



Prepared for:
Superfund Standby Program
NYSDEC
625 Broadway
Albany, New York 12233

Prepared by:
AECOM USA, Inc.
Latham, New York
August 2023

Groundwater Monitoring Report
June 2021 Sampling Event
Northeast Alloys and Metals, Utica, NY
Site No. 633045
Work Assignment No. D009803-21



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A handwritten signature in blue ink that reads "Michael A. Izdebski".

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A handwritten signature in black ink that reads "Lindsay Mitchell".

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Contents

1.0 Introduction.....	1-1
1.1 Site Description	1-1
1.2 Site Background.....	1-1
2.0 Sampling	2-1
2.1 Sample Locations and Field Observations	2-1
2.2 Groundwater Sampling Methodology.....	2-1
3.0 Summary of Analytical Results.....	3-1
3.1 Volatile Organic Compounds.....	3-1
3.2 Emerging Contaminants	3-2
4.0 Conclusions	4-1
5.0 Planned Activities and Recommendations	5-1

List of Tables

Table 1	Monitoring Well Details and Groundwater Elevations
Table 2	Groundwater Analytical Results – Volatile Organic Compounds
Table 3	Groundwater Analytical Results – Emerging Contaminants

List of Figures

Figure 1	Site Location Map
Figure 2	Site Plan and Monitoring Well Locations
Figure 3	Shallow Monitoring Well Groundwater Contour Map
Figure 4	Total VOCs in Groundwater (June 21-24, 2021)
Figure 5	Emerging Contaminants in Groundwater (June 21-24, 2021)
Figure 6	Total VOC Isoconcentrations (June 2021)

List of Appendices

Appendix A	Monitoring Well Purging/Sampling Forms
Appendix B	Laboratory Reports and Data Usability Summary Reports

1.0 Introduction

AECOM USA, Inc. (AECOM) conducted a groundwater sampling event on June 21-24, 2021 at the Northeast Alloys and Metals Site (the “Site”) in Utica, Oneida County, New York (**Figure 1**). Monitoring activities were conducted in accordance with the approved scope of work for Work Assignment No. D009803-21 with the New York State Department of Environmental Conservation (NYSDEC). This report presents the results of the monitoring event and relevant historical data.

1.1 Site Description

The 3.9-acre Site, located at 2145 Dwyer Avenue in the City of Utica, New York (**Figure 2**), was a former metal fabrication/recycling facility. The primary contaminants of concern (COCs) are trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE). A groundwater collection and treatment (GCT) system, installed in 2001, was in operation at the north end of the Site until December 10, 2020 as a result of an NYSDEC directive to turn the system off. The GCT system consists of a groundwater collection trench that discharges to a vault where groundwater is aerated to treat chlorinated volatile organic compounds (CVOCs). Prior to system shutdown, an average of approximately 200,000 gallons of shallow groundwater were treated monthly and discharged under permit to the Oneida County sanitary sewer system.

1.2 Site Background

Per the Record of Decision (ROD), the facility was historically used for electronics manufacturing (1950s), as a machine shop (1960s), and as a commercial laundry (1970s) prior to operation as a metals recycling facility between 1986 and 1991. In 1989, an underground fuel oil storage tank was removed from the southwestern portion of the courtyard and the initial presence of CVOC contamination at the Site was reported. Subsequent investigations resulted in the detection of CVOCs in soil and groundwater. TCE and cis-1,2-DCE were identified as COCs, although other VOCs were reported at lower levels. Later interviews reportedly alleged that a drum of TCE had been pierced in the courtyard by a forklift and had discharged to a storm drain. The Site was added to the NYSDEC Registry of Inactive Hazardous Waste Disposal Sites as a Class 2 site (Site No. 633045) following an environmental investigation in 1994. The remedial investigation/feasibility study (RI/FS) was completed in 1997 and the ROD was issued in March 1998.

