April 6-8, 2018 and November 16-18, 2018. Data for the sampling events is shown in **Table 3** and laboratory analytical reports are included in **Appendix B**.

Groundwater monitoring results are summarized below:

Spring 2018 Groundwater Quality Results

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

- MW-2 at 300 micrograms per liter (µg/L)
- MW-3 at 8.3 µg/L
- MW-9R at 13 µg/L
- MW-11R at 8.0 µg/L

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

- MW-2 at 100,000 µg/L
- MW-3 at 2,100 µg/L
- MW-4 at 1,200 µg/L
- MW-9R at 3,700 µg/L
- MW-11R at 850 µg/L
- MW-12 at 110 µg/L
- MW-13 at 1,700 µg/L
- MW-14 at 2,600 µg/L

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

- MW-2 at 150 µg/L
- MW-3 at 16 µg/L
- MW-9R at 43 µg/L
- MW-11R at 7.9 µg/L

- MW-13 at 11 µg/L
- MW-14 at 12 µg/L

Trichloroethene had exceedances in the following monitoring well samples:

- MW-2 at 250 µg/L
- MW-3 at 4,500 µg/L
- MW-4 at 24,000 µg/L
- MW-9R at 2,500 µg/L
- MW-11R at 4,800 µg/L
- MW-12 at 4,300 µg/L
- MW-13 at 16,000 µg/L
- MW-14 at 5,800 µg/L

Vinyl Chloride had exceedances in the following monitoring well samples:

- MW-2 at 64,000 µg/L
- MW-3 at 12 µg/L
- MW-4 at 42 µg/L
- MW-6 at 3.2 µg/L
- MW-9R at 400 µg/L
- MW-11R at 3.0 µg/L
- MW-12 at 4.6 µg/L
- MW-13 at 19 µg/L
- MW-14 at 16 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 2018 Groundwater Quality Results

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

- MW-2 at 110,000 µg/L
- MW-3 at 980 µg/L
- MW-4 at 1,300 µg/L
- MW-9R at 4,100 µg/L
- MW-11R at 270 µg/L
- MW-12 at 110 µg/L



- MW-13 at 1,400 µg/L
- MW-14 at 1,700 µg/L

Methylene chloride had exceedances in the following monitoring well samples:

- MW-2 at 1,300 µg/L
- MW-3 at 11 µg/L

Trichloroethene had exceedances in the following monitoring well samples:

- MW-3 at 1,700 µg/L
- MW-4 at 19,000 µg/L
- MW-9R at 2,200 µg/L
- MW-11R at 1,400 µg/L
- MW-12 at 4,500 µg/L
- MW-13 at 18,000 µg/L
- MW-14 at 4,800 µg/L

Vinyl Chloride had exceedances in the following monitoring well samples:

- MW-2 at 46,000 µg/L
- MW-9R at 490 µg/L

2018 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**. Wells were gauged with the treatment system turned off due to the inability of the centrifugal pump to handle the increased amount of entrained air introduced to the system when opening the wells.

Groundwater contour maps were developed based on the spring 2018 (**Figure 3**) and fall 2018 (**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 higher than adjacent wells during the spring gauging event and lower than the wells in the fall event. The inability to gauge wells with the groundwater treatment system running prevents an accurate determination of the ability of the 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 system operation, the average flow rate for 2018 was approximately 1.01 gallons per minute (gpm). The system up-time for 2018 was approximately 93%. Aside from normal down-time for routine maintenance checks, other issues that caused additional down-time were the replacement of the extraction pump motor and shutting down the system during semi-annual groundwater gauging/sampling events. Approximately 491,726 gallons of groundwater were treated and discharged by the system in 2018. Analysis of influent and effluent VOC analytical data from December 14, 2018 demonstrates that the stripper was operating at approximately 99.99% efficiency. **Table 4** contains hour meter, totalizer, and system status data for the reporting period.

2018 System Discharge 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 2018 compared to the NYSDEC Effluent Limits provided in the 2015 OM&M Manual. **Table 6** presents a summary of treatment system influent and effluent VOC analytical results. The second semi-annual system influent sample was inadvertently missed in the fall of 2018.

Effluent results were below effluent limits with the exception of:

- TCE was above the individual VOC limit of 5 µg/L on 1/18/18 at 5.1 µg/L.
- Acetone was above the individual VOC limit of 5 µg/L on 11/15/18 at 22 µg/L.
- Total VOCs were above the total discharge limit of 20 µg/L on 11/15/18 at 24.1 µg/L.

3.4 Remedial Evaluation

Although the Site remedies and ECs are still in place and functional, an evaluation of the Site 2018 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.
 - o Therefore, operation of the groundwater treatment system in conjunction with the barrier wall is not eliminating 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.
 - Planned upgrades to the groundwater treatment system to increase the groundwater recovery rate by the treatment system which will be implemented in the first quarter of 2019 may effectively capture groundwater on the upgradient side of the barrier wall near monitoring well MW-2.



- If groundwater concentrations at monitoring well MW-2 in 2019 persist at similar levels to the 2018 concentrations, an additional remedy should be evaluated for implementation in the vicinity of monitoring well MW-2. This may include extension of the groundwater recovery and treatment system to include extraction from monitoring well MW-2 directly, or include application of another remedial solution on the downgradient side of the barrier wall.
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 groundwater recovery system at the Site in 2018 is not adequately capturing dissolved-phase VOCs from migrating past the line of extraction wells located to the west of the barrier wall.
 - o Groundwater trends at these wells should be monitored. If operation of the upgraded groundwater recovery system in 2019 does not result in decreasing groundwater concentration trends at these wells, 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 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. 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.

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

- The groundwater treatment system uptime was 93% for the reporting period. Despite the uptime, the system only averaged a discharge rate of 1.01 gpm due to the inability of the centrifugal vacuum pump to handle increased entrained air generated when attempting to apply additional vacuum to the extraction wells.
 - o GES installed a TPE skid into the system to replace the centrifugal vacuum pump in March 2019. The new system components should allow the removal and treatment of significantly more water in 2019.



- o Site groundwater concentration trends in 2019 should be evaluated following operation of the enhanced groundwater recovery system at the Site to evaluate if reductions are observed in the groundwater VOC concentrations at monitoring wells MW-2, MW-12, MW-13, and MW-14 following operation of the groundwater treatment system at a higher groundwater extraction flow rate.
- The inability to measure the groundwater level of the extraction wells with the groundwater treatment system running prevents accurate determination of the hydraulic gradient between the Conewango Creek and the Site which the groundwater recovery system is operational.
 - o The groundwater treatment system upgrades installed in March of 2019 will allow proper gauging of all wells while the system is running. Groundwater level measurements in 2019 will better allow determination of hydraulic gradients during system operation. Additionally, increased pumping rates from the extraction wells should create a groundwater depression zone upgradient of the slurry wall which should mitigate migration of Site VOCs towards Conewango Creek.
- TCE concentrations at off-Site monitoring well MW-12 continue to be above TOGS limits. The presence of Municipal Supply Well 2A west of the Site and south of MW-12 warrants further investigation. VOC concentrations at off-Site monitoring well MW-7, which is closer to Municipal Supply Well 2A was non-detect for all dissolved-phase VOCs during the spring sampling round.
 - o The groundwater treatment system upgrades installed in March of 2019 will allow for increased pumping rates which may mitigate off-site contamination migration.

5.3 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 Upgrade/Repair Extraction Well Connections – The pitless adapter, drop tube, and isolation valve for each extraction well should be replaced in 2019. These upgrades will allow for system adjustments, optimization, and easier maintenance of the system.
 - o Bedding Pump Replacement- The bedding pump that transfers water from the annular space around the storm sewer pipe failed in 2017. The inability of the groundwater treatment system to handle larger amounts of water historically made the bedding pump replacement a low priority. However, the system upgrades have increased the system capacity and will allow the additional water produced by the bedding pump to be treated.

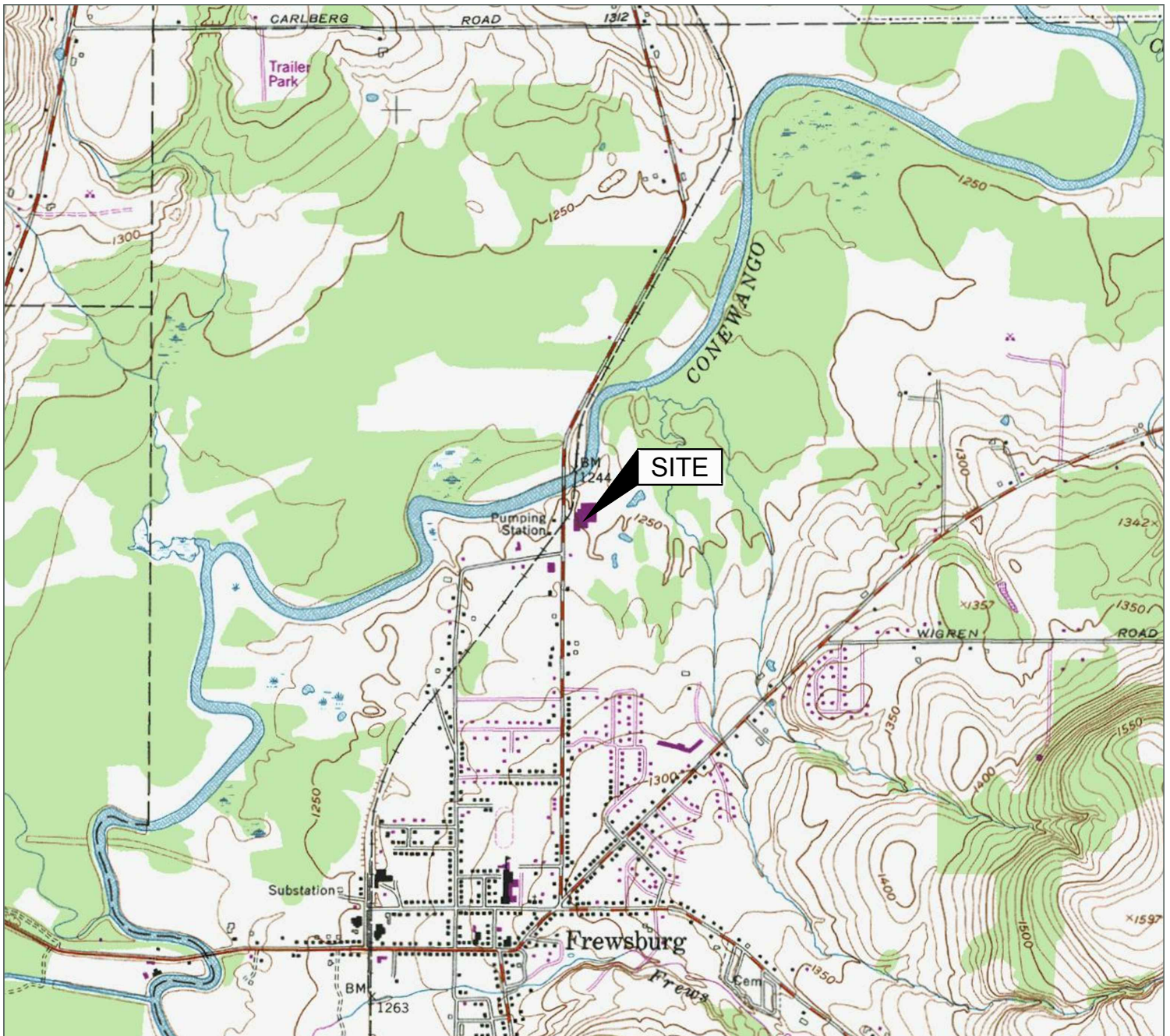


- o Treatment Building Repairs – The treatment building is generally in good condition; however, the roof has developed a few leaks that likely will increase over time. The roof was evaluated by a professional roofing company and they are recommending roof replacement due to the number of separate leaks.
- o Potable Water Supply- The potable water supply was cut off by the local water department due to a leak in the main plant area. The restoration of potable water would allow for proper cleaning and maintenance of the system as well as allowing the safety shower to function, providing on-Site personnel a safer work environment.
- Investigation Activities:
 - o Water Level Study – To better determine the effect of the treatment system on the groundwater elevation, dataloggers installed in a series of wells will allow determination of the hydraulic effect of the system on the water table.
 - o Soil Vapor Study – To determine the extent of VOC contamination below the building, a series of sub-slab vapor samples would be collected and analyzed for VOCs. The vapor study would provide data to assist in determining the suitability of the building for re-use as well as help identify hot spots for potential subsurface investigation work.
 - o Subsurface Investigation –Soil sampling of the subsurface would help determine the extent and distribution of contaminants across the Site.
- Additional Remediation Evaluation:
 - o Remedial Option Evaluation – northwest portion of the Site and off-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, the installation of some type of permeable or impermeable barrier or another remedial alternative should be evaluated.
 - Upgrades to the Site groundwater recovery system in the first quarter of 2019 may have an effect of more adequately capturing dissolved-phase VOCs in the northwest portion of the Site.
 - Alternately, the installation of a permeable barrier 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) and along the northwest property boundary (between approximately monitoring wells MW-13 and MW-4) south along the western boundary of the Site could mitigate VOC impacts present in the vicinity of monitoring wells MW-13, MW-14, and MW-12. A barrier along the northwestern property boundary could also mitigate contamination migration off-Site towards the Municipal Supply Well located across Falconer Street.



- Evaluation of permeable barrier technologies such as PlumeStop from Regenesys could provide an effective barrier with less cost than a slurry wall extension.
- An extension of the existing groundwater treatment system consisting of additional extraction wells in the northwestern portion of the Site may be another viable remedial option.
- o Remedial Option Evaluation for MW-2 – Monitoring well MW-2 has the highest groundwater VOC concentration at the Site and is located downgradient of the sheet pile barrier wall.
 - Additional soil investigation in this area would indicate if groundwater concentrations at MW-2 are a result of plume migration only, or if there are soil impacts in this area which require remediation.
 - Results of a soil investigation near monitoring well MW-2 would determine if a dissolved-phase recovery enhancement or barrier in this area would be sufficient to eliminate the groundwater-only impacts at monitoring well MW-2 (via expansion of the groundwater treatment system to monitoring well MW-2 or implementation of an in-situ permeable barrier) or if source soil treatment is required (excavation, in-situ chemical oxidation, or possible in-situ barrier implementation).

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
J.K.C.
Approved
T.P.



Scale In Feet

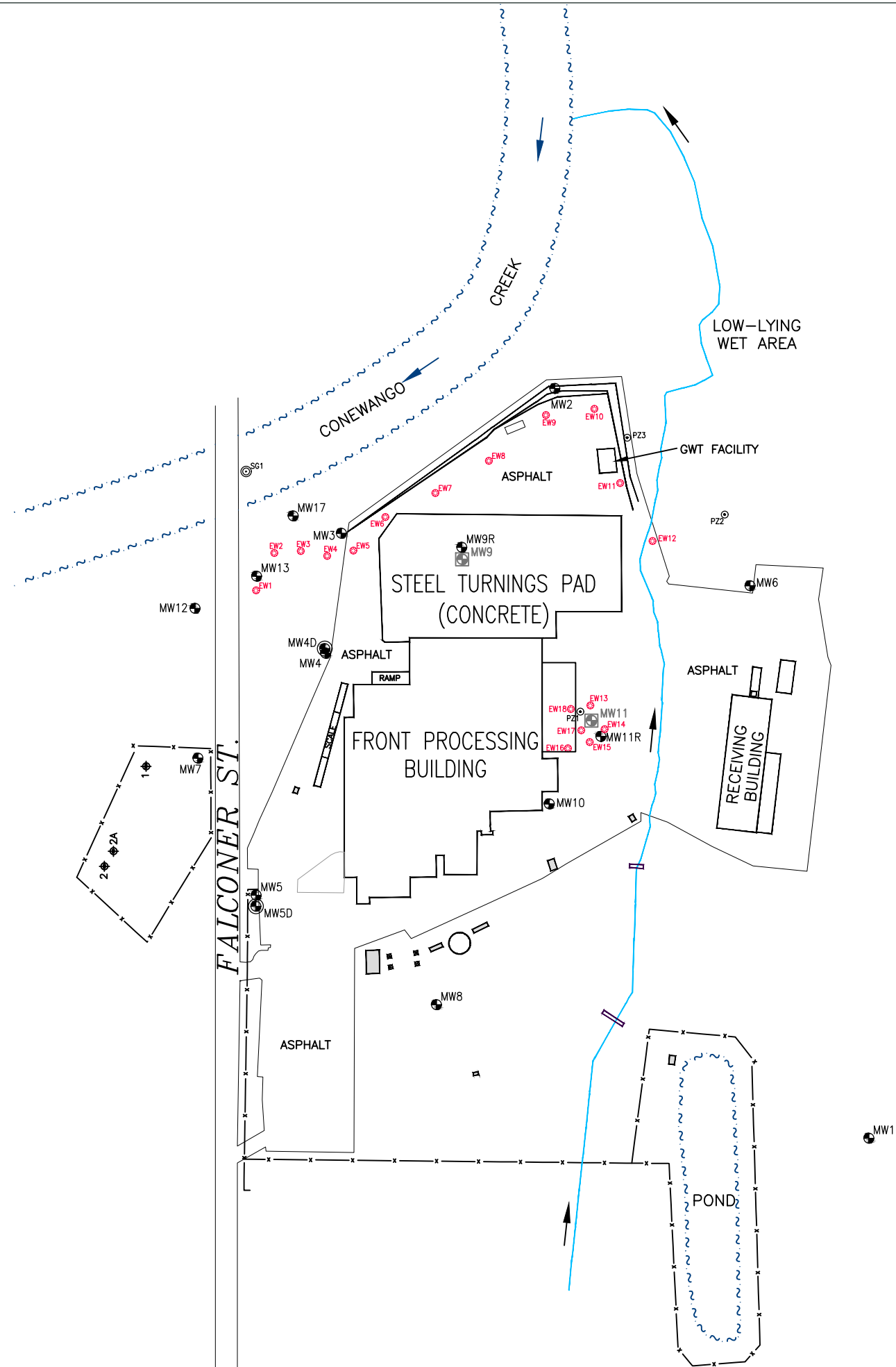
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Groundwater & Environmental Services, Inc.

Date
2/6/19
Figure
1

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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

Site Map

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

Drawn
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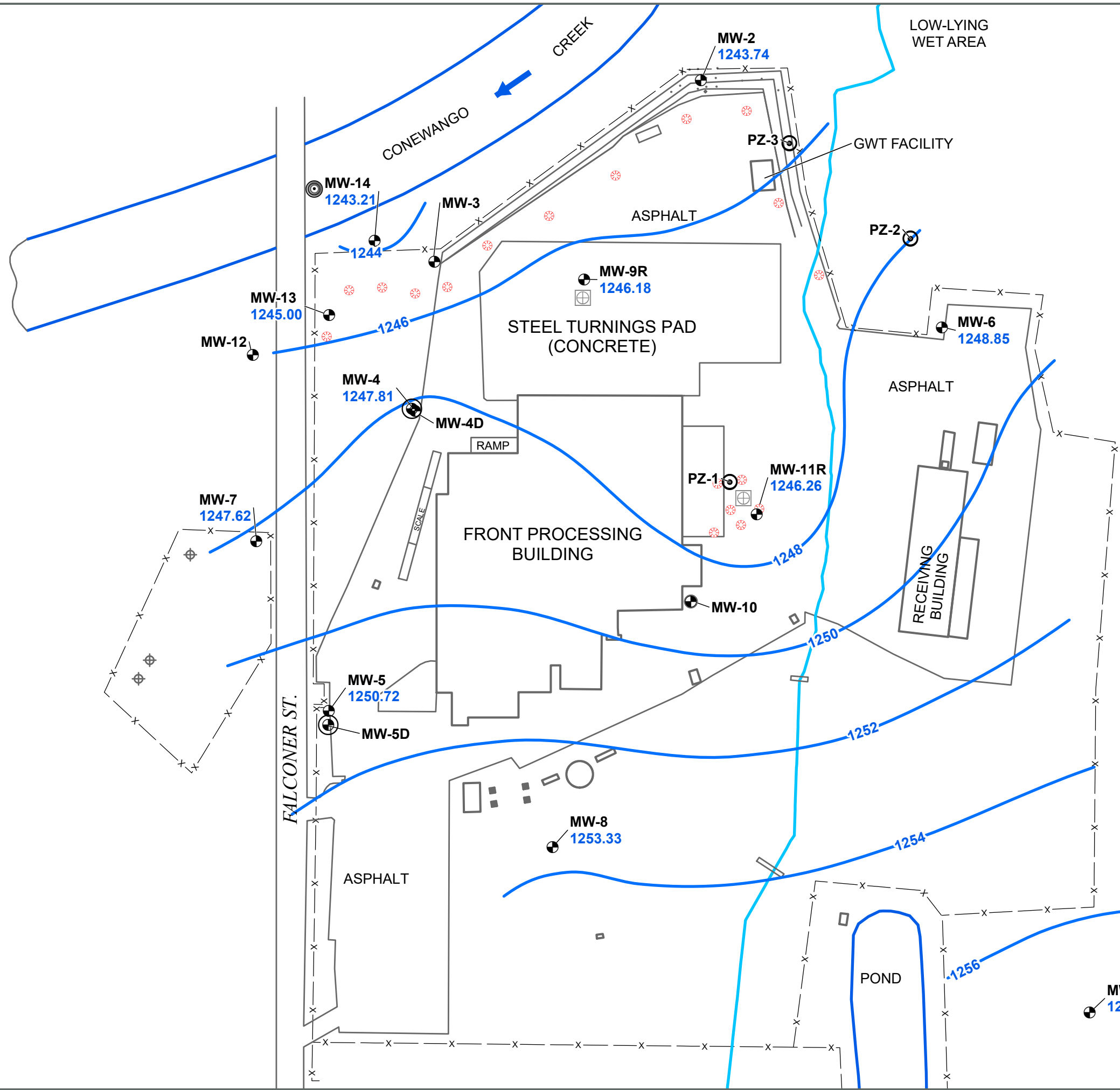
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2



Scale In Feet
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Legend

- SHALLOW MONITORING WELL
- ⊙ DEEP MONITORING WELL
- ★ EXTRACTION WELL
- ⊙ PIEZOMETER
- ⊙ SURFACE WATER/STAFF GAUGE LOCATION
- ⊕ ABANDONED WELL
- x— FENCE
- ~ GROUNDWATER CONTOUR (Feet)

Note:
GWT - Groundwater Treatment

Groundwater Contour Map - Spring Event 2018

Vac-Air Alloys, Site #907016
300 Falconer Street
Frewsburg, NY

Drawn
JTL
Designed
JTL
Approved
T.P.



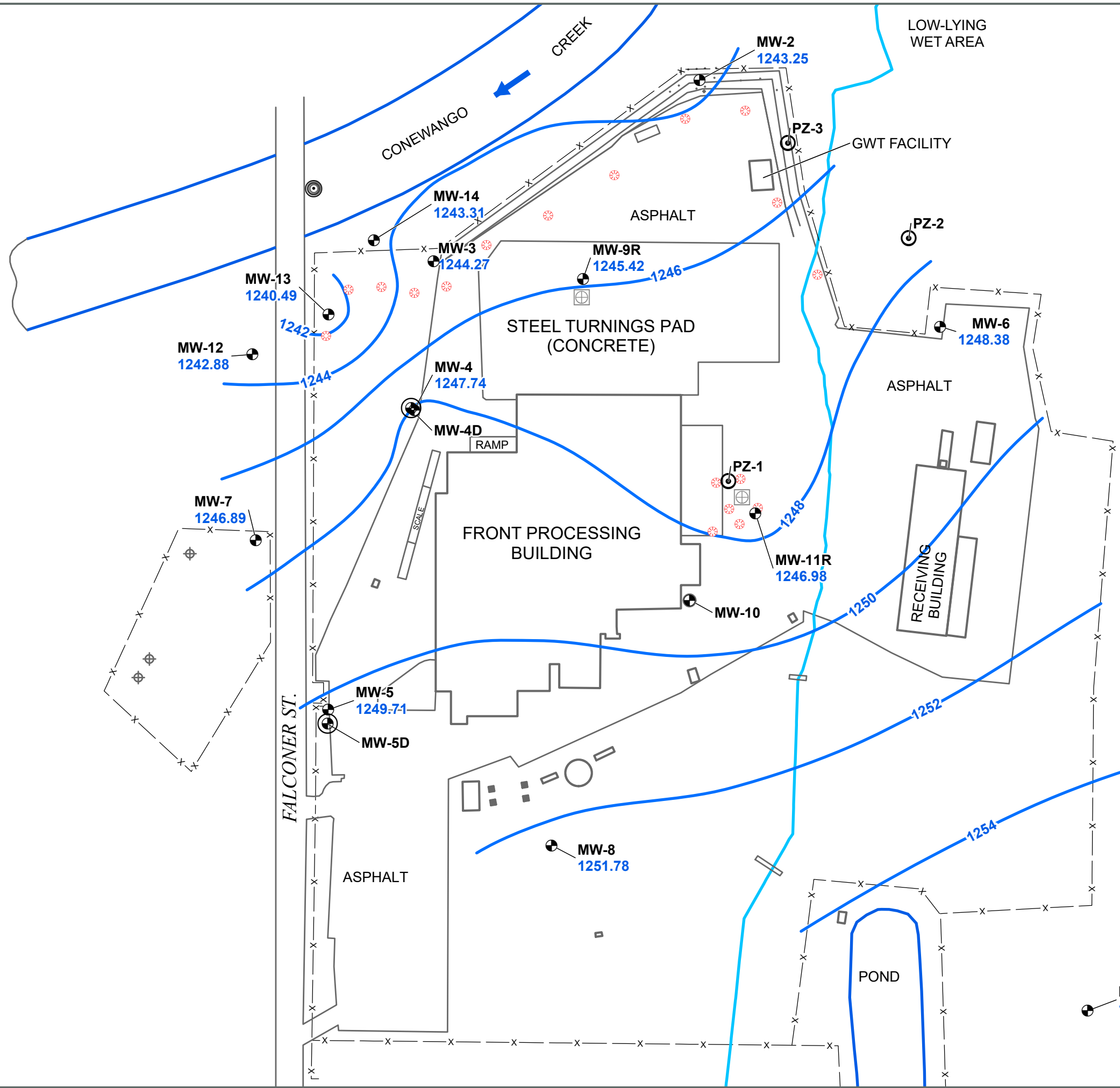
Scale In Feet (Approximate)

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Date
3/28/19
Figure
3

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Legend

- SHALLOW MONITORING WELL
- ⊙ DEEP MONITORING WELL
- ★ EXTRACTION WELL
- ⊙ PIEZOMETER
- ⊙ SURFACE WATER/STAFF GAUGE LOCATION
- ⊕ ABANDONED WELL
- ~ GROUNDWATER CONTOUR (Feet)
- x- FENCE

Note:
GWT - Groundwater Treatment

Groundwater Contour Map - Fall Event 2018

Vac-Air Alloys, Site #907016
300 Falconer Street
Frewsburg, NY

Drawn
JTL
Designed
JTL
Approved
T.P.



Date
3/28/19
Figure
4

Scale In Feet (Approximate)



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)	
			4/16-18/18	11/6-8/18	4/16-18/18	11/6-8/18
EW-1	1246.00	2	0.40	0.80	1245.60	1245.20
EW-2	1246.48	2	2.45	1.22	1244.03	1245.26
EW-3	1247.85	2	2.96	1.22	1244.89	1246.63
EW-4	1248.93	2	5.41	3.46	1243.52	1245.47
EW-5	1249.35	2	3.72	4.83	1245.63	1244.52
EW-6	1249.93	2	3.12	Flooded	1246.81	NA
EW-7	1249.60	2	4.88	Flooded	1244.72	NA
EW-8	1249.10	2	5.76	4.73	1243.34	1244.37
EW-9	1250.10	2	5.00	4.62	1245.10	1245.48
EW-10	1249.10	2	4.69	4.72	1244.41	1244.38
EW-11	1249.35	2	4.61	4.34	1244.74	1245.01
EW-12	1251.00	2	0.59	0.60	1250.41	1250.40
EW-13	1251.60	2	4.14	4.64	1247.46	1246.96
EW-14	1251.35	2	9.70	14.83	1241.65	1236.52
EW-15	1251.27	2	2.50	3.68	1248.77	1247.59
EW-16	1251.00	2	2.42	3.22	1248.58	1247.78
EW-17	1251.27	2	11.58	11.44	1239.69	1239.83
EW-18	1250.93	2	14.52	11.17	1236.41	1239.77
MW-1	1260.60	2	3.81	4.21	1256.79	1256.39
MW-2	1251.60	2	7.86	8.35	1243.74	1243.25
MW-3	1252.30	2	NM	8.03	NA	1244.27
MW-4	1250.10	2	2.29	2.36	1247.81	1247.74
MW-4D	1249.37	2	7.11	8.47	1242.26	1240.90
MW-5	1256.50	2	5.78	6.79	1250.72	1249.71
MW-5D	1255.14	2	6.61	13.79	1248.53	1241.35
MW-6	1253.70	2	4.85	5.32	1248.85	1248.38
MW-7	1253.76	2	6.14	6.87	1247.62	1246.89
MW-8	1256.65	2	3.32	4.87	1253.33	1251.78
MW-9R	1249.88	2	3.70	4.46	1246.18	1245.42
MW-10	1253.50	2	4.16	4.70	1249.34	1248.80
MW-11R	1250.80	2	4.54	3.82	1246.26	1246.98
MW-12	1243.08	2	Artesian	0.20	NA	1242.88
MW-13	1246.04	2	1.04	5.55	1245.00	1240.49
MW-14	1247.46	2	4.25	4.15	1243.21	1243.31
PZ-1	1250.22	2	4.09	4.45	1246.13	1245.77
PZ-2	1247.43	2	5.78	2.36	1241.65	1245.07
PZ-3	1250.82	2	17.28	5.44	1233.54	1245.38
SG-1	1253.91	2	10.15	12.69	1243.76	1241.22

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
Groundwater Analytical Data
April and November 2018

CAS No.	Chemical Name	NYSDEC TOGS 1.1.1 GWQS	Well ID	MW-1	MW-2		MW-3		DUP-041818 (MW-3)	MW-4		MW-4D	MW-5	MW-5D	MW-6	MW-7
			Sample Date	04/18/18	04/17/18	11/06/18	04/18/18	11/06/18	04/18/18	04/17/18	11/07/18	04/17/18	04/17/18	04/17/18	04/16/18	04/17/18
			Depth to Water (ft btoc)	3.81	7.86	8.35	8.20	8.03	8.20	2.29	2.36	7.11	5.78	6.61	4.85	6.14
71-55-6	1,1,1-Trichloroethane	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 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 < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 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 < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
79-00-5	1,1,2-Trichloroethane	1	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
75-34-3	1,1-Dichloroethane	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
75-35-4	1,1-Dichloroethene	5	µg/L	ND < 1.0 U	300 J	ND < 2000 U	8.3 J	ND < 20 U	4.2 J	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
120-82-1	1,2,4-Trichlorobenzene	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 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 < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
106-93-4	1,2-Dibromoethane	0.0006	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
95-50-1	1,2-Dichlorobenzene	3	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
107-06-2	1,2-Dichloroethane	0.6	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
78-87-5	1,2-Dichloropropane	1	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
541-73-1	1,3-Dichlorobenzene	3	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
106-46-7	1,4-Dichlorobenzene	3	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
123-91-1	1,4-Dioxane	NS	µg/L	ND < 0.40 U	ND < 40 U	0.66	ND < 0.40 U	ND < 0.40 U	ND < 0.40 U	ND < 4.0 U	ND < 0.40 U	ND < 0.40 U	ND < 0.40 U	ND < 0.40 U	ND < 0.40 U	ND < 0.40 U
78-93-3	2-Butanone	50	µg/L	ND < 5.0 U	ND < 2500 U	ND < 20000 U	ND < 50 U	ND < 200 U	ND < 50 U	ND < 500 U	ND < 4000 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U
591-78-6	2-Hexanone	50	µg/L	ND < 5.0 U	ND < 2500 UT	ND < 10000 U	ND < 50 U	ND < 100 U	ND < 50 U	ND < 500 U	ND < 2000 U	ND < 5.0 U	ND < 5.0 UT	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U
108-10-1	4-Methyl-2-pentanone	NS	µg/L	ND < 5.0 U	ND < 2500 U	ND < 10000 U	ND < 50 U	ND < 100 U	ND < 50 U	ND < 500 U	ND < 2000 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U
67-64-1	Acetone	50	µg/L	1.8 J	ND < 2500 U	ND < 20000 U	12 J	ND < 200 U	ND < 50 U	ND < 500 U	ND < 4000 U	4.3 J	1.6 J	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U
71-43-2	Benzene	1	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	0.24 J	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
75-27-4	Bromodichloromethane	50	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
75-25-2	Bromoform	50	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
74-83-9	Bromomethane	50	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
75-15-0	Carbon Disulfide	60	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
56-23-5	Carbon tetrachloride	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
108-90-7	Chlorobenzene	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
75-00-3	Chloroethane	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
67-66-3	Chloroform	7	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
74-87-3	Chloromethane	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
156-59-2	cis-1,2-Dichloroethene	5	µg/L	ND < 1.0 U	100,000	110,000	2,100	980	990	1,200	1,300	0.55 J	ND < 1.0 U	ND < 1.0 U	0.46 J	ND < 1.0 U
10061-01-5	cis-1,3-Dichloropropene	0.4	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
110-82-7	Cyclohexane	NS	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
124-48-1	Dibromochloromethane	50	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
75-71-8	Dichlorodifluoromethane	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 UT	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
100-41-4	Ethylbenzene	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
98-82-8	Isopropylbenzene	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
79-20-9	Methyl acetate	NS	µg/L	ND < 5.0 U	ND < 2500 U	ND < 5000 U	ND < 50 U	ND < 50 U	ND < 50 U	ND < 500 U	ND < 1000 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U	ND < 5.0 U
1634-04-4	Methyl tert-butyl ether	10	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
108-87-2	Methylcyclohexane	NS	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
75-09-2	Methylene chloride	5	µg/L	ND < 1.0 U	ND < 500 U	1,300 J	ND < 10 U	11 J	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
100-42-5	Styrene	50	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
127-18-4	Tetrachloroethene	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
108-88-3	Toluene	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	0.35 J	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
156-60-5	trans-1,2-Dichloroethene	5	µg/L	ND < 1.0 U	150 J	ND < 2000 U	16	ND < 20 U	6.4 J	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 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 < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
79-01-6	Trichloroethene	5	µg/L	ND < 1.0 U	250 J	ND < 2000 U	4,500	1,700	2,100	ND < 100 U	ND < 400 U	0.78 J	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
75-69-4	Trichlorofluoromethane	5	µg/L	ND < 1.0 U	ND < 500 U	ND < 2000 U	ND < 10 U	ND < 20 U	ND < 10 U	ND < 100 U	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U
75-01-4	Vinyl Chloride	2	µg/L	ND < 1.0 U	64,000	46,000	12	ND < 20 U	5.9 J	42 J	ND < 400 U	ND < 1.0 U	ND < 1.0 U	ND < 1.0 U	3.2	ND < 1.0 U
1330-20-7	Xylenes, Total	5	µg/L	ND < 2.0 U	ND < 1000 U	ND < 4000 U	ND < 20 U	ND < 40 U	ND < 20 U	ND < 200 U	ND < 800 U	ND < 2.0 U	ND < 2.0 U	ND < 2.0 U	ND < 2.0 U	ND < 2.0 U

Notes:

µg/L = micrograms per liter

ft btoc = feet below top of casing

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

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 method detection limit (MDL)

T = MS/MSD recovery is outside acceptance limits.



Table 3
Groundwater Analytical Data
April and November 2018

CAS No.	Chemical Name	NYSDEC TOGS 1.1.1 GWQS	Well ID	MW-8	MW-9R		MW-10	MW-11R		DUP-110718 (MW-11R)	MW-12		MW-13		MW-14	
			Sample Date	04/18/18	04/18/18	11/08/18	04/16/18	04/16/18	11/07/18	11/07/18	04/17/18	11/08/18	04/18/18	11/07/18	04/18/18	11/07/18
			Depth to Water (ft btoc)	3.32	8.70	4.46	4.16	4.54	3.82	3.82	Artesian	0.20	1.04	5.55	4.25	4.15
71-55-6	1,1,1-Trichloroethane	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
79-34-5	1,1,2,2-Tetrachloroethane	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
79-00-5	1,1,2-Trichloroethane	1	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
75-34-3	1,1-Dichloroethane	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
75-35-4	1,1-Dichloroethene	5	µg/L	ND < 1.0 U	13	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	8.0 J	ND < 100 U
120-82-1	1,2,4-Trichlorobenzene	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
96-12-8	1,2-Dibromo-3-chloropropane	0.04	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
106-93-4	1,2-Dibromoethane	0.0006	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
95-50-1	1,2-Dichlorobenzene	3	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
107-06-2	1,2-Dichloroethane	0.6	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
78-87-5	1,2-Dichloropropane	1	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
541-73-1	1,3-Dichlorobenzene	3	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
106-46-7	1,4-Dichlorobenzene	3	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
123-91-1	1,4-Dioxane	NS	µg/L	ND < 0.40 U	ND < 0.40 U	ND < 0.40 U	ND < 0.40 U	ND < 0.40 U	0.31 J	ND < 0.40 U	ND < 0.40 U	ND < 0.40 U	ND < 0.40 U	0.32 J	0.21 J	ND < 0.40 U
78-93-3	2-Butanone	50	µg/L	ND < 5.0 U	ND < 50 U	ND < 1000 U	ND < 5.0 U	ND < 100 U	ND < 200 U	ND < 200 U	ND < 100 U	ND < 1000 U	ND < 250 U	ND < 4000 U	ND < 100 U	ND < 1000 U
591-78-6	2-Hexanone	50	µg/L	ND < 5.0 U	ND < 50 U	ND < 500 U	ND < 5.0 U	ND < 100 U	ND < 100 U	ND < 100 U	ND < 100 U	ND < 500 U	ND < 250 U	ND < 2000 U	ND < 100 U	ND < 500 U
108-10-1	4-Methyl-2-pentanone	NS	µg/L	ND < 5.0 U	ND < 50 U	ND < 500 U	ND < 5.0 U	ND < 100 U	ND < 100 U	ND < 100 U	ND < 100 U	ND < 500 U	ND < 250 U	ND < 2000 U	ND < 100 U	ND < 500 U
67-64-1	Acetone	50	µg/L	1.2 J	17 J	ND < 1000 U	2.2 J	ND < 100 U	ND < 200 U	ND < 200 U	ND < 100 U	ND < 1000 U	ND < 250 U	ND < 4000 U	ND < 100 U	ND < 1000 U
71-43-2	Benzene	1	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
75-27-4	Bromodichloromethane	50	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
75-25-2	Bromoform	50	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
74-83-9	Bromomethane	50	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
75-15-0	Carbon Disulfide	60	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
56-23-5	Carbon tetrachloride	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
108-90-7	Chlorobenzene	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
75-00-3	Chloroethane	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
67-66-3	Chloroform	7	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
74-87-3	Chloromethane	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
156-59-2	cis-1,2-Dichloroethene	5	µg/L	ND < 1.0 U	3,700	4,100	ND < 1.0 U	850	270	280	110	110	1,700	1,400	2,600	1,700
10061-01-5	cis-1,3-Dichloropropene	0.4	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
110-82-7	Cyclohexane	NS	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
124-48-1	Dibromochloromethane	50	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
75-71-8	Dichlorodifluoromethane	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 UT	ND < 1.0 U	ND < 20 U	ND < 20 UT	ND < 20 UT	ND < 20 U	ND < 100 UT	ND < 50 U	ND < 400 UT	ND < 20 U	ND < 100 UT
100-41-4	Ethylbenzene	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
98-82-8	Isopropylbenzene	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
79-20-9	Methyl acetate	NS	µg/L	ND < 5.0 U	ND < 50 U	ND < 250 U	ND < 5.0 U	ND < 100 U	ND < 50 U	ND < 50 U	ND < 100 U	ND < 250 U	ND < 250 U	ND < 1000 U	ND < 100 U	ND < 250 U
1634-04-4	Methyl tert-butyl ether	10	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
108-87-2	Methylcyclohexane	NS	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
75-09-2	Methylene chloride	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
100-42-5	Styrene	50	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
127-18-4	Tetrachloroethene	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
108-88-3	Toluene	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
156-60-5	trans-1,2-Dichloroethene	5	µg/L	ND < 1.0 U	43	ND < 100 U	ND < 1.0 U	7.9 J	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	11 J	ND < 400 U	12 J	ND < 100 U
10061-02-6	trans-1,3-Dichloropropene	0.4	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
79-01-6	Trichloroethene	5	µg/L	ND < 1.0 U	2,500	2,200	ND < 1.0 U	4,800	1,400	1,400	4,300	4,500	16,000	18,000	5,800	4,800
75-69-4	Trichlorofluoromethane	5	µg/L	ND < 1.0 U	ND < 10 U	ND < 100 U	ND < 1.0 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 20 U	ND < 100 U	ND < 50 U	ND < 400 U	ND < 20 U	ND < 100 U
75-01-4	Vinyl Chloride	2	µg/L	ND < 1.0 U	400	490	ND < 1.0 U	3.0 J	ND < 20 U	ND < 20 U	4.6 J	ND < 100 U	19 J	ND < 400 U	16 J	ND < 100 U
1330-20-7	Xylenes, Total	5	µg/L	ND < 2.0 U	ND < 20 U	ND < 200 U	ND < 2.0 U	ND < 40 U	ND < 40 U	ND < 40 U	ND < 40 U	ND < 200 U	ND < 100 U	ND < 800 U	ND < 40 U	ND < 200 U

Notes:

µg/L = micrograms per liter

ft btoc = feet below top of casing

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

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 method detection limit (MDL)

T = MS/MSD recovery is outside acceptance limits.



Table 3
Groundwater Analytical Data
April and November 2018

Grouping	Fluorinated Alkyl Substances (FAS)	Well ID Date Depth to Water (ft btoc)	MW-2	MW-3	MW-4	MW-9R	MW-11R	DUP- 110718 (MW-11R)	MW-12	MW-13	MW-14
			11/06/18	11/06/18	11/07/18	11/08/18	11/07/18	11/07/18	11/08/18	11/07/18	11/07/18
			8.35	8.03	2.36	4.46	3.82	3.82	0.20	5.55	4.15
Perfluoroalkyl carboxylates	Perfluorobutanoic Acid (PFBA)	ng/L	ND < 23 UG	ND < 1.9 U	ND < 1.9 U	ND < 30 UG	1.5 J	1.4 J	2.6	ND < 1.8 U	ND < 8.3 UG
	Perfluoropentanoic Acid (PFPeA)	ng/L	ND < 2.0 U	ND < 1.9 U	ND < 1.9 U	ND < 4.3 UG	ND < 1.8 U	ND < 1.7 U	ND < 4.1 UG	ND < 1.8 U	ND < 3.3 UG
	Perfluorohexanoic Acid (PFHxA)	ng/L	ND < 2.0 U	ND < 1.9 U	0.88 J	1.7	ND < 1.8 U	ND < 1.7 U	1.3 J	ND < 1.8 U	1.1 J
	Perfluoroheptanoic Acid (PFHpA)	ng/L	0.76 J	0.44 J	0.59 J	0.84 J	0.35 J	ND < 1.7 U	0.95 J	1.0 J	0.77 J
	Perfluorooctanoic Acid (PFOA)	ng/L	5.2	3.4	2.4	4.8	3.0	3.0	3.7	3.3	4.4
	Perfluorononanoic Acid (PFNA)	ng/L	0.27 J	0.36 J	0.35 J	ND < 1.7 U	0.51 J	0.52 J	0.37 J	0.95 J	0.62 J
	Perfluorodecanoic Acid (PFDA)	ng/L	ND < 2.0 U	ND < 1.9 U	ND < 1.9 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.6 U	ND < 1.8 U	0.27 J
	Perfluoroundecanoic Acid (PFUnA)	ng/L	ND < 2.0 U	ND < 1.9 U	ND < 1.9 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.6 U	ND < 1.8 U	ND < 1.7 U
	Perfluorododecanoic Acid (PFDoA)	ng/L	ND < 2.0 U	ND < 1.9 U	ND < 1.9 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.6 U	ND < 1.8 U	ND < 1.7 U
	Perfluorotridecanoic Acid (PFTriA)	ng/L	ND < 2.0 U	ND < 1.9 U	ND < 1.9 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.6 U	ND < 1.8 U	ND < 1.7 U
	Perfluorotetradecanoic Acid (PFTeA)	ng/L	ND < 2.0 U	ND < 1.9 U	ND < 1.9 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.6 U	ND < 1.8 U	ND < 1.7 U
Perfluoroalkyl sulfonates	Perfluorobutanesulfonic Acid (PFBS)	ng/L	ND < 2.0 U	ND < 1.9 U	0.30 J	ND < 1.7 U	1.6 J	1.5 J	0.82 J	ND < 1.8 U	ND < 3.3 UG
	Perfluorohexanesulfonic Acid (PFHxS)	ng/L	ND < 2.0 U	1.4 JB	1.5 JB	1.9	1.1 J	1.2 J	0.79 J	1.4 JB	1.5 J
	Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	ND < 2.0 U	ND < 1.9 U	ND < 1.9 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.6 U	ND < 1.8 U	ND < 1.7 U
	Perfluorooctanesulfonic Acid (PFOS)	ng/L	35	5.7	4.8	0.95 J	6.3	6.4	1.4 J	5.1	4.5
	Perfluorodecanesulfonic Acid (PFDS)	ng/L	ND < 2.0 U	ND < 1.9 U	ND < 1.9 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.6 U	ND < 1.8 U	ND < 1.7 U
Perfluorooctane- sulfonamides	Perfluorooctane Sulfonamide (FOSA)	ng/L	ND < 2.0 U	ND < 1.9 U	ND < 1.9 U	ND < 1.7 U	ND < 1.8 U	ND < 1.7 U	ND < 1.6 U	ND < 1.8 U	ND < 1.7 U
Perfluorooctane- sulfonamidoacetic acids	N-methyl Perfluorooctane Sulfonamidoacetic Acid (NMeFOSAA)	ng/L	ND < 20 U	ND < 19 U	ND < 19 U	ND < 17 U	ND < 18 U	ND < 17 U	ND < 16 U	ND < 18 U	ND < 17 U
	N-ethyl Perfluorooctane Sulfonamidoacetic Acid (NEtFOSSA)	ng/L	ND < 20 U	ND < 19 U	ND < 19 U	ND < 17 U	ND < 18 U	ND < 17 U	ND < 16 U	ND < 18 U	ND < 17 U
Fluorinated	6:2 FTS	ng/L	ND < 20 U	2.1 J	2.4 J	1.9 J	ND < 18 U	ND < 17 U	ND < 16 U	ND < 18 U	ND < 17 U
Telomer Sulfonates	8:2 FTS	ng/L	ND < 20 U	ND < 19 U	ND < 19 U	ND < 17 U	ND < 18 U	ND < 17 U	ND < 16 U	ND < 18 U	ND < 17 U
Total FAS	70 parts per trillion*	ng/L	41.23	13.4	13.22	12.09	14.36	14.02	11.93	11.85	13.16