The selected remedy for the Site included: 1) installation of a groundwater collection and treatment system that discharges into the local publicly-owned treatment works (POTW), 2) installation of a soil vapor extraction (SVE) system at recovery wells RW-1 and RW-2, 3) excavation of contaminated soil in the east gate area in the vicinity of MW-9 to meet soil cleanup objectives, 4) implementation of restrictions on groundwater use until groundwater standards are attained, and 5) implementation of a site-wide operation, monitoring, and maintenance program to ensure that the remedial program is effective and that the remedial action goals are obtained.

Operation of the GCT system commenced in March 2001. An operation, monitoring, and maintenance (OM&M) program is in place for the Site. AECOM has performed groundwater sampling events since May 2005 to monitor the effectiveness of the remedy selected in the ROD.

According to the OM&M Manual (October 2001, prepared by URS Corporation), the results of the pre-design investigation (PDI) led to a ROD modification with respect to the proposed SVE system. Wells RW-1, RW-2 and RW-3 were installed between 1997 and 1999. The PDI results reportedly indicated that there was insufficient vadose zone contamination in the vicinity of the recovery wells to successfully operate an SVE system.

In 2008, AECOM completed additional investigations at the Site to evaluate potential data gaps with respect to building areas that were previously inaccessible but had been demolished by new owners. The investigation identified soil impacts on-site and beneath the former building slabs that were significantly higher than soil cleanup objectives. Additional overburden and bedrock monitoring wells were installed. Soil vapor monitoring was completed, which led to installation of a sub-slab depressurization system at the site building.

In 2011, AECOM evaluated the cost and feasibility of potential supplemental remedial alternatives, including excavation and in-situ chemical oxidation (ISCO). NYSDEC elected to pursue ISCO as a potential alternative to remediate the persistent contaminant mass. In July 2013, four new monitoring wells (MW-15, MW-16, MW-17, and MW-18) were installed in the source area to better gauge the success of the technology. These wells, along with several others, were sampled to represent baseline water quality prior to injection. Baseline results at the new wells exhibited the highest reported concentrations of VOCs to date. These results supported the conclusion that despite the low concentrations in groundwater collected in the GCT system, contaminant source material which is not attenuating remains on-site.

In early 2014, two consecutive full-scale rounds of ISCO injection of sodium permanganate were executed at the Site. Chemical was injected at depths of 2 to 12 feet below ground surface (bgs) at an average rate of 3 gallons per minute. Overall, the low permeability and heterogeneity of site soils restricted delivery of the chemical and limited contact in some zones. Four post-injection groundwater monitoring events and one soil sampling event occurred between August 2014 and September 2015. Groundwater samples were collected using passive diffusion bags (PDBs). The results of the monitoring, which were documented in a Remedial Action Progress Report (March 2016), indicated that ISCO injections failed to reduce VOC concentrations in soil, but were successful at reducing VOC concentrations in groundwater. Laboratory results indicated that rebound did eventually occur in some wells. The greatest overall reductions occurred in the new source area wells; however, contaminant concentrations remain significantly elevated above groundwater standards.

2.0 Sampling

2.1 Sample Locations and Field Observations

Groundwater monitoring, which includes measuring and recording groundwater elevation measurements and water quality parameters, has been conducted on a periodic basis for on-site wells (**Figure 2**) since 2005, with newer wells added to the sampling program as they have been installed. Wells were visually inspected and the overall conditions of the wells were acceptable. It is recommended that minor modifications (e.g., lock and J-Plug replacement) be completed during routine OM&M site visits when necessary.

Prior to sampling each well, depth-to-groundwater and depth-to-bottom measurements were taken using a water level indicator. The indicator was decontaminated with a Liquinox® and spring water rinse and sprayed with distilled water before each use. Depth-to-groundwater measurements were utilized to calculate groundwater elevations (**Table 1**) and to generate a groundwater contour map for the Site (**Figure 3**). **Table 1** also contains construction details for the on-site wells.

2.2 Groundwater Sampling Methodology

Wells were purged with a peristaltic pump, dedicated high-density polyethylene (HDPE) tubing and dedicated silicone tubing using low-flow techniques until the field parameters stabilized, or with a dedicated, per- and polyfluorinated alkyl substances (PFAS)-free polyethylene bailer. Water quality field parameters including temperature, conductivity, specific conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), pH, turbidity, color, and odor were measured and recorded on the Monitoring Well Purging/Sampling Forms (**Appendix A**).

All purge water was processed through the GCT system.

All twenty wells sampled for VOCs were also sampled for emerging contaminants. During the previous sampling event in December 2018, only five wells (MW-1, MW-5, MW-12, MW-15, and MW-18) were sampled for 1,4-dioxane and PFAS. The field sampling team followed NYSDEC and AECOM protocols for the collection of samples in order to prevent cross-contamination by PFAS-containing materials during sampling.

All VOC samples were collected in laboratory-supplied bottles (40 milliliter vials preserved with hydrochloric acid) and shipped to Eurofins TestAmerica Analytical Laboratory for analysis of VOCs via United States Environmental Protection Agency (US EPA) Method 624.1. Emerging contaminant samples were also submitted to Eurofins TestAmerica Analytical Laboratory, for analysis via US EPA Method 8270 SIM for 1,4-dioxane and US EPA Method 537 (modified) for the 21-analyte PFAS list. Samples were packed in a cooler with ice and shipped under standard chain-of-custody procedures.

3.0 Summary of Analytical Results

3.1 Volatile Organic Compounds

A cumulative summary of the analytical VOC data from the groundwater sampling events conducted between May 2005 and June 2021 is presented as **Table 2**. Results are compared to the New York State Ambient Water Quality Standards (AWQS) and Guidance Values (GV) for groundwater. Analytes detected and reported above the applicable AWQS or GV are presented in bold font in a shaded cell. Copies of the laboratory reports are included in **Appendix B**.

Table 2 was utilized to detect any notable trends in concentrations of VOCs in the on-site monitoring wells. Previous investigations indicated that the primary COCs for this Site are TCE and cis-1,2-DCE, although other VOCs are present. **Figure 4** depicts the VOC analytical results from the most recent sampling event.

VOC contaminant concentrations reported for the June 2021 sampling event indicate that:

- Nine of the twenty monitoring wells sampled were reported to contain at least one detectable concentration of a VOC: MW-5, MW-6, MW-9, MW-11, MW-14, MW-15, MW-16, MW-17 and MW-18.
- Laboratory results from eight of the wells (MW-5, MW-6, MW-9, MW-14, MW-15, MW-16, MW-17 and MW-18) indicated exceedances of the AWQS and/or GV.
- VOCs were not detected in the groundwater samples collected from BR-1, BR-2, BR-3, MW-1, MW-3, MW-4, MW-7R, MW-8, MW-10, MW-12, or MW-13.

VOCs have never been detected in BR-1 or BR-3 since their installation in 2008, and according to all available data (i.e., May 2005 to present), they have not been detected in MW-1 either. MW-3 has had only one detection since October 2005 (acetone in September 2017). While there were no detections during the latest sampling event, acetone was not analyzed by the laboratory.

In December 2018, BR-2 and MW-4 contained their first VOC detections since being installed in 2008 and 2005, respectively, with no exceedances in either well. Both wells contained approximately 1.5 micrograms per liter (µg/L) of total VOCs, consisting of cis-1,2-DCE and TCE. In June 2021, no VOC detections were observed at either BR-2 or MW-4.

Results from MW-5 exhibited 74.69 µg/L total VOCs, with three analytes (1,1-dichloroethane [1,1-DCA], cis-1,2-DCE, and vinyl chloride) exceeding the AWQS/GV. In December 2018, the groundwater sample contained 111.0 µg/L total VOCs, with four analytes (1,1-DCA, cis-1,2-DCE, TCE, and vinyl chloride) exceeding the AWQS/GV.