Notes:

ft btoc = feet below top of casing

ng/L = nanograms per liter

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

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

NA = Not analyzed

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

Table 4
Remedial System Operation Data 2018

Date	Hourmeter	Total hours since last visit	Totalizer	Bypass Totalizer	Total Volume Discharged	Operational Status
			Gallons	Gallons	Gallons	
1/3/2018	17507.9	118.4	493448.4	170807	6171.5	Operating Normally
1/5/2018	17555.4	47.5	495041.3	171401	2186.9	Operating Normally
1/9/2018	17654.3	98.9	498152.4	172587	4297.1	Operating Normally
1/11/2018	17703.4	49.1	499660.3	173145	2065.9	Operating Normally
1/16/2018	17820.3	116.9	507956.0	174291	9441.7	Operating Normally
1/19/2018	17870.3	50.0	510678.6	174745	3176.6	Operating Normally
1/23/2018	17988.3	118.0	517924.9	175910	8411.3	Operating Normally
1/25/2018	18038.0	49.7	521116.9	176353	3635.0	Operating Normally
1/30/2018	18156.8	118.8	528320.5	177353	8203.6	Operating Normally
2/1/2018	18206.5	49.7	531074.7	177712	3113.2	Operating Normally
2/6/2018	18322.6	116.1	537777.7	178571	7562.0	Operating Normally
2/8/2018	18373.7	51.1	539979.1	178935	2565.4	Operating Normally
2/13/2018	18491.0	117.3	545628.9	179821	6535.8	Operating Normally
2/15/2018	18542.8	51.8	548362.4	180180	3092.5	Operating Normally
2/20/2018	18658.9	116.1	554997.6	181033	7488.2	Operating Normally
2/23/2018	18729.5	70.6	559354.5	181497	4820.9	Operating Normally
2/27/2018	18829.4	99.9	565608.6	182158	6915.1	Operating Normally
3/1/2018	18873.8	44.4	568395.5	182447	3075.9	Operating Normally
3/6/2018	18996.1	122.3	574370.6	183485	7013.1	Operating Normally
3/8/2018	19042.7	46.6	576087.2	183921	2152.6	Operating Normally
3/13/2018	19163.0	120.3	580429.5	185091	5512.3	Operating Normally
3/15/2018	19208.3	45.3	581942.1	185534	1955.6	Operating Normally
3/20/2018	19329.1	120.8	585441.5	189008	6973.4	System shut down to check vac lines.
3/22/2018	19332.4	3.3	585468.7	189037	56.2	System restarted.
3/27/2018	19450.3	117.9	591042.2	191309	7845.5	Operating Normally
3/29/2018	19501.1	50.8	593631.4	192111	3391.2	Operating Normally
4/6/2018	19688.6	187.5	605523.8	194967	14748.4	Operating Normally
4/10/2018	19783.3	94.7	610186.8	196687	6383.0	Operating Normally
4/12/2018	19831.4	48.1	612822.3	196886	2834.5	Operating Normally
4/17/2018	19953.1	121.7	620062.9	197574	7928.6	System shut down during semi-annual GWS event.
4/19/2018	19955.6	2.5	620096.1	197588	47.2	System restarted.
4/24/2018	19074.6	-881.0	627337.8	198411	8064.7	Hourmeter issue
4/26/2018	19128.7	54.1	630603.6	198416	3270.8	Operating Normally
5/1/2018	19247.8	119.1	638640.4	200302	9922.8	Operating Normally
5/3/2018	19291.3	43.5	641537.8	200894	3489.4	Operating Normally
5/8/2018	19412.0	120.7	649622.4	202225	9415.6	Operating Normally
5/10/2018	19462.7	50.7	653056.7	202742	3951.3	Operating Normally
5/15/2018	19581.7	119.0	656630.9	203794	4626.2	Operating Normally
5/17/2018	19630.6	48.9	660505.0	204060	4140.1	Operating Normally
5/22/2018	19748.7	118.1	669068.7	204689	9192.7	Operating Normally
5/24/2018	19797.8	49.1	672486.1	204903	3631.4	Operating Normally
5/30/2018	19938.1	140.3	676358.8	206821	5790.7	Operating Normally
6/1/2018	19985.3	47.2	680081.0	206821	3722.2	Operating Normally
6/5/2018	19083.9	-901.4	688186.9	206837	8121.9	Hourmeter issue
6/7/2018	19126.0	42.1	690852.0	207263	3091.1	Operating Normally
6/12/2018	19249.8	123.8	698369.7	208512	8766.7	Operating Normally
6/14/2018	19296.1	46.3	700803.7	209078	3000.0	Operating Normally
6/19/2018	19417.0	120.9	708853.0	210340	9311.3	Operating Normally
6/21/2018	19446.3	29.3	712136.3	210840	3783.3	Operating Normally
6/26/2018	19588.4	142.1	720449.4	212195	9668.1	Operating Normally
6/28/2018	19632.3	43.9	723564.9	212697	3617.5	Operating Normally

Table 4
Remedial System Operation Data 2018

Date	Hourmeter	Total hours since last visit	Totalizer	Bypass Totalizer	Total Volume Discharged	Operational Status
			Gallons	Gallons	Gallons	
7/2/2018	Not Recorded	Unknown	730580.0	213582	7900.1	Operating Normally
7/5/2018	19798.5	166.2	730929.3	213632	399.3	System down, motor overload
7/10/2018	19922.4	123.9	736710.9	215090	7239.6	Operating Normally
7/12/2018	19966.9	44.5	738727.4	215617	2543.5	Operating Normally
7/17/2018	19086.7	-880.2	744300.6	217018	6974.2	Hourmeter issue
7/19/2018	19135.7	49.0	746916.8	217452	3050.2	Operating Normally
7/24/2018	19257.5	121.8	753156.1	218739	7526.3	Operating Normally
7/26/2018	19306.1	48.6	755431.2	219143	2679.1	Operating Normally
7/30/2018	19384.2	78.1	760695.5	219931	6052.3	System down, High stripper
8/2/2018	19385.0	0.8	760695.8	219932	1.3	System restarted.
8/7/2018	19504.1	119.1	765287.4	222148	6807.6	Operating Normally
8/9/2018	19552.3	48.2	768458.9	222214	3237.5	Pump lost prime, left down
8/14/2018	19553.8	1.5	768881.9	222222	431.0	System restarted.
8/16/2018	19604.8	51.0	771138.3	222564	2598.4	Operating Normally
8/21/2018	19720.9	116.1	776402.0	223422	6121.7	Operating Normally
8/22/2018	19746.7	25.8	778101.8	223541	1818.8	Operating Normally
8/28/2018	19889.5	142.8	784520.8	224372	7250.0	Operating Normally
8/30/2018	Not Recorded	Unknown	786693.1	224778	2578.3	Operating Normally
9/4/2018	19054.7	Unknown	794354.0	225724	8606.9	Hourmeter issue
9/6/2018	19104.3	49.6	795934.0	227707	3563.0	Operating Normally
9/11/2018	19223.0	118.7	799977.4	233262	9598.4	Operating Normally
9/13/2018	19271.8	48.8	802228.1	233460	2448.7	Operating Normally
9/18/2018	19393.2	121.4	807295.2	233914	5521.1	Operating Normally
9/20/2018	19442.1	48.9	809151.1	234137	2078.9	Operating Normally
9/25/2018	19559.3	117.2	815206.4	236074	7992.3	Operating Normally
9/27/2018	19606.0	46.7	818248.2	236941	3908.8	System down, motor overload
10/2/2018	19609.3	3.3	818458.4	237000	269.2	System down, motor pulled for repair.
10/16/2018	19611.9	2.6	818458.4	237000	0.0	Pump motor replaced. System restarted.
10/18/2018	19658.2	46.3	821116.3	237217	2874.9	Operating Normally
10/23/2018	19777.8	119.6	827247.0	237370	6283.7	Operating Normally
10/25/2018	19824.9	47.1	829612.1	237981	2976.1	Operating Normally
10/30/2018	19948.0	123.1	835063.9	243175	10645.8	Operating Normally
11/1/2018	19991.9	43.9	837215.3	244477	3453.4	Operating Normally
11/6/2018	20017.1	25.2	844497.8	246948	9753.5	Operating Normally
11/8/2018	20059.2	42.1	847318.4	247765	3637.6	Operating Normally
11/13/2018	20180.3	121.1	853069.6	249576	7562.2	Operating Normally
11/15/2018	20227.6	47.3	854806.9	250906	3067.3	Operating Normally
11/21/2018	20372.4	144.8	859690.4	250908	4885.5	Operating Normally
11/27/2018	20517.1	144.7	864255.9	255069	8726.5	Operating Normally
11/29/2018	20563.3	46.2	865827.8	256408	2910.9	Operating Normally
12/4/2018	20682.8	119.5	870303.5	256883	4950.7	Operating Normally
12/6/2018	20731.6	48.8	871586.7	257599	1999.2	Operating Normally
12/11/2018	20850.9	119.3	874570.7	259595	4980.0	Operating Normally
12/16/2018	20902.3	51.4	875709.3	260460	2003.6	Operating Normally
12/18/2018	21018.4	116.1	878741.6	262374	4946.3	Operating Normally
12/20/2018	21065.1	46.7	879494.9	262453	832.3	Operating Normally
12/27/2018	21237.9	172.8	883588.1	266222	7862.2	Operating Normally

Table 5
Monthly Treatment Data
Effluent 2018



Parameter	Units	Measurement Frequency	Effluent Limits (Daily Max.)	1/18/2018	2/15/2018	3/22/2018	4/19/2018	5/24/2018	6/7/2018	7/19/2018	8/22/2018	9/27/2018	10/25/2018	11/15/2018	12/20/2018
VOCs	ug/L	Monthly	10	6.04 J	5.7 J	2.2	.52 J	7.8 J	4.87 J	5.6 J	4.2 J	ND	1.5	24.1	5.3 J
Oil & Grease	mg/L	Monthly	15	2.0 J	1.9 J	1.3 J	1.4 J	1.3 J	ND<4.7	ND<0.46	1.3 J	2.5 JB	2.3 J	2.5 J	ND<4.7
Aluminum	ug/L	Monthly	2,700	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20
Iron	ug/L	Monthly	2,000	270	20	600	83 B	11	7.2	8.2	21	39	17	11	12
Zinc	ug/L	Monthly	400	1.7	2.1	4.1 B	12	1.1	.97 J B	3.0 B	1.8 B	2.6 B	3.3	1.4	3.4
pH	S.U.	Monthly	6.0-9.0	6	6	6	7	6	6	6	6	6	6	6	6

Notes:

mg/L = milligrams per litre

ug/L = micrograms per liter

VOCs = volatile organic compounds

Bold values exceed the NYSDEC Effluent Limits.

S.U. = Standard Unit

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
Treatment System VOC Data Summary

Sample Date	Concentration (ug/L)				
	TCE	cis-1,2-DCE	Vinyl Chloride	Acetone	Total VOCs
Influent					
12/14/2018	14,000	2,900	ND<200	ND<2,000	16,900
Effluent					
1/18/2018	5.1	0.94 J	ND<1.0	ND<10	6.04 J
2/15/2018	1.1	ND<1.0	ND<1.0	4.6 J	5.7 J
3/22/2018	2.2	ND<1.0	ND<1.0	ND<10	2.2
4/19/2018	0.52 J	ND<1.0	ND<1.0	ND<10	0.52 J
5/24/2018	1.8	ND<1.0	ND<1.0	6.0 J	7.8 J
6/7/2018	0.87 J	ND<1.0	ND<1.0	4.0 J	4.87 J
7/19/2018	2.5	ND<1.0	ND<1.0	3.1 J	5.6 J
8/22/2018	ND<1.0	ND<1.0	ND<1.0	4.2 J	4.2 J
9/27/2018	ND<1.0	ND<1.0	ND<1.0	ND<10	ND
10/25/2018	1.5	ND<1.0	ND<1.0	ND<10	1.5
11/15/2018	2.1	ND<1.0	ND<1.0	22	24.1
12/20/2018	2.2	ND<1.0	ND<1.0	3.1 J	5.3 J

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

TCE = trichloroethene

VOCs = volatile organic compounds

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

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)** 3.81
Date: 4/18/2018 **Depth to Bottom of Well (ft, TOC)** _____
Sampling Device: Peristaltic Pump **Feet of Water in Well (ft)** _____
Well ID: MW-1 **Volume of Water in Well (gal)** _____

Meter(s):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
8:50	4.23	6.59	7.65	0.33	-250.50	19.21	34.30
9:00	4.30	6.60	5.89	0.318	-229.90	3.01	0.0
9:10	4.30	6.61	6.14	0.319	-258.30	1.90	0.0
9:15	4.30	6.63	6.28	0.312	-266.30	1.58	0.0
9:20	4.30	6.54	6.33	0.320	-269.90	1.51	0.0
9:25	4.20	6.49	6.37	0.320	-269.30	1.46	0.0
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 8:50 Notes: 9:45 Sample Time 4 gal purged
 Purge End Time: 9:25
 Weather: Snow 30°
 Purge/Sampled by: J. Clay

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	4.16
Date:	4/16/2018	Depth to Bottom of Well (ft, TOC)	
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-1D	Volume of Water in Well (gal)	

Meter(s): YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
16:10	4.38	10.05	6.90	0.26	-163.70	7.41	17.60
16:20	5.52	9.93	7.94	0.249	-213.20	1.70	59.8
16:25	5.30	9.42	7.87	0.243	-209.20	1.40	33.5
16:30	5.44	9.86	7.86	0.239	-211.80	0.91	16.9
16:35	5.58	10.03	7.93	0.240	-222.00	0.66	4.25
16:40	5.62	10.06	7.91	0.242	-212.00	0.71	5.34
16:45	5.66	10.04	7.88	0.244	-214.20	0.48	3.95
16:50	5.70	10.06	7.86	0.246	-221.50	0.64	1.13
16:55	5.74	10.12	7.85	0.248	-222.00	0.59	0.00
17:00	5.80	10.17	7.84	0.250	-222.20	0.57	0.00
17:05	5.82	10.19	7.82	0.253	-220.50	0.42	0.00
17:10	5.90	10.25	7.82	0.255	-216.10	0.55	0.00
17:12	5.94	10.31	7.81	0.256	-215.10	0.52	0.00
17:14	5.94	10.27	7.83	0.255	-215.20	0.50	0.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	16:10	Notes:	17:45	Sample Time	5	gal purged
Purge End Time:	17:14					
Weather:	Rain/Snow					Small amount of orang iron algea
Purge/Sampled by:	J. Clay					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	7.86
Date:	4/17/2018	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): YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
8:40	9.06	8.93	6.63	2.33	-254.30	15.33	3.46
8:50	9.14	8.52	5.79	1.284	-229.10	2.12	0.0
8:55	9.18	8.44	5.79	1.240	-233.30	1.44	0.0
9:00	9.20	8.43	5.82	1.228	-242.70	1.37	0.0
9:05	9.23	8.40	5.87	1.213	-232.00	1.14	0.0
9:10	9.24	8.39	5.90	1.202	-241.80	1.10	0.0
9:15	9.26	8.39	5.93	1.196	-256.80	1.07	0.0
9:20	9.26	8.31	5.94	1.188	-251.30	1.07	0.0
9:25	9.28	8.31	5.96	1.185	-266.30	0.79	0.0
9:30	9.30	8.34	5.98	1.185	-266.70	0.86	0.0
9:35	9.31	8.30	6.01	1.181	-224.70	0.73	0.0
9:40	9.32	8.31	6.02	1.181	-223.30	0.82	0.0
9:42	9.32	8.30	6.03	1.182	-217.50	0.75	0.0
9:44	9.32	8.31	6.03	1.183	-220.40	0.74	0.0
9:46	9.32	8.33	6.03	1.182	-221.3	0.71	0.0
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	8:40	Notes:	9:55	Sample Time	7	gal purged
Purge End Time:	9:46					
Weather:	Snow 33°					
Purge/Sampled by:	J. Clay					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg **Tubing Diameter (ID):** 1/4"
Project #: 0901650 **Initial Depth to Water (ft, TOC)** 8.20
Date: 4/18/2018 **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):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
11:20	8.82	8.22	6.71	0.56	-248.20	10.79	3.87
11:30	12.34	8.70	7.34	0.601	-293.20	1.34	0.65
11:35	14.38	8.73	7.30	0.601	-290.60	1.01	0.54
11:40	15.08	8.40	7.27	0.598	-284.90	0.87	0.51
11:45	15.66	8.64	7.28	0.601	-284.80	0.90	0.00
11:50	16.00	8.63	7.27	0.601	-284.70	0.87	0.40
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 11:20 Notes: 13:25 Sample Time 3 gal purged
 Purge End Time: 11:50
 Weather: Rain/Snow
 Purge/Sampled by: J. Clay

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg **Tubing Diameter (ID):** 1/4"
Project #: 0901650 **Initial Depth to Water (ft, TOC)** 2.29
Date: 4/16/2018 **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):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
13:55	2.59	8.66	6.87	0.96	-242.50	12.04	3.02
14:05	2.88	9.20	7.08	1.052	-233.10	1.07	0.0
14:10	2.88	9.26	7.10	1.056	-251.90	0.93	0.0
14:15	2.90	9.26	7.11	1.058	-263.40	0.82	0.0
14:20	2.90	9.27	7.12	1.056	-234.50	0.62	0.0
14:25	2.91	9.33	7.14	1.058	-235.20	0.64	0.0
14:30	2.91	9.36	7.15	1.055	-245.20	0.58	0.0
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 13:55 Notes: 14:45 Sample Time 4 gal purged
 Purge End Time: 14:30
 Weather: Rain/Snow
 Purge/Sampled by: J. Clay

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	4.16
Date:	4/16/2018	Depth to Bottom of Well (ft, TOC)	
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-4D	Volume of Water in Well (gal)	

Meter(s):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
12:10	9.50	10.47	7.67	0.40	-229.80	19.03	36.60
12:20	8.60	10.89	7.48	0.541	-242.00	7.02	24.2
12:30	8.61	10.87	7.45	0.563	-219.10	7.89	19.4
12:35	8.61	10.91	7.45	0.572	-230.30	8.38	14.8
12:40	8.50	10.72	7.41	0.540	-230.60	7.77	9.35
12:50	8.94	10.75	7.35	0.523	-235.30	7.39	6.91
12:55	8.75	10.84	7.17	0.515	-238.20	7.25	11.90
13:00	8.78	10.82	7.34	0.516	-230.70	7.27	21.50
13:05	8.68	10.71	7.33	0.482	-229.00	6.89	19.10
13:10	8.70	10.13	7.22	0.431	-230.00	5.14	21.90
13:12	8.70	10.07	7.03	0.199	-246.70	3.69	20.90
13:14	8.65	9.89	6.94	0.171	-234.30	3.16	31.70
13:16	8.65	9.23	6.82	0.145	-245.70	3.24	47.40
13:18	8.65	9.35	6.78	0.142	-225.00	3.44	46.90
13:20	8.65	9.34	6.74	0.131	-220	3.7	46.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	12:10	Notes:	13:35	Sample Time	5	gal purged
Purge End Time:	13:20					
Weather:	Snow/Wind 30°					
Purge/Sampled by:	J. Clay					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg **Tubing Diameter (ID):** 1/4"
Project #: 0901650 **Initial Depth to Water (ft, TOC)** 5.78
Date: 4/17/2018 **Depth to Bottom of Well (ft, TOC)** _____
Sampling Device: Peristaltic Pump **Feet of Water in Well (ft)** _____
Well ID: MW-5 **Volume of Water in Well (gal)** _____

Meter(s):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
10:20	6.06	8.38	6.36	0.52	-188.70	6.62	153.00
10:30	6.06	8.68	7.36	0.507	-244.30	1.89	101.1
10:40	6.06	8.60	7.36	0.504	-247.90	1.39	12.1
10:45	6.06	8.60	7.38	0.503	-255.40	1.33	9.9
10:50	6.06	8.64	7.37	0.503	-251.80	1.43	7.99
10:55	6.06	8.57	7.35	0.501	-258.70	1.37	5.20
11:00	6.06	8.56	7.34	0.500	-249.00	1.40	5.01
11:05	6.06	8.52	7.35	0.501	-254.90	1.39	5.12
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 10:20 Notes: 11:20 Sample Time 9 gal purged
 Purge End Time: 11:05 MS/MSD Collected _____
 Weather: Snow 32° Small amount of orang iron algea _____
 Purge/Sampled by: J. Clay _____

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg **Tubing Diameter (ID):** 1/4"
Project #: 0901650 **Initial Depth to Water (ft, TOC)** 6.61
Date: 4/17/2018 **Depth to Bottom of Well (ft, TOC)** _____
Sampling Device: Peristaltic Pump **Feet of Water in Well (ft)** _____
Well ID: MW-5D **Volume of Water in Well (gal)** _____

Meter(s):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
11:20	6.64	8.95	7.26	0.53	-230.10	21.90	7.04
11:30	6.62	10.09	7.45	0.569	-237.00	9.28	0.0
11:35	6.61	10.24	7.44	0.571	-245.70	9.38	0.0
11:40	6.61	10.27	7.43	0.572	-230.00	9.30	0.0
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 11:20 Notes: 11:55 Sample Time 3 gal purged
 Purge End Time: 11:40
 Weather: Snow/Wind 30°
 Purge/Sampled by: J. Clay

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg **Tubing Diameter (ID):** 1/4"
Project #: 0901650 **Initial Depth to Water (ft, TOC)** 4.16
Date: 4/16/2018 **Depth to Bottom of Well (ft, TOC)** _____
Sampling Device: Peristaltic Pump **Feet of Water in Well (ft)** _____
Well ID: MW-6 **Volume of Water in Well (gal)** _____

Meter(s): YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
13:10	5.20	7.52	7.26	0.59	-213.50	7.70	2.10
13:20	5.31	7.10	5.94	0.586	-208.20	2.50	2.8
13:30	5.21	7.00	5.93	0.586	-207.20	1.70	0.0
13:35	5.15	6.94	5.96	0.586	-209.30	1.50	0.0
13:40	5.11	6.72	5.96	0.584	-216.00	1.37	0.00
13:45	5.10	6.76	5.98	0.584	-213.20	1.30	0.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 13:10 Notes: 13:30 Sample Time 2 gal purged
 Purge End Time: 13:45
 Weather: Rain/Snow large amount of orang iron algae
 Purge/Sampled by: J. Clay

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	4.16
Date:	4/16/2018	Depth to Bottom of Well (ft, TOC)	
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	
Well ID:	MW-7	Volume of Water in Well (gal)	

Meter(s):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
15:50	6.41	10.13	7.67	0.61	-235.90	6.33	829.00
15:55	6.39	9.97	7.36	0.701	-253.20	0.94	105.3
16:00	6.38	10.05	7.36	0.700	-242.70	0.69	117.0
16:05	6.39	9.99	7.34	0.698	-241.00	0.66	37.6
16:10	6.39	9.98	7.34	0.696	-240.30	0.63	16.40
16:15	64.00	9.99	7.33	0.696	-240.70	0.58	10.15
16:20	6.41	10.01	7.33	0.696	-242.10	0.53	7.33
16:25	6.41	9.87	7.32	0.696	-235.10	0.52	3.29
16:30	6.40	9.89	7.27	0.694	-236.90	0.35	0.00
16:35	6.42	10.07	7.33	0.698	-240.80	0.36	3.60
16:40	6.42	10.08	7.33	0.700	-237.90	0.44	7.16
16:45	6.42	10.09	7.31	0.700	-235.90	0.46	7.47
16:50	6.41	10.02	7.29	0.698	-231.90	0.49	3.37
16:52	6.41	9.98	7.28	0.697	-235.20	0.49	2.01
16:54	6.41	9.96	7.27	0.697	-237.2	0.5	0.65
16:56	6.41	9.90	7.27	0.696	-234.7	0.5	0.76
16:58	6.41	9.94	7.28	0.696	-240.6	0.5	0.77
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	15:50	Notes:	17:15	Sample Time	5	gal purged
Purge End Time:	17:14					
Weather:	Rain/Snow					
Purge/Sampled by:	J. Clay					

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg **Tubing Diameter (ID):** 1/4"
Project #: 0901650 **Initial Depth to Water (ft, TOC)** 3.32
Date: 4/18/2018 **Depth to Bottom of Well (ft, TOC)** _____
Sampling Device: Peristaltic Pump **Feet of Water in Well (ft)** _____
Well ID: MW-8 **Volume of Water in Well (gal)** _____

Meter(s):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
10:05	3.35	6.61	5.66	0.32	-170.50	11.53	1.41
10:10	3.34	6.92	7.25	0.328	-250.80	2.31	0.00
10:15	3.36	6.78	7.38	0.330	-264.10	1.48	0.00
10:20	3.36	6.73	7.33	0.337	-270.30	1.02	0.00
10:25	3.38	6.73	7.29	0.346	-273.70	0.93	0.00
10:30	3.39	6.75	7.27	0.354	-282.10	0.86	0.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 10:05 Notes: 10:45 Sample Time 4 gal purged
 Purge End Time: 10:30
 Weather: Cloudy 30°
 Purge/Sampled by: J. Clay

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg **Tubing Diameter (ID):** 1/4"
Project #: 0901650 **Initial Depth to Water (ft, TOC)** 4.16
Date: 4/16/2018 **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):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
14:55	4.56	10.78	7.94	0.92	-309.40	0.06	19.90
15:05	5.72	9.89	7.76	0.951	-304.10	0.01	5.9
15:10	5.90	10.50	7.73	0.955	-309.80	0.02	5.5
15:15	6.05	10.44	7.70	0.958	-313.50	0.02	2.3
15:20	6.11	10.60	7.41	0.955	-293.50	0.00	2.20
15:25	6.11	10.59	7.36	0.953	-295.60	0.00	0.31
15:30	6.11	10.59	7.44	0.949	-302.50	0.00	0.00
15:35	6.11	10.50	7.45	0.944	-302.50	0.00	0.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 15:05 Notes: 15:50 Sample Time 5 gal purged
 Purge End Time: 15:35
 Weather: Rain/Snow Small amount of orang iron algae
 Purge/Sampled by: J. Clay

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg **Tubing Diameter (ID):** 1/4"
Project #: 0901650 **Initial Depth to Water (ft, TOC)** 4.16
Date: 4/16/2018 **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):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
14:20	6.15	7.63	6.53	0.44	-203.90	6.51	169.00
14:30	6.70	8.17	6.87	0.456	-221.50	1.88	379.0
14:40	10.08	8.07	6.79	0.457	-184.50	1.42	4.5
14:45	10.22	8.07	6.86	0.446	-181.10	1.89	10.0
14:50	10.39	8.01	6.83	0.401	-175.70	4.01	
14:55	10.18	8.03	7.18	0.239	-197.30	0.00	18.50
15:00	10.06	7.93	7.39	0.208	-212.40	0.00	10.20
15:05	10.06	7.90	7.31	0.196	-218.70	0.00	6.28
15:10	10.06	8.02	7.27	0.263	-208.30	0.00	2.13
15:15	10.05	8.11	7.27	0.294	-211.70	0.00	0.00
15:20	10.05	8.11	7.28	0.347	-214.90	0.00	0.00
15:25	10.05	8.17	7.29	0.358	-210.10	0.00	0.00
15:30	10.05	8.12	7.32	0.364	-210.00	0.00	0.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 14:20 Notes: 16:00 Sample Time 5 gal purged
 Purge End Time: 15:30
 Weather: Rain/Snow Small amount of orang iron algea
 Purge/Sampled by: J. Clay

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg **Tubing Diameter (ID):** 1/4"
Project #: 0901650 **Initial Depth to Water (ft, TOC)** Artesian
Date: 4/17/2018 **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): YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
14:50	0.32	7.46	7.54	1.05	-242.90	5.69	56.70
14:55	1.46	7.60	6.98	1.043	-244.80	0.79	16.8
15:00	1.78	7.63	6.96	1.041	-236.50	0.49	5.7
15:05	1.76	7.58	6.96	1.040	-233.20	0.60	3.0
15:10	1.78	7.54	6.97	1.040	-229.60	0.58	0.00
15:15	1.81	7.66	6.97	1.042	-238.50	0.61	0.00
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 14:50 **Notes:** 15:30 **Sample Time** 2 **gal purged**
Purge End Time: 15:15
Weather: Rain/Snow
Purge/Sampled by: J. Clay

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	1.04
Date:	4/18/2018	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):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
13:30	2.40	8.50	7.74	0.53	-278.30	14.15	109.80
13:40	4.96	8.43	7.63	0.512	-284.00	1.31	62.1
13:45	5.31	8.51	7.60	0.516	-283.10	1.09	58.8
13:50	5.63	8.67	7.55	0.530	-284.70	0.74	42.9
13:55	5.61	8.66	7.53	0.539	-285.30	0.77	31.90
14:00	5.64	8.66	7.51	0.551	-286.50	0.70	55.60
14:05	5.66	8.71	7.48	0.565	-285.60	0.68	24.40
14:10	5.64	8.75	7.47	0.573	-287.20	0.61	12.90
14:15	5.70	8.86	7.46	0.585	-285.00	0.60	9.93
14:20	5.76	8.89	7.44	0.597	-272.00	0.45	7.60
14:25	5.80	8.88	7.42	0.605	269.90	0.44	5.06
14:30	5.82	8.94	7.41	0.615	-271.30	0.40	3.88
14:32	5.83	8.95	7.41	0.618	-271.30	0.44	3.88
14:34	5.84	8.93	7.41	0.619	-272.20	0.49	3.96
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	13:30	Notes:	14:40	Sample Time	6	gal purged
Purge End Time:	14:34					
Weather:	Cloudy 32°					
Purge/Sampled by:	J. Clay					

Small amount of orang iron algea

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site: NYSDEC Frewsburg **Tubing Diameter (ID):** 1/4"
Project #: 0901650 **Initial Depth to Water (ft, TOC)** 4.25
Date: 4/18/2018 **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):

YSI 556 MPS (022859) La Motte 202WE (24766)

Time	Depth to Water (ft, TOC)	Temperature (°C)	pH	Specific Conductance (mS/cm)	ORP	DO (mg/L)	Turbidity (NTU)
12:35	4.67	7.23	7.53	0.77	-228.60	16.00	8.36
12:45	6.02	8.22	7.40	0.831	-285.10	1.24	7.2
12:50	6.14	8.29	7.39	0.832	-281.50	1.19	7.8
12:55	6.33	8.41	7.37	0.833	-270.40	0.88	6.1
13:00	6.22	8.23	7.35	0.832	-284.20	0.89	3.52
13:05	6.08	8.35	7.33	0.832	284.70	0.72	0.95
13:10	6.03	8.36	7.32	0.833	285.50	0.76	0.70
13:15	6.03	8.34	7.30	0.830	284.90	0.68	0.29
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 12:35 Notes: 13:25 Sample Time 3 gal purged
 Purge End Time: 13:15
 Weather: Rain/Snow
 Purge/Sampled by: J. Clay

WELL PURGING RECORD

LOW-FLOW SAMPLING METHOD



Site:	NYSDEC Frewsburg	Tubing Diameter (ID):	1/4"
Project #:	0901650	Initial Depth to Water (ft, TOC)	8.43
Date:	11/6/2018	Depth to Bottom of Well (ft, TOC)	15.35
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)
11:10	8.59	15.13	6.49	3.33	-69.10	12.20	32.02
11:15	8.67	15.15	6.46	1.862	-70.30	0.78	24.26
11:20	8.67	15.18	6.46	1.645	-62.00	0.72	22.47
11:25	8.67	15.19	6.47	1.563	-59.50	.69.	16.33
11:30	8.67	15.23	6.47	1.524	-59.40	58.00	17.78
11:35	8.68	15.23	6.47	1.512	-58.10	0.51	14.54
11:40	8.68	15.19	6.47	1.505	-57.50	0.50	11.51
11:45	8.68	15.22	6.47	1.501	-62.20	0.45	10.10
11:50	8.68	15.14	6.48	1.512	-67.00	0.45	7.19
11:55	8.68	15.13	6.48	1.517	-68.10	0.42	8.02
12:00	8.68	15.15	6.48	1.516	-70.80	0.38	8.05
12:05	8.68	15.19	6.48	1.516	-69.70	0.38	8.07
12:10	8.68	15.20	6.47	1.516	-67.10	0.38	8.06
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	11:10	Notes:	12:15	Sample Time	5	gal purged
Purge End Time:	12:10					
Weather:	55° Cloudy/rain			Sheen		
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)	8.20
Date:	11/6/2018	Depth to Bottom of Well (ft, TOC)	23.00
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)
14:10	9.23	16.68	7.46	0.87	35.40	0.74	14.48
14:15	12.45	16.47	7.40	0.878	39.80	0.51	11.04
14:20	13.64	16.64	7.40	0.873	42.60	0.59	7.50
14:25	13.64	16.64	7.39	0.869	45.10	0.57	6.21
14:30	14.03	16.63	7.38	0.867	46.00	0.52	4.41
14:35	15.27	16.49	7.38	0.865	44.90	0.47	4.34
14:40	15.27	16.40	7.38	0.863	44.70	0.46	3.28
14:45	15.27	16.40	7.38	0.863	44.80	0.46	2.12
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	14:10	Notes:	14:45	Sample Time	3.5 gal purged
Purge End Time:	14:45				
Weather:	45° 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)** 2.29
Date: 11/7/2018 **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)
8:10	2.90	15.61	8.13	1.56	-56.80	8.29	11.52
8:15	2.85	16.29	7.41	1.612	-56.00	0.74	4.45
8:20	2.85	16.37	7.43	1.479	-46.30	0.50	2.63
8:25	2.67	16.47	7.43	1.420	-43.80	0.38	2.37
8:30	2.87	16.50	7.43	1.421	-33.60	0.35	1.26
8:35	2.87	16.48	7.43	1.420	-33.70	0.32	1.64
8:40	2.87	16.50	7.44	1.421	-27.00	0.37	1.82
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time: 8:10 Notes: 8:40 Sample Time 3.5 gal purged
 Purge End Time: 8:40
 Weather: Cloudy 40°
 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)	2.11
Date:	11/8/2018	Depth to Bottom of Well (ft, TOC)	22.50
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)
8:20	4.46	13.94	7.71	1.37	-56.90	4.00	98.11
8:25	4.67	14.35	7.34	1.494	-74.80	8.47	66.0
8:30	4.75	14.29	7.35	1.419	-76.40	1.22	65.2
8:35	4.75	14.30	7.45	1.122	-67.20	8.42	18.0
8:40	4.75	14.48	7.36	1.403	-77.10	2.19	8.56
8:45	4.62	14.58	7.33	1.376	-78.10	1.16	6.81
8:50	4.62	14.51	7.32	1.370	-79.80	1.27	8.15
8:55	4.62	14.52	7.32	1.358	-76.50	1.12	4.20
9:00	4.62	14.62	7.32	1.359	-76.30	1.49	4.12
9:05	4.62	14.67	7.32	1.369	-78.10	0.99	4.63
9:10	4.62	14.74	7.37	1.369	-71.60	1.16	6.15
9:15	4.62	14.73	7.32	1.369	-71.60	1.06	2.57
9:20	4.62	14.82	7.33	1.376	-73.30	0.95	3.03
9:23	4.62	14.86	7.32	1.375	-69.70	0.94	2.78
9:26	4.62	14.84	7.32	1.379	-70	1.0	2.63
9:29	4.62	14.86	7.32	1.378	-69.8	1.0	1.85
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	8:20	Notes:	9:30	Sample Time	5	gal purged
Purge End Time:	9:29					
Weather:	35° Cloudy					
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)	4.97
Date:	11/7/2018	Depth to Bottom of Well (ft, TOC)	15.14
Sampling Device:	Peristaltic Pump	Feet of Water in Well (ft)	3.46
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)
9:50	4.97	16.54	7.90	0.69	15.40	3.79	9.37
9:55	4.51	16.89	7.52	0.691	19.80	1.94	6.5
10:00	3.89	16.85	7.31	0.718	21.60	1.15	4.7
10:05	3.87	16.90	7.27	0.735	21.60	0.83	3.6
10:10	3.87	16.88	7.27	0.746	22.00	0.62	2.60
10:15	3.87	16.90	7.27	0.752	24.80	0.49	1.82
10:20	3.87	16.88	7.27	0.754	23.40	0.47	1.92
10:25	3.87	16.98	7.27	0.751	24.50	0.42	1.37
10:30	3.87	16.93	7.27	0.752	20.30	0.39	1.16
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	9:50	Notes:	10:30	Sample Time	3	gal purged
Purge End Time:	10:30					
Weather:	Cloudy 40°					
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)	0.20
Date:	11/8/2018	Depth to Bottom of Well (ft, TOC)	10.00
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)
10:35	0.20	12.91	8.02	1.40	57.40	65.40	3.00
10:40	2.15	13.93	7.79	1.413	51.20	6.00	2.0
10:45	2.34	13.97	7.62	1.412	45.40	0.60	1.7
10:50	2.45	14.01	7.58	1.411	42.30	0.45	1.0
10:55	2.45	14.04	7.56	1.412	41.10	0.37	0.70
11:00	2.45	14.04	7.54	1.411	37.60	0.36	0.73
11:05	2.45	14.01	7.54	1.408	36.30	0.34	0.65
11:10	2.45	14.01	7.54	1.407	35.90	0.34	0.79
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	0:00	Notes:	11:15	Sample Time	4	gal purged
Purge End Time:	11:10					
Weather:	35° Cloudy					
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)	5.55
Date:	11/7/2018	Depth to Bottom of Well (ft, TOC)	18.55
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)
12:35	3.82	13.94	8.20	0.85	-28.60	10.75	75.35
12:40	4.58	14.17	7.70	0.836	-42.20	2.64	77.3
12:45	5.57	14.10	7.71	0.799	-57.00	1.23	83.7
12:50	6.16	14.13	7.61	0.812	-52.20	2.25	76.1
12:55	5.75	14.17	7.55	0.839	-29.80	0.48	59.65
13:00	5.57	14.29	7.56	0.859	-18.10	0.47	48.16
13:05	5.42	14.38	7.45	0.881	-10.20	0.38	43.88
13:10	5.45	14.36	7.40	0.902	-12.20	0.31	38.87
13:15	5.74	14.25	7.37	0.926	-3.30	0.28	25.48
13:20	5.74	14.40	7.35	0.927	-3.30	0.26	21.98
13:25	5.74	14.31	7.36	0.933	-3.20	0.27	21.83
13:30	5.74	14.23	7.36	0.932	-3.30	0.28	21.82
13:35	5.74	14.23	7.36	0.933	-3.10	0.27	21.81
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	12:35	Notes:	13:35	Sample Time	6.5 gal purged
Purge End Time:	13:35				
Weather:	45° Sunny				
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)	4.15
Date:	11/7/2018	Depth to Bottom of Well (ft, TOC)	20.15
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)
14:30	5.35	13.23	7.83	1.19	-99.90	2.93	63.82
14:35	7.32	12.83	7.26	1.180	-91.80	1.62	43.8
14:40	7.64	12.81	7.18	1.173	-83.60	1.11	34.7
14:45	7.42	12.89	7.19	1.169	-77.30	0.94	25.2
14:50	7.51	12.89	7.23	1.161	-26.70	1.07	19.12
14:55	6.22	12.89	7.27	1.157	-53.60	0.91	14.57
15:00	6.23	12.77	7.31	1.148	-58.60	0.85	12.55
15:05	6.23	12.97	7.34	1.137	-53.70	0.70	8.47
15:10	6.23	12.95	7.35	1.132	-51.70	0.59	9.23
15:15	6.13	12.99	7.35	1.125	-50.10	0.55	8.41
15:20	6.13	12.86	7.36	1.119	-49.10	0.46	4.91
15:25	6.13	12.87	7.36	1.118	-50.70	0.42	4.87
15:30	6.13	12.87	7.36	1.119	-48.70	0.31	3.21
15:35	6.21	12.86	7.35	1.121	-49.90	0.47	3.19
		±3%	±0.1	±3%	±10mV	±10% or <0.5mg/L	±10% or <1NTU

Purge Start Time:	14:30	Notes:	15:35	Sample Time	3	gal purged
Purge End Time:	15:35					
Weather:	Clear 45°					
Purge/Sampled by:	P.Colern					

Appendix B – Laboratory Analytical Reports

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-134506-1

Client Project/Site: Frewsburg Site #907016

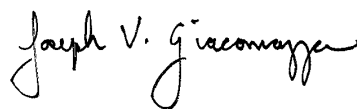
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Maurice Moore



Authorized for release by:

5/1/2018 2:45:06 PM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager

(484)685-0864

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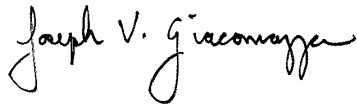
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions 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.

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
5/1/2018 2:45:06 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-134506-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

TestAmerica Job ID: 480-134506-1

Job ID: 480-134506-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-134506-1

Comments

No additional comments.

Receipt

The samples were received on 4/18/2018 6:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.8° C and 4.2° C.

Receipt Exceptions

One or more containers for the following samples were received broken or leaking: one 40ml vial received broken. MW-1 (480-134506-1), MW-2 (480-134506-2), MW-3 (480-134506-3), MW-4 (480-134506-4), MW-4D (480-134506-5), MW-5 (480-134506-6), MW-5 (480-134506-6[MS]), MW-5 (480-134506-6[MSD]), MW-5D (480-134506-7), MW-6 (480-134506-8), MW-7 (480-134506-9), MW-8 (480-134506-10), MW-9R (480-134506-11), MW-10 (480-134506-12), MW-11R (480-134506-13), MW-12 (480-134506-14), MW-13 (480-134506-15), MW-14 (480-134506-16), DUP-041818 (480-134506-17) and Trip Blank (480-134506-18).

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-3 (480-134506-3), MW-4 (480-134506-4), MW-9R (480-134506-11), MW-11R (480-134506-13) and MW-12 (480-134506-14). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 460-514615 recovered above the upper control limit for Carbon tetrachloride and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-13 (480-134506-15), MW-14 (480-134506-16) and DUP-041818 (480-134506-17). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-514816 was outside the method criteria for the following analyte(s): Dichlorodifluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-514816 recovered outside control limits for the following analyte: 2-Hexanone. This analyte was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2 (480-134506-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260C SIM: The following sample was diluted due to the nature of the sample matrix: MW-4 (480-134506-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260C SIM: The following sample was diluted due to the abundance of non-target analytes: MW-2 (480-134506-2). Elevated reporting limits (RLs) are provided.

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

VOA Prep

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

Detection Summary

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-1

Lab Sample ID: 480-134506-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	5.0	1.1	ug/L	1		8260C	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 480-134506-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	300	J	500	170	ug/L	500		8260C	Total/NA
cis-1,2-Dichloroethene	100000		500	130	ug/L	500		8260C	Total/NA
trans-1,2-Dichloroethene	150	J	500	90	ug/L	500		8260C	Total/NA
Trichloroethene	250	J	500	110	ug/L	500		8260C	Total/NA
Vinyl chloride	64000		500	30	ug/L	500		8260C	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 480-134506-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	8.3	J	10	3.4	ug/L	10		8260C	Total/NA
Acetone	12	J	50	11	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	2100		10	2.6	ug/L	10		8260C	Total/NA
trans-1,2-Dichloroethene	16		10	1.8	ug/L	10		8260C	Total/NA
Trichloroethene	4500		10	2.2	ug/L	10		8260C	Total/NA
Vinyl chloride	12		10	0.60	ug/L	10		8260C	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 480-134506-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1200		100	26	ug/L	100		8260C	Total/NA
Trichloroethene	24000		100	22	ug/L	100		8260C	Total/NA
Vinyl chloride	42	J	100	6.0	ug/L	100		8260C	Total/NA

Client Sample ID: MW-4D

Lab Sample ID: 480-134506-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.3	J	5.0	1.1	ug/L	1		8260C	Total/NA
Benzene	0.24	J	1.0	0.090	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.55	J	1.0	0.26	ug/L	1		8260C	Total/NA
Toluene	0.35	J	1.0	0.25	ug/L	1		8260C	Total/NA
Trichloroethene	0.78	J	1.0	0.22	ug/L	1		8260C	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 480-134506-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.6	J	5.0	1.1	ug/L	1		8260C	Total/NA

Client Sample ID: MW-5D

Lab Sample ID: 480-134506-7

No Detections.

Client Sample ID: MW-6

Lab Sample ID: 480-134506-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.46	J	1.0	0.26	ug/L	1		8260C	Total/NA
Vinyl chloride	3.2		1.0	0.060	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-7

Lab Sample ID: 480-134506-9

No Detections.

Client Sample ID: MW-8

Lab Sample ID: 480-134506-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.2	J	5.0	1.1	ug/L	1		8260C	Total/NA

Client Sample ID: MW-9R

Lab Sample ID: 480-134506-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	13		10	3.4	ug/L	10		8260C	Total/NA
Acetone	17	J	50	11	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	3700		10	2.6	ug/L	10		8260C	Total/NA
trans-1,2-Dichloroethene	43		10	1.8	ug/L	10		8260C	Total/NA
Trichloroethene	2500		10	2.2	ug/L	10		8260C	Total/NA
Vinyl chloride	400		10	0.60	ug/L	10		8260C	Total/NA

Client Sample ID: MW-10

Lab Sample ID: 480-134506-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.2	J	5.0	1.1	ug/L	1		8260C	Total/NA

Client Sample ID: MW-11R

Lab Sample ID: 480-134506-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	850		20	5.2	ug/L	20		8260C	Total/NA
trans-1,2-Dichloroethene	7.9	J	20	3.6	ug/L	20		8260C	Total/NA
Trichloroethene	4800		20	4.4	ug/L	20		8260C	Total/NA
Vinyl chloride	3.0	J	20	1.2	ug/L	20		8260C	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 480-134506-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	110		20	5.2	ug/L	20		8260C	Total/NA
Trichloroethene	4300		20	4.4	ug/L	20		8260C	Total/NA
Vinyl chloride	4.6	J	20	1.2	ug/L	20		8260C	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 480-134506-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1700		50	13	ug/L	50		8260C	Total/NA
trans-1,2-Dichloroethene	11	J	50	9.0	ug/L	50		8260C	Total/NA
Trichloroethene	16000		50	11	ug/L	50		8260C	Total/NA
Vinyl chloride	19	J	50	3.0	ug/L	50		8260C	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 480-134506-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.21	J	0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1-Dichloroethene	8.0	J	20	6.8	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	2600		20	5.2	ug/L	20		8260C	Total/NA
trans-1,2-Dichloroethene	12	J	20	3.6	ug/L	20		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-14 (Continued)

Lab Sample ID: 480-134506-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	5800		20	4.4	ug/L	20		8260C	Total/NA
Vinyl chloride	16	J	20	1.2	ug/L	20		8260C	Total/NA

Client Sample ID: DUP-041818

Lab Sample ID: 480-134506-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	4.2	J	10	3.4	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	990		10	2.6	ug/L	10		8260C	Total/NA
trans-1,2-Dichloroethene	6.4	J	10	1.8	ug/L	10		8260C	Total/NA
Trichloroethene	2100		10	2.2	ug/L	10		8260C	Total/NA
Vinyl chloride	5.9	J	10	0.60	ug/L	10		8260C	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 480-134506-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.23	J	1.0	0.21	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-1

Date Collected: 04/18/18 09:45

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/27/18 06:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		71 - 144					04/27/18 06:54	1
4-Bromofluorobenzene	92		72 - 133					04/27/18 06:54	1

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	0.28	ug/L			04/26/18 23:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/26/18 23:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/26/18 23:15	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/26/18 23:15	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/26/18 23:15	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/26/18 23:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/26/18 23:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/26/18 23:15	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/26/18 23:15	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/26/18 23:15	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/26/18 23:15	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/26/18 23:15	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/26/18 23:15	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/26/18 23:15	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/26/18 23:15	1
2-Hexanone	ND		5.0	0.72	ug/L			04/26/18 23:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/26/18 23:15	1
Acetone	1.8 J		5.0	1.1	ug/L			04/26/18 23:15	1
Benzene	ND		1.0	0.090	ug/L			04/26/18 23:15	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/26/18 23:15	1
Bromoform	ND		1.0	0.18	ug/L			04/26/18 23:15	1
Bromomethane	ND		1.0	0.18	ug/L			04/26/18 23:15	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/26/18 23:15	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/26/18 23:15	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/26/18 23:15	1
Chloroethane	ND		1.0	0.37	ug/L			04/26/18 23:15	1
Chloroform	ND		1.0	0.22	ug/L			04/26/18 23:15	1
Chloromethane	ND		1.0	0.22	ug/L			04/26/18 23:15	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			04/26/18 23:15	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/26/18 23:15	1
Cyclohexane	ND		1.0	0.26	ug/L			04/26/18 23:15	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/26/18 23:15	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/26/18 23:15	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/26/18 23:15	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/26/18 23:15	1
Methyl acetate	ND		5.0	0.58	ug/L			04/26/18 23:15	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/26/18 23:15	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/26/18 23:15	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/26/18 23:15	1
Styrene	ND		1.0	0.17	ug/L			04/26/18 23:15	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/26/18 23:15	1
Toluene	ND		1.0	0.25	ug/L			04/26/18 23:15	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-1

Date Collected: 04/18/18 09:45

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/26/18 23:15	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/26/18 23:15	1
Trichloroethene	ND		1.0	0.22	ug/L			04/26/18 23:15	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/26/18 23:15	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/26/18 23:15	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/26/18 23:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		74 - 132		04/26/18 23:15	1
4-Bromofluorobenzene	102		77 - 124		04/26/18 23:15	1
Dibromofluoromethane (Surr)	107		72 - 131		04/26/18 23:15	1
Toluene-d8 (Surr)	95		80 - 120		04/26/18 23:15	1

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-2
Date Collected: 04/17/18 09:55
Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		40	20	ug/L			04/27/18 07:41	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		71 - 144					04/27/18 07:41	100
4-Bromofluorobenzene	91		72 - 133					04/27/18 07:41	100

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	140	ug/L			04/27/18 23:50	500
1,1,2,2-Tetrachloroethane	ND		500	95	ug/L			04/27/18 23:50	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	170	ug/L			04/27/18 23:50	500
1,1,2-Trichloroethane	ND		500	40	ug/L			04/27/18 23:50	500
1,1-Dichloroethane	ND		500	120	ug/L			04/27/18 23:50	500
1,1-Dichloroethene	300	J	500	170	ug/L			04/27/18 23:50	500
1,2,4-Trichlorobenzene	ND		500	140	ug/L			04/27/18 23:50	500
1,2-Dibromo-3-Chloropropane	ND		500	120	ug/L			04/27/18 23:50	500
1,2-Dibromoethane	ND		500	95	ug/L			04/27/18 23:50	500
1,2-Dichlorobenzene	ND		500	110	ug/L			04/27/18 23:50	500
1,2-Dichloroethane	ND		500	130	ug/L			04/27/18 23:50	500
1,2-Dichloropropane	ND		500	90	ug/L			04/27/18 23:50	500
1,3-Dichlorobenzene	ND		500	170	ug/L			04/27/18 23:50	500
1,4-Dichlorobenzene	ND		500	170	ug/L			04/27/18 23:50	500
2-Butanone (MEK)	ND		2500	1100	ug/L			04/27/18 23:50	500
2-Hexanone	ND	*	2500	360	ug/L			04/27/18 23:50	500
4-Methyl-2-pentanone (MIBK)	ND		2500	320	ug/L			04/27/18 23:50	500
Acetone	ND		2500	540	ug/L			04/27/18 23:50	500
Benzene	ND		500	45	ug/L			04/27/18 23:50	500
Bromodichloromethane	ND		500	75	ug/L			04/27/18 23:50	500
Bromoform	ND		500	90	ug/L			04/27/18 23:50	500
Bromomethane	ND		500	90	ug/L			04/27/18 23:50	500
Carbon disulfide	ND		500	110	ug/L			04/27/18 23:50	500
Carbon tetrachloride	ND		500	170	ug/L			04/27/18 23:50	500
Chlorobenzene	ND		500	120	ug/L			04/27/18 23:50	500
Chloroethane	ND		500	190	ug/L			04/27/18 23:50	500
Chloroform	ND		500	110	ug/L			04/27/18 23:50	500
Chloromethane	ND		500	110	ug/L			04/27/18 23:50	500
cis-1,2-Dichloroethene	100000		500	130	ug/L			04/27/18 23:50	500
cis-1,3-Dichloropropene	ND		500	80	ug/L			04/27/18 23:50	500
Cyclohexane	ND		500	130	ug/L			04/27/18 23:50	500
Dibromochloromethane	ND		500	110	ug/L			04/27/18 23:50	500
Dichlorodifluoromethane	ND		500	70	ug/L			04/27/18 23:50	500
Ethylbenzene	ND		500	150	ug/L			04/27/18 23:50	500
Isopropylbenzene	ND		500	160	ug/L			04/27/18 23:50	500
Methyl acetate	ND		2500	290	ug/L			04/27/18 23:50	500
Methyl tert-butyl ether	ND		500	65	ug/L			04/27/18 23:50	500
Methylcyclohexane	ND		500	110	ug/L			04/27/18 23:50	500
Methylene Chloride	ND		500	110	ug/L			04/27/18 23:50	500
Styrene	ND		500	85	ug/L			04/27/18 23:50	500
Tetrachloroethene	ND		500	60	ug/L			04/27/18 23:50	500
Toluene	ND		500	130	ug/L			04/27/18 23:50	500