Groundwater collected from MW-6 during the June 2021 groundwater monitoring event contained 262.3 µg/L total VOCs, with four analytes (1,1-DCA, cis-1,2-DCE, 1,1,1-trichloroethane [1,1,1-TCA] and vinyl chloride) exceeding the AWQS/GV. The prior event reported 659.3 µg/L total VOCs, with the same analytes exceeding the AWQS/GV.

Only two analytes (cis-1,2-DCE and TCE) exceeded their AWQS/GV in the sample collected from MW-9, which contained 25.41 µg/L total VOCs. The prior event reported 73.88 µg/L total VOCs, with two analytes (cis-1,2-DCE and TCE) exceeding the AWQS/GV.

MW-11 contained a concentration of TCE below the AWQS (0.60 J). This well has generally contained no or low-level VOC detections in recent years.

Groundwater collected from MW-14 during the June 2021 sampling event contained 237.2 µg/L total VOCs, with five analytes (benzene, chlorobenzene, ethylbenzene, toluene, and total xylenes) exceeding the AWQS/GV. In December 2018, the groundwater sample contained 327.7 µg/L total VOCs, with seven analytes (benzene, chlorobenzene, 1,2-dichlorobenzene, ethylbenzene, toluene, m&p-xylenes, and o-xylene) exceeding the AWQS/GV.

The total VOC concentrations in the samples collected from MW-15 and MW-16 increased between 2018 and 2021. In June 2021, MW-15 contained 1,990.1 µg/L total VOCs, with six analytes (1,1-DCA, 1,1-dichloroethene (1,1-DCE), cis-1,2-DCE, trans-1,2-dichloroethene (trans-1,2-DCE), TCE and vinyl chloride) exceeding the AWQS/GV. In December 2018, MW-15 contained 1,755 µg/L total VOCs, with four analytes (1,1,1-TCA, cis-1,2-DCE, TCE and vinyl chloride) exceeding the AWQS/GV. In June 2021, 4,782.8 µg/L total VOCs were detected in MW-16. Seven analytes (1,1-DCA, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,1,1-TCA, TCE, and vinyl chloride) exceeded the AWQS/GV. In December 2018, the total VOC concentration detected was 2,649 µg/L with five analytes (1,1-DCA, 1,1-DCE, cis-1,2-DCE, TCE, and vinyl chloride) exceeding the AWQS/GV.

VOC concentrations decreased in MW-17 and MW-18 since December 2018. In June 2021, MW-17 contained 145,700 µg/L total VOCs, with five analytes (1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, TCE, and vinyl chloride) exceeding the AWQS/GV. MW-18 contained 284.60 µg/L total VOCs during the June 2021 sampling event, with two analytes (cis-1,2-DCE and vinyl chloride) exceeding the AWQS/GV. Groundwater collected from MW-17 during the December 2018 sampling event contained 176,570 µg/L total VOCs, with five analytes (1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, TCE, and vinyl chloride) exceeding the AWQS/GV. MW-18 contained 325.8 µg/L total VOCs in 2018, with two analytes (cis-1,2-DCE and vinyl chloride) exceeding the AWQS/GV.

3.2 Emerging Contaminants

Table 3 presents the laboratory results for 1,4-dioxane and PFAS compounds. Results are compared to the maximum contaminant levels (MCLs) established by the New York State Department of Health (NYSDOH), where applicable. Detected concentrations are shown in bold font and exceedances of the MCLs are shaded. **Figure 5** displays the analytical results for emerging contaminants in the wells sampled. The Category B laboratory reports and data usability summary reports (DUSRs) for the emerging contaminants data are provided in **Appendix B**.