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-2

Lab Sample ID: 480-134506-2

Date Collected: 04/17/18 09:55

Matrix: Water

Date Received: 04/18/18 18:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	150	J	500	90	ug/L			04/27/18 23:50	500
trans-1,3-Dichloropropene	ND		500	95	ug/L			04/27/18 23:50	500
Trichloroethene	250	J	500	110	ug/L			04/27/18 23:50	500
Trichlorofluoromethane	ND		500	75	ug/L			04/27/18 23:50	500
Vinyl chloride	64000		500	30	ug/L			04/27/18 23:50	500
Xylenes, Total	ND		1000	140	ug/L			04/27/18 23:50	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		74 - 132		04/27/18 23:50	500
4-Bromofluorobenzene	100		77 - 124		04/27/18 23:50	500
Dibromofluoromethane (Surr)	100		72 - 131		04/27/18 23:50	500
Toluene-d8 (Surr)	88		80 - 120		04/27/18 23:50	500

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-3
Date Collected: 04/18/18 12:05
Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/27/18 07:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		71 - 144					04/27/18 07:18	1
4-Bromofluorobenzene	92		72 - 133					04/27/18 07:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	2.8	ug/L			04/27/18 02:02	10
1,1,2,2-Tetrachloroethane	ND		10	1.9	ug/L			04/27/18 02:02	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.4	ug/L			04/27/18 02:02	10
1,1,2-Trichloroethane	ND		10	0.80	ug/L			04/27/18 02:02	10
1,1-Dichloroethane	ND		10	2.4	ug/L			04/27/18 02:02	10
1,1-Dichloroethene	8.3	J	10	3.4	ug/L			04/27/18 02:02	10
1,2,4-Trichlorobenzene	ND		10	2.7	ug/L			04/27/18 02:02	10
1,2-Dibromo-3-Chloropropane	ND		10	2.3	ug/L			04/27/18 02:02	10
1,2-Dibromoethane	ND		10	1.9	ug/L			04/27/18 02:02	10
1,2-Dichlorobenzene	ND		10	2.2	ug/L			04/27/18 02:02	10
1,2-Dichloroethane	ND		10	2.5	ug/L			04/27/18 02:02	10
1,2-Dichloropropane	ND		10	1.8	ug/L			04/27/18 02:02	10
1,3-Dichlorobenzene	ND		10	3.3	ug/L			04/27/18 02:02	10
1,4-Dichlorobenzene	ND		10	3.3	ug/L			04/27/18 02:02	10
2-Butanone (MEK)	ND		50	22	ug/L			04/27/18 02:02	10
2-Hexanone	ND		50	7.2	ug/L			04/27/18 02:02	10
4-Methyl-2-pentanone (MIBK)	ND		50	6.3	ug/L			04/27/18 02:02	10
Acetone	12	J	50	11	ug/L			04/27/18 02:02	10
Benzene	ND		10	0.90	ug/L			04/27/18 02:02	10
Bromodichloromethane	ND		10	1.5	ug/L			04/27/18 02:02	10
Bromoform	ND		10	1.8	ug/L			04/27/18 02:02	10
Bromomethane	ND		10	1.8	ug/L			04/27/18 02:02	10
Carbon disulfide	ND		10	2.2	ug/L			04/27/18 02:02	10
Carbon tetrachloride	ND		10	3.3	ug/L			04/27/18 02:02	10
Chlorobenzene	ND		10	2.4	ug/L			04/27/18 02:02	10
Chloroethane	ND		10	3.7	ug/L			04/27/18 02:02	10
Chloroform	ND		10	2.2	ug/L			04/27/18 02:02	10
Chloromethane	ND		10	2.2	ug/L			04/27/18 02:02	10
cis-1,2-Dichloroethene	2100		10	2.6	ug/L			04/27/18 02:02	10
cis-1,3-Dichloropropene	ND		10	1.6	ug/L			04/27/18 02:02	10
Cyclohexane	ND		10	2.6	ug/L			04/27/18 02:02	10
Dibromochloromethane	ND		10	2.2	ug/L			04/27/18 02:02	10
Dichlorodifluoromethane	ND		10	1.4	ug/L			04/27/18 02:02	10
Ethylbenzene	ND		10	3.0	ug/L			04/27/18 02:02	10
Isopropylbenzene	ND		10	3.2	ug/L			04/27/18 02:02	10
Methyl acetate	ND		50	5.8	ug/L			04/27/18 02:02	10
Methyl tert-butyl ether	ND		10	1.3	ug/L			04/27/18 02:02	10
Methylcyclohexane	ND		10	2.2	ug/L			04/27/18 02:02	10
Methylene Chloride	ND		10	2.1	ug/L			04/27/18 02:02	10
Styrene	ND		10	1.7	ug/L			04/27/18 02:02	10
Tetrachloroethene	ND		10	1.2	ug/L			04/27/18 02:02	10
Toluene	ND		10	2.5	ug/L			04/27/18 02:02	10

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-3

Lab Sample ID: 480-134506-3

Date Collected: 04/18/18 12:05

Matrix: Water

Date Received: 04/18/18 18:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	16		10	1.8	ug/L			04/27/18 02:02	10
trans-1,3-Dichloropropene	ND		10	1.9	ug/L			04/27/18 02:02	10
Trichloroethene	4500		10	2.2	ug/L			04/27/18 02:02	10
Trichlorofluoromethane	ND		10	1.5	ug/L			04/27/18 02:02	10
Vinyl chloride	12		10	0.60	ug/L			04/27/18 02:02	10
Xylenes, Total	ND		20	2.8	ug/L			04/27/18 02:02	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		74 - 132		04/27/18 02:02	10
4-Bromofluorobenzene	103		77 - 124		04/27/18 02:02	10
Dibromofluoromethane (Surr)	114		72 - 131		04/27/18 02:02	10
Toluene-d8 (Surr)	101		80 - 120		04/27/18 02:02	10

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-4
Date Collected: 04/17/18 14:45
Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		4.0	2.0	ug/L			04/26/18 18:27	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		71 - 144					04/26/18 18:27	10
4-Bromofluorobenzene	99		72 - 133					04/26/18 18:27	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	28	ug/L			04/27/18 03:59	100
1,1,2,2-Tetrachloroethane	ND		100	19	ug/L			04/27/18 03:59	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	34	ug/L			04/27/18 03:59	100
1,1,2-Trichloroethane	ND		100	8.0	ug/L			04/27/18 03:59	100
1,1-Dichloroethane	ND		100	24	ug/L			04/27/18 03:59	100
1,1-Dichloroethene	ND		100	34	ug/L			04/27/18 03:59	100
1,2,4-Trichlorobenzene	ND		100	27	ug/L			04/27/18 03:59	100
1,2-Dibromo-3-Chloropropane	ND		100	23	ug/L			04/27/18 03:59	100
1,2-Dibromoethane	ND		100	19	ug/L			04/27/18 03:59	100
1,2-Dichlorobenzene	ND		100	22	ug/L			04/27/18 03:59	100
1,2-Dichloroethane	ND		100	25	ug/L			04/27/18 03:59	100
1,2-Dichloropropane	ND		100	18	ug/L			04/27/18 03:59	100
1,3-Dichlorobenzene	ND		100	33	ug/L			04/27/18 03:59	100
1,4-Dichlorobenzene	ND		100	33	ug/L			04/27/18 03:59	100
2-Butanone (MEK)	ND		500	220	ug/L			04/27/18 03:59	100
2-Hexanone	ND		500	72	ug/L			04/27/18 03:59	100
4-Methyl-2-pentanone (MIBK)	ND		500	63	ug/L			04/27/18 03:59	100
Acetone	ND		500	110	ug/L			04/27/18 03:59	100
Benzene	ND		100	9.0	ug/L			04/27/18 03:59	100
Bromodichloromethane	ND		100	15	ug/L			04/27/18 03:59	100
Bromoform	ND		100	18	ug/L			04/27/18 03:59	100
Bromomethane	ND		100	18	ug/L			04/27/18 03:59	100
Carbon disulfide	ND		100	22	ug/L			04/27/18 03:59	100
Carbon tetrachloride	ND		100	33	ug/L			04/27/18 03:59	100
Chlorobenzene	ND		100	24	ug/L			04/27/18 03:59	100
Chloroethane	ND		100	37	ug/L			04/27/18 03:59	100
Chloroform	ND		100	22	ug/L			04/27/18 03:59	100
Chloromethane	ND		100	22	ug/L			04/27/18 03:59	100
cis-1,2-Dichloroethene	1200		100	26	ug/L			04/27/18 03:59	100
cis-1,3-Dichloropropene	ND		100	16	ug/L			04/27/18 03:59	100
Cyclohexane	ND		100	26	ug/L			04/27/18 03:59	100
Dibromochloromethane	ND		100	22	ug/L			04/27/18 03:59	100
Dichlorodifluoromethane	ND		100	14	ug/L			04/27/18 03:59	100
Ethylbenzene	ND		100	30	ug/L			04/27/18 03:59	100
Isopropylbenzene	ND		100	32	ug/L			04/27/18 03:59	100
Methyl acetate	ND		500	58	ug/L			04/27/18 03:59	100
Methyl tert-butyl ether	ND		100	13	ug/L			04/27/18 03:59	100
Methylcyclohexane	ND		100	22	ug/L			04/27/18 03:59	100
Methylene Chloride	ND		100	21	ug/L			04/27/18 03:59	100
Styrene	ND		100	17	ug/L			04/27/18 03:59	100
Tetrachloroethene	ND		100	12	ug/L			04/27/18 03:59	100
Toluene	ND		100	25	ug/L			04/27/18 03:59	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-4

Date Collected: 04/17/18 14:45

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		100	18	ug/L			04/27/18 03:59	100
trans-1,3-Dichloropropene	ND		100	19	ug/L			04/27/18 03:59	100
Trichloroethene	24000		100	22	ug/L			04/27/18 03:59	100
Trichlorofluoromethane	ND		100	15	ug/L			04/27/18 03:59	100
Vinyl chloride	42 J		100	6.0	ug/L			04/27/18 03:59	100
Xylenes, Total	ND		200	28	ug/L			04/27/18 03:59	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		74 - 132		04/27/18 03:59	100
4-Bromofluorobenzene	101		77 - 124		04/27/18 03:59	100
Dibromofluoromethane (Surr)	105		72 - 131		04/27/18 03:59	100
Toluene-d8 (Surr)	92		80 - 120		04/27/18 03:59	100

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-4D

Date Collected: 04/17/18 13:35

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 17:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		71 - 144					04/26/18 17:18	1
4-Bromofluorobenzene	99		72 - 133					04/26/18 17:18	1

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	0.28	ug/L			04/26/18 23:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/26/18 23:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/26/18 23:40	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/26/18 23:40	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/26/18 23:40	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/26/18 23:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/26/18 23:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/26/18 23:40	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/26/18 23:40	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/26/18 23:40	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/26/18 23:40	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/26/18 23:40	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/26/18 23:40	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/26/18 23:40	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/26/18 23:40	1
2-Hexanone	ND		5.0	0.72	ug/L			04/26/18 23:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/26/18 23:40	1
Acetone	4.3	J	5.0	1.1	ug/L			04/26/18 23:40	1
Benzene	0.24	J	1.0	0.090	ug/L			04/26/18 23:40	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/26/18 23:40	1
Bromoform	ND		1.0	0.18	ug/L			04/26/18 23:40	1
Bromomethane	ND		1.0	0.18	ug/L			04/26/18 23:40	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/26/18 23:40	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/26/18 23:40	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/26/18 23:40	1
Chloroethane	ND		1.0	0.37	ug/L			04/26/18 23:40	1
Chloroform	ND		1.0	0.22	ug/L			04/26/18 23:40	1
Chloromethane	ND		1.0	0.22	ug/L			04/26/18 23:40	1
cis-1,2-Dichloroethene	0.55	J	1.0	0.26	ug/L			04/26/18 23:40	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/26/18 23:40	1
Cyclohexane	ND		1.0	0.26	ug/L			04/26/18 23:40	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/26/18 23:40	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/26/18 23:40	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/26/18 23:40	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/26/18 23:40	1
Methyl acetate	ND		5.0	0.58	ug/L			04/26/18 23:40	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/26/18 23:40	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/26/18 23:40	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/26/18 23:40	1
Styrene	ND		1.0	0.17	ug/L			04/26/18 23:40	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/26/18 23:40	1
Toluene	0.35	J	1.0	0.25	ug/L			04/26/18 23:40	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-4D

Date Collected: 04/17/18 13:35

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/26/18 23:40	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/26/18 23:40	1
Trichloroethene	0.78	J	1.0	0.22	ug/L			04/26/18 23:40	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/26/18 23:40	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/26/18 23:40	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/26/18 23:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		74 - 132		04/26/18 23:40	1
4-Bromofluorobenzene	101		77 - 124		04/26/18 23:40	1
Dibromofluoromethane (Surr)	106		72 - 131		04/26/18 23:40	1
Toluene-d8 (Surr)	93		80 - 120		04/26/18 23:40	1

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-5
Date Collected: 04/17/18 11:20
Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 17:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		71 - 144					04/26/18 17:41	1
4-Bromofluorobenzene	102		72 - 133					04/26/18 17:41	1

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	0.28	ug/L			04/26/18 22:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/26/18 22:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/26/18 22:52	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/26/18 22:52	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/26/18 22:52	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/26/18 22:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/26/18 22:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/26/18 22:52	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/26/18 22:52	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/26/18 22:52	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/26/18 22:52	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/26/18 22:52	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/26/18 22:52	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/26/18 22:52	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/26/18 22:52	1
2-Hexanone	ND	F1	5.0	0.72	ug/L			04/26/18 22:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/26/18 22:52	1
Acetone	1.6	J	5.0	1.1	ug/L			04/26/18 22:52	1
Benzene	ND		1.0	0.090	ug/L			04/26/18 22:52	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/26/18 22:52	1
Bromoform	ND		1.0	0.18	ug/L			04/26/18 22:52	1
Bromomethane	ND		1.0	0.18	ug/L			04/26/18 22:52	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/26/18 22:52	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/26/18 22:52	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/26/18 22:52	1
Chloroethane	ND		1.0	0.37	ug/L			04/26/18 22:52	1
Chloroform	ND		1.0	0.22	ug/L			04/26/18 22:52	1
Chloromethane	ND		1.0	0.22	ug/L			04/26/18 22:52	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			04/26/18 22:52	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/26/18 22:52	1
Cyclohexane	ND		1.0	0.26	ug/L			04/26/18 22:52	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/26/18 22:52	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/26/18 22:52	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/26/18 22:52	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/26/18 22:52	1
Methyl acetate	ND		5.0	0.58	ug/L			04/26/18 22:52	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/26/18 22:52	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/26/18 22:52	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/26/18 22:52	1
Styrene	ND		1.0	0.17	ug/L			04/26/18 22:52	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/26/18 22:52	1
Toluene	ND		1.0	0.25	ug/L			04/26/18 22:52	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-5

Date Collected: 04/17/18 11:20

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/26/18 22:52	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/26/18 22:52	1
Trichloroethene	ND		1.0	0.22	ug/L			04/26/18 22:52	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/26/18 22:52	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/26/18 22:52	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/26/18 22:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		74 - 132		04/26/18 22:52	1
4-Bromofluorobenzene	110		77 - 124		04/26/18 22:52	1
Dibromofluoromethane (Surr)	110		72 - 131		04/26/18 22:52	1
Toluene-d8 (Surr)	99		80 - 120		04/26/18 22:52	1

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-5D

Date Collected: 04/17/18 11:55

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 02:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		71 - 144					04/26/18 02:56	1
4-Bromofluorobenzene	97		72 - 133					04/26/18 02:56	1

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	0.28	ug/L			04/27/18 00:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/27/18 00:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/27/18 00:03	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/27/18 00:03	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/27/18 00:03	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/27/18 00:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/27/18 00:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/27/18 00:03	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/27/18 00:03	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/27/18 00:03	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/27/18 00:03	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/27/18 00:03	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 00:03	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 00:03	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/27/18 00:03	1
2-Hexanone	ND		5.0	0.72	ug/L			04/27/18 00:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/27/18 00:03	1
Acetone	ND		5.0	1.1	ug/L			04/27/18 00:03	1
Benzene	ND		1.0	0.090	ug/L			04/27/18 00:03	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/27/18 00:03	1
Bromoform	ND		1.0	0.18	ug/L			04/27/18 00:03	1
Bromomethane	ND		1.0	0.18	ug/L			04/27/18 00:03	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/27/18 00:03	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/27/18 00:03	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/27/18 00:03	1
Chloroethane	ND		1.0	0.37	ug/L			04/27/18 00:03	1
Chloroform	ND		1.0	0.22	ug/L			04/27/18 00:03	1
Chloromethane	ND		1.0	0.22	ug/L			04/27/18 00:03	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			04/27/18 00:03	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/27/18 00:03	1
Cyclohexane	ND		1.0	0.26	ug/L			04/27/18 00:03	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/27/18 00:03	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/27/18 00:03	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/27/18 00:03	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/27/18 00:03	1
Methyl acetate	ND		5.0	0.58	ug/L			04/27/18 00:03	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/27/18 00:03	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/27/18 00:03	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/27/18 00:03	1
Styrene	ND		1.0	0.17	ug/L			04/27/18 00:03	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/27/18 00:03	1
Toluene	ND		1.0	0.25	ug/L			04/27/18 00:03	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-5D

Date Collected: 04/17/18 11:55

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/27/18 00:03	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/27/18 00:03	1
Trichloroethene	ND		1.0	0.22	ug/L			04/27/18 00:03	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/27/18 00:03	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/27/18 00:03	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/27/18 00:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		74 - 132		04/27/18 00:03	1
4-Bromofluorobenzene	99		77 - 124		04/27/18 00:03	1
Dibromofluoromethane (Surr)	105		72 - 131		04/27/18 00:03	1
Toluene-d8 (Surr)	90		80 - 120		04/27/18 00:03	1

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-6
Date Collected: 04/16/18 13:30
Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 03:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		71 - 144					04/26/18 03:19	1
4-Bromofluorobenzene	97		72 - 133					04/26/18 03:19	1

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	0.28	ug/L			04/27/18 00:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/27/18 00:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/27/18 00:27	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/27/18 00:27	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/27/18 00:27	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/27/18 00:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/27/18 00:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/27/18 00:27	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/27/18 00:27	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/27/18 00:27	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/27/18 00:27	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/27/18 00:27	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 00:27	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 00:27	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/27/18 00:27	1
2-Hexanone	ND		5.0	0.72	ug/L			04/27/18 00:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/27/18 00:27	1
Acetone	ND		5.0	1.1	ug/L			04/27/18 00:27	1
Benzene	ND		1.0	0.090	ug/L			04/27/18 00:27	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/27/18 00:27	1
Bromoform	ND		1.0	0.18	ug/L			04/27/18 00:27	1
Bromomethane	ND		1.0	0.18	ug/L			04/27/18 00:27	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/27/18 00:27	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/27/18 00:27	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/27/18 00:27	1
Chloroethane	ND		1.0	0.37	ug/L			04/27/18 00:27	1
Chloroform	ND		1.0	0.22	ug/L			04/27/18 00:27	1
Chloromethane	ND		1.0	0.22	ug/L			04/27/18 00:27	1
cis-1,2-Dichloroethene	0.46	J	1.0	0.26	ug/L			04/27/18 00:27	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/27/18 00:27	1
Cyclohexane	ND		1.0	0.26	ug/L			04/27/18 00:27	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/27/18 00:27	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/27/18 00:27	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/27/18 00:27	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/27/18 00:27	1
Methyl acetate	ND		5.0	0.58	ug/L			04/27/18 00:27	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/27/18 00:27	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/27/18 00:27	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/27/18 00:27	1
Styrene	ND		1.0	0.17	ug/L			04/27/18 00:27	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/27/18 00:27	1
Toluene	ND		1.0	0.25	ug/L			04/27/18 00:27	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-6

Date Collected: 04/16/18 13:30

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/27/18 00:27	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/27/18 00:27	1
Trichloroethene	ND		1.0	0.22	ug/L			04/27/18 00:27	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/27/18 00:27	1
Vinyl chloride	3.2		1.0	0.060	ug/L			04/27/18 00:27	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/27/18 00:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		74 - 132		04/27/18 00:27	1
4-Bromofluorobenzene	95		77 - 124		04/27/18 00:27	1
Dibromofluoromethane (Surr)	107		72 - 131		04/27/18 00:27	1
Toluene-d8 (Surr)	88		80 - 120		04/27/18 00:27	1

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-7
Date Collected: 04/17/18 17:15
Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 03:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		71 - 144					04/26/18 03:42	1
4-Bromofluorobenzene	96		72 - 133					04/26/18 03:42	1

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	0.28	ug/L			04/27/18 00:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/27/18 00:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/27/18 00:51	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/27/18 00:51	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/27/18 00:51	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/27/18 00:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/27/18 00:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/27/18 00:51	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/27/18 00:51	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/27/18 00:51	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/27/18 00:51	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/27/18 00:51	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 00:51	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 00:51	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/27/18 00:51	1
2-Hexanone	ND		5.0	0.72	ug/L			04/27/18 00:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/27/18 00:51	1
Acetone	ND		5.0	1.1	ug/L			04/27/18 00:51	1
Benzene	ND		1.0	0.090	ug/L			04/27/18 00:51	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/27/18 00:51	1
Bromoform	ND		1.0	0.18	ug/L			04/27/18 00:51	1
Bromomethane	ND		1.0	0.18	ug/L			04/27/18 00:51	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/27/18 00:51	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/27/18 00:51	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/27/18 00:51	1
Chloroethane	ND		1.0	0.37	ug/L			04/27/18 00:51	1
Chloroform	ND		1.0	0.22	ug/L			04/27/18 00:51	1
Chloromethane	ND		1.0	0.22	ug/L			04/27/18 00:51	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			04/27/18 00:51	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/27/18 00:51	1
Cyclohexane	ND		1.0	0.26	ug/L			04/27/18 00:51	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/27/18 00:51	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/27/18 00:51	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/27/18 00:51	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/27/18 00:51	1
Methyl acetate	ND		5.0	0.58	ug/L			04/27/18 00:51	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/27/18 00:51	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/27/18 00:51	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/27/18 00:51	1
Styrene	ND		1.0	0.17	ug/L			04/27/18 00:51	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/27/18 00:51	1
Toluene	ND		1.0	0.25	ug/L			04/27/18 00:51	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-7

Date Collected: 04/17/18 17:15

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/27/18 00:51	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/27/18 00:51	1
Trichloroethene	ND		1.0	0.22	ug/L			04/27/18 00:51	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/27/18 00:51	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/27/18 00:51	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/27/18 00:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		74 - 132		04/27/18 00:51	1
4-Bromofluorobenzene	105		77 - 124		04/27/18 00:51	1
Dibromofluoromethane (Surr)	117		72 - 131		04/27/18 00:51	1
Toluene-d8 (Surr)	102		80 - 120		04/27/18 00:51	1

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-8

Date Collected: 04/18/18 10:45

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 12:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		71 - 144					04/26/18 12:41	1
4-Bromofluorobenzene	95		72 - 133					04/26/18 12:41	1

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	0.28	ug/L			04/27/18 01:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/27/18 01:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/27/18 01:15	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/27/18 01:15	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/27/18 01:15	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/27/18 01:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/27/18 01:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/27/18 01:15	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/27/18 01:15	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/27/18 01:15	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/27/18 01:15	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/27/18 01:15	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 01:15	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 01:15	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/27/18 01:15	1
2-Hexanone	ND		5.0	0.72	ug/L			04/27/18 01:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/27/18 01:15	1
Acetone	1.2 J		5.0	1.1	ug/L			04/27/18 01:15	1
Benzene	ND		1.0	0.090	ug/L			04/27/18 01:15	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/27/18 01:15	1
Bromoform	ND		1.0	0.18	ug/L			04/27/18 01:15	1
Bromomethane	ND		1.0	0.18	ug/L			04/27/18 01:15	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/27/18 01:15	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/27/18 01:15	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/27/18 01:15	1
Chloroethane	ND		1.0	0.37	ug/L			04/27/18 01:15	1
Chloroform	ND		1.0	0.22	ug/L			04/27/18 01:15	1
Chloromethane	ND		1.0	0.22	ug/L			04/27/18 01:15	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			04/27/18 01:15	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/27/18 01:15	1
Cyclohexane	ND		1.0	0.26	ug/L			04/27/18 01:15	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/27/18 01:15	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/27/18 01:15	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/27/18 01:15	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/27/18 01:15	1
Methyl acetate	ND		5.0	0.58	ug/L			04/27/18 01:15	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/27/18 01:15	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/27/18 01:15	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/27/18 01:15	1
Styrene	ND		1.0	0.17	ug/L			04/27/18 01:15	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/27/18 01:15	1
Toluene	ND		1.0	0.25	ug/L			04/27/18 01:15	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-8

Lab Sample ID: 480-134506-10

Date Collected: 04/18/18 10:45

Matrix: Water

Date Received: 04/18/18 18:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/27/18 01:15	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/27/18 01:15	1
Trichloroethene	ND		1.0	0.22	ug/L			04/27/18 01:15	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/27/18 01:15	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/27/18 01:15	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/27/18 01:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		74 - 132		04/27/18 01:15	1
4-Bromofluorobenzene	98		77 - 124		04/27/18 01:15	1
Dibromofluoromethane (Surr)	103		72 - 131		04/27/18 01:15	1
Toluene-d8 (Surr)	87		80 - 120		04/27/18 01:15	1

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-9R

Date Collected: 04/18/18 15:50

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 04:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		71 - 144					04/26/18 04:28	1
4-Bromofluorobenzene	97		72 - 133					04/26/18 04:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	2.8	ug/L			04/27/18 02:25	10
1,1,2,2-Tetrachloroethane	ND		10	1.9	ug/L			04/27/18 02:25	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.4	ug/L			04/27/18 02:25	10
1,1,2-Trichloroethane	ND		10	0.80	ug/L			04/27/18 02:25	10
1,1-Dichloroethane	ND		10	2.4	ug/L			04/27/18 02:25	10
1,1-Dichloroethene	13		10	3.4	ug/L			04/27/18 02:25	10
1,2,4-Trichlorobenzene	ND		10	2.7	ug/L			04/27/18 02:25	10
1,2-Dibromo-3-Chloropropane	ND		10	2.3	ug/L			04/27/18 02:25	10
1,2-Dibromoethane	ND		10	1.9	ug/L			04/27/18 02:25	10
1,2-Dichlorobenzene	ND		10	2.2	ug/L			04/27/18 02:25	10
1,2-Dichloroethane	ND		10	2.5	ug/L			04/27/18 02:25	10
1,2-Dichloropropane	ND		10	1.8	ug/L			04/27/18 02:25	10
1,3-Dichlorobenzene	ND		10	3.3	ug/L			04/27/18 02:25	10
1,4-Dichlorobenzene	ND		10	3.3	ug/L			04/27/18 02:25	10
2-Butanone (MEK)	ND		50	22	ug/L			04/27/18 02:25	10
2-Hexanone	ND		50	7.2	ug/L			04/27/18 02:25	10
4-Methyl-2-pentanone (MIBK)	ND		50	6.3	ug/L			04/27/18 02:25	10
Acetone	17 J		50	11	ug/L			04/27/18 02:25	10
Benzene	ND		10	0.90	ug/L			04/27/18 02:25	10
Bromodichloromethane	ND		10	1.5	ug/L			04/27/18 02:25	10
Bromoform	ND		10	1.8	ug/L			04/27/18 02:25	10
Bromomethane	ND		10	1.8	ug/L			04/27/18 02:25	10
Carbon disulfide	ND		10	2.2	ug/L			04/27/18 02:25	10
Carbon tetrachloride	ND		10	3.3	ug/L			04/27/18 02:25	10
Chlorobenzene	ND		10	2.4	ug/L			04/27/18 02:25	10
Chloroethane	ND		10	3.7	ug/L			04/27/18 02:25	10
Chloroform	ND		10	2.2	ug/L			04/27/18 02:25	10
Chloromethane	ND		10	2.2	ug/L			04/27/18 02:25	10
cis-1,2-Dichloroethene	3700		10	2.6	ug/L			04/27/18 02:25	10
cis-1,3-Dichloropropene	ND		10	1.6	ug/L			04/27/18 02:25	10
Cyclohexane	ND		10	2.6	ug/L			04/27/18 02:25	10
Dibromochloromethane	ND		10	2.2	ug/L			04/27/18 02:25	10
Dichlorodifluoromethane	ND		10	1.4	ug/L			04/27/18 02:25	10
Ethylbenzene	ND		10	3.0	ug/L			04/27/18 02:25	10
Isopropylbenzene	ND		10	3.2	ug/L			04/27/18 02:25	10
Methyl acetate	ND		50	5.8	ug/L			04/27/18 02:25	10
Methyl tert-butyl ether	ND		10	1.3	ug/L			04/27/18 02:25	10
Methylcyclohexane	ND		10	2.2	ug/L			04/27/18 02:25	10
Methylene Chloride	ND		10	2.1	ug/L			04/27/18 02:25	10
Styrene	ND		10	1.7	ug/L			04/27/18 02:25	10
Tetrachloroethene	ND		10	1.2	ug/L			04/27/18 02:25	10
Toluene	ND		10	2.5	ug/L			04/27/18 02:25	10

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-9R

Date Collected: 04/18/18 15:50

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	43		10	1.8	ug/L			04/27/18 02:25	10
trans-1,3-Dichloropropene	ND		10	1.9	ug/L			04/27/18 02:25	10
Trichloroethene	2500		10	2.2	ug/L			04/27/18 02:25	10
Trichlorofluoromethane	ND		10	1.5	ug/L			04/27/18 02:25	10
Vinyl chloride	400		10	0.60	ug/L			04/27/18 02:25	10
Xylenes, Total	ND		20	2.8	ug/L			04/27/18 02:25	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		74 - 132		04/27/18 02:25	10
4-Bromofluorobenzene	95		77 - 124		04/27/18 02:25	10
Dibromofluoromethane (Surr)	100		72 - 131		04/27/18 02:25	10
Toluene-d8 (Surr)	90		80 - 120		04/27/18 02:25	10

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-10

Date Collected: 04/16/18 17:45

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 04:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		71 - 144					04/26/18 04:51	1
4-Bromofluorobenzene	96		72 - 133					04/26/18 04:51	1

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	0.28	ug/L			04/27/18 01:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/27/18 01:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/27/18 01:38	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/27/18 01:38	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/27/18 01:38	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/27/18 01:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/27/18 01:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/27/18 01:38	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/27/18 01:38	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/27/18 01:38	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/27/18 01:38	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/27/18 01:38	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 01:38	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 01:38	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/27/18 01:38	1
2-Hexanone	ND		5.0	0.72	ug/L			04/27/18 01:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/27/18 01:38	1
Acetone	2.2 J		5.0	1.1	ug/L			04/27/18 01:38	1
Benzene	ND		1.0	0.090	ug/L			04/27/18 01:38	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/27/18 01:38	1
Bromoform	ND		1.0	0.18	ug/L			04/27/18 01:38	1
Bromomethane	ND		1.0	0.18	ug/L			04/27/18 01:38	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/27/18 01:38	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/27/18 01:38	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/27/18 01:38	1
Chloroethane	ND		1.0	0.37	ug/L			04/27/18 01:38	1
Chloroform	ND		1.0	0.22	ug/L			04/27/18 01:38	1
Chloromethane	ND		1.0	0.22	ug/L			04/27/18 01:38	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			04/27/18 01:38	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/27/18 01:38	1
Cyclohexane	ND		1.0	0.26	ug/L			04/27/18 01:38	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/27/18 01:38	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/27/18 01:38	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/27/18 01:38	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/27/18 01:38	1
Methyl acetate	ND		5.0	0.58	ug/L			04/27/18 01:38	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/27/18 01:38	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/27/18 01:38	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/27/18 01:38	1
Styrene	ND		1.0	0.17	ug/L			04/27/18 01:38	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/27/18 01:38	1
Toluene	ND		1.0	0.25	ug/L			04/27/18 01:38	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-10

Date Collected: 04/16/18 17:45

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/27/18 01:38	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/27/18 01:38	1
Trichloroethene	ND		1.0	0.22	ug/L			04/27/18 01:38	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/27/18 01:38	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/27/18 01:38	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/27/18 01:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		74 - 132		04/27/18 01:38	1
4-Bromofluorobenzene	94		77 - 124		04/27/18 01:38	1
Dibromofluoromethane (Surr)	105		72 - 131		04/27/18 01:38	1
Toluene-d8 (Surr)	88		80 - 120		04/27/18 01:38	1

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-11R

Date Collected: 04/16/18 16:00

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-13

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 05:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		71 - 144					04/26/18 05:14	1
4-Bromofluorobenzene	97		72 - 133					04/26/18 05:14	1

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	5.6	ug/L			04/27/18 03:12	20
1,1,2,2-Tetrachloroethane	ND		20	3.8	ug/L			04/27/18 03:12	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.8	ug/L			04/27/18 03:12	20
1,1,2-Trichloroethane	ND		20	1.6	ug/L			04/27/18 03:12	20
1,1-Dichloroethane	ND		20	4.8	ug/L			04/27/18 03:12	20
1,1-Dichloroethene	ND		20	6.8	ug/L			04/27/18 03:12	20
1,2,4-Trichlorobenzene	ND		20	5.4	ug/L			04/27/18 03:12	20
1,2-Dibromo-3-Chloropropane	ND		20	4.6	ug/L			04/27/18 03:12	20
1,2-Dibromoethane	ND		20	3.8	ug/L			04/27/18 03:12	20
1,2-Dichlorobenzene	ND		20	4.4	ug/L			04/27/18 03:12	20
1,2-Dichloroethane	ND		20	5.0	ug/L			04/27/18 03:12	20
1,2-Dichloropropane	ND		20	3.6	ug/L			04/27/18 03:12	20
1,3-Dichlorobenzene	ND		20	6.6	ug/L			04/27/18 03:12	20
1,4-Dichlorobenzene	ND		20	6.6	ug/L			04/27/18 03:12	20
2-Butanone (MEK)	ND		100	44	ug/L			04/27/18 03:12	20
2-Hexanone	ND		100	14	ug/L			04/27/18 03:12	20
4-Methyl-2-pentanone (MIBK)	ND		100	13	ug/L			04/27/18 03:12	20
Acetone	ND		100	21	ug/L			04/27/18 03:12	20
Benzene	ND		20	1.8	ug/L			04/27/18 03:12	20
Bromodichloromethane	ND		20	3.0	ug/L			04/27/18 03:12	20
Bromoform	ND		20	3.6	ug/L			04/27/18 03:12	20
Bromomethane	ND		20	3.6	ug/L			04/27/18 03:12	20
Carbon disulfide	ND		20	4.4	ug/L			04/27/18 03:12	20
Carbon tetrachloride	ND		20	6.6	ug/L			04/27/18 03:12	20
Chlorobenzene	ND		20	4.8	ug/L			04/27/18 03:12	20
Chloroethane	ND		20	7.4	ug/L			04/27/18 03:12	20
Chloroform	ND		20	4.4	ug/L			04/27/18 03:12	20
Chloromethane	ND		20	4.4	ug/L			04/27/18 03:12	20
cis-1,2-Dichloroethene	850		20	5.2	ug/L			04/27/18 03:12	20
cis-1,3-Dichloropropene	ND		20	3.2	ug/L			04/27/18 03:12	20
Cyclohexane	ND		20	5.2	ug/L			04/27/18 03:12	20
Dibromochloromethane	ND		20	4.4	ug/L			04/27/18 03:12	20
Dichlorodifluoromethane	ND		20	2.8	ug/L			04/27/18 03:12	20
Ethylbenzene	ND		20	6.0	ug/L			04/27/18 03:12	20
Isopropylbenzene	ND		20	6.4	ug/L			04/27/18 03:12	20
Methyl acetate	ND		100	12	ug/L			04/27/18 03:12	20
Methyl tert-butyl ether	ND		20	2.6	ug/L			04/27/18 03:12	20
Methylcyclohexane	ND		20	4.4	ug/L			04/27/18 03:12	20
Methylene Chloride	ND		20	4.2	ug/L			04/27/18 03:12	20
Styrene	ND		20	3.4	ug/L			04/27/18 03:12	20
Tetrachloroethene	ND		20	2.4	ug/L			04/27/18 03:12	20
Toluene	ND		20	5.0	ug/L			04/27/18 03:12	20

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-11R

Lab Sample ID: 480-134506-13

Date Collected: 04/16/18 16:00

Matrix: Water

Date Received: 04/18/18 18:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	7.9	J	20	3.6	ug/L			04/27/18 03:12	20
trans-1,3-Dichloropropene	ND		20	3.8	ug/L			04/27/18 03:12	20
Trichloroethene	4800		20	4.4	ug/L			04/27/18 03:12	20
Trichlorofluoromethane	ND		20	3.0	ug/L			04/27/18 03:12	20
Vinyl chloride	3.0	J	20	1.2	ug/L			04/27/18 03:12	20
Xylenes, Total	ND		40	5.6	ug/L			04/27/18 03:12	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		74 - 132		04/27/18 03:12	20
4-Bromofluorobenzene	95		77 - 124		04/27/18 03:12	20
Dibromofluoromethane (Surr)	100		72 - 131		04/27/18 03:12	20
Toluene-d8 (Surr)	88		80 - 120		04/27/18 03:12	20

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-12

Date Collected: 04/17/18 15:30

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 05:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		71 - 144					04/26/18 05:37	1
4-Bromofluorobenzene	96		72 - 133					04/26/18 05:37	1

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	5.6	ug/L			04/27/18 03:35	20
1,1,2,2-Tetrachloroethane	ND		20	3.8	ug/L			04/27/18 03:35	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.8	ug/L			04/27/18 03:35	20
1,1,2-Trichloroethane	ND		20	1.6	ug/L			04/27/18 03:35	20
1,1-Dichloroethane	ND		20	4.8	ug/L			04/27/18 03:35	20
1,1-Dichloroethene	ND		20	6.8	ug/L			04/27/18 03:35	20
1,2,4-Trichlorobenzene	ND		20	5.4	ug/L			04/27/18 03:35	20
1,2-Dibromo-3-Chloropropane	ND		20	4.6	ug/L			04/27/18 03:35	20
1,2-Dibromoethane	ND		20	3.8	ug/L			04/27/18 03:35	20
1,2-Dichlorobenzene	ND		20	4.4	ug/L			04/27/18 03:35	20
1,2-Dichloroethane	ND		20	5.0	ug/L			04/27/18 03:35	20
1,2-Dichloropropane	ND		20	3.6	ug/L			04/27/18 03:35	20
1,3-Dichlorobenzene	ND		20	6.6	ug/L			04/27/18 03:35	20
1,4-Dichlorobenzene	ND		20	6.6	ug/L			04/27/18 03:35	20
2-Butanone (MEK)	ND		100	44	ug/L			04/27/18 03:35	20
2-Hexanone	ND		100	14	ug/L			04/27/18 03:35	20
4-Methyl-2-pentanone (MIBK)	ND		100	13	ug/L			04/27/18 03:35	20
Acetone	ND		100	21	ug/L			04/27/18 03:35	20
Benzene	ND		20	1.8	ug/L			04/27/18 03:35	20
Bromodichloromethane	ND		20	3.0	ug/L			04/27/18 03:35	20
Bromoform	ND		20	3.6	ug/L			04/27/18 03:35	20
Bromomethane	ND		20	3.6	ug/L			04/27/18 03:35	20
Carbon disulfide	ND		20	4.4	ug/L			04/27/18 03:35	20
Carbon tetrachloride	ND		20	6.6	ug/L			04/27/18 03:35	20
Chlorobenzene	ND		20	4.8	ug/L			04/27/18 03:35	20
Chloroethane	ND		20	7.4	ug/L			04/27/18 03:35	20
Chloroform	ND		20	4.4	ug/L			04/27/18 03:35	20
Chloromethane	ND		20	4.4	ug/L			04/27/18 03:35	20
cis-1,2-Dichloroethene	110		20	5.2	ug/L			04/27/18 03:35	20
cis-1,3-Dichloropropene	ND		20	3.2	ug/L			04/27/18 03:35	20
Cyclohexane	ND		20	5.2	ug/L			04/27/18 03:35	20
Dibromochloromethane	ND		20	4.4	ug/L			04/27/18 03:35	20
Dichlorodifluoromethane	ND		20	2.8	ug/L			04/27/18 03:35	20
Ethylbenzene	ND		20	6.0	ug/L			04/27/18 03:35	20
Isopropylbenzene	ND		20	6.4	ug/L			04/27/18 03:35	20
Methyl acetate	ND		100	12	ug/L			04/27/18 03:35	20
Methyl tert-butyl ether	ND		20	2.6	ug/L			04/27/18 03:35	20
Methylcyclohexane	ND		20	4.4	ug/L			04/27/18 03:35	20
Methylene Chloride	ND		20	4.2	ug/L			04/27/18 03:35	20
Styrene	ND		20	3.4	ug/L			04/27/18 03:35	20
Tetrachloroethene	ND		20	2.4	ug/L			04/27/18 03:35	20
Toluene	ND		20	5.0	ug/L			04/27/18 03:35	20

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-12

Date Collected: 04/17/18 15:30

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		20	3.6	ug/L			04/27/18 03:35	20
trans-1,3-Dichloropropene	ND		20	3.8	ug/L			04/27/18 03:35	20
Trichloroethene	4300		20	4.4	ug/L			04/27/18 03:35	20
Trichlorofluoromethane	ND		20	3.0	ug/L			04/27/18 03:35	20
Vinyl chloride	4.6 J		20	1.2	ug/L			04/27/18 03:35	20
Xylenes, Total	ND		40	5.6	ug/L			04/27/18 03:35	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		74 - 132		04/27/18 03:35	20
4-Bromofluorobenzene	96		77 - 124		04/27/18 03:35	20
Dibromofluoromethane (Surr)	102		72 - 131		04/27/18 03:35	20
Toluene-d8 (Surr)	90		80 - 120		04/27/18 03:35	20

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-13
Date Collected: 04/18/18 14:40
Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 06:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		71 - 144					04/26/18 06:00	1
4-Bromofluorobenzene	96		72 - 133					04/26/18 06:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	14	ug/L			04/27/18 10:39	50
1,1,2,2-Tetrachloroethane	ND		50	9.5	ug/L			04/27/18 10:39	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	17	ug/L			04/27/18 10:39	50
1,1,2-Trichloroethane	ND		50	4.0	ug/L			04/27/18 10:39	50
1,1-Dichloroethane	ND		50	12	ug/L			04/27/18 10:39	50
1,1-Dichloroethene	ND		50	17	ug/L			04/27/18 10:39	50
1,2,4-Trichlorobenzene	ND		50	14	ug/L			04/27/18 10:39	50
1,2-Dibromo-3-Chloropropane	ND		50	12	ug/L			04/27/18 10:39	50
1,2-Dibromoethane	ND		50	9.5	ug/L			04/27/18 10:39	50
1,2-Dichlorobenzene	ND		50	11	ug/L			04/27/18 10:39	50
1,2-Dichloroethane	ND		50	13	ug/L			04/27/18 10:39	50
1,2-Dichloropropane	ND		50	9.0	ug/L			04/27/18 10:39	50
1,3-Dichlorobenzene	ND		50	17	ug/L			04/27/18 10:39	50
1,4-Dichlorobenzene	ND		50	17	ug/L			04/27/18 10:39	50
2-Butanone (MEK)	ND		250	110	ug/L			04/27/18 10:39	50
2-Hexanone	ND		250	36	ug/L			04/27/18 10:39	50
4-Methyl-2-pentanone (MIBK)	ND		250	32	ug/L			04/27/18 10:39	50
Acetone	ND		250	54	ug/L			04/27/18 10:39	50
Benzene	ND		50	4.5	ug/L			04/27/18 10:39	50
Bromodichloromethane	ND		50	7.5	ug/L			04/27/18 10:39	50
Bromoform	ND		50	9.0	ug/L			04/27/18 10:39	50
Bromomethane	ND		50	9.0	ug/L			04/27/18 10:39	50
Carbon disulfide	ND		50	11	ug/L			04/27/18 10:39	50
Carbon tetrachloride	ND		50	17	ug/L			04/27/18 10:39	50
Chlorobenzene	ND		50	12	ug/L			04/27/18 10:39	50
Chloroethane	ND		50	19	ug/L			04/27/18 10:39	50
Chloroform	ND		50	11	ug/L			04/27/18 10:39	50
Chloromethane	ND		50	11	ug/L			04/27/18 10:39	50
cis-1,2-Dichloroethene	1700		50	13	ug/L			04/27/18 10:39	50
cis-1,3-Dichloropropene	ND		50	8.0	ug/L			04/27/18 10:39	50
Cyclohexane	ND		50	13	ug/L			04/27/18 10:39	50
Dibromochloromethane	ND		50	11	ug/L			04/27/18 10:39	50
Dichlorodifluoromethane	ND		50	7.0	ug/L			04/27/18 10:39	50
Ethylbenzene	ND		50	15	ug/L			04/27/18 10:39	50
Isopropylbenzene	ND		50	16	ug/L			04/27/18 10:39	50
Methyl acetate	ND		250	29	ug/L			04/27/18 10:39	50
Methyl tert-butyl ether	ND		50	6.5	ug/L			04/27/18 10:39	50
Methylcyclohexane	ND		50	11	ug/L			04/27/18 10:39	50
Methylene Chloride	ND		50	11	ug/L			04/27/18 10:39	50
Styrene	ND		50	8.5	ug/L			04/27/18 10:39	50
Tetrachloroethene	ND		50	6.0	ug/L			04/27/18 10:39	50
Toluene	ND		50	13	ug/L			04/27/18 10:39	50

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-13

Date Collected: 04/18/18 14:40

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	11	J	50	9.0	ug/L			04/27/18 10:39	50
trans-1,3-Dichloropropene	ND		50	9.5	ug/L			04/27/18 10:39	50
Trichloroethene	16000		50	11	ug/L			04/27/18 10:39	50
Trichlorofluoromethane	ND		50	7.5	ug/L			04/27/18 10:39	50
Vinyl chloride	19	J	50	3.0	ug/L			04/27/18 10:39	50
Xylenes, Total	ND		100	14	ug/L			04/27/18 10:39	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		74 - 132		04/27/18 10:39	50
4-Bromofluorobenzene	95		77 - 124		04/27/18 10:39	50
Dibromofluoromethane (Surr)	100		72 - 131		04/27/18 10:39	50
Toluene-d8 (Surr)	88		80 - 120		04/27/18 10:39	50

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-14
Date Collected: 04/18/18 13:25
Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	J	0.40	0.20	ug/L			04/26/18 06:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		71 - 144					04/26/18 06:23	1
4-Bromofluorobenzene	96		72 - 133					04/26/18 06:23	1

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	5.6	ug/L			04/27/18 11:03	20
1,1,2,2-Tetrachloroethane	ND		20	3.8	ug/L			04/27/18 11:03	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.8	ug/L			04/27/18 11:03	20
1,1,2-Trichloroethane	ND		20	1.6	ug/L			04/27/18 11:03	20
1,1-Dichloroethane	ND		20	4.8	ug/L			04/27/18 11:03	20
1,1-Dichloroethene	8.0	J	20	6.8	ug/L			04/27/18 11:03	20
1,2,4-Trichlorobenzene	ND		20	5.4	ug/L			04/27/18 11:03	20
1,2-Dibromo-3-Chloropropane	ND		20	4.6	ug/L			04/27/18 11:03	20
1,2-Dibromoethane	ND		20	3.8	ug/L			04/27/18 11:03	20
1,2-Dichlorobenzene	ND		20	4.4	ug/L			04/27/18 11:03	20
1,2-Dichloroethane	ND		20	5.0	ug/L			04/27/18 11:03	20
1,2-Dichloropropane	ND		20	3.6	ug/L			04/27/18 11:03	20
1,3-Dichlorobenzene	ND		20	6.6	ug/L			04/27/18 11:03	20
1,4-Dichlorobenzene	ND		20	6.6	ug/L			04/27/18 11:03	20
2-Butanone (MEK)	ND		100	44	ug/L			04/27/18 11:03	20
2-Hexanone	ND		100	14	ug/L			04/27/18 11:03	20
4-Methyl-2-pentanone (MIBK)	ND		100	13	ug/L			04/27/18 11:03	20
Acetone	ND		100	21	ug/L			04/27/18 11:03	20
Benzene	ND		20	1.8	ug/L			04/27/18 11:03	20
Bromodichloromethane	ND		20	3.0	ug/L			04/27/18 11:03	20
Bromoform	ND		20	3.6	ug/L			04/27/18 11:03	20
Bromomethane	ND		20	3.6	ug/L			04/27/18 11:03	20
Carbon disulfide	ND		20	4.4	ug/L			04/27/18 11:03	20
Carbon tetrachloride	ND		20	6.6	ug/L			04/27/18 11:03	20
Chlorobenzene	ND		20	4.8	ug/L			04/27/18 11:03	20
Chloroethane	ND		20	7.4	ug/L			04/27/18 11:03	20
Chloroform	ND		20	4.4	ug/L			04/27/18 11:03	20
Chloromethane	ND		20	4.4	ug/L			04/27/18 11:03	20
cis-1,2-Dichloroethene	2600		20	5.2	ug/L			04/27/18 11:03	20
cis-1,3-Dichloropropene	ND		20	3.2	ug/L			04/27/18 11:03	20
Cyclohexane	ND		20	5.2	ug/L			04/27/18 11:03	20
Dibromochloromethane	ND		20	4.4	ug/L			04/27/18 11:03	20
Dichlorodifluoromethane	ND		20	2.8	ug/L			04/27/18 11:03	20
Ethylbenzene	ND		20	6.0	ug/L			04/27/18 11:03	20
Isopropylbenzene	ND		20	6.4	ug/L			04/27/18 11:03	20
Methyl acetate	ND		100	12	ug/L			04/27/18 11:03	20
Methyl tert-butyl ether	ND		20	2.6	ug/L			04/27/18 11:03	20
Methylcyclohexane	ND		20	4.4	ug/L			04/27/18 11:03	20
Methylene Chloride	ND		20	4.2	ug/L			04/27/18 11:03	20
Styrene	ND		20	3.4	ug/L			04/27/18 11:03	20
Tetrachloroethene	ND		20	2.4	ug/L			04/27/18 11:03	20
Toluene	ND		20	5.0	ug/L			04/27/18 11:03	20

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-14

Date Collected: 04/18/18 13:25

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-16

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	12	J	20	3.6	ug/L			04/27/18 11:03	20
trans-1,3-Dichloropropene	ND		20	3.8	ug/L			04/27/18 11:03	20
Trichloroethene	5800		20	4.4	ug/L			04/27/18 11:03	20
Trichlorofluoromethane	ND		20	3.0	ug/L			04/27/18 11:03	20
Vinyl chloride	16	J	20	1.2	ug/L			04/27/18 11:03	20
Xylenes, Total	ND		40	5.6	ug/L			04/27/18 11:03	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		74 - 132		04/27/18 11:03	20
4-Bromofluorobenzene	95		77 - 124		04/27/18 11:03	20
Dibromofluoromethane (Surr)	105		72 - 131		04/27/18 11:03	20
Toluene-d8 (Surr)	87		80 - 120		04/27/18 11:03	20

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: DUP-041818

Date Collected: 04/18/18 00:00

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-17

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			04/26/18 06:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		71 - 144					04/26/18 06:46	1
4-Bromofluorobenzene	96		72 - 133					04/26/18 06:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	2.8	ug/L			04/27/18 10:15	10
1,1,2,2-Tetrachloroethane	ND		10	1.9	ug/L			04/27/18 10:15	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.4	ug/L			04/27/18 10:15	10
1,1,2-Trichloroethane	ND		10	0.80	ug/L			04/27/18 10:15	10
1,1-Dichloroethane	ND		10	2.4	ug/L			04/27/18 10:15	10
1,1-Dichloroethene	4.2 J		10	3.4	ug/L			04/27/18 10:15	10
1,2,4-Trichlorobenzene	ND		10	2.7	ug/L			04/27/18 10:15	10
1,2-Dibromo-3-Chloropropane	ND		10	2.3	ug/L			04/27/18 10:15	10
1,2-Dibromoethane	ND		10	1.9	ug/L			04/27/18 10:15	10
1,2-Dichlorobenzene	ND		10	2.2	ug/L			04/27/18 10:15	10
1,2-Dichloroethane	ND		10	2.5	ug/L			04/27/18 10:15	10
1,2-Dichloropropane	ND		10	1.8	ug/L			04/27/18 10:15	10
1,3-Dichlorobenzene	ND		10	3.3	ug/L			04/27/18 10:15	10
1,4-Dichlorobenzene	ND		10	3.3	ug/L			04/27/18 10:15	10
2-Butanone (MEK)	ND		50	22	ug/L			04/27/18 10:15	10
2-Hexanone	ND		50	7.2	ug/L			04/27/18 10:15	10
4-Methyl-2-pentanone (MIBK)	ND		50	6.3	ug/L			04/27/18 10:15	10
Acetone	ND		50	11	ug/L			04/27/18 10:15	10
Benzene	ND		10	0.90	ug/L			04/27/18 10:15	10
Bromodichloromethane	ND		10	1.5	ug/L			04/27/18 10:15	10
Bromoform	ND		10	1.8	ug/L			04/27/18 10:15	10
Bromomethane	ND		10	1.8	ug/L			04/27/18 10:15	10
Carbon disulfide	ND		10	2.2	ug/L			04/27/18 10:15	10
Carbon tetrachloride	ND		10	3.3	ug/L			04/27/18 10:15	10
Chlorobenzene	ND		10	2.4	ug/L			04/27/18 10:15	10
Chloroethane	ND		10	3.7	ug/L			04/27/18 10:15	10
Chloroform	ND		10	2.2	ug/L			04/27/18 10:15	10
Chloromethane	ND		10	2.2	ug/L			04/27/18 10:15	10
cis-1,2-Dichloroethene	990		10	2.6	ug/L			04/27/18 10:15	10
cis-1,3-Dichloropropene	ND		10	1.6	ug/L			04/27/18 10:15	10
Cyclohexane	ND		10	2.6	ug/L			04/27/18 10:15	10
Dibromochloromethane	ND		10	2.2	ug/L			04/27/18 10:15	10
Dichlorodifluoromethane	ND		10	1.4	ug/L			04/27/18 10:15	10
Ethylbenzene	ND		10	3.0	ug/L			04/27/18 10:15	10
Isopropylbenzene	ND		10	3.2	ug/L			04/27/18 10:15	10
Methyl acetate	ND		50	5.8	ug/L			04/27/18 10:15	10
Methyl tert-butyl ether	ND		10	1.3	ug/L			04/27/18 10:15	10
Methylcyclohexane	ND		10	2.2	ug/L			04/27/18 10:15	10
Methylene Chloride	ND		10	2.1	ug/L			04/27/18 10:15	10
Styrene	ND		10	1.7	ug/L			04/27/18 10:15	10
Tetrachloroethene	ND		10	1.2	ug/L			04/27/18 10:15	10
Toluene	ND		10	2.5	ug/L			04/27/18 10:15	10

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: DUP-041818

Lab Sample ID: 480-134506-17

Date Collected: 04/18/18 00:00

Matrix: Water

Date Received: 04/18/18 18:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	6.4	J	10	1.8	ug/L			04/27/18 10:15	10
trans-1,3-Dichloropropene	ND		10	1.9	ug/L			04/27/18 10:15	10
Trichloroethene	2100		10	2.2	ug/L			04/27/18 10:15	10
Trichlorofluoromethane	ND		10	1.5	ug/L			04/27/18 10:15	10
Vinyl chloride	5.9	J	10	0.60	ug/L			04/27/18 10:15	10
Xylenes, Total	ND		20	2.8	ug/L			04/27/18 10:15	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		74 - 132		04/27/18 10:15	10
4-Bromofluorobenzene	107		77 - 124		04/27/18 10:15	10
Dibromofluoromethane (Surr)	112		72 - 131		04/27/18 10:15	10
Toluene-d8 (Surr)	99		80 - 120		04/27/18 10:15	10

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: Trip Blank

Date Collected: 04/18/18 00:00

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-18

Matrix: Water

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	0.28	ug/L			04/26/18 22:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/26/18 22:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/26/18 22:29	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/26/18 22:29	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/26/18 22:29	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/26/18 22:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/26/18 22:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/26/18 22:29	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/26/18 22:29	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/26/18 22:29	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/26/18 22:29	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/26/18 22:29	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/26/18 22:29	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/26/18 22:29	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/26/18 22:29	1
2-Hexanone	ND		5.0	0.72	ug/L			04/26/18 22:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/26/18 22:29	1
Acetone	ND		5.0	1.1	ug/L			04/26/18 22:29	1
Benzene	ND		1.0	0.090	ug/L			04/26/18 22:29	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/26/18 22:29	1
Bromoform	ND		1.0	0.18	ug/L			04/26/18 22:29	1
Bromomethane	ND		1.0	0.18	ug/L			04/26/18 22:29	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/26/18 22:29	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/26/18 22:29	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/26/18 22:29	1
Chloroethane	ND		1.0	0.37	ug/L			04/26/18 22:29	1
Chloroform	ND		1.0	0.22	ug/L			04/26/18 22:29	1
Chloromethane	ND		1.0	0.22	ug/L			04/26/18 22:29	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			04/26/18 22:29	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/26/18 22:29	1
Cyclohexane	ND		1.0	0.26	ug/L			04/26/18 22:29	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/26/18 22:29	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/26/18 22:29	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/26/18 22:29	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/26/18 22:29	1
Methyl acetate	ND		5.0	0.58	ug/L			04/26/18 22:29	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/26/18 22:29	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/26/18 22:29	1
Methylene Chloride	0.23	J	1.0	0.21	ug/L			04/26/18 22:29	1
Styrene	ND		1.0	0.17	ug/L			04/26/18 22:29	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/26/18 22:29	1
Toluene	ND		1.0	0.25	ug/L			04/26/18 22:29	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/26/18 22:29	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/26/18 22:29	1
Trichloroethene	ND		1.0	0.22	ug/L			04/26/18 22:29	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/26/18 22:29	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/26/18 22:29	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/26/18 22:29	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: Trip Blank

Date Collected: 04/18/18 00:00

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-18

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	98		74 - 132		04/26/18 22:29	1
4-Bromofluorobenzene	94		77 - 124		04/26/18 22:29	1
Dibromofluoromethane (Surr)	102		72 - 131		04/26/18 22:29	1
Toluene-d8 (Surr)	88		80 - 120		04/26/18 22:29	1

Surrogate Summary

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

TestAmerica Job ID: 480-134506-1

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)			
		DCA (74-132)	BFB (77-124)	DBFM (72-131)	TOL (80-120)
480-134506-1	MW-1	112	102	107	95
480-134506-2	MW-2	98	100	100	88
480-134506-3	MW-3	117	103	114	101
480-134506-4	MW-4	101	101	105	92
480-134506-5	MW-4D	105	101	106	93
480-134506-6	MW-5	109	110	110	99
480-134506-6 MS	MW-5	103	99	103	92
480-134506-6 MSD	MW-5	100	101	100	91
480-134506-7	MW-5D	102	99	105	90
480-134506-8	MW-6	101	95	107	88
480-134506-9	MW-7	115	105	117	102
480-134506-10	MW-8	99	98	103	87
480-134506-11	MW-9R	98	95	100	90
480-134506-12	MW-10	100	94	105	88
480-134506-13	MW-11R	102	95	100	88
480-134506-14	MW-12	101	96	102	90
480-134506-15	MW-13	99	95	100	88
480-134506-16	MW-14	102	95	105	87
480-134506-17	DUP-041818	112	107	112	99
480-134506-18	Trip Blank	98	94	102	88
LCS 460-514487/3	Lab Control Sample	99	99	101	91
LCS 460-514615/4	Lab Control Sample	100	101	101	91
LCS 460-514816/4	Lab Control Sample	106	108	106	97
LCSD 460-514615/5	Lab Control Sample Dup	97	98	99	91
LCSD 460-514816/5	Lab Control Sample Dup	99	101	99	91
MB 460-514487/7	Method Blank	100	97	102	90
MB 460-514615/8	Method Blank	101	95	104	89
MB 460-514816/8	Method Blank	99	97	101	85

Surrogate Legend

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

BFB = 4-Bromofluorobenzene

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCA (71-144)	BFB (72-133)
480-134506-1	MW-1	98	92
480-134506-1 MS	MW-1	112	93
480-134506-1 MSD	MW-1	112	92
480-134506-2	MW-2	103	91
480-134506-3	MW-3	97	92
480-134506-4	MW-4	101	99
480-134506-5	MW-4D	101	99
480-134506-6	MW-5	102	102

TestAmerica Buffalo

Surrogate Summary

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

TestAmerica Job ID: 480-134506-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCA (71-144)	BFB (72-133)
480-134506-6 MS	MW-5	108	95
480-134506-6 MSD	MW-5	108	95
480-134506-7	MW-5D	90	97
480-134506-8	MW-6	90	97
480-134506-9	MW-7	90	96
480-134506-10	MW-8	109	95
480-134506-11	MW-9R	90	97
480-134506-12	MW-10	91	96
480-134506-13	MW-11R	91	97
480-134506-14	MW-12	93	96
480-134506-15	MW-13	90	96
480-134506-16	MW-14	90	96
480-134506-17	DUP-041818	93	96
LCS 460-514169/4	Lab Control Sample	85	95
LCS 460-514273/3	Lab Control Sample	107	99
LCS 460-514496/4	Lab Control Sample	91	98
LCS 460-514624/3	Lab Control Sample	107	93
LCSD 460-514169/5	Lab Control Sample Dup	88	96
LCSD 460-514273/4	Lab Control Sample Dup	105	99
LCSD 460-514624/4	Lab Control Sample Dup	108	92
MB 460-514169/8	Method Blank	90	95
MB 460-514273/7	Method Blank	107	98
MB 460-514496/7	Method Blank	89	95
MB 460-514624/7	Method Blank	112	94

Surrogate Legend

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

BFB = 4-Bromofluorobenzene

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: MB 460-514487/7

Matrix: Water

Analysis Batch: 514487

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	0.28	ug/L			04/26/18 21:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/26/18 21:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/26/18 21:52	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/26/18 21:52	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/26/18 21:52	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/26/18 21:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/26/18 21:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/26/18 21:52	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/26/18 21:52	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/26/18 21:52	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/26/18 21:52	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/26/18 21:52	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/26/18 21:52	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/26/18 21:52	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/26/18 21:52	1
2-Hexanone	ND		5.0	0.72	ug/L			04/26/18 21:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/26/18 21:52	1
Acetone	ND		5.0	1.1	ug/L			04/26/18 21:52	1
Benzene	ND		1.0	0.090	ug/L			04/26/18 21:52	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/26/18 21:52	1
Bromoform	ND		1.0	0.18	ug/L			04/26/18 21:52	1
Bromomethane	ND		1.0	0.18	ug/L			04/26/18 21:52	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/26/18 21:52	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/26/18 21:52	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/26/18 21:52	1
Chloroethane	ND		1.0	0.37	ug/L			04/26/18 21:52	1
Chloroform	ND		1.0	0.22	ug/L			04/26/18 21:52	1
Chloromethane	ND		1.0	0.22	ug/L			04/26/18 21:52	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			04/26/18 21:52	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/26/18 21:52	1
Cyclohexane	ND		1.0	0.26	ug/L			04/26/18 21:52	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/26/18 21:52	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/26/18 21:52	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/26/18 21:52	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/26/18 21:52	1
Methyl acetate	ND		5.0	0.58	ug/L			04/26/18 21:52	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/26/18 21:52	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/26/18 21:52	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/26/18 21:52	1
Styrene	ND		1.0	0.17	ug/L			04/26/18 21:52	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/26/18 21:52	1
Toluene	ND		1.0	0.25	ug/L			04/26/18 21:52	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/26/18 21:52	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/26/18 21:52	1
Trichloroethene	ND		1.0	0.22	ug/L			04/26/18 21:52	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/26/18 21:52	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/26/18 21:52	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/26/18 21:52	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		74 - 132		04/26/18 21:52	1
4-Bromofluorobenzene	97		77 - 124		04/26/18 21:52	1
Dibromofluoromethane (Surr)	102		72 - 131		04/26/18 21:52	1
Toluene-d8 (Surr)	90		80 - 120		04/26/18 21:52	1

Lab Sample ID: LCS 460-514487/3

Matrix: Water

Analysis Batch: 514487

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	20.0	22.0		ug/L		110	75 - 125
1,1,2,2-Tetrachloroethane	20.0	20.3		ug/L		101	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.5		ug/L		102	59 - 150
1,1,2-Trichloroethane	20.0	20.4		ug/L		102	78 - 120
1,1-Dichloroethane	20.0	21.0		ug/L		105	77 - 123
1,1-Dichloroethene	20.0	20.1		ug/L		100	74 - 123
1,2,4-Trichlorobenzene	20.0	21.5		ug/L		108	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	18.2		ug/L		91	55 - 134
1,2-Dibromoethane	20.0	19.8		ug/L		99	80 - 120
1,2-Dichlorobenzene	20.0	21.9		ug/L		109	80 - 120
1,2-Dichloroethane	20.0	22.0		ug/L		110	76 - 121
1,2-Dichloropropane	20.0	20.1		ug/L		101	77 - 123
1,3-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 120
1,4-Dichlorobenzene	20.0	21.1		ug/L		106	80 - 120
2-Butanone (MEK)	100	98.7		ug/L		99	64 - 120
2-Hexanone	100	75.1		ug/L		75	71 - 125
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	78 - 124
Acetone	100	103		ug/L		103	39 - 150
Benzene	20.0	19.9		ug/L		100	77 - 121
Bromodichloromethane	20.0	21.7		ug/L		108	76 - 120
Bromoform	20.0	19.6		ug/L		98	53 - 120
Bromomethane	20.0	23.6		ug/L		118	10 - 150
Carbon disulfide	20.0	19.1		ug/L		96	69 - 133
Carbon tetrachloride	20.0	22.6		ug/L		113	70 - 132
Chlorobenzene	20.0	20.0		ug/L		100	80 - 120
Chloroethane	20.0	20.3		ug/L		102	52 - 150
Chloroform	20.0	21.9		ug/L		110	80 - 120
Chloromethane	20.0	18.4		ug/L		92	56 - 131
cis-1,2-Dichloroethene	20.0	20.7		ug/L		104	80 - 120
cis-1,3-Dichloropropene	20.0	19.3		ug/L		97	77 - 120
Cyclohexane	20.0	21.2		ug/L		106	56 - 150
Dibromochloromethane	20.0	20.6		ug/L		103	73 - 120
Dichlorodifluoromethane	20.0	16.0		ug/L		80	50 - 131
Ethylbenzene	20.0	19.2		ug/L		96	80 - 120
Isopropylbenzene	20.0	21.1		ug/L		106	80 - 123
Methyl acetate	40.0	35.8		ug/L		90	66 - 144
Methyl tert-butyl ether	20.0	21.5		ug/L		107	79 - 122
Methylcyclohexane	20.0	20.4		ug/L		102	61 - 145
Methylene Chloride	20.0	20.4		ug/L		102	77 - 123
Styrene	20.0	19.3		ug/L		96	80 - 120
Tetrachloroethene	20.0	20.0		ug/L		100	78 - 122
Toluene	20.0	19.7		ug/L		98	80 - 120
trans-1,2-Dichloroethene	20.0	19.9		ug/L		100	79 - 120

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: LCS 460-514487/3

Matrix: Water

Analysis Batch: 514487

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	20.0	18.1		ug/L		91	76 - 120
Trichloroethene	20.0	19.3		ug/L		97	77 - 120
Trichlorofluoromethane	20.0	22.6		ug/L		113	71 - 143
Vinyl chloride	20.0	19.4		ug/L		97	62 - 138

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		74 - 132
4-Bromofluorobenzene	99		77 - 124
Dibromofluoromethane (Surr)	101		72 - 131
Toluene-d8 (Surr)	91		80 - 120

Lab Sample ID: 480-134506-6 MS

Matrix: Water

Analysis Batch: 514487

Client Sample ID: MW-5

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		20.0	23.6		ug/L		118	75 - 125
1,1,2,2-Tetrachloroethane	ND		20.0	19.9		ug/L		99	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20.0	21.5		ug/L		108	59 - 150
1,1,2-Trichloroethane	ND		20.0	19.7		ug/L		98	78 - 120
1,1-Dichloroethane	ND		20.0	21.9		ug/L		110	77 - 123
1,1-Dichloroethene	ND		20.0	20.0		ug/L		100	74 - 123
1,2,4-Trichlorobenzene	ND		20.0	19.6		ug/L		98	80 - 124
1,2-Dibromo-3-Chloropropane	ND		20.0	15.5		ug/L		77	55 - 134
1,2-Dibromoethane	ND		20.0	19.4		ug/L		97	80 - 120
1,2-Dichlorobenzene	ND		20.0	21.8		ug/L		109	80 - 120
1,2-Dichloroethane	ND		20.0	22.9		ug/L		115	76 - 121
1,2-Dichloropropane	ND		20.0	20.2		ug/L		101	77 - 123
1,3-Dichlorobenzene	ND		20.0	20.6		ug/L		103	80 - 120
1,4-Dichlorobenzene	ND		20.0	20.0		ug/L		100	80 - 120
2-Butanone (MEK)	ND		100	92.3		ug/L		92	64 - 120
2-Hexanone	ND	F1	100	69.9	F1	ug/L		70	71 - 125
4-Methyl-2-pentanone (MIBK)	ND		100	99.0		ug/L		99	78 - 124
Acetone	1.6	J	100	93.4		ug/L		92	39 - 150
Benzene	ND		20.0	20.4		ug/L		102	77 - 121
Bromodichloromethane	ND		20.0	21.9		ug/L		109	76 - 120
Bromoform	ND		20.0	19.6		ug/L		98	53 - 120
Bromomethane	ND		20.0	25.6		ug/L		128	10 - 150
Carbon disulfide	ND		20.0	19.8		ug/L		99	69 - 133
Carbon tetrachloride	ND		20.0	23.3		ug/L		117	70 - 132
Chlorobenzene	ND		20.0	20.1		ug/L		100	80 - 120
Chloroethane	ND		20.0	21.8		ug/L		109	52 - 150
Chloroform	ND		20.0	21.9		ug/L		110	80 - 120
Chloromethane	ND		20.0	18.6		ug/L		93	56 - 131
cis-1,2-Dichloroethene	ND		20.0	22.0		ug/L		110	80 - 120
cis-1,3-Dichloropropene	ND		20.0	18.8		ug/L		94	77 - 120
Cyclohexane	ND		20.0	21.1		ug/L		105	56 - 150

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: 480-134506-6 MS

Matrix: Water

Analysis Batch: 514487

Client Sample ID: MW-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromochloromethane	ND		20.0	20.4		ug/L		102	73 - 120
Dichlorodifluoromethane	ND		20.0	16.5		ug/L		83	50 - 131
Ethylbenzene	ND		20.0	20.0		ug/L		100	80 - 120
Isopropylbenzene	ND		20.0	20.9		ug/L		105	80 - 123
Methyl acetate	ND		40.0	32.5		ug/L		81	66 - 144
Methyl tert-butyl ether	ND		20.0	21.3		ug/L		106	79 - 122
Methylcyclohexane	ND		20.0	20.1		ug/L		100	61 - 145
Methylene Chloride	ND		20.0	21.1		ug/L		105	77 - 123
Styrene	ND		20.0	19.8		ug/L		99	80 - 120
Tetrachloroethene	ND		20.0	20.5		ug/L		103	78 - 122
Toluene	ND		20.0	20.1		ug/L		101	80 - 120
trans-1,2-Dichloroethene	ND		20.0	20.2		ug/L		101	79 - 120
trans-1,3-Dichloropropene	ND		20.0	17.3		ug/L		86	76 - 120
Trichloroethene	ND		20.0	20.4		ug/L		102	77 - 120
Trichlorofluoromethane	ND		20.0	22.6		ug/L		113	71 - 143
Vinyl chloride	ND		20.0	19.8		ug/L		99	62 - 138

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		74 - 132
4-Bromofluorobenzene	99		77 - 124
Dibromofluoromethane (Surr)	103		72 - 131
Toluene-d8 (Surr)	92		80 - 120

Lab Sample ID: 480-134506-6 MSD

Matrix: Water

Analysis Batch: 514487

Client Sample ID: MW-5

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		20.0	23.2		ug/L		116	75 - 125	2	30
1,1,2,2-Tetrachloroethane	ND		20.0	20.0		ug/L		100	74 - 120	0	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20.0	22.5		ug/L		113	59 - 150	5	30
1,1,2-Trichloroethane	ND		20.0	19.4		ug/L		97	78 - 120	2	30
1,1-Dichloroethane	ND		20.0	21.8		ug/L		109	77 - 123	1	30
1,1-Dichloroethene	ND		20.0	19.9		ug/L		99	74 - 123	1	30
1,2,4-Trichlorobenzene	ND		20.0	20.8		ug/L		104	80 - 124	6	30
1,2-Dibromo-3-Chloropropane	ND		20.0	18.2		ug/L		91	55 - 134	16	30
1,2-Dibromoethane	ND		20.0	21.0		ug/L		105	80 - 120	8	30
1,2-Dichlorobenzene	ND		20.0	22.4		ug/L		112	80 - 120	2	30
1,2-Dichloroethane	ND		20.0	22.1		ug/L		111	76 - 121	3	30
1,2-Dichloropropane	ND		20.0	20.5		ug/L		102	77 - 123	1	30
1,3-Dichlorobenzene	ND		20.0	20.7		ug/L		103	80 - 120	0	30
1,4-Dichlorobenzene	ND		20.0	21.0		ug/L		105	80 - 120	5	30
2-Butanone (MEK)	ND		100	92.7		ug/L		93	64 - 120	0	30
2-Hexanone	ND	F1	100	71.0		ug/L		71	71 - 125	2	30
4-Methyl-2-pentanone (MIBK)	ND		100	101		ug/L		101	78 - 124	2	30
Acetone	1.6	J	100	98.2		ug/L		97	39 - 150	5	30
Benzene	ND		20.0	21.3		ug/L		106	77 - 121	4	30

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: 480-134506-6 MSD

Matrix: Water

Analysis Batch: 514487

Client Sample ID: MW-5

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		20.0	21.5		ug/L		108	76 - 120	2	30
Bromoform	ND		20.0	19.2		ug/L		96	53 - 120	2	30
Bromomethane	ND		20.0	23.4		ug/L		117	10 - 150	9	30
Carbon disulfide	ND		20.0	19.8		ug/L		99	69 - 133	0	30
Carbon tetrachloride	ND		20.0	24.5		ug/L		122	70 - 132	5	30
Chlorobenzene	ND		20.0	20.1		ug/L		100	80 - 120	0	30
Chloroethane	ND		20.0	21.1		ug/L		106	52 - 150	3	30
Chloroform	ND		20.0	22.6		ug/L		113	80 - 120	3	30
Chloromethane	ND		20.0	19.8		ug/L		99	56 - 131	6	30
cis-1,2-Dichloroethene	ND		20.0	22.2		ug/L		111	80 - 120	1	30
cis-1,3-Dichloropropene	ND		20.0	18.9		ug/L		95	77 - 120	1	30
Cyclohexane	ND		20.0	20.3		ug/L		101	56 - 150	4	30
Dibromochloromethane	ND		20.0	20.8		ug/L		104	73 - 120	2	30
Dichlorodifluoromethane	ND		20.0	17.3		ug/L		87	50 - 131	5	30
Ethylbenzene	ND		20.0	20.1		ug/L		100	80 - 120	1	30
Isopropylbenzene	ND		20.0	21.6		ug/L		108	80 - 123	3	30
Methyl acetate	ND		40.0	33.7		ug/L		84	66 - 144	4	30
Methyl tert-butyl ether	ND		20.0	21.1		ug/L		106	79 - 122	1	30
Methylcyclohexane	ND		20.0	20.4		ug/L		102	61 - 145	2	30
Methylene Chloride	ND		20.0	21.2		ug/L		106	77 - 123	1	30
Styrene	ND		20.0	19.8		ug/L		99	80 - 120	0	30
Tetrachloroethene	ND		20.0	20.4		ug/L		102	78 - 122	1	30
Toluene	ND		20.0	20.3		ug/L		102	80 - 120	1	30
trans-1,2-Dichloroethene	ND		20.0	20.7		ug/L		104	79 - 120	2	30
trans-1,3-Dichloropropene	ND		20.0	18.0		ug/L		90	76 - 120	4	30
Trichloroethene	ND		20.0	20.3		ug/L		102	77 - 120	0	30
Trichlorofluoromethane	ND		20.0	23.1		ug/L		116	71 - 143	2	30
Vinyl chloride	ND		20.0	20.3		ug/L		101	62 - 138	3	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		74 - 132
4-Bromofluorobenzene	101		77 - 124
Dibromofluoromethane (Surr)	100		72 - 131
Toluene-d8 (Surr)	91		80 - 120

Lab Sample ID: MB 460-514615/8

Matrix: Water

Analysis Batch: 514615

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	0.28	ug/L			04/27/18 09:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/27/18 09:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/27/18 09:28	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/27/18 09:28	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/27/18 09:28	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/27/18 09:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/27/18 09:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/27/18 09:28	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: MB 460-514615/8

Matrix: Water

Analysis Batch: 514615

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/27/18 09:28	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/27/18 09:28	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/27/18 09:28	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/27/18 09:28	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 09:28	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 09:28	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/27/18 09:28	1
2-Hexanone	ND		5.0	0.72	ug/L			04/27/18 09:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/27/18 09:28	1
Acetone	ND		5.0	1.1	ug/L			04/27/18 09:28	1
Benzene	ND		1.0	0.090	ug/L			04/27/18 09:28	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/27/18 09:28	1
Bromoform	ND		1.0	0.18	ug/L			04/27/18 09:28	1
Bromomethane	ND		1.0	0.18	ug/L			04/27/18 09:28	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/27/18 09:28	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/27/18 09:28	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/27/18 09:28	1
Chloroethane	ND		1.0	0.37	ug/L			04/27/18 09:28	1
Chloroform	ND		1.0	0.22	ug/L			04/27/18 09:28	1
Chloromethane	ND		1.0	0.22	ug/L			04/27/18 09:28	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			04/27/18 09:28	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/27/18 09:28	1
Cyclohexane	ND		1.0	0.26	ug/L			04/27/18 09:28	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/27/18 09:28	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/27/18 09:28	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/27/18 09:28	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/27/18 09:28	1
Methyl acetate	ND		5.0	0.58	ug/L			04/27/18 09:28	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/27/18 09:28	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/27/18 09:28	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/27/18 09:28	1
Styrene	ND		1.0	0.17	ug/L			04/27/18 09:28	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/27/18 09:28	1
Toluene	ND		1.0	0.25	ug/L			04/27/18 09:28	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/27/18 09:28	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/27/18 09:28	1
Trichloroethene	ND		1.0	0.22	ug/L			04/27/18 09:28	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/27/18 09:28	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/27/18 09:28	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/27/18 09:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		74 - 132		04/27/18 09:28	1
4-Bromofluorobenzene	95		77 - 124		04/27/18 09:28	1
Dibromofluoromethane (Surr)	104		72 - 131		04/27/18 09:28	1
Toluene-d8 (Surr)	89		80 - 120		04/27/18 09:28	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: LCS 460-514615/4

Matrix: Water

Analysis Batch: 514615

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	20.0	22.9		ug/L		115	75 - 125
1,1,2,2-Tetrachloroethane	20.0	19.1		ug/L		96	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.3		ug/L		112	59 - 150
1,1,2-Trichloroethane	20.0	19.1		ug/L		96	78 - 120
1,1-Dichloroethane	20.0	21.3		ug/L		106	77 - 123
1,1-Dichloroethene	20.0	20.2		ug/L		101	74 - 123
1,2,4-Trichlorobenzene	20.0	20.0		ug/L		100	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	16.0		ug/L		80	55 - 134
1,2-Dibromoethane	20.0	19.7		ug/L		98	80 - 120
1,2-Dichlorobenzene	20.0	21.0		ug/L		105	80 - 120
1,2-Dichloroethane	20.0	22.1		ug/L		111	76 - 121
1,2-Dichloropropane	20.0	20.4		ug/L		102	77 - 123
1,3-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120
1,4-Dichlorobenzene	20.0	19.2		ug/L		96	80 - 120
2-Butanone (MEK)	100	94.0		ug/L		94	64 - 120
2-Hexanone	100	72.3		ug/L		72	71 - 125
4-Methyl-2-pentanone (MIBK)	100	100		ug/L		100	78 - 124
Acetone	100	102		ug/L		102	39 - 150
Benzene	20.0	20.2		ug/L		101	77 - 121
Bromodichloromethane	20.0	21.6		ug/L		108	76 - 120
Bromoform	20.0	18.6		ug/L		93	53 - 120
Bromomethane	20.0	25.5		ug/L		127	10 - 150
Carbon disulfide	20.0	19.1		ug/L		96	69 - 133
Carbon tetrachloride	20.0	24.5		ug/L		123	70 - 132
Chlorobenzene	20.0	19.2		ug/L		96	80 - 120
Chloroethane	20.0	23.4		ug/L		117	52 - 150
Chloroform	20.0	22.4		ug/L		112	80 - 120
Chloromethane	20.0	20.1		ug/L		100	56 - 131
cis-1,2-Dichloroethene	20.0	21.3		ug/L		106	80 - 120
cis-1,3-Dichloropropene	20.0	18.8		ug/L		94	77 - 120
Cyclohexane	20.0	22.0		ug/L		110	56 - 150
Dibromochloromethane	20.0	19.8		ug/L		99	73 - 120
Dichlorodifluoromethane	20.0	18.0		ug/L		90	50 - 131
Ethylbenzene	20.0	19.8		ug/L		99	80 - 120
Isopropylbenzene	20.0	20.7		ug/L		103	80 - 123
Methyl acetate	40.0	34.8		ug/L		87	66 - 144
Methyl tert-butyl ether	20.0	20.9		ug/L		104	79 - 122
Methylcyclohexane	20.0	21.2		ug/L		106	61 - 145
Methylene Chloride	20.0	20.9		ug/L		105	77 - 123
Styrene	20.0	18.7		ug/L		94	80 - 120
Tetrachloroethene	20.0	20.2		ug/L		101	78 - 122
Toluene	20.0	19.7		ug/L		99	80 - 120
trans-1,2-Dichloroethene	20.0	20.2		ug/L		101	79 - 120
trans-1,3-Dichloropropene	20.0	17.5		ug/L		88	76 - 120
Trichloroethene	20.0	20.5		ug/L		103	77 - 120
Trichlorofluoromethane	20.0	25.2		ug/L		126	71 - 143
Vinyl chloride	20.0	21.4		ug/L		107	62 - 138

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: LCS 460-514615/4

Matrix: Water

Analysis Batch: 514615

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		74 - 132
4-Bromofluorobenzene	101		77 - 124
Dibromofluoromethane (Surr)	101		72 - 131
Toluene-d8 (Surr)	91		80 - 120

Lab Sample ID: LCSD 460-514615/5

Matrix: Water

Analysis Batch: 514615

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	22.4		ug/L		112	75 - 125	2	30
1,1,2,2-Tetrachloroethane	20.0	19.8		ug/L		99	74 - 120	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.9		ug/L		104	59 - 150	7	30
1,1,2-Trichloroethane	20.0	19.7		ug/L		98	78 - 120	3	30
1,1-Dichloroethane	20.0	21.4		ug/L		107	77 - 123	1	30
1,1-Dichloroethene	20.0	19.7		ug/L		98	74 - 123	3	30
1,2,4-Trichlorobenzene	20.0	20.0		ug/L		100	80 - 124	0	30
1,2-Dibromo-3-Chloropropane	20.0	17.4		ug/L		87	55 - 134	9	30
1,2-Dibromoethane	20.0	19.9		ug/L		99	80 - 120	1	30
1,2-Dichlorobenzene	20.0	21.1		ug/L		105	80 - 120	0	30
1,2-Dichloroethane	20.0	21.8		ug/L		109	76 - 121	1	30
1,2-Dichloropropane	20.0	20.6		ug/L		103	77 - 123	1	30
1,3-Dichlorobenzene	20.0	19.7		ug/L		98	80 - 120	0	30
1,4-Dichlorobenzene	20.0	19.5		ug/L		97	80 - 120	2	30
2-Butanone (MEK)	100	99.6		ug/L		100	64 - 120	6	30
2-Hexanone	100	72.9		ug/L		73	71 - 125	1	30
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	78 - 124	3	30
Acetone	100	103		ug/L		103	39 - 150	1	30
Benzene	20.0	20.2		ug/L		101	77 - 121	0	30
Bromodichloromethane	20.0	21.9		ug/L		109	76 - 120	1	30
Bromoform	20.0	18.8		ug/L		94	53 - 120	1	30
Bromomethane	20.0	22.3		ug/L		111	10 - 150	13	30
Carbon disulfide	20.0	19.0		ug/L		95	69 - 133	0	30
Carbon tetrachloride	20.0	23.4		ug/L		117	70 - 132	5	30
Chlorobenzene	20.0	19.4		ug/L		97	80 - 120	1	30
Chloroethane	20.0	20.9		ug/L		104	52 - 150	12	30
Chloroform	20.0	22.3		ug/L		111	80 - 120	1	30
Chloromethane	20.0	18.1		ug/L		91	56 - 131	10	30
cis-1,2-Dichloroethene	20.0	21.1		ug/L		106	80 - 120	1	30
cis-1,3-Dichloropropene	20.0	19.0		ug/L		95	77 - 120	1	30
Cyclohexane	20.0	21.6		ug/L		108	56 - 150	2	30
Dibromochloromethane	20.0	20.7		ug/L		103	73 - 120	4	30
Dichlorodifluoromethane	20.0	16.0		ug/L		80	50 - 131	12	30
Ethylbenzene	20.0	20.2		ug/L		101	80 - 120	2	30
Isopropylbenzene	20.0	21.5		ug/L		107	80 - 123	4	30
Methyl acetate	40.0	35.9		ug/L		90	66 - 144	3	30
Methyl tert-butyl ether	20.0	21.0		ug/L		105	79 - 122	0	30

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: LCSD 460-514615/5

Matrix: Water

Analysis Batch: 514615

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylcyclohexane	20.0	21.2		ug/L		106	61 - 145	0	30
Methylene Chloride	20.0	20.2		ug/L		101	77 - 123	3	30
Styrene	20.0	19.7		ug/L		99	80 - 120	5	30
Tetrachloroethene	20.0	20.7		ug/L		104	78 - 122	3	30
Toluene	20.0	19.7		ug/L		98	80 - 120	0	30
trans-1,2-Dichloroethene	20.0	20.7		ug/L		104	79 - 120	3	30
trans-1,3-Dichloropropene	20.0	18.8		ug/L		94	76 - 120	7	30
Trichloroethene	20.0	20.2		ug/L		101	77 - 120	1	30
Trichlorofluoromethane	20.0	22.6		ug/L		113	71 - 143	11	30
Vinyl chloride	20.0	18.5		ug/L		92	62 - 138	14	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		74 - 132
4-Bromofluorobenzene	98		77 - 124
Dibromofluoromethane (Surr)	99		72 - 131
Toluene-d8 (Surr)	91		80 - 120

Lab Sample ID: MB 460-514816/8

Matrix: Water

Analysis Batch: 514816

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	0.28	ug/L			04/27/18 21:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.19	ug/L			04/27/18 21:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.34	ug/L			04/27/18 21:52	1
1,1,2-Trichloroethane	ND		1.0	0.080	ug/L			04/27/18 21:52	1
1,1-Dichloroethane	ND		1.0	0.24	ug/L			04/27/18 21:52	1
1,1-Dichloroethene	ND		1.0	0.34	ug/L			04/27/18 21:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			04/27/18 21:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.23	ug/L			04/27/18 21:52	1
1,2-Dibromoethane	ND		1.0	0.19	ug/L			04/27/18 21:52	1
1,2-Dichlorobenzene	ND		1.0	0.22	ug/L			04/27/18 21:52	1
1,2-Dichloroethane	ND		1.0	0.25	ug/L			04/27/18 21:52	1
1,2-Dichloropropane	ND		1.0	0.18	ug/L			04/27/18 21:52	1
1,3-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 21:52	1
1,4-Dichlorobenzene	ND		1.0	0.33	ug/L			04/27/18 21:52	1
2-Butanone (MEK)	ND		5.0	2.2	ug/L			04/27/18 21:52	1
2-Hexanone	ND		5.0	0.72	ug/L			04/27/18 21:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.63	ug/L			04/27/18 21:52	1
Acetone	ND		5.0	1.1	ug/L			04/27/18 21:52	1
Benzene	ND		1.0	0.090	ug/L			04/27/18 21:52	1
Bromodichloromethane	ND		1.0	0.15	ug/L			04/27/18 21:52	1
Bromoform	ND		1.0	0.18	ug/L			04/27/18 21:52	1
Bromomethane	ND		1.0	0.18	ug/L			04/27/18 21:52	1
Carbon disulfide	ND		1.0	0.22	ug/L			04/27/18 21:52	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			04/27/18 21:52	1
Chlorobenzene	ND		1.0	0.24	ug/L			04/27/18 21:52	1
Chloroethane	ND		1.0	0.37	ug/L			04/27/18 21:52	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: MB 460-514816/8

Matrix: Water

Analysis Batch: 514816

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.22	ug/L			04/27/18 21:52	1
Chloromethane	ND		1.0	0.22	ug/L			04/27/18 21:52	1
cis-1,2-Dichloroethene	ND		1.0	0.26	ug/L			04/27/18 21:52	1
cis-1,3-Dichloropropene	ND		1.0	0.16	ug/L			04/27/18 21:52	1
Cyclohexane	ND		1.0	0.26	ug/L			04/27/18 21:52	1
Dibromochloromethane	ND		1.0	0.22	ug/L			04/27/18 21:52	1
Dichlorodifluoromethane	ND		1.0	0.14	ug/L			04/27/18 21:52	1
Ethylbenzene	ND		1.0	0.30	ug/L			04/27/18 21:52	1
Isopropylbenzene	ND		1.0	0.32	ug/L			04/27/18 21:52	1
Methyl acetate	ND		5.0	0.58	ug/L			04/27/18 21:52	1
Methyl tert-butyl ether	ND		1.0	0.13	ug/L			04/27/18 21:52	1
Methylcyclohexane	ND		1.0	0.22	ug/L			04/27/18 21:52	1
Methylene Chloride	ND		1.0	0.21	ug/L			04/27/18 21:52	1
Styrene	ND		1.0	0.17	ug/L			04/27/18 21:52	1
Tetrachloroethene	ND		1.0	0.12	ug/L			04/27/18 21:52	1
Toluene	ND		1.0	0.25	ug/L			04/27/18 21:52	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			04/27/18 21:52	1
trans-1,3-Dichloropropene	ND		1.0	0.19	ug/L			04/27/18 21:52	1
Trichloroethene	ND		1.0	0.22	ug/L			04/27/18 21:52	1
Trichlorofluoromethane	ND		1.0	0.15	ug/L			04/27/18 21:52	1
Vinyl chloride	ND		1.0	0.060	ug/L			04/27/18 21:52	1
Xylenes, Total	ND		2.0	0.28	ug/L			04/27/18 21:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		74 - 132		04/27/18 21:52	1
4-Bromofluorobenzene	97		77 - 124		04/27/18 21:52	1
Dibromofluoromethane (Surr)	101		72 - 131		04/27/18 21:52	1
Toluene-d8 (Surr)	85		80 - 120		04/27/18 21:52	1

Lab Sample ID: LCS 460-514816/4

Matrix: Water

Analysis Batch: 514816

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	20.0	22.0		ug/L		110	75 - 125
1,1,2,2-Tetrachloroethane	20.0	19.7		ug/L		99	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.4		ug/L		102	59 - 150
1,1,2-Trichloroethane	20.0	19.4		ug/L		97	78 - 120
1,1-Dichloroethane	20.0	20.8		ug/L		104	77 - 123
1,1-Dichloroethene	20.0	18.9		ug/L		95	74 - 123
1,2,4-Trichlorobenzene	20.0	20.2		ug/L		101	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	16.3		ug/L		82	55 - 134
1,2-Dibromoethane	20.0	20.1		ug/L		100	80 - 120
1,2-Dichlorobenzene	20.0	22.1		ug/L		111	80 - 120
1,2-Dichloroethane	20.0	21.8		ug/L		109	76 - 121
1,2-Dichloropropane	20.0	20.8		ug/L		104	77 - 123
1,3-Dichlorobenzene	20.0	21.1		ug/L		106	80 - 120

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: LCS 460-514816/4

Matrix: Water

Analysis Batch: 514816

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	20.0	20.8		ug/L		104	80 - 120
2-Butanone (MEK)	100	87.8		ug/L		88	64 - 120
2-Hexanone	100	68.4	*	ug/L		68	71 - 125
4-Methyl-2-pentanone (MIBK)	100	99.5		ug/L		99	78 - 124
Acetone	100	95.7		ug/L		96	39 - 150
Benzene	20.0	19.8		ug/L		99	77 - 121
Bromodichloromethane	20.0	21.8		ug/L		109	76 - 120
Bromoform	20.0	18.9		ug/L		94	53 - 120
Bromomethane	20.0	25.6		ug/L		128	10 - 150
Carbon disulfide	20.0	18.6		ug/L		93	69 - 133
Carbon tetrachloride	20.0	21.7		ug/L		109	70 - 132
Chlorobenzene	20.0	19.4		ug/L		97	80 - 120
Chloroethane	20.0	21.9		ug/L		109	52 - 150
Chloroform	20.0	21.8		ug/L		109	80 - 120
Chloromethane	20.0	19.9		ug/L		100	56 - 131
cis-1,2-Dichloroethene	20.0	21.0		ug/L		105	80 - 120
cis-1,3-Dichloropropene	20.0	19.1		ug/L		96	77 - 120
Cyclohexane	20.0	20.0		ug/L		100	56 - 150
Dibromochloromethane	20.0	20.7		ug/L		103	73 - 120
Dichlorodifluoromethane	20.0	16.2		ug/L		81	50 - 131
Ethylbenzene	20.0	18.9		ug/L		95	80 - 120
Isopropylbenzene	20.0	20.7		ug/L		103	80 - 123
Methyl acetate	40.0	34.1		ug/L		85	66 - 144
Methyl tert-butyl ether	20.0	20.5		ug/L		102	79 - 122
Methylcyclohexane	20.0	19.3		ug/L		97	61 - 145
Methylene Chloride	20.0	20.7		ug/L		104	77 - 123
Styrene	20.0	18.9		ug/L		94	80 - 120
Tetrachloroethene	20.0	19.9		ug/L		100	78 - 122
Toluene	20.0	19.5		ug/L		98	80 - 120
trans-1,2-Dichloroethene	20.0	19.6		ug/L		98	79 - 120
trans-1,3-Dichloropropene	20.0	18.5		ug/L		92	76 - 120
Trichloroethene	20.0	21.5		ug/L		107	77 - 120
Trichlorofluoromethane	20.0	24.2		ug/L		121	71 - 143
Vinyl chloride	20.0	21.2		ug/L		106	62 - 138

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		74 - 132
4-Bromofluorobenzene	108		77 - 124
Dibromofluoromethane (Surr)	106		72 - 131
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCSD 460-514816/5

Matrix: Water

Analysis Batch: 514816

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	20.6		ug/L		103	75 - 125	7	30
1,1,2,2-Tetrachloroethane	20.0	17.7		ug/L		88	74 - 120	11	30

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: LCSD 460-514816/5

Matrix: Water

Analysis Batch: 514816

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.7		ug/L		98	59 - 150	4	30
1,1,2-Trichloroethane	20.0	18.5		ug/L		92	78 - 120	5	30
1,1-Dichloroethane	20.0	20.3		ug/L		102	77 - 123	2	30
1,1-Dichloroethene	20.0	17.4		ug/L		87	74 - 123	8	30
1,2,4-Trichlorobenzene	20.0	20.6		ug/L		103	80 - 124	2	30
1,2-Dibromo-3-Chloropropane	20.0	14.5		ug/L		72	55 - 134	12	30
1,2-Dibromoethane	20.0	18.9		ug/L		94	80 - 120	6	30
1,2-Dichlorobenzene	20.0	20.3		ug/L		102	80 - 120	8	30
1,2-Dichloroethane	20.0	20.9		ug/L		105	76 - 121	4	30
1,2-Dichloropropane	20.0	19.1		ug/L		95	77 - 123	9	30
1,3-Dichlorobenzene	20.0	18.1		ug/L		90	80 - 120	15	30
1,4-Dichlorobenzene	20.0	20.0		ug/L		100	80 - 120	4	30
2-Butanone (MEK)	100	88.2		ug/L		88	64 - 120	0	30
2-Hexanone	100	64.3	*	ug/L		64	71 - 125	6	30
4-Methyl-2-pentanone (MIBK)	100	93.3		ug/L		93	78 - 124	6	30
Acetone	100	88.4		ug/L		88	39 - 150	8	30
Benzene	20.0	18.4		ug/L		92	77 - 121	8	30
Bromodichloromethane	20.0	20.3		ug/L		101	76 - 120	7	30
Bromoform	20.0	17.4		ug/L		87	53 - 120	8	30
Bromomethane	20.0	24.0		ug/L		120	10 - 150	6	30
Carbon disulfide	20.0	17.7		ug/L		88	69 - 133	5	30
Carbon tetrachloride	20.0	20.9		ug/L		104	70 - 132	4	30
Chlorobenzene	20.0	18.6		ug/L		93	80 - 120	5	30
Chloroethane	20.0	20.8		ug/L		104	52 - 150	5	30
Chloroform	20.0	21.2		ug/L		106	80 - 120	3	30
Chloromethane	20.0	18.8		ug/L		94	56 - 131	6	30
cis-1,2-Dichloroethene	20.0	20.6		ug/L		103	80 - 120	2	30
cis-1,3-Dichloropropene	20.0	17.7		ug/L		89	77 - 120	8	30
Cyclohexane	20.0	19.5		ug/L		98	56 - 150	3	30
Dibromochloromethane	20.0	19.5		ug/L		97	73 - 120	6	30
Dichlorodifluoromethane	20.0	14.8		ug/L		74	50 - 131	9	30
Ethylbenzene	20.0	18.7		ug/L		94	80 - 120	1	30
Isopropylbenzene	20.0	19.2		ug/L		96	80 - 123	7	30
Methyl acetate	40.0	33.2		ug/L		83	66 - 144	3	30
Methyl tert-butyl ether	20.0	19.9		ug/L		100	79 - 122	3	30
Methylcyclohexane	20.0	18.9		ug/L		95	61 - 145	2	30
Methylene Chloride	20.0	19.1		ug/L		95	77 - 123	8	30
Styrene	20.0	17.5		ug/L		88	80 - 120	7	30
Tetrachloroethene	20.0	18.5		ug/L		93	78 - 122	7	30
Toluene	20.0	18.7		ug/L		93	80 - 120	4	30
trans-1,2-Dichloroethene	20.0	18.7		ug/L		94	79 - 120	5	30
trans-1,3-Dichloropropene	20.0	16.7		ug/L		84	76 - 120	10	30
Trichloroethene	20.0	18.6		ug/L		93	77 - 120	14	30
Trichlorofluoromethane	20.0	21.5		ug/L		107	71 - 143	12	30
Vinyl chloride	20.0	19.8		ug/L		99	62 - 138	7	30

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: LCSD 460-514816/5

Matrix: Water

Analysis Batch: 514816

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		74 - 132
4-Bromofluorobenzene	101		77 - 124
Dibromofluoromethane (Surr)	99		72 - 131
Toluene-d8 (Surr)	91		80 - 120

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

Lab Sample ID: MB 460-514169/8

Matrix: Water

Analysis Batch: 514169

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L	-		04/25/18 23:51	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		71 - 144					04/25/18 23:51	1
4-Bromofluorobenzene	95		72 - 133					04/25/18 23:51	1

Lab Sample ID: LCS 460-514169/4

Matrix: Water

Analysis Batch: 514169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	5.00	5.46		ug/L	-	109	66 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	85		71 - 144				
4-Bromofluorobenzene	95		72 - 133				

Lab Sample ID: LCSD 460-514169/5

Matrix: Water

Analysis Batch: 514169

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	5.00	5.40		ug/L	-	108	66 - 135	1	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	88		71 - 144						
4-Bromofluorobenzene	96		72 - 133						

Lab Sample ID: MB 460-514273/7

Matrix: Water

Analysis Batch: 514273

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L	-		04/26/18 11:09	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: MB 460-514273/7

Matrix: Water

Analysis Batch: 514273

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		71 - 144		04/26/18 11:09	1
4-Bromofluorobenzene	98		72 - 133		04/26/18 11:09	1

Lab Sample ID: LCS 460-514273/3

Matrix: Water

Analysis Batch: 514273

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	5.00	5.38		ug/L		108	66 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		71 - 144
4-Bromofluorobenzene	99		72 - 133

Lab Sample ID: LCSD 460-514273/4

Matrix: Water

Analysis Batch: 514273

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	5.00	5.36		ug/L		107	66 - 135	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		71 - 144
4-Bromofluorobenzene	99		72 - 133

Lab Sample ID: 480-134506-6 MS

Matrix: Water

Analysis Batch: 514273

Client Sample ID: MW-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	ND		5.00	5.22		ug/L		104	66 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		71 - 144
4-Bromofluorobenzene	95		72 - 133

Lab Sample ID: 480-134506-6 MSD

Matrix: Water

Analysis Batch: 514273

Client Sample ID: MW-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		5.00	4.96		ug/L		99	66 - 135	5	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		71 - 144
4-Bromofluorobenzene	95		72 - 133

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: MB 460-514496/7

Matrix: Water

Analysis Batch: 514496

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L	-		04/26/18 23:36	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		71 - 144					04/26/18 23:36	1
4-Bromofluorobenzene	95		72 - 133					04/26/18 23:36	1

Lab Sample ID: LCS 460-514496/4

Matrix: Water

Analysis Batch: 514496

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	5.00	5.70		ug/L	-	114	66 - 135
Surrogate	%Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	91		71 - 144				
4-Bromofluorobenzene	98		72 - 133				

Lab Sample ID: MB 460-514624/7

Matrix: Water

Analysis Batch: 514624

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L	-		04/27/18 10:55	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		71 - 144					04/27/18 10:55	1
4-Bromofluorobenzene	94		72 - 133					04/27/18 10:55	1

Lab Sample ID: LCS 460-514624/3

Matrix: Water

Analysis Batch: 514624

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	5.00	5.11		ug/L	-	102	66 - 135
Surrogate	%Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	107		71 - 144				
4-Bromofluorobenzene	93		72 - 133				

Lab Sample ID: LCSD 460-514624/4

Matrix: Water

Analysis Batch: 514624

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	5.00	5.16		ug/L	-	103	66 - 135	1	30

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-134506-1

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

Lab Sample ID: LCSD 460-514624/4

Matrix: Water

Analysis Batch: 514624

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		71 - 144
4-Bromofluorobenzene	92		72 - 133

Lab Sample ID: 480-134506-1 MS

Matrix: Water

Analysis Batch: 514624

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	ND		10.0	10.7		ug/L		107	66 - 135

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	112		71 - 144
4-Bromofluorobenzene	93		72 - 133

Lab Sample ID: 480-134506-1 MSD

Matrix: Water

Analysis Batch: 514624

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		10.0	10.9		ug/L		109	66 - 135	2	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	112		71 - 144
4-Bromofluorobenzene	92		72 - 133

QC Association Summary

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

TestAmerica Job ID: 480-134506-1

GC/MS VOA

Analysis Batch: 514169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134506-7	MW-5D	Total/NA	Water	8260C SIM	
480-134506-8	MW-6	Total/NA	Water	8260C SIM	
480-134506-9	MW-7	Total/NA	Water	8260C SIM	
480-134506-11	MW-9R	Total/NA	Water	8260C SIM	
480-134506-12	MW-10	Total/NA	Water	8260C SIM	
480-134506-13	MW-11R	Total/NA	Water	8260C SIM	
480-134506-14	MW-12	Total/NA	Water	8260C SIM	
480-134506-15	MW-13	Total/NA	Water	8260C SIM	
480-134506-16	MW-14	Total/NA	Water	8260C SIM	
480-134506-17	DUP-041818	Total/NA	Water	8260C SIM	
MB 460-514169/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-514169/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-514169/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 514273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134506-4	MW-4	Total/NA	Water	8260C SIM	
480-134506-5	MW-4D	Total/NA	Water	8260C SIM	
480-134506-6	MW-5	Total/NA	Water	8260C SIM	
480-134506-10	MW-8	Total/NA	Water	8260C SIM	
MB 460-514273/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-514273/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-514273/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
480-134506-6 MS	MW-5	Total/NA	Water	8260C SIM	
480-134506-6 MSD	MW-5	Total/NA	Water	8260C SIM	

Analysis Batch: 514487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134506-1	MW-1	Total/NA	Water	8260C	
480-134506-3	MW-3	Total/NA	Water	8260C	
480-134506-4	MW-4	Total/NA	Water	8260C	
480-134506-5	MW-4D	Total/NA	Water	8260C	
480-134506-6	MW-5	Total/NA	Water	8260C	
480-134506-7	MW-5D	Total/NA	Water	8260C	
480-134506-8	MW-6	Total/NA	Water	8260C	
480-134506-9	MW-7	Total/NA	Water	8260C	
480-134506-10	MW-8	Total/NA	Water	8260C	
480-134506-11	MW-9R	Total/NA	Water	8260C	
480-134506-12	MW-10	Total/NA	Water	8260C	
480-134506-13	MW-11R	Total/NA	Water	8260C	
480-134506-14	MW-12	Total/NA	Water	8260C	
480-134506-18	Trip Blank	Total/NA	Water	8260C	
MB 460-514487/7	Method Blank	Total/NA	Water	8260C	
LCS 460-514487/3	Lab Control Sample	Total/NA	Water	8260C	
480-134506-6 MS	MW-5	Total/NA	Water	8260C	
480-134506-6 MSD	MW-5	Total/NA	Water	8260C	

Analysis Batch: 514496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134506-1	MW-1	Total/NA	Water	8260C SIM	
480-134506-2	MW-2	Total/NA	Water	8260C SIM	

TestAmerica Buffalo

QC Association Summary

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

TestAmerica Job ID: 480-134506-1

GC/MS VOA (Continued)

Analysis Batch: 514496 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134506-3	MW-3	Total/NA	Water	8260C SIM	
MB 460-514496/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-514496/4	Lab Control Sample	Total/NA	Water	8260C SIM	

Analysis Batch: 514615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134506-15	MW-13	Total/NA	Water	8260C	
480-134506-16	MW-14	Total/NA	Water	8260C	
480-134506-17	DUP-041818	Total/NA	Water	8260C	
MB 460-514615/8	Method Blank	Total/NA	Water	8260C	
LCS 460-514615/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-514615/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 514624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-514624/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-514624/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-514624/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	
480-134506-1 MS	MW-1	Total/NA	Water	8260C SIM	
480-134506-1 MSD	MW-1	Total/NA	Water	8260C SIM	

Analysis Batch: 514816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134506-2	MW-2	Total/NA	Water	8260C	
MB 460-514816/8	Method Blank	Total/NA	Water	8260C	
LCS 460-514816/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-514816/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Lab Chronicle

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-1

Date Collected: 04/18/18 09:45

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	514487	04/26/18 23:15	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514496	04/27/18 06:54	KLB	TAL EDI

Client Sample ID: MW-2

Date Collected: 04/17/18 09:55

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	514816	04/27/18 23:50	XXC	TAL EDI
Total/NA	Analysis	8260C SIM		100	514496	04/27/18 07:41	KLB	TAL EDI

Client Sample ID: MW-3

Date Collected: 04/18/18 12:05

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	514487	04/27/18 02:02	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514496	04/27/18 07:18	KLB	TAL EDI

Client Sample ID: MW-4

Date Collected: 04/17/18 14:45

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	514487	04/27/18 03:59	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		10	514273	04/26/18 18:27	KLB	TAL EDI

Client Sample ID: MW-4D

Date Collected: 04/17/18 13:35

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	514487	04/26/18 23:40	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514273	04/26/18 17:18	KLB	TAL EDI

Client Sample ID: MW-5

Date Collected: 04/17/18 11:20

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	514487	04/26/18 22:52	KLB	TAL EDI

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-5

Date Collected: 04/17/18 11:20

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C SIM		1	514273	04/26/18 17:41	KLB	TAL EDI

Client Sample ID: MW-5D

Date Collected: 04/17/18 11:55

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	514487	04/27/18 00:03	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514169	04/26/18 02:56	KLB	TAL EDI

Client Sample ID: MW-6

Date Collected: 04/16/18 13:30

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	514487	04/27/18 00:27	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514169	04/26/18 03:19	KLB	TAL EDI

Client Sample ID: MW-7

Date Collected: 04/17/18 17:15

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	514487	04/27/18 00:51	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514169	04/26/18 03:42	KLB	TAL EDI

Client Sample ID: MW-8

Date Collected: 04/18/18 10:45

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	514487	04/27/18 01:15	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514273	04/26/18 12:41	KLB	TAL EDI

Client Sample ID: MW-9R

Date Collected: 04/18/18 15:50

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	514487	04/27/18 02:25	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514169	04/26/18 04:28	KLB	TAL EDI

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: MW-10

Date Collected: 04/16/18 17:45

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	514487	04/27/18 01:38	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514169	04/26/18 04:51	KLB	TAL EDI

Client Sample ID: MW-11R

Date Collected: 04/16/18 16:00

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	514487	04/27/18 03:12	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514169	04/26/18 05:14	KLB	TAL EDI

Client Sample ID: MW-12

Date Collected: 04/17/18 15:30

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	514487	04/27/18 03:35	KLB	TAL EDI
Total/NA	Analysis	8260C SIM		1	514169	04/26/18 05:37	KLB	TAL EDI

Client Sample ID: MW-13

Date Collected: 04/18/18 14:40

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	514615	04/27/18 10:39	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	514169	04/26/18 06:00	KLB	TAL EDI

Client Sample ID: MW-14

Date Collected: 04/18/18 13:25

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	514615	04/27/18 11:03	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	514169	04/26/18 06:23	KLB	TAL EDI

Client Sample ID: DUP-041818

Date Collected: 04/18/18 00:00

Date Received: 04/18/18 18:30

Lab Sample ID: 480-134506-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	514615	04/27/18 10:15	CJM	TAL EDI

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-134506-1

Client Sample ID: DUP-041818

Lab Sample ID: 480-134506-17

Date Collected: 04/18/18 00:00

Matrix: Water

Date Received: 04/18/18 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C SIM		1	514169	04/26/18 06:46	KLB	TAL EDI

Client Sample ID: Trip Blank

Lab Sample ID: 480-134506-18

Date Collected: 04/18/18 00:00

Matrix: Water

Date Received: 04/18/18 18:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	514487	04/26/18 22:29	KLB	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-134506-1

Laboratory: 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	03-31-18 *

Laboratory: TestAmerica Edison

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
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-18
New Jersey	NELAP	2	12028	06-30-18
New York	NELAP	2	11452	04-01-19
Pennsylvania	NELAP	3	68-00522	02-28-19
Rhode Island	State Program	1	LAO00132	12-30-18
USDA	Federal		NJCA-003-08	06-13-20

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

TestAmerica Buffalo

Method Summary

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

TestAmerica Job ID: 480-134506-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

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

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

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

TestAmerica Job ID: 480-134506-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-134506-1	MW-1	Water	04/18/18 09:45	04/18/18 18:30
480-134506-2	MW-2	Water	04/17/18 09:55	04/18/18 18:30
480-134506-3	MW-3	Water	04/18/18 12:05	04/18/18 18:30
480-134506-4	MW-4	Water	04/17/18 14:45	04/18/18 18:30
480-134506-5	MW-4D	Water	04/17/18 13:35	04/18/18 18:30
480-134506-6	MW-5	Water	04/17/18 11:20	04/18/18 18:30
480-134506-7	MW-5D	Water	04/17/18 11:55	04/18/18 18:30
480-134506-8	MW-6	Water	04/16/18 13:30	04/18/18 18:30
480-134506-9	MW-7	Water	04/17/18 17:15	04/18/18 18:30
480-134506-10	MW-8	Water	04/18/18 10:45	04/18/18 18:30
480-134506-11	MW-9R	Water	04/18/18 15:50	04/18/18 18:30
480-134506-12	MW-10	Water	04/16/18 17:45	04/18/18 18:30
480-134506-13	MW-11R	Water	04/16/18 16:00	04/18/18 18:30
480-134506-14	MW-12	Water	04/17/18 15:30	04/18/18 18:30
480-134506-15	MW-13	Water	04/18/18 14:40	04/18/18 18:30
480-134506-16	MW-14	Water	04/18/18 13:25	04/18/18 18:30
480-134506-17	DUP-041818	Water	04/18/18 00:00	04/18/18 18:30
480-134506-18	Trip Blank	Water	04/18/18 00:00	04/18/18 18:30

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

480-134506 COC

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 2 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 OLMO4.2 list	1,4 Dioxane	MS/MSD	Sample Specific Notes:
MW-1	4/18/18	9:45	G	W	3	N		X	X		
MW-2	4/17/18	9:55	G	W	3	N		X	X		
MW-3	4/18/18	12:05	G	W	3	N		X	X		
MW-4	4/17/18	14:45	G	W	3	N		X	X		
MW-4D	4/17/18	13:35	G	W	3	N		X	X		
MW-5	4/17/18	11:30	G	W	9	N		X	X	X	
MW-5D	4/17/18	11:55	G	W	3	N		X	X		
MW-6	4/16/18	13:30	G	W	3	N		X	X		
MW-7	4/17/18	17:15	G	W	3	N		X	X		
MW-8	4/18/18	10:45	G	W	3	N		X	X		
MW-9R	4/18/18	15:50	G	W	3	N		X	X		
MW-10	4/16/18	17:45	G	W	3	N		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 epoken@gesonline.com, tpalmer@gesonline.com, buffalolabs@gesonline.com
Category B Deliverable

Custody Seal No.:		Cooler Temp. (°C): Obs'd: 3.8, 4.2 Cor'd: 4.1		Therm ID No.: 411	
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
<i>[Signature]</i>	GES	4/18/18 18:30	<i>[Signature]</i>	Company:	4/18/18 18:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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

Chain of Custody Record

Regulatory Program:						Site Contact: Eric Popken (GES)						Date:									
☐ DW ☐ NPDES ☐ RCRA ☐ Other:						Lab Contact: Orlette Johnson						Carrier:									
Maurice Moore						Tel/Fax: (716) 851-7220						COC No.: 2 of 2 COCs									
Analysis Turnaround Time ☐ CALENDAR DAYS ☒ WORKING DAYS Custom TAT: _____ ☐ 10 days ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day												Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix		# of Cont.	
Sample Identification												Filtered Sample (Y / N)		Perform MS / MSD (Y / N)		8260C - TCLVOCs OLM04.2 list		1, 4 Dioxane		MS/MSD	
MW-11R												N	X	X							
MW-12												N	X	X							
MW-13												N	X	X							
MW-14												N	X	X							
DUP- 041818												N	X	X							
Trip Blank												N	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																					
Special Instructions/QC Requirements & Comments: Email report to epopken@gesonline.com, tpalmer@gesonline.com, buffalolabs@gesonline.com Category B Deliverable																					
Relinquished by: [Signature] Date/Time: 4/18/18 1830																					
Relinquished by: [Signature] Date/Time: 4/18/18 1830																					
Relinquished by: [Signature] Date/Time: 4/18/18 1830																					

TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody

Client Information (Sub Contract Lab)

Client Contact: Sampler:
Shipping/Receiving Phone:

Company: TestAmerica Laboratories, Inc.

Address: 777 New Durham Road, Due Date Requested: 4/30/2018

City: Edison TAT Requested (days):

State Zip: NJ, 08817

Phone: 732-549-3900 (Tel) 732-549-3679 (Fax) PO #:

Email: W/O #:

Project Name: Frewsburg Site #907016 Project #: 48013647

Site: SSOW#:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Notes
MMW-1 (480-134506-1)	4/18/18	09:45	Eastern	✓
MMW-2 (480-134506-2)	4/17/18	09:55	Eastern	✓
MMW-3 (480-134506-3)	4/18/18	12:05	Eastern	✓
MMW-4 (480-134506-4)	4/17/18	14:45	Eastern	✓
MMW-4D (480-134506-5)	4/17/18	13:35	Eastern	✓
MMW-5 (480-134506-6)	4/17/18	11:20	Eastern	✓
MMW-5 (480-134506-6MS)	4/17/18	11:20	MS	✓
MMW-5 (480-134506-6MSD)	4/17/18	11:20	MSD	✓
MMW-5D (480-134506-7)	4/17/18	11:55	Eastern	✓

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (Specify) Primary Deliverable Rank: 2

Empty Kit Relinquished by: Date:

Relinquished by: *[Signature]* Date/Time: 4/24/18 1630 Com:

Relinquished by: Date/Time: Com:

Custody Seals Intact: Custody Seal No.:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

THE LEADER IN ENVIRONMENTAL TESTING

IR#11 y.o; 3.1

Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING.

[illegible]

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-134506-1

Login Number: 134506

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth P

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-134506-1

Login Number: 134506

List Number: 2

Creator: Armbruster, Chris

List Source: TestAmerica Edison

List Creation: 04/25/18 02:48 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.0 3.1°C IR11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-144996-1

Client Project/Site: Frewsburg Site #907016

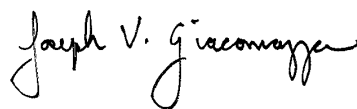
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Maurice Moore



Authorized for release by:

12/17/2018 4:12:47 PM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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www.testamericainc.com

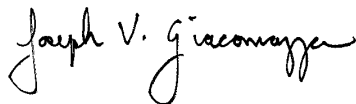
The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail 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
12/17/2018 4:12:47 PM

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Definitions/Glossary

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

TestAmerica Job ID: 480-144996-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	Isotope Dilution analyte is outside acceptance limits.
G	The reported quantitation limit has been raised due to an exhibited elevated noise or matrix interference
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

TestAmerica Job ID: 480-144996-1

Job ID: 480-144996-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-144996-1

Comments

No additional comments.

Receipt

The samples were received on 11/9/2018 3:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.4° C and 3.3° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2 (480-144996-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-445660 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane. 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 samples are impacted: MW-2 (480-144996-1), MW-3 (480-144996-2), MW-4 (480-144996-3), MW-9R (480-144996-4), MW-12 (480-144996-6), MW-13 (480-144996-7), MW-14 (480-144996-8) and TRIP BLANK (480-144996-10).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-2 (480-144996-1), MW-3 (480-144996-2), MW-4 (480-144996-3), MW-4 (480-144996-3[MS]), MW-4 (480-144996-3[MSD]), MW-9R (480-144996-4), MW-12 (480-144996-6), MW-13 (480-144996-7) and MW-14 (480-144996-8). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-4 (480-144996-3), MW-4 (480-144996-3[MS]), MW-4 (480-144996-3[MSD]), MW-9R (480-144996-4), MW-11R (480-144996-5), MW-12 (480-144996-6), MW-13 (480-144996-7), MW-14 (480-144996-8) and DUP-110718 (480-144996-9). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-445696 recovered outside acceptance criteria, low biased, for Vinyl chloride and 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 samples are impacted: MW-4 (480-144996-3), MW-11R (480-144996-5), MW-12 (480-144996-6), MW-13 (480-144996-7), MW-14 (480-144996-8) and DUP-110718 (480-144996-9).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-445696 recovered outside control limits for the following analyte: Dichlorodifluoromethane, which has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The following samples are impacted: MW-4 (480-144996-3), MW-9R (480-144996-4), MW-11R (480-144996-5), MW-12 (480-144996-6), MW-13 (480-144996-7), MW-14 (480-144996-8) and DUP-110718 (480-144996-9).

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 480-445696 was outside the method criteria, low bias, for the following analyte: Vinyl chloride. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated. Due to holding time limitations the samples were not reanalyzed. The following sample is impacted: MW-9R (480-144996-4).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-445696 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-9R (480-144996-4).

Method(s) 8260C: Due to the high concentration of Trichloroethene, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 480-445696 could not be evaluated for accuracy and precision. The data has been qualified and reported. The associated laboratory control sample (LCS) met acceptance criteria for this analyte.

Case Narrative

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

TestAmerica Job ID: 480-144996-1

Job ID: 480-144996-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

Dioxin

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-2 (480-144996-1). 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 samples exhibited elevated noise or matrix interferences for Perfluoropentanoic acid (PFPeA) causing elevation of the reporting limit (RL): MW-12 (480-144996-6). 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 Perfluoropentanoic acid (PFPeA) causing elevation of the reporting limit (RL): MW-9R (480-144996-4) and (320-45081-A-1-A). 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), Perfluoropentanoic acid (PFPeA) and Perfluorobutanesulfonic acid (PFBS) causing elevation of the reporting limit (RL): MW-14 (480-144996-8). The reporting limit (RL) for the affected analytes has been raised to be equal to the matrix, and a "G" qualifier applied.

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

LCMS

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-6:2 FTS in the following sample: MW-13 (480-144996-7). Re-analysis was performed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recoveries for M2-6:2 FTS and M2-8:2 FTS are above the method recommended limit for the following samples: MW-2 (480-144996-1) and MW-3 (480-144996-2). Re-analysis was performed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recovery for M2-6:2 FTS is above the method recommended limit for the following samples: MW-4 (480-144996-3), MW-4 (480-144996-3[MS]) and MW-4 (480-144996-3[MSD]). Re-analysis was performed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recoveries are above the method recommended limit for M2-6:2 FTS and M2-8:2 FTS in the following sample: (320-45081-A-1-B MS). Re-analysis was performed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recoveries are above the method recommended limit for M2-6:2 FTS and M2-8:2 FTS in the following samples: MW-9R (480-144996-4) and MW-14 (480-144996-8). Re-analysis was performed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

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

Organic Prep

Method(s) 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-260047.

Method(s) 3535: The following sample was observed to contain sediment prior to extraction: MW-13 (480-144996-7).

Method(s) 3535: The following sample was observed to be a yellow color and contained sediment prior to extraction: MW-2 (480-144996-1).

Method(s) 3535: The following sample was observed to be a light yellow color after extraction: MW-2 (480-144996-1).

Case Narrative

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

TestAmerica Job ID: 480-144996-1

Job ID: 480-144996-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 3535: The following sample had non-settleable particulate matter which plugged the SPE extraction disk. The amount of sample remaining plus the weight of the bottle are recorded in the "notes" field of the prep batch. The "tare weight" recorded is the weight of the emptied bottle: MW-9R (480-144996-4). The reporting limits (RLs) have been adjusted proportionately.

Method(s) 3535: The following samples: MW-9R (480-144996-4) were observed to be gray in color with sediment present.

Method(s) 3535: The following samples: MW-9R (480-144996-4) were observed to be cloudy after the eluting process.

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

VOA Prep

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

Detection Summary

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-2

Lab Sample ID: 480-144996-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.66		0.40	0.20	ug/L	1		8260C SIM	Total/NA
1,1-Dichloroethene	280	J	500	150	ug/L	500		8260C	Total/NA
cis-1,2-Dichloroethene	99000	E	500	410	ug/L	500		8260C	Total/NA
Methylene Chloride	280	J	500	220	ug/L	500		8260C	Total/NA
Trichloroethene	520		500	230	ug/L	500		8260C	Total/NA
Vinyl chloride	47000		500	450	ug/L	500		8260C	Total/NA
cis-1,2-Dichloroethene - DL	110000		2000	1600	ug/L	2000		8260C	Total/NA
Methylene Chloride - DL	1300	J	2000	880	ug/L	2000		8260C	Total/NA
Vinyl chloride - DL	46000		2000	1800	ug/L	2000		8260C	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.76	J	2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.2		2.0	0.83	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.27	J	2.0	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	35		2.0	0.53	ng/L	1		537 (modified)	Total/NA
6:2 FTS	2.0	J	20	2.0	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 480-144996-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	980		20	16	ug/L	20		8260C	Total/NA
Methylene Chloride	11	J	20	8.8	ug/L	20		8260C	Total/NA
Trichloroethene	1700		20	9.2	ug/L	20		8260C	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.44	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.4		1.9	0.82	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.36	J	1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.7		1.9	0.52	ng/L	1		537 (modified)	Total/NA
6:2 FTS	2.1	J	19	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 480-144996-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	780		100	81	ug/L	100		8260C	Total/NA
Methylene Chloride	73	J	100	44	ug/L	100		8260C	Total/NA
Trichloroethene	14000	E	100	46	ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene - DL	1300		400	320	ug/L	400		8260C	Total/NA
Trichloroethene - DL	19000	F1	400	180	ug/L	400		8260C	Total/NA
Perfluorohexanoic acid (PFHxA)	0.88	J	1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.59	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.4		1.9	0.82	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.35	J	1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.30	J	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.5	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.8		1.9	0.52	ng/L	1		537 (modified)	Total/NA
6:2 FTS	2.4	J	19	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-9R

Lab Sample ID: 480-144996-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	16		10	2.9	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	4000	E	10	8.1	ug/L	10		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-9R (Continued)

Lab Sample ID: 480-144996-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	7.4	J	10	4.4	ug/L	10		8260C	Total/NA
trans-1,2-Dichloroethene	45		10	9.0	ug/L	10		8260C	Total/NA
Trichloroethene	2000	E	10	4.6	ug/L	10		8260C	Total/NA
Vinyl chloride	420		10	9.0	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene - DL	4100		100	81	ug/L	100		8260C	Total/NA
Trichloroethene - DL	2200		100	46	ug/L	100		8260C	Total/NA
Vinyl chloride - DL	490		100	90	ug/L	100		8260C	Total/NA
Perfluorohexanoic acid (PFHxA)	1.7		1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.84	J	1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.8		1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.9		1.7	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.95	J	1.7	0.46	ng/L	1		537 (modified)	Total/NA
6:2 FTS	1.9	J	17	1.7	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-11R

Lab Sample ID: 480-144996-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.31	J	0.40	0.20	ug/L	1		8260C SIM	Total/NA
cis-1,2-Dichloroethene	270		20	16	ug/L	20		8260C	Total/NA
Trichloroethene	1400		20	9.2	ug/L	20		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	1.5	J	1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.35	J	1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.0		1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.51	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.6	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.1	J	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	6.3		1.8	0.48	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 480-144996-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	120		20	16	ug/L	20		8260C	Total/NA
Methylene Chloride	12	J	20	8.8	ug/L	20		8260C	Total/NA
Trichloroethene	5000	E	20	9.2	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene - DL	110		100	81	ug/L	100		8260C	Total/NA
Trichloroethene - DL	4500		100	46	ug/L	100		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	2.6		1.6	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.3	J	1.6	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.95	J	1.6	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.7		1.6	0.70	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.37	J	1.6	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.82	J	1.6	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.79	J	1.6	0.14	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.4	J	1.6	0.44	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 480-144996-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.32	J	0.40	0.20	ug/L	1		8260C SIM	Total/NA
cis-1,2-Dichloroethene	1300		50	41	ug/L	50		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-13 (Continued)

Lab Sample ID: 480-144996-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	34	J	50	22	ug/L	50		8260C	Total/NA
Trichloroethene	19000	E	50	23	ug/L	50		8260C	Total/NA
cis-1,2-Dichloroethene - DL	1400		400	320	ug/L	400		8260C	Total/NA
Trichloroethene - DL	18000		400	180	ug/L	400		8260C	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.0	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.3		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.95	J	1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.1		1.8	0.49	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 480-144996-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	11	J	20	5.8	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	1800		20	16	ug/L	20		8260C	Total/NA
Methylene Chloride	13	J	20	8.8	ug/L	20		8260C	Total/NA
Trichloroethene	4700	E	20	9.2	ug/L	20		8260C	Total/NA
Vinyl chloride	19	J	20	18	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene - DL	1700		100	81	ug/L	100		8260C	Total/NA
Trichloroethene - DL	4800		100	46	ug/L	100		8260C	Total/NA
Perfluorohexanoic acid (PFHxA)	1.1	J	1.7	0.48	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.77	J	1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.4		1.7	0.71	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.62	J	1.7	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.27	J	1.7	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.5	J	1.7	0.14	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.5		1.7	0.45	ng/L	1		537 (modified)	Total/NA

Client Sample ID: DUP-110718

Lab Sample ID: 480-144996-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	280		20	16	ug/L	20		8260C	Total/NA
Trichloroethene	1400		20	9.2	ug/L	20		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	1.4	J	1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.0		1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.52	J	1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.5	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.2	J	1.7	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	6.4		1.7	0.46	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-144996-10

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-2
Date Collected: 11/06/18 12:15
Date Received: 11/09/18 15:10

Lab Sample ID: 480-144996-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.66		0.40	0.20	ug/L			11/20/18 11:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	76		72 - 133					11/20/18 11:29	1

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			11/14/18 17:58	500
1,1,2,2-Tetrachloroethane	ND		500	110	ug/L			11/14/18 17:58	500
1,1,2-Trichloroethane	ND		500	120	ug/L			11/14/18 17:58	500
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	160	ug/L			11/14/18 17:58	500
1,1-Dichloroethane	ND		500	190	ug/L			11/14/18 17:58	500
1,1-Dichloroethene	280	J	500	150	ug/L			11/14/18 17:58	500
1,2,4-Trichlorobenzene	ND		500	210	ug/L			11/14/18 17:58	500
1,2-Dibromo-3-Chloropropane	ND		500	200	ug/L			11/14/18 17:58	500
1,2-Dichlorobenzene	ND		500	400	ug/L			11/14/18 17:58	500
1,2-Dichloroethane	ND		500	110	ug/L			11/14/18 17:58	500
1,2-Dichloropropane	ND		500	360	ug/L			11/14/18 17:58	500
1,3-Dichlorobenzene	ND		500	390	ug/L			11/14/18 17:58	500
1,4-Dichlorobenzene	ND		500	420	ug/L			11/14/18 17:58	500
2-Butanone (MEK)	ND		5000	660	ug/L			11/14/18 17:58	500
2-Hexanone	ND		2500	620	ug/L			11/14/18 17:58	500
4-Methyl-2-pentanone (MIBK)	ND		2500	1100	ug/L			11/14/18 17:58	500
Acetone	ND		5000	1500	ug/L			11/14/18 17:58	500
Benzene	ND		500	210	ug/L			11/14/18 17:58	500
Bromodichloromethane	ND		500	200	ug/L			11/14/18 17:58	500
Bromoform	ND		500	130	ug/L			11/14/18 17:58	500
Bromomethane	ND		500	350	ug/L			11/14/18 17:58	500
Carbon disulfide	ND		500	95	ug/L			11/14/18 17:58	500
Carbon tetrachloride	ND		500	140	ug/L			11/14/18 17:58	500
Chlorobenzene	ND		500	380	ug/L			11/14/18 17:58	500
Dibromochloromethane	ND		500	160	ug/L			11/14/18 17:58	500
Chloroethane	ND		500	160	ug/L			11/14/18 17:58	500
Chloroform	ND		500	170	ug/L			11/14/18 17:58	500
Chloromethane	ND		500	180	ug/L			11/14/18 17:58	500
cis-1,2-Dichloroethene	99000	E	500	410	ug/L			11/14/18 17:58	500
cis-1,3-Dichloropropene	ND		500	180	ug/L			11/14/18 17:58	500
Cyclohexane	ND		500	90	ug/L			11/14/18 17:58	500
Dichlorodifluoromethane	ND		500	340	ug/L			11/14/18 17:58	500
Ethylbenzene	ND		500	370	ug/L			11/14/18 17:58	500
1,2-Dibromoethane	ND		500	370	ug/L			11/14/18 17:58	500
Isopropylbenzene	ND		500	400	ug/L			11/14/18 17:58	500
Methyl acetate	ND		1300	650	ug/L			11/14/18 17:58	500
Methyl tert-butyl ether	ND		500	80	ug/L			11/14/18 17:58	500
Methylcyclohexane	ND		500	80	ug/L			11/14/18 17:58	500
Methylene Chloride	280	J	500	220	ug/L			11/14/18 17:58	500
Styrene	ND		500	370	ug/L			11/14/18 17:58	500
Tetrachloroethene	ND		500	180	ug/L			11/14/18 17:58	500
Toluene	ND		500	260	ug/L			11/14/18 17:58	500
trans-1,2-Dichloroethene	ND		500	450	ug/L			11/14/18 17:58	500

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-2

Lab Sample ID: 480-144996-1

Date Collected: 11/06/18 12:15

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		500	190	ug/L			11/14/18 17:58	500
Trichloroethene	520		500	230	ug/L			11/14/18 17:58	500
Trichlorofluoromethane	ND		500	440	ug/L			11/14/18 17:58	500
Vinyl chloride	47000		500	450	ug/L			11/14/18 17:58	500
Xylenes, Total	ND		1000	330	ug/L			11/14/18 17:58	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/14/18 17:58	500
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		11/14/18 17:58	500
4-Bromofluorobenzene (Surr)	108		73 - 120		11/14/18 17:58	500
Dibromofluoromethane (Surr)	94		75 - 123		11/14/18 17:58	500

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			11/15/18 02:06	2000
1,1,1,2,2-Tetrachloroethane	ND		2000	420	ug/L			11/15/18 02:06	2000
1,1,2-Trichloroethane	ND		2000	460	ug/L			11/15/18 02:06	2000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2000	620	ug/L			11/15/18 02:06	2000
1,1-Dichloroethane	ND		2000	760	ug/L			11/15/18 02:06	2000
1,1-Dichloroethene	ND		2000	580	ug/L			11/15/18 02:06	2000
1,2,4-Trichlorobenzene	ND		2000	820	ug/L			11/15/18 02:06	2000
1,2-Dibromo-3-Chloropropane	ND		2000	780	ug/L			11/15/18 02:06	2000
1,2-Dichlorobenzene	ND		2000	1600	ug/L			11/15/18 02:06	2000
1,2-Dichloroethane	ND		2000	420	ug/L			11/15/18 02:06	2000
1,2-Dichloropropane	ND		2000	1400	ug/L			11/15/18 02:06	2000
1,3-Dichlorobenzene	ND		2000	1600	ug/L			11/15/18 02:06	2000
1,4-Dichlorobenzene	ND		2000	1700	ug/L			11/15/18 02:06	2000
2-Butanone (MEK)	ND		20000	2600	ug/L			11/15/18 02:06	2000
2-Hexanone	ND		10000	2500	ug/L			11/15/18 02:06	2000
4-Methyl-2-pentanone (MIBK)	ND		10000	4200	ug/L			11/15/18 02:06	2000
Acetone	ND		20000	6000	ug/L			11/15/18 02:06	2000
Benzene	ND		2000	820	ug/L			11/15/18 02:06	2000
Bromodichloromethane	ND		2000	780	ug/L			11/15/18 02:06	2000
Bromoform	ND		2000	520	ug/L			11/15/18 02:06	2000
Bromomethane	ND		2000	1400	ug/L			11/15/18 02:06	2000
Carbon disulfide	ND		2000	380	ug/L			11/15/18 02:06	2000
Carbon tetrachloride	ND		2000	540	ug/L			11/15/18 02:06	2000
Chlorobenzene	ND		2000	1500	ug/L			11/15/18 02:06	2000
Dibromochloromethane	ND		2000	640	ug/L			11/15/18 02:06	2000
Chloroethane	ND		2000	640	ug/L			11/15/18 02:06	2000
Chloroform	ND		2000	680	ug/L			11/15/18 02:06	2000
Chloromethane	ND		2000	700	ug/L			11/15/18 02:06	2000
cis-1,2-Dichloroethene	110000		2000	1600	ug/L			11/15/18 02:06	2000
cis-1,3-Dichloropropene	ND		2000	720	ug/L			11/15/18 02:06	2000
Cyclohexane	ND		2000	360	ug/L			11/15/18 02:06	2000
Dichlorodifluoromethane	ND		2000	1400	ug/L			11/15/18 02:06	2000
Ethylbenzene	ND		2000	1500	ug/L			11/15/18 02:06	2000
1,2-Dibromoethane	ND		2000	1500	ug/L			11/15/18 02:06	2000
Isopropylbenzene	ND		2000	1600	ug/L			11/15/18 02:06	2000
Methyl acetate	ND		5000	2600	ug/L			11/15/18 02:06	2000

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-2

Lab Sample ID: 480-144996-1

Date Collected: 11/06/18 12:15

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2000	320	ug/L			11/15/18 02:06	2000
Methylcyclohexane	ND		2000	320	ug/L			11/15/18 02:06	2000
Methylene Chloride	1300	J	2000	880	ug/L			11/15/18 02:06	2000
Styrene	ND		2000	1500	ug/L			11/15/18 02:06	2000
Tetrachloroethene	ND		2000	720	ug/L			11/15/18 02:06	2000
Toluene	ND		2000	1000	ug/L			11/15/18 02:06	2000
trans-1,2-Dichloroethene	ND		2000	1800	ug/L			11/15/18 02:06	2000
trans-1,3-Dichloropropene	ND		2000	740	ug/L			11/15/18 02:06	2000
Trichloroethene	ND		2000	920	ug/L			11/15/18 02:06	2000
Trichlorofluoromethane	ND		2000	1800	ug/L			11/15/18 02:06	2000
Vinyl chloride	46000		2000	1800	ug/L			11/15/18 02:06	2000
Xylenes, Total	ND		4000	1300	ug/L			11/15/18 02:06	2000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	97		80 - 120		11/15/18 02:06	2000
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		77 - 120		11/15/18 02:06	2000
<i>4-Bromofluorobenzene (Surr)</i>	108		73 - 120		11/15/18 02:06	2000
<i>Dibromofluoromethane (Surr)</i>	97		75 - 123		11/15/18 02:06	2000

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	G	23	23	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.48	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.57	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluoroheptanoic acid (PFHpA)	0.76	J	2.0	0.25	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorooctanoic acid (PFOA)	5.2		2.0	0.83	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorononanoic acid (PFNA)	0.27	J	2.0	0.26	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.54	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.28	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.17	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorooctanesulfonic acid (PFOS)	35		2.0	0.53	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		11/20/18 07:00	11/27/18 17:25	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.34	ng/L		11/20/18 07:00	11/27/18 17:25	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	3.0	ng/L		11/20/18 07:00	11/27/18 17:25	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		11/20/18 07:00	11/27/18 17:25	1
6:2 FTS	2.0	J	20	2.0	ng/L		11/20/18 07:00	11/27/18 17:25	1
8:2 FTS	ND		20	2.0	ng/L		11/20/18 07:00	11/27/18 17:25	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>13C4 PFBA</i>	35		25 - 150	11/20/18 07:00	11/27/18 17:25	1
<i>13C5 PFPeA</i>	51		25 - 150	11/20/18 07:00	11/27/18 17:25	1
<i>13C2 PFHxA</i>	65		25 - 150	11/20/18 07:00	11/27/18 17:25	1
<i>13C4 PFHpA</i>	82		25 - 150	11/20/18 07:00	11/27/18 17:25	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-2

Lab Sample ID: 480-144996-1

Date Collected: 11/06/18 12:15

Matrix: Water

Date Received: 11/09/18 15:10

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	98		25 - 150	11/20/18 07:00	11/27/18 17:25	1
13C5 PFNA	106		25 - 150	11/20/18 07:00	11/27/18 17:25	1
13C2 PFDA	100		25 - 150	11/20/18 07:00	11/27/18 17:25	1
13C2 PFUnA	120		25 - 150	11/20/18 07:00	11/27/18 17:25	1
13C2 PFDoA	105		25 - 150	11/20/18 07:00	11/27/18 17:25	1
13C2 PFTeDA	113		25 - 150	11/20/18 07:00	11/27/18 17:25	1
13C3 PFBS	73		25 - 150	11/20/18 07:00	11/27/18 17:25	1
18O2 PFHxS	92		25 - 150	11/20/18 07:00	11/27/18 17:25	1
13C4 PFOS	102		25 - 150	11/20/18 07:00	11/27/18 17:25	1
13C8 FOSA	106		25 - 150	11/20/18 07:00	11/27/18 17:25	1
d3-NMeFOSAA	127		25 - 150	11/20/18 07:00	11/27/18 17:25	1
d5-NEtFOSAA	131		25 - 150	11/20/18 07:00	11/27/18 17:25	1
M2-6:2 FTS	277	*	25 - 150	11/20/18 07:00	11/27/18 17:25	1
M2-8:2 FTS	205	*	25 - 150	11/20/18 07:00	11/27/18 17:25	1

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-3

Date Collected: 11/06/18 14:45

Date Received: 11/09/18 15:10

Lab Sample ID: 480-144996-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			11/19/18 15:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	83		72 - 133					11/19/18 15:46	1

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			11/15/18 02:33	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			11/15/18 02:33	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			11/15/18 02:33	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			11/15/18 02:33	20
1,1-Dichloroethane	ND		20	7.6	ug/L			11/15/18 02:33	20
1,1-Dichloroethene	ND		20	5.8	ug/L			11/15/18 02:33	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			11/15/18 02:33	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			11/15/18 02:33	20
1,2-Dichlorobenzene	ND		20	16	ug/L			11/15/18 02:33	20
1,2-Dichloroethane	ND		20	4.2	ug/L			11/15/18 02:33	20
1,2-Dichloropropane	ND		20	14	ug/L			11/15/18 02:33	20
1,3-Dichlorobenzene	ND		20	16	ug/L			11/15/18 02:33	20
1,4-Dichlorobenzene	ND		20	17	ug/L			11/15/18 02:33	20
2-Butanone (MEK)	ND		200	26	ug/L			11/15/18 02:33	20
2-Hexanone	ND		100	25	ug/L			11/15/18 02:33	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			11/15/18 02:33	20
Acetone	ND		200	60	ug/L			11/15/18 02:33	20
Benzene	ND		20	8.2	ug/L			11/15/18 02:33	20
Bromodichloromethane	ND		20	7.8	ug/L			11/15/18 02:33	20
Bromoform	ND		20	5.2	ug/L			11/15/18 02:33	20
Bromomethane	ND		20	14	ug/L			11/15/18 02:33	20
Carbon disulfide	ND		20	3.8	ug/L			11/15/18 02:33	20
Carbon tetrachloride	ND		20	5.4	ug/L			11/15/18 02:33	20
Chlorobenzene	ND		20	15	ug/L			11/15/18 02:33	20
Dibromochloromethane	ND		20	6.4	ug/L			11/15/18 02:33	20
Chloroethane	ND		20	6.4	ug/L			11/15/18 02:33	20
Chloroform	ND		20	6.8	ug/L			11/15/18 02:33	20
Chloromethane	ND		20	7.0	ug/L			11/15/18 02:33	20
cis-1,2-Dichloroethene	980		20	16	ug/L			11/15/18 02:33	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			11/15/18 02:33	20
Cyclohexane	ND		20	3.6	ug/L			11/15/18 02:33	20
Dichlorodifluoromethane	ND		20	14	ug/L			11/15/18 02:33	20
Ethylbenzene	ND		20	15	ug/L			11/15/18 02:33	20
1,2-Dibromoethane	ND		20	15	ug/L			11/15/18 02:33	20
Isopropylbenzene	ND		20	16	ug/L			11/15/18 02:33	20
Methyl acetate	ND		50	26	ug/L			11/15/18 02:33	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			11/15/18 02:33	20
Methylcyclohexane	ND		20	3.2	ug/L			11/15/18 02:33	20
Methylene Chloride	11 J		20	8.8	ug/L			11/15/18 02:33	20
Styrene	ND		20	15	ug/L			11/15/18 02:33	20
Tetrachloroethene	ND		20	7.2	ug/L			11/15/18 02:33	20
Toluene	ND		20	10	ug/L			11/15/18 02:33	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			11/15/18 02:33	20

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-3

Lab Sample ID: 480-144996-2

Date Collected: 11/06/18 14:45

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			11/15/18 02:33	20
Trichloroethene	1700		20	9.2	ug/L			11/15/18 02:33	20
Trichlorofluoromethane	ND		20	18	ug/L			11/15/18 02:33	20
Vinyl chloride	ND		20	18	ug/L			11/15/18 02:33	20
Xylenes, Total	ND		40	13	ug/L			11/15/18 02:33	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/15/18 02:33	20
1,2-Dichloroethane-d4 (Surr)	106		77 - 120		11/15/18 02:33	20
4-Bromofluorobenzene (Surr)	105		73 - 120		11/15/18 02:33	20
Dibromofluoromethane (Surr)	97		75 - 123		11/15/18 02:33	20

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.9	0.34	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.47	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.56	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluoroheptanoic acid (PFHpA)	0.44	J	1.9	0.24	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorooctanoic acid (PFOA)	3.4		1.9	0.82	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorononanoic acid (PFNA)	0.36	J	1.9	0.26	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.30	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.1	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.53	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	1.3	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.28	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.19	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	1.9	0.16	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.18	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorooctanesulfonic acid (PFOS)	5.7		1.9	0.52	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.31	ng/L		11/20/18 07:00	11/27/18 17:33	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.34	ng/L		11/20/18 07:00	11/27/18 17:33	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		19	3.0	ng/L		11/20/18 07:00	11/27/18 17:33	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		19	1.8	ng/L		11/20/18 07:00	11/27/18 17:33	1
6:2 FTS	2.1	J	19	1.9	ng/L		11/20/18 07:00	11/27/18 17:33	1
8:2 FTS	ND		19	1.9	ng/L		11/20/18 07:00	11/27/18 17:33	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	52		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C5 PFPeA	64		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C2 PFHxA	75		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C4 PFHpA	88		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C4 PFOA	95		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C5 PFNA	108		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C2 PFDA	109		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C2 PFUnA	104		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C2 PFDoA	102		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C2 PFTeDA	112		25 - 150	11/20/18 07:00	11/27/18 17:33	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-3

Date Collected: 11/06/18 14:45

Date Received: 11/09/18 15:10

Lab Sample ID: 480-144996-2

Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	83		25 - 150	11/20/18 07:00	11/27/18 17:33	1
18O2 PFHxS	96		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C4 PFOS	103		25 - 150	11/20/18 07:00	11/27/18 17:33	1
13C8 FOSA	105		25 - 150	11/20/18 07:00	11/27/18 17:33	1
d3-NMeFOSAA	122		25 - 150	11/20/18 07:00	11/27/18 17:33	1
d5-NEtFOSAA	119		25 - 150	11/20/18 07:00	11/27/18 17:33	1
M2-6:2 FTS	222	*	25 - 150	11/20/18 07:00	11/27/18 17:33	1
M2-8:2 FTS	157	*	25 - 150	11/20/18 07:00	11/27/18 17:33	1

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-4
Date Collected: 11/07/18 08:40
Date Received: 11/09/18 15:10

Lab Sample ID: 480-144996-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			11/19/18 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	73		72 - 133					11/19/18 14:56	1

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			11/15/18 02:59	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			11/15/18 02:59	100
1,1,2-Trichloroethane	ND		100	23	ug/L			11/15/18 02:59	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			11/15/18 02:59	100
1,1-Dichloroethane	ND		100	38	ug/L			11/15/18 02:59	100
1,1-Dichloroethene	ND		100	29	ug/L			11/15/18 02:59	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			11/15/18 02:59	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			11/15/18 02:59	100
1,2-Dichlorobenzene	ND		100	79	ug/L			11/15/18 02:59	100
1,2-Dichloroethane	ND		100	21	ug/L			11/15/18 02:59	100
1,2-Dichloropropane	ND		100	72	ug/L			11/15/18 02:59	100
1,3-Dichlorobenzene	ND		100	78	ug/L			11/15/18 02:59	100
1,4-Dichlorobenzene	ND		100	84	ug/L			11/15/18 02:59	100
2-Butanone (MEK)	ND		1000	130	ug/L			11/15/18 02:59	100
2-Hexanone	ND		500	120	ug/L			11/15/18 02:59	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			11/15/18 02:59	100
Acetone	ND		1000	300	ug/L			11/15/18 02:59	100
Benzene	ND		100	41	ug/L			11/15/18 02:59	100
Bromodichloromethane	ND		100	39	ug/L			11/15/18 02:59	100
Bromoform	ND		100	26	ug/L			11/15/18 02:59	100
Bromomethane	ND		100	69	ug/L			11/15/18 02:59	100
Carbon disulfide	ND		100	19	ug/L			11/15/18 02:59	100
Carbon tetrachloride	ND		100	27	ug/L			11/15/18 02:59	100
Chlorobenzene	ND		100	75	ug/L			11/15/18 02:59	100
Dibromochloromethane	ND		100	32	ug/L			11/15/18 02:59	100
Chloroethane	ND		100	32	ug/L			11/15/18 02:59	100
Chloroform	ND		100	34	ug/L			11/15/18 02:59	100
Chloromethane	ND		100	35	ug/L			11/15/18 02:59	100
cis-1,2-Dichloroethene	780		100	81	ug/L			11/15/18 02:59	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			11/15/18 02:59	100
Cyclohexane	ND		100	18	ug/L			11/15/18 02:59	100
Dichlorodifluoromethane	ND		100	68	ug/L			11/15/18 02:59	100
Ethylbenzene	ND		100	74	ug/L			11/15/18 02:59	100
1,2-Dibromoethane	ND		100	73	ug/L			11/15/18 02:59	100
Isopropylbenzene	ND		100	79	ug/L			11/15/18 02:59	100
Methyl acetate	ND		250	130	ug/L			11/15/18 02:59	100
Methyl tert-butyl ether	ND		100	16	ug/L			11/15/18 02:59	100
Methylcyclohexane	ND		100	16	ug/L			11/15/18 02:59	100
Methylene Chloride	73 J		100	44	ug/L			11/15/18 02:59	100
Styrene	ND		100	73	ug/L			11/15/18 02:59	100
Tetrachloroethene	ND		100	36	ug/L			11/15/18 02:59	100
Toluene	ND		100	51	ug/L			11/15/18 02:59	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			11/15/18 02:59	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-4

Lab Sample ID: 480-144996-3

Date Collected: 11/07/18 08:40

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		100	37	ug/L			11/15/18 02:59	100
Trichloroethene	14000	E	100	46	ug/L			11/15/18 02:59	100
Trichlorofluoromethane	ND		100	88	ug/L			11/15/18 02:59	100
Vinyl chloride	ND		100	90	ug/L			11/15/18 02:59	100
Xylenes, Total	ND		200	66	ug/L			11/15/18 02:59	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		11/15/18 02:59	100
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		11/15/18 02:59	100
4-Bromofluorobenzene (Surr)	103		73 - 120		11/15/18 02:59	100
Dibromofluoromethane (Surr)	97		75 - 123		11/15/18 02:59	100

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		400	330	ug/L			11/15/18 10:30	400
1,1,2,2-Tetrachloroethane	ND		400	84	ug/L			11/15/18 10:30	400
1,1,2-Trichloroethane	ND		400	92	ug/L			11/15/18 10:30	400
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		400	120	ug/L			11/15/18 10:30	400
1,1-Dichloroethane	ND		400	150	ug/L			11/15/18 10:30	400
1,1-Dichloroethene	ND		400	120	ug/L			11/15/18 10:30	400
1,2,4-Trichlorobenzene	ND		400	160	ug/L			11/15/18 10:30	400
1,2-Dibromo-3-Chloropropane	ND		400	160	ug/L			11/15/18 10:30	400
1,2-Dichlorobenzene	ND		400	320	ug/L			11/15/18 10:30	400
1,2-Dichloroethane	ND		400	84	ug/L			11/15/18 10:30	400
1,2-Dichloropropane	ND		400	290	ug/L			11/15/18 10:30	400
1,3-Dichlorobenzene	ND		400	310	ug/L			11/15/18 10:30	400
1,4-Dichlorobenzene	ND		400	340	ug/L			11/15/18 10:30	400
2-Butanone (MEK)	ND		4000	530	ug/L			11/15/18 10:30	400
2-Hexanone	ND		2000	500	ug/L			11/15/18 10:30	400
4-Methyl-2-pentanone (MIBK)	ND		2000	840	ug/L			11/15/18 10:30	400
Acetone	ND		4000	1200	ug/L			11/15/18 10:30	400
Benzene	ND		400	160	ug/L			11/15/18 10:30	400
Bromodichloromethane	ND		400	160	ug/L			11/15/18 10:30	400
Bromoform	ND		400	100	ug/L			11/15/18 10:30	400
Bromomethane	ND		400	280	ug/L			11/15/18 10:30	400
Carbon disulfide	ND		400	76	ug/L			11/15/18 10:30	400
Carbon tetrachloride	ND		400	110	ug/L			11/15/18 10:30	400
Chlorobenzene	ND		400	300	ug/L			11/15/18 10:30	400
Dibromochloromethane	ND		400	130	ug/L			11/15/18 10:30	400
Chloroethane	ND		400	130	ug/L			11/15/18 10:30	400
Chloroform	ND		400	140	ug/L			11/15/18 10:30	400
Chloromethane	ND		400	140	ug/L			11/15/18 10:30	400
cis-1,2-Dichloroethene	1300		400	320	ug/L			11/15/18 10:30	400
cis-1,3-Dichloropropene	ND		400	140	ug/L			11/15/18 10:30	400
Cyclohexane	ND		400	72	ug/L			11/15/18 10:30	400
Dichlorodifluoromethane	ND *		400	270	ug/L			11/15/18 10:30	400
Ethylbenzene	ND		400	300	ug/L			11/15/18 10:30	400
1,2-Dibromoethane	ND		400	290	ug/L			11/15/18 10:30	400
Isopropylbenzene	ND		400	320	ug/L			11/15/18 10:30	400
Methyl acetate	ND		1000	520	ug/L			11/15/18 10:30	400

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-4

Lab Sample ID: 480-144996-3

Date Collected: 11/07/18 08:40

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		400	64	ug/L			11/15/18 10:30	400
Methylcyclohexane	ND		400	64	ug/L			11/15/18 10:30	400
Methylene Chloride	ND		400	180	ug/L			11/15/18 10:30	400
Styrene	ND		400	290	ug/L			11/15/18 10:30	400
Tetrachloroethene	ND		400	140	ug/L			11/15/18 10:30	400
Toluene	ND		400	200	ug/L			11/15/18 10:30	400
trans-1,2-Dichloroethene	ND		400	360	ug/L			11/15/18 10:30	400
trans-1,3-Dichloropropene	ND		400	150	ug/L			11/15/18 10:30	400
Trichloroethene	19000	F1	400	180	ug/L			11/15/18 10:30	400
Trichlorofluoromethane	ND		400	350	ug/L			11/15/18 10:30	400
Vinyl chloride	ND		400	360	ug/L			11/15/18 10:30	400
Xylenes, Total	ND		800	260	ug/L			11/15/18 10:30	400

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/15/18 10:30	400
1,2-Dichloroethane-d4 (Surr)	97		77 - 120		11/15/18 10:30	400
4-Bromofluorobenzene (Surr)	97		73 - 120		11/15/18 10:30	400
Dibromofluoromethane (Surr)	95		75 - 123		11/15/18 10:30	400

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.9	0.34	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.47	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorohexanoic acid (PFHxA)	0.88	J	1.9	0.56	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluoroheptanoic acid (PFHpA)	0.59	J	1.9	0.24	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorooctanoic acid (PFOA)	2.4		1.9	0.82	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorononanoic acid (PFNA)	0.35	J	1.9	0.26	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.30	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.1	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.53	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	1.3	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.28	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorobutanesulfonic acid (PFBS)	0.30	J	1.9	0.19	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorohexanesulfonic acid (PFHxS)	1.5	J B	1.9	0.16	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.18	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorooctanesulfonic acid (PFOS)	4.8		1.9	0.52	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.31	ng/L		11/20/18 07:00	11/27/18 17:40	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.34	ng/L		11/20/18 07:00	11/27/18 17:40	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		19	3.0	ng/L		11/20/18 07:00	11/27/18 17:40	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		19	1.8	ng/L		11/20/18 07:00	11/27/18 17:40	1
6:2 FTS	2.4	J	19	1.9	ng/L		11/20/18 07:00	11/27/18 17:40	1
8:2 FTS	ND		19	1.9	ng/L		11/20/18 07:00	11/27/18 17:40	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	56		25 - 150				11/20/18 07:00	11/27/18 17:40	1
13C5 PFPeA	67		25 - 150				11/20/18 07:00	11/27/18 17:40	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-4

Lab Sample ID: 480-144996-3

Date Collected: 11/07/18 08:40

Matrix: Water

Date Received: 11/09/18 15:10

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	78		25 - 150	11/20/18 07:00	11/27/18 17:40	1
13C4 PFHpA	83		25 - 150	11/20/18 07:00	11/27/18 17:40	1
13C4 PFOA	95		25 - 150	11/20/18 07:00	11/27/18 17:40	1
13C5 PFNA	100		25 - 150	11/20/18 07:00	11/27/18 17:40	1
13C2 PFDA	98		25 - 150	11/20/18 07:00	11/27/18 17:40	1
13C2 PFUnA	101		25 - 150	11/20/18 07:00	11/27/18 17:40	1
13C2 PFDoA	90		25 - 150	11/20/18 07:00	11/27/18 17:40	1
13C2 PFTeDA	99		25 - 150	11/20/18 07:00	11/27/18 17:40	1
13C3 PFBS	74		25 - 150	11/20/18 07:00	11/27/18 17:40	1
18O2 PFHxS	88		25 - 150	11/20/18 07:00	11/27/18 17:40	1
13C4 PFOS	98		25 - 150	11/20/18 07:00	11/27/18 17:40	1
13C8 FOSA	99		25 - 150	11/20/18 07:00	11/27/18 17:40	1
d3-NMeFOSAA	108		25 - 150	11/20/18 07:00	11/27/18 17:40	1
d5-NEtFOSAA	102		25 - 150	11/20/18 07:00	11/27/18 17:40	1
M2-6:2 FTS	188 *		25 - 150	11/20/18 07:00	11/27/18 17:40	1
M2-8:2 FTS	110		25 - 150	11/20/18 07:00	11/27/18 17:40	1

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-9R

Lab Sample ID: 480-144996-4

Date Collected: 11/08/18 09:30

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			11/19/18 16:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	81		72 - 133					11/19/18 16:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			11/15/18 03:26	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			11/15/18 03:26	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			11/15/18 03:26	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			11/15/18 03:26	10
1,1-Dichloroethane	ND		10	3.8	ug/L			11/15/18 03:26	10
1,1-Dichloroethene	16		10	2.9	ug/L			11/15/18 03:26	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			11/15/18 03:26	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			11/15/18 03:26	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			11/15/18 03:26	10
1,2-Dichloroethane	ND		10	2.1	ug/L			11/15/18 03:26	10
1,2-Dichloropropane	ND		10	7.2	ug/L			11/15/18 03:26	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			11/15/18 03:26	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			11/15/18 03:26	10
2-Butanone (MEK)	ND		100	13	ug/L			11/15/18 03:26	10
2-Hexanone	ND		50	12	ug/L			11/15/18 03:26	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			11/15/18 03:26	10
Acetone	ND		100	30	ug/L			11/15/18 03:26	10
Benzene	ND		10	4.1	ug/L			11/15/18 03:26	10
Bromodichloromethane	ND		10	3.9	ug/L			11/15/18 03:26	10
Bromoform	ND		10	2.6	ug/L			11/15/18 03:26	10
Bromomethane	ND		10	6.9	ug/L			11/15/18 03:26	10
Carbon disulfide	ND		10	1.9	ug/L			11/15/18 03:26	10
Carbon tetrachloride	ND		10	2.7	ug/L			11/15/18 03:26	10
Chlorobenzene	ND		10	7.5	ug/L			11/15/18 03:26	10
Dibromochloromethane	ND		10	3.2	ug/L			11/15/18 03:26	10
Chloroethane	ND		10	3.2	ug/L			11/15/18 03:26	10
Chloroform	ND		10	3.4	ug/L			11/15/18 03:26	10
Chloromethane	ND		10	3.5	ug/L			11/15/18 03:26	10
cis-1,2-Dichloroethene	4000	E	10	8.1	ug/L			11/15/18 03:26	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			11/15/18 03:26	10
Cyclohexane	ND		10	1.8	ug/L			11/15/18 03:26	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			11/15/18 03:26	10
Ethylbenzene	ND		10	7.4	ug/L			11/15/18 03:26	10
1,2-Dibromoethane	ND		10	7.3	ug/L			11/15/18 03:26	10
Isopropylbenzene	ND		10	7.9	ug/L			11/15/18 03:26	10
Methyl acetate	ND		25	13	ug/L			11/15/18 03:26	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			11/15/18 03:26	10
Methylcyclohexane	ND		10	1.6	ug/L			11/15/18 03:26	10
Methylene Chloride	7.4	J	10	4.4	ug/L			11/15/18 03:26	10
Styrene	ND		10	7.3	ug/L			11/15/18 03:26	10
Tetrachloroethene	ND		10	3.6	ug/L			11/15/18 03:26	10
Toluene	ND		10	5.1	ug/L			11/15/18 03:26	10
trans-1,2-Dichloroethene	45		10	9.0	ug/L			11/15/18 03:26	10

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-9R

Lab Sample ID: 480-144996-4

Date Collected: 11/08/18 09:30

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			11/15/18 03:26	10
Trichloroethene	2000	E	10	4.6	ug/L			11/15/18 03:26	10
Trichlorofluoromethane	ND		10	8.8	ug/L			11/15/18 03:26	10
Vinyl chloride	420		10	9.0	ug/L			11/15/18 03:26	10
Xylenes, Total	ND		20	6.6	ug/L			11/15/18 03:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/15/18 03:26	10
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		11/15/18 03:26	10
4-Bromofluorobenzene (Surr)	102		73 - 120		11/15/18 03:26	10
Dibromofluoromethane (Surr)	95		75 - 123		11/15/18 03:26	10

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		100	82	ug/L			11/15/18 10:53	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			11/15/18 10:53	100
1,1,2-Trichloroethane	ND		100	23	ug/L			11/15/18 10:53	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			11/15/18 10:53	100
1,1-Dichloroethane	ND		100	38	ug/L			11/15/18 10:53	100
1,1-Dichloroethene	ND		100	29	ug/L			11/15/18 10:53	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			11/15/18 10:53	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			11/15/18 10:53	100
1,2-Dichlorobenzene	ND		100	79	ug/L			11/15/18 10:53	100
1,2-Dichloroethane	ND		100	21	ug/L			11/15/18 10:53	100
1,2-Dichloropropane	ND		100	72	ug/L			11/15/18 10:53	100
1,3-Dichlorobenzene	ND		100	78	ug/L			11/15/18 10:53	100
1,4-Dichlorobenzene	ND		100	84	ug/L			11/15/18 10:53	100
2-Butanone (MEK)	ND		1000	130	ug/L			11/15/18 10:53	100
2-Hexanone	ND		500	120	ug/L			11/15/18 10:53	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			11/15/18 10:53	100
Acetone	ND		1000	300	ug/L			11/15/18 10:53	100
Benzene	ND		100	41	ug/L			11/15/18 10:53	100
Bromodichloromethane	ND		100	39	ug/L			11/15/18 10:53	100
Bromoform	ND		100	26	ug/L			11/15/18 10:53	100
Bromomethane	ND		100	69	ug/L			11/15/18 10:53	100
Carbon disulfide	ND		100	19	ug/L			11/15/18 10:53	100
Carbon tetrachloride	ND		100	27	ug/L			11/15/18 10:53	100
Chlorobenzene	ND		100	75	ug/L			11/15/18 10:53	100
Dibromochloromethane	ND		100	32	ug/L			11/15/18 10:53	100
Chloroethane	ND		100	32	ug/L			11/15/18 10:53	100
Chloroform	ND		100	34	ug/L			11/15/18 10:53	100
Chloromethane	ND		100	35	ug/L			11/15/18 10:53	100
cis-1,2-Dichloroethene	4100		100	81	ug/L			11/15/18 10:53	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			11/15/18 10:53	100
Cyclohexane	ND		100	18	ug/L			11/15/18 10:53	100
Dichlorodifluoromethane	ND *		100	68	ug/L			11/15/18 10:53	100
Ethylbenzene	ND		100	74	ug/L			11/15/18 10:53	100
1,2-Dibromoethane	ND		100	73	ug/L			11/15/18 10:53	100
Isopropylbenzene	ND		100	79	ug/L			11/15/18 10:53	100
Methyl acetate	ND		250	130	ug/L			11/15/18 10:53	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-9R

Lab Sample ID: 480-144996-4

Date Collected: 11/08/18 09:30

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		100	16	ug/L			11/15/18 10:53	100
Methylcyclohexane	ND		100	16	ug/L			11/15/18 10:53	100
Methylene Chloride	ND		100	44	ug/L			11/15/18 10:53	100
Styrene	ND		100	73	ug/L			11/15/18 10:53	100
Tetrachloroethene	ND		100	36	ug/L			11/15/18 10:53	100
Toluene	ND		100	51	ug/L			11/15/18 10:53	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			11/15/18 10:53	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			11/15/18 10:53	100
Trichloroethene	2200		100	46	ug/L			11/15/18 10:53	100
Trichlorofluoromethane	ND		100	88	ug/L			11/15/18 10:53	100
Vinyl chloride	490		100	90	ug/L			11/15/18 10:53	100
Xylenes, Total	ND		200	66	ug/L			11/15/18 10:53	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/15/18 10:53	100
1,2-Dichloroethane-d4 (Surr)	93		77 - 120		11/15/18 10:53	100
4-Bromofluorobenzene (Surr)	97		73 - 120		11/15/18 10:53	100
Dibromofluoromethane (Surr)	94		75 - 123		11/15/18 10:53	100

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		11/21/18 13:50	12/14/18 03:02	1
Perfluoropentanoic acid (PFPeA)	ND	G	4.3	4.3	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorohexanoic acid (PFHxA)	1.7		1.7	0.50	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluoroheptanoic acid (PFHpA)	0.84	J	1.7	0.21	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorooctanoic acid (PFOA)	4.8		1.7	0.73	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.26	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.94	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.17	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorohexanesulfonic acid (PFHxS)	1.9		1.7	0.15	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorooctanesulfonic acid (PFOS)	0.95	J	1.7	0.46	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		11/21/18 13:50	12/14/18 03:02	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30	ng/L		11/21/18 13:50	12/14/18 03:02	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		11/21/18 13:50	12/14/18 03:02	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		11/21/18 13:50	12/14/18 03:02	1
6:2 FTS	1.9	J	17	1.7	ng/L		11/21/18 13:50	12/14/18 03:02	1
8:2 FTS	ND		17	1.7	ng/L		11/21/18 13:50	12/14/18 03:02	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	49		25 - 150				11/21/18 13:50	12/14/18 03:02	1
13C5 PFPeA	58		25 - 150				11/21/18 13:50	12/14/18 03:02	1
13C2 PFHxA	79		25 - 150				11/21/18 13:50	12/14/18 03:02	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-9R

Lab Sample ID: 480-144996-4

Date Collected: 11/08/18 09:30

Matrix: Water

Date Received: 11/09/18 15:10

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFHpA	83		25 - 150	11/21/18 13:50	12/14/18 03:02	1
13C4 PFOA	89		25 - 150	11/21/18 13:50	12/14/18 03:02	1
13C5 PFNA	92		25 - 150	11/21/18 13:50	12/14/18 03:02	1
13C2 PFDA	92		25 - 150	11/21/18 13:50	12/14/18 03:02	1
13C2 PFUnA	93		25 - 150	11/21/18 13:50	12/14/18 03:02	1
13C2 PFDoA	91		25 - 150	11/21/18 13:50	12/14/18 03:02	1
13C2 PFTeDA	96		25 - 150	11/21/18 13:50	12/14/18 03:02	1
13C3 PFBS	84		25 - 150	11/21/18 13:50	12/14/18 03:02	1
18O2 PFHxS	87		25 - 150	11/21/18 13:50	12/14/18 03:02	1
13C4 PFOS	93		25 - 150	11/21/18 13:50	12/14/18 03:02	1
13C8 FOSA	84		25 - 150	11/21/18 13:50	12/14/18 03:02	1
d3-NMeFOSAA	84		25 - 150	11/21/18 13:50	12/14/18 03:02	1
d5-NEtFOSAA	84		25 - 150	11/21/18 13:50	12/14/18 03:02	1
M2-6:2 FTS	192 *		25 - 150	11/21/18 13:50	12/14/18 03:02	1
M2-8:2 FTS	132		25 - 150	11/21/18 13:50	12/14/18 03:02	1

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-11R

Lab Sample ID: 480-144996-5

Date Collected: 11/07/18 10:30

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.31	J	0.40	0.20	ug/L			11/19/18 16:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		72 - 133					11/19/18 16:37	1

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			11/15/18 11:16	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			11/15/18 11:16	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			11/15/18 11:16	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			11/15/18 11:16	20
1,1-Dichloroethane	ND		20	7.6	ug/L			11/15/18 11:16	20
1,1-Dichloroethene	ND		20	5.8	ug/L			11/15/18 11:16	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			11/15/18 11:16	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			11/15/18 11:16	20
1,2-Dichlorobenzene	ND		20	16	ug/L			11/15/18 11:16	20
1,2-Dichloroethane	ND		20	4.2	ug/L			11/15/18 11:16	20
1,2-Dichloropropane	ND		20	14	ug/L			11/15/18 11:16	20
1,3-Dichlorobenzene	ND		20	16	ug/L			11/15/18 11:16	20
1,4-Dichlorobenzene	ND		20	17	ug/L			11/15/18 11:16	20
2-Butanone (MEK)	ND		200	26	ug/L			11/15/18 11:16	20
2-Hexanone	ND		100	25	ug/L			11/15/18 11:16	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			11/15/18 11:16	20
Acetone	ND		200	60	ug/L			11/15/18 11:16	20
Benzene	ND		20	8.2	ug/L			11/15/18 11:16	20
Bromodichloromethane	ND		20	7.8	ug/L			11/15/18 11:16	20
Bromoform	ND		20	5.2	ug/L			11/15/18 11:16	20
Bromomethane	ND		20	14	ug/L			11/15/18 11:16	20
Carbon disulfide	ND		20	3.8	ug/L			11/15/18 11:16	20
Carbon tetrachloride	ND		20	5.4	ug/L			11/15/18 11:16	20
Chlorobenzene	ND		20	15	ug/L			11/15/18 11:16	20
Dibromochloromethane	ND		20	6.4	ug/L			11/15/18 11:16	20
Chloroethane	ND		20	6.4	ug/L			11/15/18 11:16	20
Chloroform	ND		20	6.8	ug/L			11/15/18 11:16	20
Chloromethane	ND		20	7.0	ug/L			11/15/18 11:16	20
cis-1,2-Dichloroethene	270		20	16	ug/L			11/15/18 11:16	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			11/15/18 11:16	20
Cyclohexane	ND		20	3.6	ug/L			11/15/18 11:16	20
Dichlorodifluoromethane	ND *		20	14	ug/L			11/15/18 11:16	20
Ethylbenzene	ND		20	15	ug/L			11/15/18 11:16	20
1,2-Dibromoethane	ND		20	15	ug/L			11/15/18 11:16	20
Isopropylbenzene	ND		20	16	ug/L			11/15/18 11:16	20
Methyl acetate	ND		50	26	ug/L			11/15/18 11:16	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			11/15/18 11:16	20
Methylcyclohexane	ND		20	3.2	ug/L			11/15/18 11:16	20
Methylene Chloride	ND		20	8.8	ug/L			11/15/18 11:16	20
Styrene	ND		20	15	ug/L			11/15/18 11:16	20
Tetrachloroethene	ND		20	7.2	ug/L			11/15/18 11:16	20
Toluene	ND		20	10	ug/L			11/15/18 11:16	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			11/15/18 11:16	20

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-11R

Lab Sample ID: 480-144996-5

Date Collected: 11/07/18 10:30

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			11/15/18 11:16	20
Trichloroethene	1400		20	9.2	ug/L			11/15/18 11:16	20
Trichlorofluoromethane	ND		20	18	ug/L			11/15/18 11:16	20
Vinyl chloride	ND		20	18	ug/L			11/15/18 11:16	20
Xylenes, Total	ND		40	13	ug/L			11/15/18 11:16	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		11/15/18 11:16	20
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		11/15/18 11:16	20
4-Bromofluorobenzene (Surr)	101		73 - 120		11/15/18 11:16	20
Dibromofluoromethane (Surr)	96		75 - 123		11/15/18 11:16	20

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.5	J	1.8	0.31	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.43	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.51	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluoroheptanoic acid (PFHpA)	0.35	J	1.8	0.22	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorooctanoic acid (PFOA)	3.0		1.8	0.75	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorononanoic acid (PFNA)	0.51	J	1.8	0.24	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.27	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.97	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.49	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.1	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorobutanesulfonic acid (PFBS)	1.6	J	1.8	0.18	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorohexanesulfonic acid (PFHxS)	1.1	J	1.8	0.15	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorooctanesulfonic acid (PFOS)	6.3		1.8	0.48	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		11/21/18 13:50	12/07/18 04:31	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.31	ng/L		11/21/18 13:50	12/07/18 04:31	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.7	ng/L		11/21/18 13:50	12/07/18 04:31	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		11/21/18 13:50	12/07/18 04:31	1
6:2 FTS	ND		18	1.8	ng/L		11/21/18 13:50	12/07/18 04:31	1
8:2 FTS	ND		18	1.8	ng/L		11/21/18 13:50	12/07/18 04:31	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	54		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C5 PFPeA	74		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C2 PFHxA	78		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C4 PFHpA	78		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C4 PFOA	83		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C5 PFNA	89		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C2 PFDA	87		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C2 PFUnA	86		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C2 PFDoA	87		25 - 150	11/21/18 13:50	12/07/18 04:31	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-11R

Lab Sample ID: 480-144996-5

Date Collected: 11/07/18 10:30

Matrix: Water

Date Received: 11/09/18 15:10

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFTeDA	84		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C3 PFBS	78		25 - 150	11/21/18 13:50	12/07/18 04:31	1
18O2 PFHxS	82		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C4 PFOS	88		25 - 150	11/21/18 13:50	12/07/18 04:31	1
13C8 FOSA	86		25 - 150	11/21/18 13:50	12/07/18 04:31	1
d3-NMeFOSAA	101		25 - 150	11/21/18 13:50	12/07/18 04:31	1
d5-NEtFOSAA	99		25 - 150	11/21/18 13:50	12/07/18 04:31	1
M2-6:2 FTS	129		25 - 150	11/21/18 13:50	12/07/18 04:31	1
M2-8:2 FTS	106		25 - 150	11/21/18 13:50	12/07/18 04:31	1

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-12

Date Collected: 11/08/18 11:15

Date Received: 11/09/18 15:10

Lab Sample ID: 480-144996-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			11/19/18 17:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	82		72 - 133					11/19/18 17:02	1

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			11/15/18 04:20	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			11/15/18 04:20	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			11/15/18 04:20	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			11/15/18 04:20	20
1,1-Dichloroethane	ND		20	7.6	ug/L			11/15/18 04:20	20
1,1-Dichloroethene	ND		20	5.8	ug/L			11/15/18 04:20	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			11/15/18 04:20	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			11/15/18 04:20	20
1,2-Dichlorobenzene	ND		20	16	ug/L			11/15/18 04:20	20
1,2-Dichloroethane	ND		20	4.2	ug/L			11/15/18 04:20	20
1,2-Dichloropropane	ND		20	14	ug/L			11/15/18 04:20	20
1,3-Dichlorobenzene	ND		20	16	ug/L			11/15/18 04:20	20
1,4-Dichlorobenzene	ND		20	17	ug/L			11/15/18 04:20	20
2-Butanone (MEK)	ND		200	26	ug/L			11/15/18 04:20	20
2-Hexanone	ND		100	25	ug/L			11/15/18 04:20	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			11/15/18 04:20	20
Acetone	ND		200	60	ug/L			11/15/18 04:20	20
Benzene	ND		20	8.2	ug/L			11/15/18 04:20	20
Bromodichloromethane	ND		20	7.8	ug/L			11/15/18 04:20	20
Bromoform	ND		20	5.2	ug/L			11/15/18 04:20	20
Bromomethane	ND		20	14	ug/L			11/15/18 04:20	20
Carbon disulfide	ND		20	3.8	ug/L			11/15/18 04:20	20
Carbon tetrachloride	ND		20	5.4	ug/L			11/15/18 04:20	20
Chlorobenzene	ND		20	15	ug/L			11/15/18 04:20	20
Dibromochloromethane	ND		20	6.4	ug/L			11/15/18 04:20	20
Chloroethane	ND		20	6.4	ug/L			11/15/18 04:20	20
Chloroform	ND		20	6.8	ug/L			11/15/18 04:20	20
Chloromethane	ND		20	7.0	ug/L			11/15/18 04:20	20
cis-1,2-Dichloroethene	120		20	16	ug/L			11/15/18 04:20	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			11/15/18 04:20	20
Cyclohexane	ND		20	3.6	ug/L			11/15/18 04:20	20
Dichlorodifluoromethane	ND		20	14	ug/L			11/15/18 04:20	20
Ethylbenzene	ND		20	15	ug/L			11/15/18 04:20	20
1,2-Dibromoethane	ND		20	15	ug/L			11/15/18 04:20	20
Isopropylbenzene	ND		20	16	ug/L			11/15/18 04:20	20
Methyl acetate	ND		50	26	ug/L			11/15/18 04:20	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			11/15/18 04:20	20
Methylcyclohexane	ND		20	3.2	ug/L			11/15/18 04:20	20
Methylene Chloride	12 J		20	8.8	ug/L			11/15/18 04:20	20
Styrene	ND		20	15	ug/L			11/15/18 04:20	20
Tetrachloroethene	ND		20	7.2	ug/L			11/15/18 04:20	20
Toluene	ND		20	10	ug/L			11/15/18 04:20	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			11/15/18 04:20	20

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-12

Lab Sample ID: 480-144996-6

Date Collected: 11/08/18 11:15

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			11/15/18 04:20	20
Trichloroethene	5000	E	20	9.2	ug/L			11/15/18 04:20	20
Trichlorofluoromethane	ND		20	18	ug/L			11/15/18 04:20	20
Vinyl chloride	ND		20	18	ug/L			11/15/18 04:20	20
Xylenes, Total	ND		40	13	ug/L			11/15/18 04:20	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		11/15/18 04:20	20
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		11/15/18 04:20	20
4-Bromofluorobenzene (Surr)	108		73 - 120		11/15/18 04:20	20
Dibromofluoromethane (Surr)	96		75 - 123		11/15/18 04:20	20

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		100	82	ug/L			11/15/18 11:39	100
1,1,1,2-Tetrachloroethane	ND		100	21	ug/L			11/15/18 11:39	100
1,1,2-Trichloroethane	ND		100	23	ug/L			11/15/18 11:39	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			11/15/18 11:39	100
1,1-Dichloroethane	ND		100	38	ug/L			11/15/18 11:39	100
1,1-Dichloroethene	ND		100	29	ug/L			11/15/18 11:39	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			11/15/18 11:39	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			11/15/18 11:39	100
1,2-Dichlorobenzene	ND		100	79	ug/L			11/15/18 11:39	100
1,2-Dichloroethane	ND		100	21	ug/L			11/15/18 11:39	100
1,2-Dichloropropane	ND		100	72	ug/L			11/15/18 11:39	100
1,3-Dichlorobenzene	ND		100	78	ug/L			11/15/18 11:39	100
1,4-Dichlorobenzene	ND		100	84	ug/L			11/15/18 11:39	100
2-Butanone (MEK)	ND		1000	130	ug/L			11/15/18 11:39	100
2-Hexanone	ND		500	120	ug/L			11/15/18 11:39	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			11/15/18 11:39	100
Acetone	ND		1000	300	ug/L			11/15/18 11:39	100
Benzene	ND		100	41	ug/L			11/15/18 11:39	100
Bromodichloromethane	ND		100	39	ug/L			11/15/18 11:39	100
Bromoform	ND		100	26	ug/L			11/15/18 11:39	100
Bromomethane	ND		100	69	ug/L			11/15/18 11:39	100
Carbon disulfide	ND		100	19	ug/L			11/15/18 11:39	100
Carbon tetrachloride	ND		100	27	ug/L			11/15/18 11:39	100
Chlorobenzene	ND		100	75	ug/L			11/15/18 11:39	100
Dibromochloromethane	ND		100	32	ug/L			11/15/18 11:39	100
Chloroethane	ND		100	32	ug/L			11/15/18 11:39	100
Chloroform	ND		100	34	ug/L			11/15/18 11:39	100
Chloromethane	ND		100	35	ug/L			11/15/18 11:39	100
cis-1,2-Dichloroethene	110		100	81	ug/L			11/15/18 11:39	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			11/15/18 11:39	100
Cyclohexane	ND		100	18	ug/L			11/15/18 11:39	100
Dichlorodifluoromethane	ND *		100	68	ug/L			11/15/18 11:39	100
Ethylbenzene	ND		100	74	ug/L			11/15/18 11:39	100
1,2-Dibromoethane	ND		100	73	ug/L			11/15/18 11:39	100
Isopropylbenzene	ND		100	79	ug/L			11/15/18 11:39	100
Methyl acetate	ND		250	130	ug/L			11/15/18 11:39	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-12

Lab Sample ID: 480-144996-6

Date Collected: 11/08/18 11:15

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		100	16	ug/L			11/15/18 11:39	100
Methylcyclohexane	ND		100	16	ug/L			11/15/18 11:39	100
Methylene Chloride	ND		100	44	ug/L			11/15/18 11:39	100
Styrene	ND		100	73	ug/L			11/15/18 11:39	100
Tetrachloroethene	ND		100	36	ug/L			11/15/18 11:39	100
Toluene	ND		100	51	ug/L			11/15/18 11:39	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			11/15/18 11:39	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			11/15/18 11:39	100
Trichloroethene	4500		100	46	ug/L			11/15/18 11:39	100
Trichlorofluoromethane	ND		100	88	ug/L			11/15/18 11:39	100
Vinyl chloride	ND		100	90	ug/L			11/15/18 11:39	100
Xylenes, Total	ND		200	66	ug/L			11/15/18 11:39	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/15/18 11:39	100
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		11/15/18 11:39	100
4-Bromofluorobenzene (Surr)	98		73 - 120		11/15/18 11:39	100
Dibromofluoromethane (Surr)	96		75 - 123		11/15/18 11:39	100

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	2.6		1.6	0.29	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluoropentanoic acid (PFPeA)	ND	G	4.1	4.1	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorohexanoic acid (PFHxA)	1.3	J	1.6	0.48	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluoroheptanoic acid (PFHpA)	0.95	J	1.6	0.21	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorooctanoic acid (PFOA)	3.7		1.6	0.70	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorononanoic acid (PFNA)	0.37	J	1.6	0.22	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.25	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.90	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.45	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	1.1	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.24	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorobutanesulfonic acid (PFBS)	0.82	J	1.6	0.16	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorohexanesulfonic acid (PFHxS)	0.79	J	1.6	0.14	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.16	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorooctanesulfonic acid (PFOS)	1.4	J	1.6	0.44	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.26	ng/L		11/21/18 13:50	12/07/18 04:38	1
Perfluorooctanesulfonamide (FOSA)	ND		1.6	0.29	ng/L		11/21/18 13:50	12/07/18 04:38	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	2.5	ng/L		11/21/18 13:50	12/07/18 04:38	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		16	1.6	ng/L		11/21/18 13:50	12/07/18 04:38	1
6:2 FTS	ND		16	1.6	ng/L		11/21/18 13:50	12/07/18 04:38	1
8:2 FTS	ND		16	1.6	ng/L		11/21/18 13:50	12/07/18 04:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	51		25 - 150				11/21/18 13:50	12/07/18 04:38	1
13C5 PFPeA	74		25 - 150				11/21/18 13:50	12/07/18 04:38	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-12

Lab Sample ID: 480-144996-6

Date Collected: 11/08/18 11:15

Matrix: Water

Date Received: 11/09/18 15:10

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	76		25 - 150	11/21/18 13:50	12/07/18 04:38	1
13C4 PFHpA	79		25 - 150	11/21/18 13:50	12/07/18 04:38	1
13C4 PFOA	81		25 - 150	11/21/18 13:50	12/07/18 04:38	1
13C5 PFNA	82		25 - 150	11/21/18 13:50	12/07/18 04:38	1
13C2 PFDA	88		25 - 150	11/21/18 13:50	12/07/18 04:38	1
13C2 PFUnA	82		25 - 150	11/21/18 13:50	12/07/18 04:38	1
13C2 PFDoA	79		25 - 150	11/21/18 13:50	12/07/18 04:38	1
13C2 PFTeDA	81		25 - 150	11/21/18 13:50	12/07/18 04:38	1
13C3 PFBS	74		25 - 150	11/21/18 13:50	12/07/18 04:38	1
18O2 PFHxS	81		25 - 150	11/21/18 13:50	12/07/18 04:38	1
13C4 PFOS	86		25 - 150	11/21/18 13:50	12/07/18 04:38	1
13C8 FOSA	81		25 - 150	11/21/18 13:50	12/07/18 04:38	1
d3-NMeFOSAA	96		25 - 150	11/21/18 13:50	12/07/18 04:38	1
d5-NEtFOSAA	100		25 - 150	11/21/18 13:50	12/07/18 04:38	1
M2-6:2 FTS	124		25 - 150	11/21/18 13:50	12/07/18 04:38	1
M2-8:2 FTS	97		25 - 150	11/21/18 13:50	12/07/18 04:38	1

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-13

Date Collected: 11/07/18 13:35

Date Received: 11/09/18 15:10

Lab Sample ID: 480-144996-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.32	J	0.40	0.20	ug/L			11/19/18 17:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	77		72 - 133					11/19/18 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			11/15/18 04:47	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			11/15/18 04:47	50
1,1,2-Trichloroethane	ND		50	12	ug/L			11/15/18 04:47	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16	ug/L			11/15/18 04:47	50
1,1-Dichloroethane	ND		50	19	ug/L			11/15/18 04:47	50
1,1-Dichloroethene	ND		50	15	ug/L			11/15/18 04:47	50
1,2,4-Trichlorobenzene	ND		50	21	ug/L			11/15/18 04:47	50
1,2-Dibromo-3-Chloropropane	ND		50	20	ug/L			11/15/18 04:47	50
1,2-Dichlorobenzene	ND		50	40	ug/L			11/15/18 04:47	50
1,2-Dichloroethane	ND		50	11	ug/L			11/15/18 04:47	50
1,2-Dichloropropane	ND		50	36	ug/L			11/15/18 04:47	50
1,3-Dichlorobenzene	ND		50	39	ug/L			11/15/18 04:47	50
1,4-Dichlorobenzene	ND		50	42	ug/L			11/15/18 04:47	50
2-Butanone (MEK)	ND		500	66	ug/L			11/15/18 04:47	50
2-Hexanone	ND		250	62	ug/L			11/15/18 04:47	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			11/15/18 04:47	50
Acetone	ND		500	150	ug/L			11/15/18 04:47	50
Benzene	ND		50	21	ug/L			11/15/18 04:47	50
Bromodichloromethane	ND		50	20	ug/L			11/15/18 04:47	50
Bromoform	ND		50	13	ug/L			11/15/18 04:47	50
Bromomethane	ND		50	35	ug/L			11/15/18 04:47	50
Carbon disulfide	ND		50	9.5	ug/L			11/15/18 04:47	50
Carbon tetrachloride	ND		50	14	ug/L			11/15/18 04:47	50
Chlorobenzene	ND		50	38	ug/L			11/15/18 04:47	50
Dibromochloromethane	ND		50	16	ug/L			11/15/18 04:47	50
Chloroethane	ND		50	16	ug/L			11/15/18 04:47	50
Chloroform	ND		50	17	ug/L			11/15/18 04:47	50
Chloromethane	ND		50	18	ug/L			11/15/18 04:47	50
cis-1,2-Dichloroethene	1300		50	41	ug/L			11/15/18 04:47	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			11/15/18 04:47	50
Cyclohexane	ND		50	9.0	ug/L			11/15/18 04:47	50
Dichlorodifluoromethane	ND		50	34	ug/L			11/15/18 04:47	50
Ethylbenzene	ND		50	37	ug/L			11/15/18 04:47	50
1,2-Dibromoethane	ND		50	37	ug/L			11/15/18 04:47	50
Isopropylbenzene	ND		50	40	ug/L			11/15/18 04:47	50
Methyl acetate	ND		130	65	ug/L			11/15/18 04:47	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			11/15/18 04:47	50
Methylcyclohexane	ND		50	8.0	ug/L			11/15/18 04:47	50
Methylene Chloride	34	J	50	22	ug/L			11/15/18 04:47	50
Styrene	ND		50	37	ug/L			11/15/18 04:47	50
Tetrachloroethene	ND		50	18	ug/L			11/15/18 04:47	50
Toluene	ND		50	26	ug/L			11/15/18 04:47	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			11/15/18 04:47	50

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-13

Lab Sample ID: 480-144996-7

Date Collected: 11/07/18 13:35

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		50	19	ug/L			11/15/18 04:47	50
Trichloroethene	19000	E	50	23	ug/L			11/15/18 04:47	50
Trichlorofluoromethane	ND		50	44	ug/L			11/15/18 04:47	50
Vinyl chloride	ND		50	45	ug/L			11/15/18 04:47	50
Xylenes, Total	ND		100	33	ug/L			11/15/18 04:47	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/15/18 04:47	50
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		11/15/18 04:47	50
4-Bromofluorobenzene (Surr)	105		73 - 120		11/15/18 04:47	50
Dibromofluoromethane (Surr)	98		75 - 123		11/15/18 04:47	50

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		400	330	ug/L			11/15/18 12:02	400
1,1,2,2-Tetrachloroethane	ND		400	84	ug/L			11/15/18 12:02	400
1,1,2-Trichloroethane	ND		400	92	ug/L			11/15/18 12:02	400
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		400	120	ug/L			11/15/18 12:02	400
1,1-Dichloroethane	ND		400	150	ug/L			11/15/18 12:02	400
1,1-Dichloroethene	ND		400	120	ug/L			11/15/18 12:02	400
1,2,4-Trichlorobenzene	ND		400	160	ug/L			11/15/18 12:02	400
1,2-Dibromo-3-Chloropropane	ND		400	160	ug/L			11/15/18 12:02	400
1,2-Dichlorobenzene	ND		400	320	ug/L			11/15/18 12:02	400
1,2-Dichloroethane	ND		400	84	ug/L			11/15/18 12:02	400
1,2-Dichloropropane	ND		400	290	ug/L			11/15/18 12:02	400
1,3-Dichlorobenzene	ND		400	310	ug/L			11/15/18 12:02	400
1,4-Dichlorobenzene	ND		400	340	ug/L			11/15/18 12:02	400
2-Butanone (MEK)	ND		4000	530	ug/L			11/15/18 12:02	400
2-Hexanone	ND		2000	500	ug/L			11/15/18 12:02	400
4-Methyl-2-pentanone (MIBK)	ND		2000	840	ug/L			11/15/18 12:02	400
Acetone	ND		4000	1200	ug/L			11/15/18 12:02	400
Benzene	ND		400	160	ug/L			11/15/18 12:02	400
Bromodichloromethane	ND		400	160	ug/L			11/15/18 12:02	400
Bromoform	ND		400	100	ug/L			11/15/18 12:02	400
Bromomethane	ND		400	280	ug/L			11/15/18 12:02	400
Carbon disulfide	ND		400	76	ug/L			11/15/18 12:02	400
Carbon tetrachloride	ND		400	110	ug/L			11/15/18 12:02	400
Chlorobenzene	ND		400	300	ug/L			11/15/18 12:02	400
Dibromochloromethane	ND		400	130	ug/L			11/15/18 12:02	400
Chloroethane	ND		400	130	ug/L			11/15/18 12:02	400
Chloroform	ND		400	140	ug/L			11/15/18 12:02	400
Chloromethane	ND		400	140	ug/L			11/15/18 12:02	400
cis-1,2-Dichloroethene	1400		400	320	ug/L			11/15/18 12:02	400
cis-1,3-Dichloropropene	ND		400	140	ug/L			11/15/18 12:02	400
Cyclohexane	ND		400	72	ug/L			11/15/18 12:02	400
Dichlorodifluoromethane	ND *		400	270	ug/L			11/15/18 12:02	400
Ethylbenzene	ND		400	300	ug/L			11/15/18 12:02	400
1,2-Dibromoethane	ND		400	290	ug/L			11/15/18 12:02	400
Isopropylbenzene	ND		400	320	ug/L			11/15/18 12:02	400
Methyl acetate	ND		1000	520	ug/L			11/15/18 12:02	400

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-13

Lab Sample ID: 480-144996-7

Date Collected: 11/07/18 13:35

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		400	64	ug/L			11/15/18 12:02	400
Methylcyclohexane	ND		400	64	ug/L			11/15/18 12:02	400
Methylene Chloride	ND		400	180	ug/L			11/15/18 12:02	400
Styrene	ND		400	290	ug/L			11/15/18 12:02	400
Tetrachloroethene	ND		400	140	ug/L			11/15/18 12:02	400
Toluene	ND		400	200	ug/L			11/15/18 12:02	400
trans-1,2-Dichloroethene	ND		400	360	ug/L			11/15/18 12:02	400
trans-1,3-Dichloropropene	ND		400	150	ug/L			11/15/18 12:02	400
Trichloroethene	18000		400	180	ug/L			11/15/18 12:02	400
Trichlorofluoromethane	ND		400	350	ug/L			11/15/18 12:02	400
Vinyl chloride	ND		400	360	ug/L			11/15/18 12:02	400
Xylenes, Total	ND		800	260	ug/L			11/15/18 12:02	400

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/15/18 12:02	400
1,2-Dichloroethane-d4 (Surr)	98		77 - 120		11/15/18 12:02	400
4-Bromofluorobenzene (Surr)	94		73 - 120		11/15/18 12:02	400
Dibromofluoromethane (Surr)	96		75 - 123		11/15/18 12:02	400

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.8	0.32	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.45	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.53	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluoroheptanoic acid (PFHpA)	1.0	J	1.8	0.23	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorooctanoic acid (PFOA)	3.3		1.8	0.77	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorononanoic acid (PFNA)	0.95	J	1.8	0.25	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.26	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.18	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorohexanesulfonic acid (PFHxS)	1.4	J B	1.8	0.15	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorooctanesulfonic acid (PFOS)	5.1		1.8	0.49	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		11/19/18 09:43	11/27/18 08:32	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.32	ng/L		11/19/18 09:43	11/27/18 08:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	2.8	ng/L		11/19/18 09:43	11/27/18 08:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		18	1.7	ng/L		11/19/18 09:43	11/27/18 08:32	1
6:2 FTS	ND		18	1.8	ng/L		11/19/18 09:43	11/27/18 08:32	1
8:2 FTS	ND		18	1.8	ng/L		11/19/18 09:43	11/27/18 08:32	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	61		25 - 150				11/19/18 09:43	11/27/18 08:32	1
13C5 PFPeA	69		25 - 150				11/19/18 09:43	11/27/18 08:32	1
13C2 PFHxA	79		25 - 150				11/19/18 09:43	11/27/18 08:32	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-13

Lab Sample ID: 480-144996-7

Date Collected: 11/07/18 13:35

Matrix: Water

Date Received: 11/09/18 15:10

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFHpA	85		25 - 150	11/19/18 09:43	11/27/18 08:32	1
13C4 PFOA	99		25 - 150	11/19/18 09:43	11/27/18 08:32	1
13C5 PFNA	104		25 - 150	11/19/18 09:43	11/27/18 08:32	1
13C2 PFDA	105		25 - 150	11/19/18 09:43	11/27/18 08:32	1
13C2 PFUnA	104		25 - 150	11/19/18 09:43	11/27/18 08:32	1
13C2 PFDoA	97		25 - 150	11/19/18 09:43	11/27/18 08:32	1
13C2 PFTeDA	100		25 - 150	11/19/18 09:43	11/27/18 08:32	1
13C3 PFBS	76		25 - 150	11/19/18 09:43	11/27/18 08:32	1
18O2 PFHxS	84		25 - 150	11/19/18 09:43	11/27/18 08:32	1
13C4 PFOS	95		25 - 150	11/19/18 09:43	11/27/18 08:32	1
13C8 FOSA	94		25 - 150	11/19/18 09:43	11/27/18 08:32	1
d3-NMeFOSAA	111		25 - 150	11/19/18 09:43	11/27/18 08:32	1
d5-NEtFOSAA	108		25 - 150	11/19/18 09:43	11/27/18 08:32	1
M2-6:2 FTS	175 *		25 - 150	11/19/18 09:43	11/27/18 08:32	1
M2-8:2 FTS	64		25 - 150	11/19/18 09:43	11/27/18 08:32	1

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-14

Lab Sample ID: 480-144996-8

Date Collected: 11/07/18 15:35

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			11/19/18 17:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	82		72 - 133					11/19/18 17:52	1

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			11/15/18 05:13	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			11/15/18 05:13	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			11/15/18 05:13	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			11/15/18 05:13	20
1,1-Dichloroethane	ND		20	7.6	ug/L			11/15/18 05:13	20
1,1-Dichloroethene	11	J	20	5.8	ug/L			11/15/18 05:13	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			11/15/18 05:13	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			11/15/18 05:13	20
1,2-Dichlorobenzene	ND		20	16	ug/L			11/15/18 05:13	20
1,2-Dichloroethane	ND		20	4.2	ug/L			11/15/18 05:13	20
1,2-Dichloropropane	ND		20	14	ug/L			11/15/18 05:13	20
1,3-Dichlorobenzene	ND		20	16	ug/L			11/15/18 05:13	20
1,4-Dichlorobenzene	ND		20	17	ug/L			11/15/18 05:13	20
2-Butanone (MEK)	ND		200	26	ug/L			11/15/18 05:13	20
2-Hexanone	ND		100	25	ug/L			11/15/18 05:13	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			11/15/18 05:13	20
Acetone	ND		200	60	ug/L			11/15/18 05:13	20
Benzene	ND		20	8.2	ug/L			11/15/18 05:13	20
Bromodichloromethane	ND		20	7.8	ug/L			11/15/18 05:13	20
Bromoform	ND		20	5.2	ug/L			11/15/18 05:13	20
Bromomethane	ND		20	14	ug/L			11/15/18 05:13	20
Carbon disulfide	ND		20	3.8	ug/L			11/15/18 05:13	20
Carbon tetrachloride	ND		20	5.4	ug/L			11/15/18 05:13	20
Chlorobenzene	ND		20	15	ug/L			11/15/18 05:13	20
Dibromochloromethane	ND		20	6.4	ug/L			11/15/18 05:13	20
Chloroethane	ND		20	6.4	ug/L			11/15/18 05:13	20
Chloroform	ND		20	6.8	ug/L			11/15/18 05:13	20
Chloromethane	ND		20	7.0	ug/L			11/15/18 05:13	20
cis-1,2-Dichloroethene	1800		20	16	ug/L			11/15/18 05:13	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			11/15/18 05:13	20
Cyclohexane	ND		20	3.6	ug/L			11/15/18 05:13	20
Dichlorodifluoromethane	ND		20	14	ug/L			11/15/18 05:13	20
Ethylbenzene	ND		20	15	ug/L			11/15/18 05:13	20
1,2-Dibromoethane	ND		20	15	ug/L			11/15/18 05:13	20
Isopropylbenzene	ND		20	16	ug/L			11/15/18 05:13	20
Methyl acetate	ND		50	26	ug/L			11/15/18 05:13	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			11/15/18 05:13	20
Methylcyclohexane	ND		20	3.2	ug/L			11/15/18 05:13	20
Methylene Chloride	13	J	20	8.8	ug/L			11/15/18 05:13	20
Styrene	ND		20	15	ug/L			11/15/18 05:13	20
Tetrachloroethene	ND		20	7.2	ug/L			11/15/18 05:13	20
Toluene	ND		20	10	ug/L			11/15/18 05:13	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			11/15/18 05:13	20

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-14

Lab Sample ID: 480-144996-8

Date Collected: 11/07/18 15:35

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			11/15/18 05:13	20
Trichloroethene	4700	E	20	9.2	ug/L			11/15/18 05:13	20
Trichlorofluoromethane	ND		20	18	ug/L			11/15/18 05:13	20
Vinyl chloride	19	J	20	18	ug/L			11/15/18 05:13	20
Xylenes, Total	ND		40	13	ug/L			11/15/18 05:13	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/15/18 05:13	20
1,2-Dichloroethane-d4 (Surr)	98		77 - 120		11/15/18 05:13	20
4-Bromofluorobenzene (Surr)	100		73 - 120		11/15/18 05:13	20
Dibromofluoromethane (Surr)	96		75 - 123		11/15/18 05:13	20

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		100	82	ug/L			11/15/18 12:25	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			11/15/18 12:25	100
1,1,2-Trichloroethane	ND		100	23	ug/L			11/15/18 12:25	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			11/15/18 12:25	100
1,1-Dichloroethane	ND		100	38	ug/L			11/15/18 12:25	100
1,1-Dichloroethene	ND		100	29	ug/L			11/15/18 12:25	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			11/15/18 12:25	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			11/15/18 12:25	100
1,2-Dichlorobenzene	ND		100	79	ug/L			11/15/18 12:25	100
1,2-Dichloroethane	ND		100	21	ug/L			11/15/18 12:25	100
1,2-Dichloropropane	ND		100	72	ug/L			11/15/18 12:25	100
1,3-Dichlorobenzene	ND		100	78	ug/L			11/15/18 12:25	100
1,4-Dichlorobenzene	ND		100	84	ug/L			11/15/18 12:25	100
2-Butanone (MEK)	ND		1000	130	ug/L			11/15/18 12:25	100
2-Hexanone	ND		500	120	ug/L			11/15/18 12:25	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			11/15/18 12:25	100
Acetone	ND		1000	300	ug/L			11/15/18 12:25	100
Benzene	ND		100	41	ug/L			11/15/18 12:25	100
Bromodichloromethane	ND		100	39	ug/L			11/15/18 12:25	100
Bromoform	ND		100	26	ug/L			11/15/18 12:25	100
Bromomethane	ND		100	69	ug/L			11/15/18 12:25	100
Carbon disulfide	ND		100	19	ug/L			11/15/18 12:25	100
Carbon tetrachloride	ND		100	27	ug/L			11/15/18 12:25	100
Chlorobenzene	ND		100	75	ug/L			11/15/18 12:25	100
Dibromochloromethane	ND		100	32	ug/L			11/15/18 12:25	100
Chloroethane	ND		100	32	ug/L			11/15/18 12:25	100
Chloroform	ND		100	34	ug/L			11/15/18 12:25	100
Chloromethane	ND		100	35	ug/L			11/15/18 12:25	100
cis-1,2-Dichloroethene	1700		100	81	ug/L			11/15/18 12:25	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			11/15/18 12:25	100
Cyclohexane	ND		100	18	ug/L			11/15/18 12:25	100
Dichlorodifluoromethane	ND *		100	68	ug/L			11/15/18 12:25	100
Ethylbenzene	ND		100	74	ug/L			11/15/18 12:25	100
1,2-Dibromoethane	ND		100	73	ug/L			11/15/18 12:25	100
Isopropylbenzene	ND		100	79	ug/L			11/15/18 12:25	100
Methyl acetate	ND		250	130	ug/L			11/15/18 12:25	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-14

Lab Sample ID: 480-144996-8

Date Collected: 11/07/18 15:35

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		100	16	ug/L			11/15/18 12:25	100
Methylcyclohexane	ND		100	16	ug/L			11/15/18 12:25	100
Methylene Chloride	ND		100	44	ug/L			11/15/18 12:25	100
Styrene	ND		100	73	ug/L			11/15/18 12:25	100
Tetrachloroethene	ND		100	36	ug/L			11/15/18 12:25	100
Toluene	ND		100	51	ug/L			11/15/18 12:25	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			11/15/18 12:25	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			11/15/18 12:25	100
Trichloroethene	4800		100	46	ug/L			11/15/18 12:25	100
Trichlorofluoromethane	ND		100	88	ug/L			11/15/18 12:25	100
Vinyl chloride	ND		100	90	ug/L			11/15/18 12:25	100
Xylenes, Total	ND		200	66	ug/L			11/15/18 12:25	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		11/15/18 12:25	100
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		11/15/18 12:25	100
4-Bromofluorobenzene (Surr)	103		73 - 120		11/15/18 12:25	100
Dibromofluoromethane (Surr)	96		75 - 123		11/15/18 12:25	100

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND	G	8.3	8.3	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluoropentanoic acid (PFPeA)	ND	G	3.3	3.3	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorohexanoic acid (PFHxA)	1.1	J	1.7	0.48	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluoroheptanoic acid (PFHpA)	0.77	J	1.7	0.21	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorooctanoic acid (PFOA)	4.4		1.7	0.71	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorononanoic acid (PFNA)	0.62	J	1.7	0.22	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorodecanoic acid (PFDA)	0.27	J	1.7	0.26	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.91	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.46	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.24	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorobutanesulfonic acid (PFBS)	ND	G	3.3	3.3	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorohexanesulfonic acid (PFHxS)	1.5	J	1.7	0.14	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorooctanesulfonic acid (PFOS)	4.5		1.7	0.45	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		11/21/18 13:50	12/14/18 03:09	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.29	ng/L		11/21/18 13:50	12/14/18 03:09	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		11/21/18 13:50	12/14/18 03:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		11/21/18 13:50	12/14/18 03:09	1
6:2 FTS	ND		17	1.7	ng/L		11/21/18 13:50	12/14/18 03:09	1
8:2 FTS	ND		17	1.7	ng/L		11/21/18 13:50	12/14/18 03:09	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	42		25 - 150				11/21/18 13:50	12/14/18 03:09	1
13C5 PFPeA	62		25 - 150				11/21/18 13:50	12/14/18 03:09	1
13C2 PFHxA	77		25 - 150				11/21/18 13:50	12/14/18 03:09	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-14

Lab Sample ID: 480-144996-8

Date Collected: 11/07/18 15:35

Matrix: Water

Date Received: 11/09/18 15:10

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFHpA	75		25 - 150	11/21/18 13:50	12/14/18 03:09	1
13C4 PFOA	85		25 - 150	11/21/18 13:50	12/14/18 03:09	1
13C5 PFNA	89		25 - 150	11/21/18 13:50	12/14/18 03:09	1
13C2 PFDA	88		25 - 150	11/21/18 13:50	12/14/18 03:09	1
13C2 PFUnA	83		25 - 150	11/21/18 13:50	12/14/18 03:09	1
13C2 PFDoA	84		25 - 150	11/21/18 13:50	12/14/18 03:09	1
13C2 PFTeDA	83		25 - 150	11/21/18 13:50	12/14/18 03:09	1
13C3 PFBS	83		25 - 150	11/21/18 13:50	12/14/18 03:09	1
18O2 PFHxS	82		25 - 150	11/21/18 13:50	12/14/18 03:09	1
13C4 PFOS	91		25 - 150	11/21/18 13:50	12/14/18 03:09	1
13C8 FOSA	85		25 - 150	11/21/18 13:50	12/14/18 03:09	1
d3-NMeFOSAA	86		25 - 150	11/21/18 13:50	12/14/18 03:09	1
d5-NEtFOSAA	79		25 - 150	11/21/18 13:50	12/14/18 03:09	1
M2-6:2 FTS	212 *		25 - 150	11/21/18 13:50	12/14/18 03:09	1
M2-8:2 FTS	126		25 - 150	11/21/18 13:50	12/14/18 03:09	1

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: DUP-110718

Lab Sample ID: 480-144996-9

Date Collected: 11/07/18 10:30

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			11/20/18 11:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		72 - 133					11/20/18 11:54	1

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			11/15/18 12:48	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			11/15/18 12:48	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			11/15/18 12:48	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			11/15/18 12:48	20
1,1-Dichloroethane	ND		20	7.6	ug/L			11/15/18 12:48	20
1,1-Dichloroethene	ND		20	5.8	ug/L			11/15/18 12:48	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			11/15/18 12:48	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			11/15/18 12:48	20
1,2-Dichlorobenzene	ND		20	16	ug/L			11/15/18 12:48	20
1,2-Dichloroethane	ND		20	4.2	ug/L			11/15/18 12:48	20
1,2-Dichloropropane	ND		20	14	ug/L			11/15/18 12:48	20
1,3-Dichlorobenzene	ND		20	16	ug/L			11/15/18 12:48	20
1,4-Dichlorobenzene	ND		20	17	ug/L			11/15/18 12:48	20
2-Butanone (MEK)	ND		200	26	ug/L			11/15/18 12:48	20
2-Hexanone	ND		100	25	ug/L			11/15/18 12:48	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			11/15/18 12:48	20
Acetone	ND		200	60	ug/L			11/15/18 12:48	20
Benzene	ND		20	8.2	ug/L			11/15/18 12:48	20
Bromodichloromethane	ND		20	7.8	ug/L			11/15/18 12:48	20
Bromoform	ND		20	5.2	ug/L			11/15/18 12:48	20
Bromomethane	ND		20	14	ug/L			11/15/18 12:48	20
Carbon disulfide	ND		20	3.8	ug/L			11/15/18 12:48	20
Carbon tetrachloride	ND		20	5.4	ug/L			11/15/18 12:48	20
Chlorobenzene	ND		20	15	ug/L			11/15/18 12:48	20
Dibromochloromethane	ND		20	6.4	ug/L			11/15/18 12:48	20
Chloroethane	ND		20	6.4	ug/L			11/15/18 12:48	20
Chloroform	ND		20	6.8	ug/L			11/15/18 12:48	20
Chloromethane	ND		20	7.0	ug/L			11/15/18 12:48	20
cis-1,2-Dichloroethene	280		20	16	ug/L			11/15/18 12:48	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			11/15/18 12:48	20
Cyclohexane	ND		20	3.6	ug/L			11/15/18 12:48	20
Dichlorodifluoromethane	ND *		20	14	ug/L			11/15/18 12:48	20
Ethylbenzene	ND		20	15	ug/L			11/15/18 12:48	20
1,2-Dibromoethane	ND		20	15	ug/L			11/15/18 12:48	20
Isopropylbenzene	ND		20	16	ug/L			11/15/18 12:48	20
Methyl acetate	ND		50	26	ug/L			11/15/18 12:48	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			11/15/18 12:48	20
Methylcyclohexane	ND		20	3.2	ug/L			11/15/18 12:48	20
Methylene Chloride	ND		20	8.8	ug/L			11/15/18 12:48	20
Styrene	ND		20	15	ug/L			11/15/18 12:48	20
Tetrachloroethene	ND		20	7.2	ug/L			11/15/18 12:48	20
Toluene	ND		20	10	ug/L			11/15/18 12:48	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			11/15/18 12:48	20

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: DUP-110718

Lab Sample ID: 480-144996-9

Date Collected: 11/07/18 10:30

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			11/15/18 12:48	20
Trichloroethene	1400		20	9.2	ug/L			11/15/18 12:48	20
Trichlorofluoromethane	ND		20	18	ug/L			11/15/18 12:48	20
Vinyl chloride	ND		20	18	ug/L			11/15/18 12:48	20
Xylenes, Total	ND		40	13	ug/L			11/15/18 12:48	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/15/18 12:48	20
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		11/15/18 12:48	20
4-Bromofluorobenzene (Surr)	98		73 - 120		11/15/18 12:48	20
Dibromofluoromethane (Surr)	97		75 - 123		11/15/18 12:48	20

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.4	J	1.7	0.30	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.42	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.50	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.21	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorooctanoic acid (PFOA)	3.0		1.7	0.73	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorononanoic acid (PFNA)	0.52	J	1.7	0.23	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.27	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.94	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.47	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	1.1	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.25	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorobutanesulfonic acid (PFBS)	1.5	J	1.7	0.17	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorohexanesulfonic acid (PFHxS)	1.2	J	1.7	0.15	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.16	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorooctanesulfonic acid (PFOS)	6.4		1.7	0.46	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		11/21/18 13:50	12/07/18 04:53	1
Perfluorooctanesulfonamide (FOSA)	ND		1.7	0.30	ng/L		11/21/18 13:50	12/07/18 04:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	2.7	ng/L		11/21/18 13:50	12/07/18 04:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		11/21/18 13:50	12/07/18 04:53	1
6:2 FTS	ND		17	1.7	ng/L		11/21/18 13:50	12/07/18 04:53	1
8:2 FTS	ND		17	1.7	ng/L		11/21/18 13:50	12/07/18 04:53	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	53		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C5 PFPeA	78		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C2 PFHxA	79		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C4 PFHpA	82		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C4 PFOA	85		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C5 PFNA	87		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C2 PFDA	88		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C2 PFUnA	93		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C2 PFDoA	81		25 - 150	11/21/18 13:50	12/07/18 04:53	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: DUP-110718

Lab Sample ID: 480-144996-9

Date Collected: 11/07/18 10:30

Matrix: Water

Date Received: 11/09/18 15:10

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFTeDA	82		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C3 PFBS	81		25 - 150	11/21/18 13:50	12/07/18 04:53	1
18O2 PFHxS	83		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C4 PFOS	92		25 - 150	11/21/18 13:50	12/07/18 04:53	1
13C8 FOSA	87		25 - 150	11/21/18 13:50	12/07/18 04:53	1
d3-NMeFOSAA	103		25 - 150	11/21/18 13:50	12/07/18 04:53	1
d5-NEtFOSAA	103		25 - 150	11/21/18 13:50	12/07/18 04:53	1
M2-6:2 FTS	144		25 - 150	11/21/18 13:50	12/07/18 04:53	1
M2-8:2 FTS	107		25 - 150	11/21/18 13:50	12/07/18 04:53	1

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-144996-10

Date Collected: 11/07/18 00:00

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			11/20/18 10:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		72 - 133					11/20/18 10:38	1

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			11/15/18 06:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/18 06:07	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/18 06:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/18 06:07	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/18 06:07	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/18 06:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/18 06:07	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/18 06:07	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/18 06:07	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/18 06:07	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/18 06:07	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/18 06:07	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/18 06:07	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/18 06:07	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/18 06:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/18 06:07	1
Acetone	ND		10	3.0	ug/L			11/15/18 06:07	1
Benzene	ND		1.0	0.41	ug/L			11/15/18 06:07	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/18 06:07	1
Bromoform	ND		1.0	0.26	ug/L			11/15/18 06:07	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/18 06:07	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/18 06:07	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/15/18 06:07	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/18 06:07	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/15/18 06:07	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/18 06:07	1
Chloroform	ND		1.0	0.34	ug/L			11/15/18 06:07	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/18 06:07	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/18 06:07	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/18 06:07	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/18 06:07	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/18 06:07	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/18 06:07	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/15/18 06:07	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/18 06:07	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/18 06:07	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/18 06:07	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/18 06:07	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/18 06:07	1
Styrene	ND		1.0	0.73	ug/L			11/15/18 06:07	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/18 06:07	1
Toluene	ND		1.0	0.51	ug/L			11/15/18 06:07	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/18 06:07	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-144996-10

Date Collected: 11/07/18 00:00

Matrix: Water

Date Received: 11/09/18 15:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/18 06:07	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/18 06:07	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/18 06:07	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/18 06:07	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/15/18 06:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		80 - 120		11/15/18 06:07	1
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		11/15/18 06:07	1
4-Bromofluorobenzene (Surr)	101		73 - 120		11/15/18 06:07	1
Dibromofluoromethane (Surr)	96		75 - 123		11/15/18 06:07	1

Surrogate Summary

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

TestAmerica Job ID: 480-144996-1

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)
480-144996-1	MW-2	98	101	108	94
480-144996-1 - DL	MW-2	97	103	108	97
480-144996-2	MW-3	97	106	105	97
480-144996-3	MW-4	95	99	103	97
480-144996-3 - DL	MW-4	97	97	97	95
480-144996-3 MS	MW-4	95	101	106	98
480-144996-3 MS - DL	MW-4	99	91	101	95
480-144996-3 MSD	MW-4	98	106	105	97
480-144996-3 MSD - DL	MW-4	98	92	100	95
480-144996-4	MW-9R	97	99	102	95
480-144996-4 - DL	MW-9R	97	93	97	94
480-144996-5	MW-11R	99	99	101	96
480-144996-6	MW-12	95	104	108	96
480-144996-6 - DL	MW-12	98	99	98	96
480-144996-7	MW-13	97	105	105	98
480-144996-7 - DL	MW-13	97	98	94	96
480-144996-8	MW-14	97	98	100	96
480-144996-8 - DL	MW-14	99	99	103	96
480-144996-9	DUP-110718	98	100	98	97
480-144996-10	TRIP BLANK	94	101	101	96
LCS 480-445409/5	Lab Control Sample	97	103	109	96
LCS 480-445660/5	Lab Control Sample	99	103	106	95
LCS 480-445696/5	Lab Control Sample	99	93	101	94
MB 480-445409/7	Method Blank	93	97	102	92
MB 480-445660/7	Method Blank	96	101	108	93
MB 480-445696/7	Method Blank	97	100	100	98

Surrogate Legend

TOL = Toluene-d8 (Surr)

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

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (72-133)			
480-144996-1	MW-2	76			
480-144996-2	MW-3	83			
480-144996-3	MW-4	73			
480-144996-3 MS	MW-4	78			
480-144996-3 MSD	MW-4	72			
480-144996-4	MW-9R	81			
480-144996-5	MW-11R	91			
480-144996-6	MW-12	82			
480-144996-7	MW-13	77			
480-144996-8	MW-14	82			

TestAmerica Buffalo

Surrogate Summary

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

TestAmerica Job ID: 480-144996-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB (72-133)	
480-144996-9	DUP-110718	97	
480-144996-10	TRIP BLANK	105	
LCS 460-569541/3	Lab Control Sample	100	
LCS 460-569848/3	Lab Control Sample	106	
LCSD 460-569848/4	Lab Control Sample Dup	106	
MB 460-569541/7	Method Blank	106	
MB 460-569848/9	Method Blank	103	
Surrogate Legend			
BFB = 4-Bromofluorobenzene			

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: MB 480-445409/7

Matrix: Water

Analysis Batch: 445409

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/14/18 10:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/14/18 10:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/14/18 10:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/14/18 10:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/14/18 10:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/14/18 10:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/14/18 10:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/14/18 10:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/14/18 10:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/14/18 10:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/14/18 10:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/14/18 10:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/14/18 10:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/14/18 10:37	1
2-Hexanone	ND		5.0	1.2	ug/L			11/14/18 10:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/14/18 10:37	1
Acetone	ND		10	3.0	ug/L			11/14/18 10:37	1
Benzene	ND		1.0	0.41	ug/L			11/14/18 10:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/14/18 10:37	1
Bromoform	ND		1.0	0.26	ug/L			11/14/18 10:37	1
Bromomethane	ND		1.0	0.69	ug/L			11/14/18 10:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/14/18 10:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/14/18 10:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/14/18 10:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/14/18 10:37	1
Chloroethane	ND		1.0	0.32	ug/L			11/14/18 10:37	1
Chloroform	ND		1.0	0.34	ug/L			11/14/18 10:37	1
Chloromethane	ND		1.0	0.35	ug/L			11/14/18 10:37	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/14/18 10:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/14/18 10:37	1
Cyclohexane	ND		1.0	0.18	ug/L			11/14/18 10:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/14/18 10:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/14/18 10:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/14/18 10:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/14/18 10:37	1
Methyl acetate	ND		2.5	1.3	ug/L			11/14/18 10:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/14/18 10:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/14/18 10:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/14/18 10:37	1
Styrene	ND		1.0	0.73	ug/L			11/14/18 10:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/14/18 10:37	1
Toluene	ND		1.0	0.51	ug/L			11/14/18 10:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/14/18 10:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/14/18 10:37	1
Trichloroethene	ND		1.0	0.46	ug/L			11/14/18 10:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/14/18 10:37	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/14/18 10:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/14/18 10:37	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93		80 - 120		11/14/18 10:37	1
1,2-Dichloroethane-d4 (Surr)	97		77 - 120		11/14/18 10:37	1
4-Bromofluorobenzene (Surr)	102		73 - 120		11/14/18 10:37	1
Dibromofluoromethane (Surr)	92		75 - 123		11/14/18 10:37	1

Lab Sample ID: LCS 480-445409/5

Matrix: Water

Analysis Batch: 445409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	22.9		ug/L		92	73 - 126
1,1,2,2-Tetrachloroethane	25.0	21.0		ug/L		84	76 - 120
1,1,2-Trichloroethane	25.0	22.9		ug/L		91	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.1		ug/L		84	61 - 148
1,1-Dichloroethane	25.0	25.1		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	21.8		ug/L		87	66 - 127
1,2,4-Trichlorobenzene	25.0	25.5		ug/L		102	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.1		ug/L		92	56 - 134
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	26.2		ug/L		105	75 - 120
1,2-Dichloropropane	25.0	24.3		ug/L		97	76 - 120
1,3-Dichlorobenzene	25.0	23.9		ug/L		95	77 - 120
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	80 - 120
2-Butanone (MEK)	125	132		ug/L		105	57 - 140
2-Hexanone	125	138		ug/L		110	65 - 127
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	71 - 125
Acetone	125	161		ug/L		129	56 - 142
Benzene	25.0	22.7		ug/L		91	71 - 124
Bromodichloromethane	25.0	23.8		ug/L		95	80 - 122
Bromoform	25.0	23.2		ug/L		93	61 - 132
Bromomethane	25.0	20.7		ug/L		83	55 - 144
Carbon disulfide	25.0	20.8		ug/L		83	59 - 134
Carbon tetrachloride	25.0	22.6		ug/L		91	72 - 134
Chlorobenzene	25.0	24.1		ug/L		97	80 - 120
Dibromochloromethane	25.0	23.5		ug/L		94	75 - 125
Chloroethane	25.0	22.4		ug/L		90	69 - 136
Chloroform	25.0	23.4		ug/L		94	73 - 127
Chloromethane	25.0	22.3		ug/L		89	68 - 124
cis-1,2-Dichloroethene	25.0	22.9		ug/L		92	74 - 124
cis-1,3-Dichloropropene	25.0	23.6		ug/L		95	74 - 124
Cyclohexane	25.0	23.3		ug/L		93	59 - 135
Dichlorodifluoromethane	25.0	18.1		ug/L		73	59 - 135
Ethylbenzene	25.0	24.2		ug/L		97	77 - 123
1,2-Dibromoethane	25.0	24.6		ug/L		98	77 - 120
Isopropylbenzene	25.0	22.9		ug/L		92	77 - 122
Methyl acetate	50.0	49.5		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	23.9		ug/L		95	77 - 120
Methylcyclohexane	25.0	21.1		ug/L		84	68 - 134
Methylene Chloride	25.0	21.9		ug/L		87	75 - 124
Styrene	25.0	23.0		ug/L		92	80 - 120
Tetrachloroethene	25.0	25.3		ug/L		101	74 - 122
Toluene	25.0	23.2		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	21.7		ug/L		87	73 - 127

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: LCS 480-445409/5

Matrix: Water

Analysis Batch: 445409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	25.0	23.4		ug/L		94	80 - 120
Trichloroethene	25.0	23.3		ug/L		93	74 - 123
Trichlorofluoromethane	25.0	22.4		ug/L		90	62 - 150
Vinyl chloride	25.0	20.9		ug/L		84	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		77 - 120
4-Bromofluorobenzene (Surr)	109		73 - 120
Dibromofluoromethane (Surr)	96		75 - 123

Lab Sample ID: MB 480-445660/7

Matrix: Water

Analysis Batch: 445660

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/14/18 22:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/14/18 22:15	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/14/18 22:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/14/18 22:15	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/14/18 22:15	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/14/18 22:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/14/18 22:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/14/18 22:15	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/14/18 22:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/14/18 22:15	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/14/18 22:15	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/14/18 22:15	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/14/18 22:15	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/14/18 22:15	1
2-Hexanone	ND		5.0	1.2	ug/L			11/14/18 22:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/14/18 22:15	1
Acetone	ND		10	3.0	ug/L			11/14/18 22:15	1
Benzene	ND		1.0	0.41	ug/L			11/14/18 22:15	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/14/18 22:15	1
Bromoform	ND		1.0	0.26	ug/L			11/14/18 22:15	1
Bromomethane	ND		1.0	0.69	ug/L			11/14/18 22:15	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/14/18 22:15	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/14/18 22:15	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/14/18 22:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/14/18 22:15	1
Chloroethane	ND		1.0	0.32	ug/L			11/14/18 22:15	1
Chloroform	ND		1.0	0.34	ug/L			11/14/18 22:15	1
Chloromethane	ND		1.0	0.35	ug/L			11/14/18 22:15	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/14/18 22:15	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/14/18 22:15	1
Cyclohexane	ND		1.0	0.18	ug/L			11/14/18 22:15	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/14/18 22:15	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: MB 480-445660/7

Matrix: Water

Analysis Batch: 445660

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.74	ug/L			11/14/18 22:15	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/14/18 22:15	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/14/18 22:15	1
Methyl acetate	ND		2.5	1.3	ug/L			11/14/18 22:15	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/14/18 22:15	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/14/18 22:15	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/14/18 22:15	1
Styrene	ND		1.0	0.73	ug/L			11/14/18 22:15	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/14/18 22:15	1
Toluene	ND		1.0	0.51	ug/L			11/14/18 22:15	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/14/18 22:15	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/14/18 22:15	1
Trichloroethene	ND		1.0	0.46	ug/L			11/14/18 22:15	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/14/18 22:15	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/14/18 22:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/14/18 22:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		11/14/18 22:15	1
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		11/14/18 22:15	1
4-Bromofluorobenzene (Surr)	108		73 - 120		11/14/18 22:15	1
Dibromofluoromethane (Surr)	93		75 - 123		11/14/18 22:15	1

Lab Sample ID: LCS 480-445660/5

Matrix: Water

Analysis Batch: 445660

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	22.6		ug/L		90	73 - 126
1,1,2,2-Tetrachloroethane	25.0	19.6		ug/L		79	76 - 120
1,1,2-Trichloroethane	25.0	22.2		ug/L		89	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.6		ug/L		94	61 - 148
1,1-Dichloroethane	25.0	24.2		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	22.3		ug/L		89	66 - 127
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	21.3		ug/L		85	56 - 134
1,2-Dichlorobenzene	25.0	23.0		ug/L		92	80 - 124
1,2-Dichloroethane	25.0	25.0		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	23.1		ug/L		92	76 - 120
1,3-Dichlorobenzene	25.0	22.8		ug/L		91	77 - 120
1,4-Dichlorobenzene	25.0	22.3		ug/L		89	80 - 120
2-Butanone (MEK)	125	117		ug/L		93	57 - 140
2-Hexanone	125	127		ug/L		102	65 - 127
4-Methyl-2-pentanone (MIBK)	125	127		ug/L		101	71 - 125
Acetone	125	118		ug/L		94	56 - 142
Benzene	25.0	21.7		ug/L		87	71 - 124
Bromodichloromethane	25.0	22.2		ug/L		89	80 - 122

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: LCS 480-445660/5

Matrix: Water

Analysis Batch: 445660

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	25.0	21.9		ug/L		87	61 - 132
Bromomethane	25.0	20.2		ug/L		81	55 - 144
Carbon disulfide	25.0	21.1		ug/L		85	59 - 134
Carbon tetrachloride	25.0	24.4		ug/L		98	72 - 134
Chlorobenzene	25.0	23.8		ug/L		95	80 - 120
Dibromochloromethane	25.0	22.7		ug/L		91	75 - 125
Chloroethane	25.0	21.9		ug/L		88	69 - 136
Chloroform	25.0	22.4		ug/L		90	73 - 127
Chloromethane	25.0	22.3		ug/L		89	68 - 124
cis-1,2-Dichloroethene	25.0	22.2		ug/L		89	74 - 124
cis-1,3-Dichloropropene	25.0	21.8		ug/L		87	74 - 124
Cyclohexane	25.0	25.7		ug/L		103	59 - 135
Dichlorodifluoromethane	25.0	21.5		ug/L		86	59 - 135
Ethylbenzene	25.0	23.6		ug/L		94	77 - 123
1,2-Dibromoethane	25.0	23.6		ug/L		95	77 - 120
Isopropylbenzene	25.0	22.7		ug/L		91	77 - 122
Methyl acetate	50.0	43.9		ug/L		88	74 - 133
Methyl tert-butyl ether	25.0	22.6		ug/L		90	77 - 120
Methylcyclohexane	25.0	23.3		ug/L		93	68 - 134
Methylene Chloride	25.0	20.5		ug/L		82	75 - 124
Styrene	25.0	22.5		ug/L		90	80 - 120
Tetrachloroethene	25.0	26.5		ug/L		106	74 - 122
Toluene	25.0	22.4		ug/L		90	80 - 122
trans-1,2-Dichloroethene	25.0	20.8		ug/L		83	73 - 127
trans-1,3-Dichloropropene	25.0	22.9		ug/L		91	80 - 120
Trichloroethene	25.0	22.0		ug/L		88	74 - 123
Trichlorofluoromethane	25.0	23.7		ug/L		95	62 - 150
Vinyl chloride	25.0	21.3		ug/L		85	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)	106		73 - 120
Dibromofluoromethane (Surr)	95		75 - 123

Lab Sample ID: 480-144996-3 MS

Matrix: Water

Analysis Batch: 445660

Client Sample ID: MW-4

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	2540		ug/L		102	73 - 126
1,1,2,2-Tetrachloroethane	ND		2500	2070		ug/L		83	76 - 120
1,1,2-Trichloroethane	ND		2500	2130		ug/L		85	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2500	2540		ug/L		101	61 - 148
1,1-Dichloroethane	ND		2500	2570		ug/L		103	77 - 120
1,1-Dichloroethene	ND		2500	2420		ug/L		97	66 - 127
1,2,4-Trichlorobenzene	ND		2500	2530		ug/L		101	79 - 122

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: 480-144996-3 MS

Matrix: Water

Analysis Batch: 445660

Client Sample ID: MW-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		2500	2150		ug/L		86	56 - 134
1,2-Dichlorobenzene	ND		2500	2400		ug/L		96	80 - 124
1,2-Dichloroethane	ND		2500	2600		ug/L		104	75 - 120
1,2-Dichloropropane	ND		2500	2500		ug/L		100	76 - 120
1,3-Dichlorobenzene	ND		2500	2360		ug/L		95	77 - 120
1,4-Dichlorobenzene	ND		2500	2300		ug/L		92	78 - 124
2-Butanone (MEK)	ND		12500	12100		ug/L		97	57 - 140
2-Hexanone	ND		12500	12700		ug/L		102	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		12500	12100		ug/L		97	71 - 125
Acetone	ND		12500	12100		ug/L		97	56 - 142
Benzene	ND		2500	2320		ug/L		93	71 - 124
Bromodichloromethane	ND		2500	2400		ug/L		96	80 - 122
Bromoform	ND		2500	2210		ug/L		89	61 - 132
Bromomethane	ND		2500	2010		ug/L		80	55 - 144
Carbon disulfide	ND		2500	2200		ug/L		88	59 - 134
Carbon tetrachloride	ND		2500	2580		ug/L		103	72 - 134
Chlorobenzene	ND		2500	2380		ug/L		95	80 - 120
Dibromochloromethane	ND		2500	2240		ug/L		90	75 - 125
Chloroethane	ND		2500	2310		ug/L		93	69 - 136
Chloroform	ND		2500	2370		ug/L		95	73 - 127
Chloromethane	ND		2500	2480		ug/L		99	68 - 124
cis-1,2-Dichloroethene	780		2500	3320		ug/L		102	74 - 124
cis-1,3-Dichloropropene	ND		2500	2300		ug/L		92	74 - 124
Cyclohexane	ND		2500	2830		ug/L		113	59 - 135
Dichlorodifluoromethane	ND		2500	2350		ug/L		94	59 - 135
Ethylbenzene	ND		2500	2350		ug/L		94	77 - 123
1,2-Dibromoethane	ND		2500	2290		ug/L		92	77 - 120
Isopropylbenzene	ND		2500	2330		ug/L		93	77 - 122
Methyl acetate	ND		5000	4890		ug/L		98	74 - 133
Methyl tert-butyl ether	ND		2500	2290		ug/L		92	77 - 120
Methylcyclohexane	ND		2500	2520		ug/L		101	68 - 134
Methylene Chloride	73	J	2500	2210		ug/L		86	75 - 124
Styrene	ND		2500	2180		ug/L		87	80 - 120
Tetrachloroethene	ND		2500	2690		ug/L		107	74 - 122
Toluene	ND		2500	2230		ug/L		89	80 - 122
trans-1,2-Dichloroethene	ND		2500	2300		ug/L		92	73 - 127
trans-1,3-Dichloropropene	ND		2500	2160		ug/L		86	80 - 120
Trichloroethene	14000	E	2500	20400	E 4	ug/L		245	74 - 123
Trichlorofluoromethane	ND		2500	2580		ug/L		103	62 - 150
Vinyl chloride	ND		2500	2400		ug/L		96	65 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	95		80 - 120
1,2-Dichloroethane-d4 (Surr)	101		77 - 120
4-Bromofluorobenzene (Surr)	106		73 - 120
Dibromofluoromethane (Surr)	98		75 - 123

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: 480-144996-3 MSD

Matrix: Water

Analysis Batch: 445660

Client Sample ID: MW-4

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	2430		ug/L		97	73 - 126	4	15
1,1,2,2-Tetrachloroethane	ND		2500	2030		ug/L		81	76 - 120	2	15
1,1,2-Trichloroethane	ND		2500	2210		ug/L		89	76 - 122	4	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2500	2450		ug/L		98	61 - 148	4	20
1,1-Dichloroethane	ND		2500	2510		ug/L		101	77 - 120	2	20
1,1-Dichloroethene	ND		2500	2310		ug/L		92	66 - 127	5	16
1,2,4-Trichlorobenzene	ND		2500	2570		ug/L		103	79 - 122	1	20
1,2-Dibromo-3-Chloropropane	ND		2500	2170		ug/L		87	56 - 134	1	15
1,2-Dichlorobenzene	ND		2500	2380		ug/L		95	80 - 124	1	20
1,2-Dichloroethane	ND		2500	2670		ug/L		107	75 - 120	3	20
1,2-Dichloropropane	ND		2500	2380		ug/L		95	76 - 120	5	20
1,3-Dichlorobenzene	ND		2500	2330		ug/L		93	77 - 120	1	20
1,4-Dichlorobenzene	ND		2500	2300		ug/L		92	78 - 124	0	20
2-Butanone (MEK)	ND		12500	12000		ug/L		96	57 - 140	0	20
2-Hexanone	ND		12500	12900		ug/L		103	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	ND		12500	12700		ug/L		102	71 - 125	5	35
Acetone	ND		12500	11600		ug/L		93	56 - 142	5	15
Benzene	ND		2500	2210		ug/L		88	71 - 124	5	13
Bromodichloromethane	ND		2500	2370		ug/L		95	80 - 122	1	15
Bromoform	ND		2500	2260		ug/L		90	61 - 132	2	15
Bromomethane	ND		2500	2050		ug/L		82	55 - 144	2	15
Carbon disulfide	ND		2500	2150		ug/L		86	59 - 134	2	15
Carbon tetrachloride	ND		2500	2540		ug/L		101	72 - 134	2	15
Chlorobenzene	ND		2500	2330		ug/L		93	80 - 120	2	25
Dibromochloromethane	ND		2500	2260		ug/L		91	75 - 125	1	15
Chloroethane	ND		2500	2330		ug/L		93	69 - 136	1	15
Chloroform	ND		2500	2260		ug/L		91	73 - 127	4	20
Chloromethane	ND		2500	2410		ug/L		96	68 - 124	3	15
cis-1,2-Dichloroethene	780		2500	3310		ug/L		101	74 - 124	0	15
cis-1,3-Dichloropropene	ND		2500	2270		ug/L		91	74 - 124	1	15
Cyclohexane	ND		2500	2700		ug/L		108	59 - 135	5	20
Dichlorodifluoromethane	ND		2500	2240		ug/L		89	59 - 135	5	20
Ethylbenzene	ND		2500	2320		ug/L		93	77 - 123	1	15
1,2-Dibromoethane	ND		2500	2330		ug/L		93	77 - 120	1	15
Isopropylbenzene	ND		2500	2300		ug/L		92	77 - 122	1	20
Methyl acetate	ND		5000	4860		ug/L		97	74 - 133	1	20
Methyl tert-butyl ether	ND		2500	2280		ug/L		91	77 - 120	0	37
Methylcyclohexane	ND		2500	2440		ug/L		98	68 - 134	3	20
Methylene Chloride	73 J		2500	2210		ug/L		85	75 - 124	0	15
Styrene	ND		2500	2240		ug/L		90	80 - 120	3	20
Tetrachloroethene	ND		2500	2640		ug/L		106	74 - 122	2	20
Toluene	ND		2500	2220		ug/L		89	80 - 122	0	15
trans-1,2-Dichloroethene	ND		2500	2190		ug/L		87	73 - 127	5	20
trans-1,3-Dichloropropene	ND		2500	2210		ug/L		88	80 - 120	2	15
Trichloroethene	14000 E		2500	19700 E 4		ug/L		217	74 - 123	3	16
Trichlorofluoromethane	ND		2500	2340		ug/L		94	62 - 150	10	20
Vinyl chloride	ND		2500	2310		ug/L		93	65 - 133	4	15

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: 480-144996-3 MSD

Matrix: Water

Analysis Batch: 445660

Client Sample ID: MW-4

Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	97		75 - 123

Lab Sample ID: MB 480-445696/7

Matrix: Water

Analysis Batch: 445696

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/18 09:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/18 09:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/18 09:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/18 09:53	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/18 09:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/18 09:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/18 09:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/18 09:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/18 09:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/18 09:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/18 09:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/18 09:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/18 09:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/18 09:53	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/18 09:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/18 09:53	1
Acetone	ND		10	3.0	ug/L			11/15/18 09:53	1
Benzene	ND		1.0	0.41	ug/L			11/15/18 09:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/18 09:53	1
Bromoform	ND		1.0	0.26	ug/L			11/15/18 09:53	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/18 09:53	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/18 09:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/15/18 09:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/18 09:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/15/18 09:53	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/18 09:53	1
Chloroform	ND		1.0	0.34	ug/L			11/15/18 09:53	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/18 09:53	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/18 09:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/18 09:53	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/18 09:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/18 09:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/18 09:53	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/15/18 09:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/18 09:53	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/18 09:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/18 09:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/18 09:53	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: MB 480-445696/7

Matrix: Water

Analysis Batch: 445696

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/18 09:53	1
Styrene	ND		1.0	0.73	ug/L			11/15/18 09:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/18 09:53	1
Toluene	ND		1.0	0.51	ug/L			11/15/18 09:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/18 09:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/18 09:53	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/18 09:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/18 09:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/18 09:53	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/15/18 09:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/15/18 09:53	1
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		11/15/18 09:53	1
4-Bromofluorobenzene (Surr)	100		73 - 120		11/15/18 09:53	1
Dibromofluoromethane (Surr)	98		75 - 123		11/15/18 09:53	1

Lab Sample ID: LCS 480-445696/5

Matrix: Water

Analysis Batch: 445696

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	21.5		ug/L		86	73 - 126
1,1,1,2-Tetrachloroethane	25.0	23.8		ug/L		95	76 - 120
1,1,1,2-Trichloroethane	25.0	23.2		ug/L		93	76 - 122
1,1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.6		ug/L		87	61 - 148
1,1-Dichloroethane	25.0	21.6		ug/L		87	77 - 120
1,1-Dichloroethene	25.0	19.6		ug/L		78	66 - 127
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		94	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.7		ug/L		91	56 - 134
1,2-Dichlorobenzene	25.0	23.4		ug/L		94	80 - 124
1,2-Dichloroethane	25.0	22.8		ug/L		91	75 - 120
1,2-Dichloropropane	25.0	23.2		ug/L		93	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	118		ug/L		95	57 - 140
2-Hexanone	125	132		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125
Acetone	125	129		ug/L		103	56 - 142
Benzene	25.0	22.6		ug/L		91	71 - 124
Bromodichloromethane	25.0	23.8		ug/L		95	80 - 122
Bromoform	25.0	24.6		ug/L		98	61 - 132
Bromomethane	25.0	20.4		ug/L		81	55 - 144
Carbon disulfide	25.0	19.3		ug/L		77	59 - 134
Carbon tetrachloride	25.0	20.9		ug/L		83	72 - 134
Chlorobenzene	25.0	23.6		ug/L		94	80 - 120
Dibromochloromethane	25.0	25.3		ug/L		101	75 - 125

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: LCS 480-445696/5

Matrix: Water

Analysis Batch: 445696

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	25.0	20.5		ug/L		82	69 - 136
Chloroform	25.0	21.5		ug/L		86	73 - 127
Chloromethane	25.0	17.7		ug/L		71	68 - 124
cis-1,2-Dichloroethene	25.0	22.4		ug/L		90	74 - 124
cis-1,3-Dichloropropene	25.0	22.9		ug/L		92	74 - 124
Cyclohexane	25.0	21.2		ug/L		85	59 - 135
Dichlorodifluoromethane	25.0	12.5	*	ug/L		50	59 - 135
Ethylbenzene	25.0	23.6		ug/L		94	77 - 123
1,2-Dibromoethane	25.0	24.4		ug/L		97	77 - 120
Isopropylbenzene	25.0	22.1		ug/L		88	77 - 122
Methyl acetate	50.0	38.4		ug/L		77	74 - 133
Methyl tert-butyl ether	25.0	21.7		ug/L		87	77 - 120
Methylcyclohexane	25.0	20.7		ug/L		83	68 - 134
Methylene Chloride	25.0	23.1		ug/L		92	75 - 124
Styrene	25.0	23.7		ug/L		95	80 - 120
Tetrachloroethene	25.0	22.3		ug/L		89	74 - 122
Toluene	25.0	22.9		ug/L		91	80 - 122
trans-1,2-Dichloroethene	25.0	21.1		ug/L		84	73 - 127
trans-1,3-Dichloropropene	25.0	24.2		ug/L		97	80 - 120
Trichloroethene	25.0	21.4		ug/L		86	74 - 123
Trichlorofluoromethane	25.0	20.3		ug/L		81	62 - 150
Vinyl chloride	25.0	18.7		ug/L		75	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	93		77 - 120
4-Bromofluorobenzene (Surr)	101		73 - 120
Dibromofluoromethane (Surr)	94		75 - 123

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

Lab Sample ID: 480-144996-3 MS

Matrix: Water

Analysis Batch: 445696

Client Sample ID: MW-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane - DL	ND		10000	8080		ug/L		81	73 - 126
1,1,1,2-Tetrachloroethane - DL	ND		10000	8810		ug/L		88	76 - 120
1,1,2-Trichloroethane - DL	ND		10000	8790		ug/L		88	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane - DL	ND		10000	8190		ug/L		82	61 - 148
1,1-Dichloroethane - DL	ND		10000	8380		ug/L		84	77 - 120
1,1-Dichloroethene - DL	ND		10000	7810		ug/L		78	66 - 127
1,2,4-Trichlorobenzene - DL	ND		10000	8560		ug/L		86	79 - 122
1,2-Dibromo-3-Chloropropane - DL	ND		10000	8010		ug/L		80	56 - 134
1,2-Dichlorobenzene - DL	ND		10000	8810		ug/L		88	80 - 124
1,2-Dichloroethane - DL	ND		10000	8140		ug/L		81	75 - 120

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: 480-144996-3 MS

Matrix: Water

Analysis Batch: 445696

Client Sample ID: MW-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane - DL	ND		10000	8720		ug/L		87	76 - 120
1,3-Dichlorobenzene - DL	ND		10000	8800		ug/L		88	77 - 120
1,4-Dichlorobenzene - DL	ND		10000	8860		ug/L		89	78 - 124
2-Butanone (MEK) - DL	ND		50000	45200		ug/L		90	57 - 140
2-Hexanone - DL	ND		50000	47800		ug/L		96	65 - 127
4-Methyl-2-pentanone (MIBK) - DL	ND		50000	46100		ug/L		92	71 - 125
Acetone - DL	ND		50000	42800		ug/L		86	56 - 142
Benzene - DL	ND		10000	8470		ug/L		85	71 - 124
Bromodichloromethane - DL	ND		10000	8650		ug/L		87	80 - 122
Bromoform - DL	ND		10000	7770		ug/L		78	61 - 132
Bromomethane - DL	ND		10000	8010		ug/L		80	55 - 144
Carbon disulfide - DL	ND		10000	7090		ug/L		71	59 - 134
Carbon tetrachloride - DL	ND		10000	7990		ug/L		80	72 - 134
Chlorobenzene - DL	ND		10000	8610		ug/L		86	80 - 120
Dibromochloromethane - DL	ND		10000	8760		ug/L		88	75 - 125
Chloroethane - DL	ND		10000	8360		ug/L		84	69 - 136
Chloroform - DL	ND		10000	7960		ug/L		80	73 - 127
Chloromethane - DL	ND		10000	7240		ug/L		72	68 - 124
cis-1,2-Dichloroethene - DL	1300		10000	9580		ug/L		83	74 - 124
cis-1,3-Dichloropropene - DL	ND		10000	7960		ug/L		80	74 - 124
Cyclohexane - DL	ND		10000	8180		ug/L		82	59 - 135
Dichlorodifluoromethane - DL	ND *		10000	6170		ug/L		62	59 - 135
Ethylbenzene - DL	ND		10000	8850		ug/L		88	77 - 123
1,2-Dibromoethane - DL	ND		10000	9050		ug/L		91	77 - 120
Isopropylbenzene - DL	ND		10000	8530		ug/L		85	77 - 122
Methyl acetate - DL	ND		20000	16600		ug/L		83	74 - 133
Methyl tert-butyl ether - DL	ND		10000	8220		ug/L		82	77 - 120
Methylcyclohexane - DL	ND		10000	7910		ug/L		79	68 - 134
Methylene Chloride - DL	ND		10000	8670		ug/L		87	75 - 124
Styrene - DL	ND		10000	8710		ug/L		87	80 - 120
Tetrachloroethene - DL	ND		10000	8590		ug/L		86	74 - 122
Toluene - DL	ND		10000	8640		ug/L		86	80 - 122
trans-1,2-Dichloroethene - DL	ND		10000	8350		ug/L		84	73 - 127
trans-1,3-Dichloropropene - DL	ND		10000	8310		ug/L		83	80 - 120
Trichloroethene - DL	19000	F1	10000	23600	F1	ug/L		41	74 - 123
Trichlorofluoromethane - DL	ND		10000	9450		ug/L		94	62 - 150
Vinyl chloride - DL	ND		10000	8240		ug/L		82	65 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr) - DL	99		80 - 120
1,2-Dichloroethane-d4 (Surr) - DL	91		77 - 120
4-Bromofluorobenzene (Surr) - DL	101		73 - 120
Dibromofluoromethane (Surr) - DL	95		75 - 123

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: 480-144996-3 MSD

Matrix: Water

Analysis Batch: 445696

Client Sample ID: MW-4

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 - DL	ND		10000	8660		ug/L		87	73 - 126	7	15
1,1,2,2-Tetrachloroethane - DL	ND		10000	9240		ug/L		92	76 - 120	5	15
1,1,2-Trichloroethane - DL	ND		10000	9000		ug/L		90	76 - 122	2	15
1,1,2-Trichloro-1,2,2-trifluoroethane - DL	ND		10000	8420		ug/L		84	61 - 148	3	20
1,1-Dichloroethane - DL	ND		10000	8650		ug/L		86	77 - 120	3	20
1,1-Dichloroethene - DL	ND		10000	8160		ug/L		82	66 - 127	4	16
1,2,4-Trichlorobenzene - DL	ND		10000	9060		ug/L		91	79 - 122	6	20
1,2-Dibromo-3-Chloropropane - DL	ND		10000	8370		ug/L		84	56 - 134	4	15
1,2-Dichlorobenzene - DL	ND		10000	9270		ug/L		93	80 - 124	5	20
1,2-Dichloroethane - DL	ND		10000	8560		ug/L		86	75 - 120	5	20
1,2-Dichloropropane - DL	ND		10000	9190		ug/L		92	76 - 120	5	20
1,3-Dichlorobenzene - DL	ND		10000	9130		ug/L		91	77 - 120	4	20
1,4-Dichlorobenzene - DL	ND		10000	9330		ug/L		93	78 - 124	5	20
2-Butanone (MEK) - DL	ND		50000	51500		ug/L		103	57 - 140	13	20
2-Hexanone - DL	ND		50000	49500		ug/L		99	65 - 127	4	15
4-Methyl-2-pentanone (MIBK) - DL	ND		50000	47200		ug/L		94	71 - 125	2	35
Acetone - DL	ND		50000	45200		ug/L		90	56 - 142	6	15
Benzene - DL	ND		10000	8900		ug/L		89	71 - 124	5	13
Bromodichloromethane - DL	ND		10000	9100		ug/L		91	80 - 122	5	15
Bromoform - DL	ND		10000	8640		ug/L		86	61 - 132	11	15
Bromomethane - DL	ND		10000	8440		ug/L		84	55 - 144	5	15
Carbon disulfide - DL	ND		10000	7650		ug/L		76	59 - 134	8	15
Carbon tetrachloride - DL	ND		10000	8390		ug/L		84	72 - 134	5	15
Chlorobenzene - DL	ND		10000	9000		ug/L		90	80 - 120	4	25
Dibromochloromethane - DL	ND		10000	9220		ug/L		92	75 - 125	5	15
Chloroethane - DL	ND		10000	8820		ug/L		88	69 - 136	5	15
Chloroform - DL	ND		10000	8350		ug/L		83	73 - 127	5	20
Chloromethane - DL	ND		10000	7550		ug/L		75	68 - 124	4	15
cis-1,2-Dichloroethene - DL	1300		10000	9870		ug/L		86	74 - 124	3	15
cis-1,3-Dichloropropene - DL	ND		10000	8360		ug/L		84	74 - 124	5	15
Cyclohexane - DL	ND		10000	8790		ug/L		88	59 - 135	7	20
Dichlorodifluoromethane - DL	ND	*	10000	6470		ug/L		65	59 - 135	5	20
Ethylbenzene - DL	ND		10000	9050		ug/L		90	77 - 123	2	15
1,2-Dibromoethane - DL	ND		10000	9360		ug/L		94	77 - 120	3	15
Isopropylbenzene - DL	ND		10000	9020		ug/L		90	77 - 122	6	20
Methyl acetate - DL	ND		20000	16200		ug/L		81	74 - 133	2	20
Methyl tert-butyl ether - DL	ND		10000	8310		ug/L		83	77 - 120	1	37
Methylcyclohexane - DL	ND		10000	8390		ug/L		84	68 - 134	6	20
Methylene Chloride - DL	ND		10000	9270		ug/L		93	75 - 124	7	15
Styrene - DL	ND		10000	9090		ug/L		91	80 - 120	4	20
Tetrachloroethene - DL	ND		10000	9030		ug/L		90	74 - 122	5	20
Toluene - DL	ND		10000	8840		ug/L		88	80 - 122	2	15
trans-1,2-Dichloroethene - DL	ND		10000	8640		ug/L		86	73 - 127	3	20
trans-1,3-Dichloropropene - DL	ND		10000	8890		ug/L		89	80 - 120	7	15
Trichloroethene - DL	19000	F1	10000	24500	F1	ug/L		51	74 - 123	4	16
Trichlorofluoromethane - DL	ND		10000	10300		ug/L		103	62 - 150	8	20

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: 480-144996-3 MSD

Matrix: Water

Analysis Batch: 445696

Client Sample ID: MW-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride - DL	ND		10000	8630		ug/L		86	65 - 133	5	15
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Toluene-d8 (Surr) - DL	98		80 - 120								
1,2-Dichloroethane-d4 (Surr) - DL	92		77 - 120								
4-Bromofluorobenzene (Surr) - DL	100		73 - 120								
Dibromofluoromethane (Surr) - DL	95		75 - 123								

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

Lab Sample ID: MB 460-569541/7

Matrix: Water

Analysis Batch: 569541

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			11/19/18 08:38	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	106		72 - 133					11/19/18 08:38	1

Lab Sample ID: LCS 460-569541/3

Matrix: Water

Analysis Batch: 569541

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	5.00	5.31		ug/L		106	66 - 135		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene	100		72 - 133						

Lab Sample ID: 480-144996-3 MS

Matrix: Water

Analysis Batch: 569541

Client Sample ID: MW-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	ND		5.00	6.66		ug/L		133	66 - 135		
Surrogate	MS %Recovery	MS Qualifier	Limits								
4-Bromofluorobenzene	78		72 - 133								

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: 480-144996-3 MSD

Matrix: Water

Analysis Batch: 569541

Client Sample ID: MW-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		5.00	6.49		ug/L		130	66 - 135	3	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene	72		72 - 133								

Lab Sample ID: MB 460-569848/9

Matrix: Water

Analysis Batch: 569848

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.40	0.20	ug/L			11/20/18 10:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		72 - 133					11/20/18 10:04	1

Lab Sample ID: LCS 460-569848/3

Matrix: Water

Analysis Batch: 569848

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	5.00	5.32		ug/L		106	66 - 135		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene	106		72 - 133						

Lab Sample ID: LCSD 460-569848/4

Matrix: Water

Analysis Batch: 569848

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	5.00	5.47		ug/L		109	66 - 135	3	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene	106		72 - 133						

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-260047/1-A

Matrix: Water

Analysis Batch: 261351

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 260047

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/19/18 09:43	11/27/18 07:24	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: MB 320-260047/1-A

Matrix: Water

Analysis Batch: 261351

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 260047

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorohexanesulfonic acid (PFHxS)	0.443	J	2.0	0.17	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/19/18 09:43	11/27/18 07:24	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.35	ng/L		11/19/18 09:43	11/27/18 07:24	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		11/19/18 09:43	11/27/18 07:24	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		11/19/18 09:43	11/27/18 07:24	1
6:2 FTS	ND		20	2.0	ng/L		11/19/18 09:43	11/27/18 07:24	1
8:2 FTS	ND		20	2.0	ng/L		11/19/18 09:43	11/27/18 07:24	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	87		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C5 PFPeA	96		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C2 PFHxA	98		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C4 PFHpA	95		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C4 PFOA	100		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C5 PFNA	107		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C2 PFDA	105		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C2 PFUnA	103		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C2 PFDoA	107		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C2 PFTeDA	116		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C3 PFBS	87		25 - 150	11/19/18 09:43	11/27/18 07:24	1
18O2 PFHxS	93		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C4 PFOS	94		25 - 150	11/19/18 09:43	11/27/18 07:24	1
13C8 FOSA	97		25 - 150	11/19/18 09:43	11/27/18 07:24	1
d3-NMeFOSAA	120		25 - 150	11/19/18 09:43	11/27/18 07:24	1
d5-NEtFOSAA	119		25 - 150	11/19/18 09:43	11/27/18 07:24	1
M2-6:2 FTS	98		25 - 150	11/19/18 09:43	11/27/18 07:24	1
M2-8:2 FTS	89		25 - 150	11/19/18 09:43	11/27/18 07:24	1

Lab Sample ID: LCS 320-260047/2-A

Matrix: Water

Analysis Batch: 261351

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 260047

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	41.2		ng/L		103	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	39.4		ng/L		98	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	40.7		ng/L		102	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	38.4		ng/L		96	66 - 126

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: LCS 320-260047/2-A

Matrix: Water

Analysis Batch: 261351

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 260047

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanoic acid (PFOA)	40.0	36.8		ng/L		92	64 - 124
Perfluorononanoic acid (PFNA)	40.0	39.5		ng/L		99	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	37.7		ng/L		94	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	36.8		ng/L		92	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	42.0		ng/L		105	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	39.5		ng/L		99	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	33.6		ng/L		84	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	39.0		ng/L		110	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.3		ng/L		97	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	35.6		ng/L		94	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	33.4		ng/L		90	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	38.7		ng/L		100	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	42.1		ng/L		105	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	37.5		ng/L		94	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	39.8		ng/L		100	65 - 125
6:2 FTS	37.9	38.6		ng/L		102	66 - 126
8:2 FTS	38.3	42.4		ng/L		111	67 - 127

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	88		25 - 150
13C5 PFPeA	96		25 - 150
13C2 PFHxA	92		25 - 150
13C4 PFHpA	97		25 - 150
13C4 PFOA	99		25 - 150
13C5 PFNA	105		25 - 150
13C2 PFDA	105		25 - 150
13C2 PFUnA	106		25 - 150
13C2 PFDoA	105		25 - 150
13C2 PFTeDA	125		25 - 150
13C3 PFBS	87		25 - 150
18O2 PFHxS	89		25 - 150
13C4 PFOS	97		25 - 150
13C8 FOSA	94		25 - 150
d3-NMeFOSAA	116		25 - 150
d5-NEtFOSAA	117		25 - 150
M2-6:2 FTS	91		25 - 150
M2-8:2 FTS	89		25 - 150

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: LCSD 320-260047/3-A

Matrix: Water

Analysis Batch: 261351

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 260047

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	40.0	39.2		ng/L		98	70 - 130	5	30
Perfluoropentanoic acid (PFPeA)	40.0	39.7		ng/L		99	66 - 126	1	30
Perfluorohexanoic acid (PFHxA)	40.0	36.9		ng/L		92	66 - 126	10	30
Perfluoroheptanoic acid (PFHpA)	40.0	38.8		ng/L		97	66 - 126	1	30
Perfluorooctanoic acid (PFOA)	40.0	38.5		ng/L		96	64 - 124	5	30
Perfluorononanoic acid (PFNA)	40.0	38.8		ng/L		97	68 - 128	2	30
Perfluorodecanoic acid (PFDA)	40.0	40.2		ng/L		100	69 - 129	6	30
Perfluoroundecanoic acid (PFUnA)	40.0	37.7		ng/L		94	60 - 120	2	30
Perfluorododecanoic acid (PFDoA)	40.0	39.5		ng/L		99	71 - 131	6	30
Perfluorotridecanoic acid (PFTriA)	40.0	39.3		ng/L		98	72 - 132	1	30
Perfluorotetradecanoic acid (PFTeA)	40.0	31.9		ng/L		80	68 - 128	5	30
Perfluorobutanesulfonic acid (PFBS)	35.4	36.4		ng/L		103	73 - 133	7	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.9		ng/L		90	63 - 123	7	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.2		ng/L		100	68 - 128	7	30
Perfluorooctanesulfonic acid (PFOS)	37.1	34.9		ng/L		94	67 - 127	4	30
Perfluorodecanesulfonic acid (PFDS)	38.6	37.8		ng/L		98	68 - 128	2	30
Perfluorooctanesulfonamide (FOSA)	40.0	42.0		ng/L		105	70 - 130	0	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	37.4		ng/L		93	67 - 127	0	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	37.5		ng/L		94	65 - 125	6	30
6:2 FTS	37.9	37.6		ng/L		99	66 - 126	3	30
8:2 FTS	38.3	40.3		ng/L		105	67 - 127	5	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	89		25 - 150
13C5 PFPeA	99		25 - 150
13C2 PFHxA	95		25 - 150
13C4 PFHpA	96		25 - 150
13C4 PFOA	104		25 - 150
13C5 PFNA	103		25 - 150
13C2 PFDA	101		25 - 150
13C2 PFUnA	104		25 - 150
13C2 PFDoA	103		25 - 150
13C2 PFTeDA	125		25 - 150
13C3 PFBS	88		25 - 150
18O2 PFHxS	95		25 - 150
13C4 PFOS	97		25 - 150
13C8 FOSA	94		25 - 150
d3-NMeFOSAA	111		25 - 150
d5-NEtFOSAA	117		25 - 150

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: LCSD 320-260047/3-A

Matrix: Water

Analysis Batch: 261351

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 260047

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
M2-6:2 FTS	102		25 - 150
M2-8:2 FTS	89		25 - 150

Lab Sample ID: MB 320-260271/1-A

Matrix: Water

Analysis Batch: 261143

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 260271

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorohexanesulfonic acid (PFHxS)	0.300	J	2.0	0.17	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/20/18 07:00	11/25/18 16:57	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.35	ng/L		11/20/18 07:00	11/25/18 16:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		11/20/18 07:00	11/25/18 16:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		11/20/18 07:00	11/25/18 16:57	1
6:2 FTS	ND		20	2.0	ng/L		11/20/18 07:00	11/25/18 16:57	1
8:2 FTS	ND		20	2.0	ng/L		11/20/18 07:00	11/25/18 16:57	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	86		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C5 PFPeA	93		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C2 PFHxA	88		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C4 PFHpA	97		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C4 PFOA	101		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C5 PFNA	102		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C2 PFDA	99		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C2 PFUnA	99		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C2 PFDoA	98		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C2 PFTeDA	115		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C3 PFBS	85		25 - 150	11/20/18 07:00	11/25/18 16:57	1
18O2 PFHxS	90		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C4 PFOS	94		25 - 150	11/20/18 07:00	11/25/18 16:57	1
13C8 FOSA	90		25 - 150	11/20/18 07:00	11/25/18 16:57	1
d3-NMeFOSAA	116		25 - 150	11/20/18 07:00	11/25/18 16:57	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: MB 320-260271/1-A

Matrix: Water

Analysis Batch: 261143

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 260271

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>d5-NEtFOSAA</i>	115		25 - 150	11/20/18 07:00	11/25/18 16:57	1
<i>M2-6:2 FTS</i>	114		25 - 150	11/20/18 07:00	11/25/18 16:57	1
<i>M2-8:2 FTS</i>	98		25 - 150	11/20/18 07:00	11/25/18 16:57	1

Lab Sample ID: LCS 320-260271/2-A

Matrix: Water

Analysis Batch: 261501

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 260271

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
Perfluorobutanoic acid (PFBA)	40.0	41.5		ng/L		104	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	41.0		ng/L		103	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	38.7		ng/L		97	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	43.0		ng/L		107	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	40.1		ng/L		100	64 - 124
Perfluorononanoic acid (PFNA)	40.0	39.6		ng/L		99	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	39.2		ng/L		98	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	36.2		ng/L		90	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	37.5		ng/L		94	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	38.0		ng/L		95	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	36.4		ng/L		91	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	38.4		ng/L		109	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.4		ng/L		97	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	36.7		ng/L		96	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	36.1		ng/L		97	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	38.7		ng/L		100	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	42.3		ng/L		106	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	35.7		ng/L		89	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	41.1		ng/L		103	65 - 125
6:2 FTS	37.9	39.2		ng/L		103	66 - 126
8:2 FTS	38.3	44.4		ng/L		116	67 - 127

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>13C4 PFBA</i>	89		25 - 150
<i>13C5 PFPeA</i>	95		25 - 150
<i>13C2 PFHxA</i>	96		25 - 150
<i>13C4 PFHpA</i>	94		25 - 150
<i>13C4 PFOA</i>	94		25 - 150
<i>13C5 PFNA</i>	106		25 - 150
<i>13C2 PFDA</i>	98		25 - 150

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: LCS 320-260271/2-A

Matrix: Water

Analysis Batch: 261501

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 260271

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
13C2 PFUnA	100		25 - 150
13C2 PFDoA	100		25 - 150
13C2 PFTeDA	109		25 - 150
13C3 PFBS	84		25 - 150
18O2 PFHxS	90		25 - 150
13C4 PFOS	96		25 - 150
13C8 FOSA	91		25 - 150
d3-NMeFOSAA	104		25 - 150
d5-NEtFOSAA	97		25 - 150
M2-6:2 FTS	86		25 - 150
M2-8:2 FTS	76		25 - 150

Lab Sample ID: 480-144996-3 MS

Matrix: Water

Analysis Batch: 261501

Client Sample ID: MW-4

Prep Type: Total/NA

Prep Batch: 260271

Analyte	Sample		Spike	MS		Unit	D	%Rec	%Rec.	
	Result	Qualifier		Result	Qualifier				Limits	
Perfluorobutanoic acid (PFBA)	ND		38.5	42.6		ng/L		111	70 - 130	
Perfluoropentanoic acid (PFPeA)	ND		38.5	39.0		ng/L		101	66 - 126	
Perfluorohexanoic acid (PFHxA)	0.88	J	38.5	39.1		ng/L		99	66 - 126	
Perfluoroheptanoic acid (PFHpA)	0.59	J	38.5	38.1		ng/L		98	66 - 126	
Perfluorooctanoic acid (PFOA)	2.4		38.5	36.5		ng/L		88	64 - 124	
Perfluorononanoic acid (PFNA)	0.35	J	38.5	42.4		ng/L		109	68 - 128	
Perfluorodecanoic acid (PFDA)	ND		38.5	37.0		ng/L		96	69 - 129	
Perfluoroundecanoic acid (PFUnA)	ND		38.5	35.8		ng/L		93	60 - 120	
Perfluorododecanoic acid (PFDoA)	ND		38.5	37.3		ng/L		97	71 - 131	
Perfluorotridecanoic acid (PFTriA)	ND		38.5	37.0		ng/L		96	72 - 132	
Perfluorotetradecanoic acid (PFTeA)	ND		38.5	34.9		ng/L		91	68 - 128	
Perfluorobutanesulfonic acid (PFBS)	0.30	J	34.0	37.4		ng/L		109	73 - 133	
Perfluorohexanesulfonic acid (PFHxS)	1.5	J B	35.0	38.4		ng/L		105	63 - 123	
Perfluoroheptanesulfonic Acid (PFHpS)	ND		36.7	33.8		ng/L		92	68 - 128	
Perfluorooctanesulfonic acid (PFOS)	4.8		35.7	39.2		ng/L		96	67 - 127	
Perfluorodecanesulfonic acid (PFDS)	ND		37.1	34.9		ng/L		94	68 - 128	
Perfluorooctanesulfonamide (FOSA)	ND		38.5	38.2		ng/L		99	70 - 130	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		38.5	36.9		ng/L		96	67 - 127	
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		38.5	40.1		ng/L		104	65 - 125	
6:2 FTS	2.4	J	36.5	42.3		ng/L		109	66 - 126	
8:2 FTS	ND		36.9	36.9		ng/L		100	67 - 127	

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFBA	57		25 - 150
13C5 PFPeA	66		25 - 150
13C2 PFHxA	77		25 - 150
13C4 PFHpA	86		25 - 150
13C4 PFOA	97		25 - 150
13C5 PFNA	95		25 - 150
13C2 PFDA	98		25 - 150
13C2 PFUnA	99		25 - 150
13C2 PFDoA	96		25 - 150
13C2 PFTeDA	100		25 - 150
13C3 PFBS	77		25 - 150
18O2 PFHxS	84		25 - 150
13C4 PFOS	98		25 - 150
13C8 FOSA	96		25 - 150
d3-NMeFOSAA	106		25 - 150
d5-NEtFOSAA	99		25 - 150
M2-6:2 FTS	191	*	25 - 150
M2-8:2 FTS	115		25 - 150

Lab Sample ID: 480-144996-3 MSD
Matrix: Water
Analysis Batch: 261501

Client Sample ID: MW-4
Prep Type: Total/NA
Prep Batch: 260271

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	ND		38.6	45.7		ng/L		118	70 - 130	25	30
Perfluoropentanoic acid (PFPeA)	ND		38.6	38.0		ng/L		98	66 - 126	3	30
Perfluorohexanoic acid (PFHxA)	0.88	J	38.6	39.7		ng/L		101	66 - 126	1	30
Perfluoroheptanoic acid (PFHpA)	0.59	J	38.6	39.3		ng/L		100	66 - 126	3	30
Perfluorooctanoic acid (PFOA)	2.4		38.6	40.1		ng/L		98	64 - 124	10	30
Perfluorononanoic acid (PFNA)	0.35	J	38.6	44.7		ng/L		115	68 - 128	5	30
Perfluorodecanoic acid (PFDA)	ND		38.6	40.9		ng/L		106	69 - 129	10	30
Perfluoroundecanoic acid (PFUnA)	ND		38.6	36.9		ng/L		95	60 - 120	3	30
Perfluorododecanoic acid (PFDoA)	ND		38.6	37.3		ng/L		97	71 - 131	0	30
Perfluorotridecanoic acid (PFTriA)	ND		38.6	35.6		ng/L		92	72 - 132	4	30
Perfluorotetradecanoic acid (PFTeA)	ND		38.6	33.0		ng/L		86	68 - 128	6	30
Perfluorobutanesulfonic acid (PFBS)	0.30	J	34.1	36.8		ng/L		107	73 - 133	7	30
Perfluorohexanesulfonic acid (PFHxS)	1.5	J B	35.1	35.2		ng/L		96	63 - 123	9	30
Perfluoroheptanesulfonic Acid (PFHpS)	ND		36.8	38.8		ng/L		106	68 - 128	14	30
Perfluorooctanesulfonic acid (PFOS)	4.8		35.8	39.6		ng/L		97	67 - 127	1	30
Perfluorodecanesulfonic acid (PFDS)	ND		37.2	34.5		ng/L		93	68 - 128	1	30
Perfluorooctanesulfonamide (FOSA)	ND		38.6	37.4		ng/L		97	70 - 130	2	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		38.6	34.6		ng/L		90	67 - 127	7	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		38.6	37.6		ng/L		97	65 - 125	7	30
6:2 FTS	2.4	J	36.6	42.5		ng/L		110	66 - 126	0	30
8:2 FTS	ND		37.0	40.7		ng/L		110	67 - 127	10	30

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

<i>Isotope Dilution</i>	<i>MSD</i> %Recovery	<i>MSD</i> Qualifier	<i>Limits</i>
13C4 PFBA	59		25 - 150
13C5 PFPeA	71		25 - 150
13C2 PFHxA	82		25 - 150
13C4 PFHpA	93		25 - 150
13C4 PFOA	101		25 - 150
13C5 PFNA	100		25 - 150
13C2 PFDA	105		25 - 150
13C2 PFUnA	105		25 - 150
13C2 PFDoA	105		25 - 150
13C2 PFTeDA	107		25 - 150
13C3 PFBS	82		25 - 150
18O2 PFHxS	96		25 - 150
13C4 PFOS	99		25 - 150
13C8 FOSA	106		25 - 150
d3-NMeFOSAA	120		25 - 150
d5-NEtFOSAA	117		25 - 150
M2-6:2 FTS	186	*	25 - 150
M2-8:2 FTS	119		25 - 150

Lab Sample ID: MB 320-260685/1-A
Matrix: Water
Analysis Batch: 263629

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260685

<i>Analyte</i>	<i>MB</i> Result	<i>MB</i> Qualifier	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Perfluorobutanoic acid (PFBA)	ND		2.0	0.35	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.29	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.17	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		11/21/18 13:50	12/07/18 02:38	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.35	ng/L		11/21/18 13:50	12/07/18 02:38	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	3.1	ng/L		11/21/18 13:50	12/07/18 02:38	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.9	ng/L		11/21/18 13:50	12/07/18 02:38	1
6:2 FTS	ND		20	2.0	ng/L		11/21/18 13:50	12/07/18 02:38	1
8:2 FTS	ND		20	2.0	ng/L		11/21/18 13:50	12/07/18 02:38	1

<i>Isotope Dilution</i>	<i>MB</i> %Recovery	<i>MB</i> Qualifier	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	86		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C5 PFPeA	93		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C2 PFHxA	95		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C4 PFHpA	91		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C4 PFOA	91		25 - 150	11/21/18 13:50	12/07/18 02:38	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: MB 320-260685/1-A

Matrix: Water

Analysis Batch: 263629

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 260685

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	90		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C2 PFDA	99		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C2 PFUnA	92		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C2 PFDoA	92		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C2 PFTeDA	92		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C3 PFBS	88		25 - 150	11/21/18 13:50	12/07/18 02:38	1
18O2 PFHxS	92		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C4 PFOS	96		25 - 150	11/21/18 13:50	12/07/18 02:38	1
13C8 FOSA	93		25 - 150	11/21/18 13:50	12/07/18 02:38	1
d3-NMeFOSAA	108		25 - 150	11/21/18 13:50	12/07/18 02:38	1
d5-NEtFOSAA	109		25 - 150	11/21/18 13:50	12/07/18 02:38	1
M2-6:2 FTS	103		25 - 150	11/21/18 13:50	12/07/18 02:38	1
M2-8:2 FTS	98		25 - 150	11/21/18 13:50	12/07/18 02:38	1

Lab Sample ID: LCS 320-260685/2-A

Matrix: Water

Analysis Batch: 263629

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 260685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	39.4		ng/L		98	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	39.6		ng/L		99	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	36.0		ng/L		90	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	37.7		ng/L		94	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	37.8		ng/L		95	64 - 124
Perfluorononanoic acid (PFNA)	40.0	41.6		ng/L		104	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	37.3		ng/L		93	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	36.8		ng/L		92	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	36.2		ng/L		90	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	37.9		ng/L		95	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	37.4		ng/L		94	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	35.9		ng/L		102	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.7		ng/L		95	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	36.4		ng/L		96	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	34.5		ng/L		93	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	36.6		ng/L		95	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	38.3		ng/L		96	70 - 130
N-methylperfluorooctanesulfona midoacetic acid (NMeFOSAA)	40.0	35.1		ng/L		88	67 - 127
N-ethylperfluorooctanesulfonami doacetic acid (NEtFOSAA)	40.0	39.4		ng/L		98	65 - 125
6:2 FTS	37.9	38.9		ng/L		103	66 - 126

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-144996-1

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

Lab Sample ID: LCS 320-260685/2-A

Matrix: Water

Analysis Batch: 263629

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 260685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
8:2 FTS	38.3	37.2		ng/L		97	67 - 127
Isotope Dilution		LCS %Recovery	LCS Qualifier	Limits			
13C4 PFBA		85		25 - 150			
13C5 PFPeA		87		25 - 150			
13C2 PFHxA		93		25 - 150			
13C4 PFHpA		90		25 - 150			
13C4 PFOA		86		25 - 150			
13C5 PFNA		84		25 - 150			
13C2 PFDA		91		25 - 150			
13C2 PFUnA		90		25 - 150			
13C2 PFDoA		90		25 - 150			
13C2 PFTeDA		91		25 - 150			
13C3 PFBS		83		25 - 150			
18O2 PFHxS		88		25 - 150			
13C4 PFOS		93		25 - 150			
13C8 FOSA		86		25 - 150			
d3-NMeFOSAA		108		25 - 150			
d5-NEtFOSAA		98		25 - 150			
M2-6:2 FTS		96		25 - 150			
M2-8:2 FTS		97		25 - 150			

QC Association Summary

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

TestAmerica Job ID: 480-144996-1

GC/MS VOA

Analysis Batch: 445409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-1	MW-2	Total/NA	Water	8260C	
MB 480-445409/7	Method Blank	Total/NA	Water	8260C	
LCS 480-445409/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 445660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-1 - DL	MW-2	Total/NA	Water	8260C	
480-144996-2	MW-3	Total/NA	Water	8260C	
480-144996-3	MW-4	Total/NA	Water	8260C	
480-144996-4	MW-9R	Total/NA	Water	8260C	
480-144996-6	MW-12	Total/NA	Water	8260C	
480-144996-7	MW-13	Total/NA	Water	8260C	
480-144996-8	MW-14	Total/NA	Water	8260C	
480-144996-10	TRIP BLANK	Total/NA	Water	8260C	
MB 480-445660/7	Method Blank	Total/NA	Water	8260C	
LCS 480-445660/5	Lab Control Sample	Total/NA	Water	8260C	
480-144996-3 MS	MW-4	Total/NA	Water	8260C	
480-144996-3 MSD	MW-4	Total/NA	Water	8260C	

Analysis Batch: 445696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-3 - DL	MW-4	Total/NA	Water	8260C	
480-144996-4 - DL	MW-9R	Total/NA	Water	8260C	
480-144996-5	MW-11R	Total/NA	Water	8260C	
480-144996-6 - DL	MW-12	Total/NA	Water	8260C	
480-144996-7 - DL	MW-13	Total/NA	Water	8260C	
480-144996-8 - DL	MW-14	Total/NA	Water	8260C	
480-144996-9	DUP-110718	Total/NA	Water	8260C	
MB 480-445696/7	Method Blank	Total/NA	Water	8260C	
LCS 480-445696/5	Lab Control Sample	Total/NA	Water	8260C	
480-144996-3 MS - DL	MW-4	Total/NA	Water	8260C	
480-144996-3 MSD - DL	MW-4	Total/NA	Water	8260C	

Analysis Batch: 569541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-2	MW-3	Total/NA	Water	8260C SIM	
480-144996-3	MW-4	Total/NA	Water	8260C SIM	
480-144996-4	MW-9R	Total/NA	Water	8260C SIM	
480-144996-5	MW-11R	Total/NA	Water	8260C SIM	
480-144996-6	MW-12	Total/NA	Water	8260C SIM	
480-144996-7	MW-13	Total/NA	Water	8260C SIM	
480-144996-8	MW-14	Total/NA	Water	8260C SIM	
MB 460-569541/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-569541/3	Lab Control Sample	Total/NA	Water	8260C SIM	
480-144996-3 MS	MW-4	Total/NA	Water	8260C SIM	
480-144996-3 MSD	MW-4	Total/NA	Water	8260C SIM	

Analysis Batch: 569848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-1	MW-2	Total/NA	Water	8260C SIM	
480-144996-9	DUP-110718	Total/NA	Water	8260C SIM	

TestAmerica Buffalo

QC Association Summary

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

TestAmerica Job ID: 480-144996-1

GC/MS VOA (Continued)

Analysis Batch: 569848 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-10	TRIP BLANK	Total/NA	Water	8260C SIM	
MB 460-569848/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-569848/3	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-569848/4	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

LCMS

Prep Batch: 260047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-7	MW-13	Total/NA	Water	3535	
MB 320-260047/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-260047/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-260047/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Prep Batch: 260271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-1	MW-2	Total/NA	Water	3535	
480-144996-2	MW-3	Total/NA	Water	3535	
480-144996-3	MW-4	Total/NA	Water	3535	
MB 320-260271/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-260271/2-A	Lab Control Sample	Total/NA	Water	3535	
480-144996-3 MS	MW-4	Total/NA	Water	3535	
480-144996-3 MSD	MW-4	Total/NA	Water	3535	

Prep Batch: 260685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-4	MW-9R	Total/NA	Water	3535	
480-144996-5	MW-11R	Total/NA	Water	3535	
480-144996-6	MW-12	Total/NA	Water	3535	
480-144996-8	MW-14	Total/NA	Water	3535	
480-144996-9	DUP-110718	Total/NA	Water	3535	
MB 320-260685/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-260685/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 261143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-260271/1-A	Method Blank	Total/NA	Water	537 (modified)	260271

Analysis Batch: 261351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-7	MW-13	Total/NA	Water	537 (modified)	260047
MB 320-260047/1-A	Method Blank	Total/NA	Water	537 (modified)	260047
LCS 320-260047/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	260047
LCSD 320-260047/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	260047

Analysis Batch: 261501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-1	MW-2	Total/NA	Water	537 (modified)	260271
480-144996-2	MW-3	Total/NA	Water	537 (modified)	260271
480-144996-3	MW-4	Total/NA	Water	537 (modified)	260271

TestAmerica Buffalo

QC Association Summary

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

TestAmerica Job ID: 480-144996-1

LCMS (Continued)

Analysis Batch: 261501 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-260271/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	260271
480-144996-3 MS	MW-4	Total/NA	Water	537 (modified)	260271
480-144996-3 MSD	MW-4	Total/NA	Water	537 (modified)	260271

Analysis Batch: 263629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-5	MW-11R	Total/NA	Water	537 (modified)	260685
480-144996-6	MW-12	Total/NA	Water	537 (modified)	260685
480-144996-9	DUP-110718	Total/NA	Water	537 (modified)	260685
MB 320-260685/1-A	Method Blank	Total/NA	Water	537 (modified)	260685
LCS 320-260685/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	260685

Analysis Batch: 265196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144996-4	MW-9R	Total/NA	Water	537 (modified)	260685
480-144996-8	MW-14	Total/NA	Water	537 (modified)	260685

Lab Chronicle

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-2

Date Collected: 11/06/18 12:15

Date Received: 11/09/18 15:10

Lab Sample ID: 480-144996-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	445409	11/14/18 17:58	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	2000	445660	11/15/18 02:06	AMM	TAL BUF
Total/NA	Analysis	8260C SIM		1	569848	11/20/18 11:29	SZD	TAL EDI
Total/NA	Prep	3535			260271	11/20/18 07:00	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	261501	11/27/18 17:25	JRB	TAL SAC

Client Sample ID: MW-3

Date Collected: 11/06/18 14:45

Date Received: 11/09/18 15:10

Lab Sample ID: 480-144996-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	445660	11/15/18 02:33	AMM	TAL BUF
Total/NA	Analysis	8260C SIM		1	569541	11/19/18 15:46	SZD	TAL EDI
Total/NA	Prep	3535			260271	11/20/18 07:00	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	261501	11/27/18 17:33	JRB	TAL SAC

Client Sample ID: MW-4

Date Collected: 11/07/18 08:40

Date Received: 11/09/18 15:10

Lab Sample ID: 480-144996-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	445660	11/15/18 02:59	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	400	445696	11/15/18 10:30	NMC	TAL BUF
Total/NA	Analysis	8260C SIM		1	569541	11/19/18 14:56	SZD	TAL EDI
Total/NA	Prep	3535			260271	11/20/18 07:00	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	261501	11/27/18 17:40	JRB	TAL SAC

Client Sample ID: MW-9R

Date Collected: 11/08/18 09:30

Date Received: 11/09/18 15:10

Lab Sample ID: 480-144996-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	445660	11/15/18 03:26	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	100	445696	11/15/18 10:53	NMC	TAL BUF
Total/NA	Analysis	8260C SIM		1	569541	11/19/18 16:11	SZD	TAL EDI
Total/NA	Prep	3535			260685	11/21/18 13:50	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	265196	12/14/18 03:02	CBW	TAL SAC

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: MW-11R

Lab Sample ID: 480-144996-5

Date Collected: 11/07/18 10:30

Matrix: Water

Date Received: 11/09/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	445696	11/15/18 11:16	NMC	TAL BUF
Total/NA	Analysis	8260C SIM		1	569541	11/19/18 16:37	SZD	TAL EDI
Total/NA	Prep	3535			260685	11/21/18 13:50	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	263629	12/07/18 04:31	S1M	TAL SAC

Client Sample ID: MW-12

Lab Sample ID: 480-144996-6

Date Collected: 11/08/18 11:15

Matrix: Water

Date Received: 11/09/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	445660	11/15/18 04:20	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	100	445696	11/15/18 11:39	NMC	TAL BUF
Total/NA	Analysis	8260C SIM		1	569541	11/19/18 17:02	SZD	TAL EDI
Total/NA	Prep	3535			260685	11/21/18 13:50	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	263629	12/07/18 04:38	S1M	TAL SAC

Client Sample ID: MW-13

Lab Sample ID: 480-144996-7

Date Collected: 11/07/18 13:35

Matrix: Water

Date Received: 11/09/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	445660	11/15/18 04:47	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	400	445696	11/15/18 12:02	NMC	TAL BUF
Total/NA	Analysis	8260C SIM		1	569541	11/19/18 17:27	SZD	TAL EDI
Total/NA	Prep	3535			260047	11/19/18 09:43	MYV	TAL SAC
Total/NA	Analysis	537 (modified)		1	261351	11/27/18 08:32	D1R	TAL SAC

Client Sample ID: MW-14

Lab Sample ID: 480-144996-8

Date Collected: 11/07/18 15:35

Matrix: Water

Date Received: 11/09/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	445660	11/15/18 05:13	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	100	445696	11/15/18 12:25	NMC	TAL BUF
Total/NA	Analysis	8260C SIM		1	569541	11/19/18 17:52	SZD	TAL EDI
Total/NA	Prep	3535			260685	11/21/18 13:50	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	265196	12/14/18 03:09	CBW	TAL SAC

Lab Chronicle

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

TestAmerica Job ID: 480-144996-1

Client Sample ID: DUP-110718

Lab Sample ID: 480-144996-9

Date Collected: 11/07/18 10:30

Matrix: Water

Date Received: 11/09/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	445696	11/15/18 12:48	NMC	TAL BUF
Total/NA	Analysis	8260C SIM		1	569848	11/20/18 11:54	SZD	TAL EDI
Total/NA	Prep	3535			260685	11/21/18 13:50	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	263629	12/07/18 04:53	S1M	TAL SAC

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-144996-10

Date Collected: 11/07/18 00:00

Matrix: Water

Date Received: 11/09/18 15:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	445660	11/15/18 06:07	AMM	TAL BUF
Total/NA	Analysis	8260C SIM		1	569848	11/20/18 10:38	SZD	TAL EDI

Laboratory References:

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

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL SAC = 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

TestAmerica Job ID: 480-144996-1

Laboratory: 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	03-31-19

Laboratory: TestAmerica Edison

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
Connecticut	State Program	1	PH-0200	09-30-20
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-18
New Jersey	NELAP	2	12028	06-30-19
New York	NELAP	2	11452	04-01-19
Pennsylvania	NELAP	3	68-00522	02-28-19
Rhode Island	State Program	1	LAO00132	12-30-18
USDA	Federal		NJCA-003-08	06-13-20

Laboratory: 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 ELAP		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	01-31-19
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	01-29-19
Illinois	NELAP	5	200060	03-17-19
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 Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
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	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

TestAmerica Buffalo

Method Summary

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

TestAmerica Job ID: 480-144996-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC
5030C	Purge and Trap	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL EDI

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

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL SAC = 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

TestAmerica Job ID: 480-144996-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-144996-1	MW-2	Water	11/06/18 12:15	11/09/18 15:10
480-144996-2	MW-3	Water	11/06/18 14:45	11/09/18 15:10
480-144996-3	MW-4	Water	11/07/18 08:40	11/09/18 15:10
480-144996-4	MW-9R	Water	11/08/18 09:30	11/09/18 15:10
480-144996-5	MW-11R	Water	11/07/18 10:30	11/09/18 15:10
480-144996-6	MW-12	Water	11/08/18 11:15	11/09/18 15:10
480-144996-7	MW-13	Water	11/07/18 13:35	11/09/18 15:10
480-144996-8	MW-14	Water	11/07/18 15:35	11/09/18 15:10
480-144996-9	DUP-110718	Water	11/07/18 10:30	11/09/18 15:10
480-144996-10	TRIP BLANK	Water	11/07/18 00:00	11/09/18 15:10

TestAmerica Buffalo

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

Chain of Custody Record

Regulatory Program: ☐ JOW ☐ 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		Analysis Turnaround Time						Sampler:				
Buffalo, NY 14203		☐ CALENDAR DAYS ☒ WORKING DAYS						For Lab Use Only:				
716-851-7220		Custom TAT: 10 days						Walk-in Client:				
Phone		☐ 2 weeks						Lab Sampling:				
FAX		☐ 1 week						Job / SDG No.:				
Project Name: DEC Frewsburg, 300 Falconer Street		☐ 2 days										
Site No.: 907016 (GES Project #0901685)		☐ 1 day										
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 OLMO4.2 list	1, 4 Dioxane	PFAs List	MS/MSD	Sample Specific Notes:
MW-2	11-6-18	1215	G	W	7	N		X	X	X		
MW-3	11-6-18	1445	G	W	7	N		X	X	X		
MW-4	11-7-18	840	G	W	21	N	X	X	X	X		
MW-9R	11-8-18	930	G	W	7	N		X	X	X		
MW-11R	11-7-18	1030	G	W	7	N		X	X	X		
MW-12	11-8-18		G	W	7	N		X	X	X		
MW-13	11-7-18	1335	G	W	7	N		X	X	X		
MW-14	11-7-18	1535	G	W	7	N		X	X	X		
DUP-110718	11-7-18	1030	G	W	7	N		X	X	X		
Trip Blank			G	W		N						

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

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

Custody Seals Intact:		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Therm ID No.:	
Relinquished by: <i>Patricia</i>	Company: <i>GES</i>	Date/Time: 11-8-18 1510	Received by: <i>Patricia</i>	Company: <i>GES</i>	Date/Time: 11/8/18 1510		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:		
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:		

Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record



THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA

Client Information (Sub Contract Lab)		Sampler:	Lab Pk:	Carrier Tracking No(s):	COG No:					
Client Contact:		Phone:	Johnson, Orlotte S		480-46390.1					
Shipping/Receiving:			E-mail:	State of Origin:	Page:					
Company:			Orlote.Johnson@testamerica.com	New York	Page 1 of 2					
Address:		Due Date Requested:	Accreditations Required (See note):		Job #:					
777 New Durham Road,		11/21/2018	NELAP - New York		480-144996-1					
City:	Edison	TAT Requested (days):	Analysis Requested							
State, Zip:	NJ, 08817									
Phone:	732-549-3900 (e) 732-549-3679 (fax)	PO #:								
Email:		WQC #:								
Project Name:	Freeweb Site #907016	Project #:								
Site:		SSOV#:								
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (In-water, Suspended, Overhead, Bottom, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C_SIM/6030C (MOD) Volatile SIM	Total Number of containers	Special Instructions/Note:
MMW-2 (480-144996-1)	11/6/18	12:15	Eastern	Water		X	X	2		
MMW-3 (480-144996-2)	11/6/18	14:45	Eastern	Water		X	X	2		
MMW-4 (480-144996-3)	11/7/18	08:40	Eastern	Water		X	X	2		
MMW-4 (480-144996-3MS)	11/7/18	08:40	Eastern	MS	Water	X	X	2		
MMW-4 (480-144996-3MSD)	11/7/18	08:40	Eastern	MSD	Water	X	X	2		
MMW-9R (480-144996-4)	11/8/18	09:30	Eastern	Water		X	X	2		
MMW-11R (480-144996-5)	11/7/18	10:30	Eastern	Water		X	X	2		
MMW-12 (480-144996-6)	11/8/18	Eastern	Eastern	Water		X	X	2		
MMW-13 (480-144996-7)	11/7/18	13:35	Eastern	Water		X	X	2		
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out sub-contract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/chemicals being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to said compliance to TestAmerica Laboratories, Inc.										
Possible Hazard Identification		☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months								
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2		Special Instructions/QC Requirements:						
Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:						
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:			
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:			
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:						

testAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-144996-1

Login Number: 144996

List Source: 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: 480-144996-1

Login Number: 144996

List Number: 2

Creator: Armbruster, Chris

List Source: TestAmerica Edison

List Creation: 11/12/18 10:33 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
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	3.7°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-144996-1

Login Number: 144996

List Source: TestAmerica Sacramento

List Number: 3

List Creation: 11/12/18 02:28 PM

Creator: Gooch, Mayce

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	526454
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	1.2C
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").	N/A	
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

TestAmerica Job ID: 480-144996-1

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)
480-144996-1	MW-2	35	51	65	82	98	106	100	120
480-144996-2	MW-3	52	64	75	88	95	108	109	104
480-144996-3	MW-4	56	67	78	83	95	100	98	101
480-144996-3 MS	MW-4	57	66	77	86	97	95	98	99
480-144996-3 MSD	MW-4	59	71	82	93	101	100	105	105
480-144996-4	MW-9R	49	58	79	83	89	92	92	93
480-144996-5	MW-11R	54	74	78	78	83	89	87	86
480-144996-6	MW-12	51	74	76	79	81	82	88	82
480-144996-7	MW-13	61	69	79	85	99	104	105	104
480-144996-8	MW-14	42	62	77	75	85	89	88	83
480-144996-9	DUP-110718	53	78	79	82	85	87	88	93
LCS 320-260047/2-A	Lab Control Sample	88	96	92	97	99	105	105	106
LCS 320-260271/2-A	Lab Control Sample	89	95	96	94	94	106	98	100
LCS 320-260685/2-A	Lab Control Sample	85	87	93	90	86	84	91	90
LCSD 320-260047/3-A	Lab Control Sample Dup	89	99	95	96	104	103	101	104
MB 320-260047/1-A	Method Blank	87	96	98	95	100	107	105	103
MB 320-260271/1-A	Method Blank	86	93	88	97	101	102	99	99
MB 320-260685/1-A	Method Blank	86	93	95	91	91	90	99	92
		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	13C3-PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	i-NMeFOSA (25-150)	5-NEtFOSA (25-150)
480-144996-1	MW-2	105	113	73	92	102	106	127	131
480-144996-2	MW-3	102	112	83	96	103	105	122	119
480-144996-3	MW-4	90	99	74	88	98	99	108	102
480-144996-3 MS	MW-4	96	100	77	84	98	96	106	99
480-144996-3 MSD	MW-4	105	107	82	96	99	106	120	117
480-144996-4	MW-9R	91	96	84	87	93	84	84	84
480-144996-5	MW-11R	87	84	78	82	88	86	101	99
480-144996-6	MW-12	79	81	74	81	86	81	96	100
480-144996-7	MW-13	97	100	76	84	95	94	111	108
480-144996-8	MW-14	84	83	83	82	91	85	86	79
480-144996-9	DUP-110718	81	82	81	83	92	87	103	103
LCS 320-260047/2-A	Lab Control Sample	105	125	87	89	97	94	116	117
LCS 320-260271/2-A	Lab Control Sample	100	109	84	90	96	91	104	97
LCS 320-260685/2-A	Lab Control Sample	90	91	83	88	93	86	108	98
LCSD 320-260047/3-A	Lab Control Sample Dup	103	125	88	95	97	94	111	117
MB 320-260047/1-A	Method Blank	107	116	87	93	94	97	120	119
MB 320-260271/1-A	Method Blank	98	115	85	90	94	90	116	115
MB 320-260685/1-A	Method Blank	92	92	88	92	96	93	108	109
		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)						
480-144996-1	MW-2	277 *	205 *						
480-144996-2	MW-3	222 *	157 *						
480-144996-3	MW-4	188 *	110						
480-144996-3 MS	MW-4	191 *	115						
480-144996-3 MSD	MW-4	186 *	119						
480-144996-4	MW-9R	192 *	132						

TestAmerica Buffalo

Isotope Dilution Summary

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

TestAmerica Job ID: 480-144996-1

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

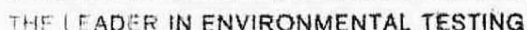
Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)	
		M262FTS (25-150)	M282FTS (25-150)
480-144996-5	MW-11R	129	106
480-144996-6	MW-12	124	97
480-144996-7	MW-13	175 *	64
480-144996-8	MW-14	212 *	126
480-144996-9	DUP-110718	144	107
LCS 320-260047/2-A	Lab Control Sample	91	89
LCS 320-260271/2-A	Lab Control Sample	86	76
LCS 320-260685/2-A	Lab Control Sample	96	97
LCSD 320-260047/3-A	Lab Control Sample Dup	102	89
MB 320-260047/1-A	Method Blank	98	89
MB 320-260271/1-A	Method Blank	114	98
MB 320-260685/1-A	Method Blank	103	98

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



Sample Receiving Notes



480-144996 Field Sheet

Jot

Tracking # 927607182137 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:

Therm. ID: **AK-2 / AK-3 / AK-5 / AK-6 / HACCP / Other**_____
(+0.7°C)Ice Wet Gel Other

Cooler Custody Seal: _____

Sample Custody Seal: 526454

Cooler ID: _____

Temp: Observed 1.2 Corrected 1.2

From: Temp Blank ☐ Sample ☒

NCM Filed: Yes ☐ No ☐

Yes No NA

Perchlorate has headspace? ☐ ☐ ☐

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?* ☐ ☐ ☐

Multiphasic samples are not present? ☐ ☐ ☐

Sample temp OK? ☐ ☐ ☐

Sample out of temp? ☐ ☐ ☐

Initials: SD Date: 11/10/18

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

W 1 A