Of the twenty wells evaluated for 1,4-dioxane, three wells, MW-5, MW-6, and MW-16 reported a concentration greater than or equal to the 1.0 µg/L MCL. 1.1 µg/L of 1,4-dioxane was detected in MW-5, while 6.6 µg/L was detected in MW-6 and 1.0 µg/L was detected in MW-16. Four wells contained concentrations of 1,4-dioxane below the MCL: MW-10 (0.36 µg/L), MW-12 (0.019 J µg/L), MW-15 (0.92 µg/L), and MW-18 (0.074 J µg/L).

In general, PFAS contaminant concentrations reported for the June 2021 sampling event indicate that:

- All twenty monitoring wells sampled were reported to contain at least one detectable PFAS from the 21-analyte list.

- Laboratory analytical results for two of the wells (MW-17 and MW-18) indicated exceedances of the MCL of 10 ng/L for Perfluorooctanesulfonic acid (PFOS).
- None of the samples contained a concentration of Perfluorooctanoic acid (PFOA) above the MCL of 10 ng/L for the compound.

Of the twenty wells sampled for PFAS in June 2021:

- BR-1 contained a total PFAS concentration of 30.75 nanograms per liter (ng/L) with eleven analytes detected, including PFOA (3.2 ng/L) and PFOS (0.60 J ng/L). However, neither PFOA nor PFOS exceeded the MCL in the sample. By contrast, the duplicate sample for the well only contained 2.6 J ng/L of PFAS, and neither PFOA nor PFOS were detected.
- Sample BR-2 exhibited a total PFAS concentration of 3.66 ng/L, with six analytes detected, including PFOS (0.41 J ng/L), which was below the MCL. PFOA was not detected in the sample.
- The sample collected from BR-3 only contained one analyte and had a total PFAS concentration of 1.2 J ng/L. Neither PFOA nor PFOS was detected in the sample.
- MW-1 contained a total PFAS concentration of 1.51 ng/L, with two analytes detected. During the December 2018 sampling event, MW-1 contained a total PFAS concentration of 2.5 J ng/L, with one analyte detected. Neither PFOA nor PFOS was detected in either sample.
- Results from MW-3 exhibited a total PFAS concentration of 2.48 ng/L, with five analytes detected including PFOS (0.40 J ng/L), which was below the MCL. PFOA was not detected in the sample.
- MW-4 contained a total PFAS concentration of 19.63 ng/L with nine analytes detected, including PFOA (2.8 ng/L) and PFOS (0.77 J ng/L). However, neither PFOA nor PFOS exceeded the MCL in the sample.
- The June 2021 total PFAS concentration in MW-5 was 6.54 ng/L, which included seven detected analytes. The PFOA concentration in the sample was 2.1 ng/L, while the PFOS concentration was 0.5 J ng/L. Neither PFOA nor PFOS exceeded the MCL in the June 2021 sample. In December 2018, MW-5 had a higher total PFAS concentration of 32 ng/L, which contained detections of five analytes including 9.6 J ng/L of PFOA and 10 ng/L of PFOS (which is equal to the MCL for the compound).
- Groundwater collected from MW-6 contained a total of 15.48 ng/L of total PFAS, with detectable concentrations of eight analytes including PFOA (5.5 ng/L) and PFOS (1.3 J ng/L). Neither PFOA nor PFOS exceeded the MCL in the sample.
- Sample MW-7R exhibited a total PFAS concentration of 3.88 ng/L, with five analytes detected. The PFOA concentration in the sample was 0.55 J ng/L, while the PFOS concentration was 1.0 J ng/L. Neither PFOA nor PFOS exceeded the MCL.
- Sample MW-8 contained a total PFAS concentration of 9.51 ng/L with eleven analytes detected, including PFOA (0.58 J ng/L) and PFOS (0.97 J ng/L), both of which were below the MCL.

- MW-9 contained a total PFAS concentration of 5.26 ng/L with six analytes detected, including PFOA (1.0 J ng/L) and PFOS (0.58 J ng/L). However, neither PFOA nor PFOS exceeded the MCL in the sample.
- In the MW-10 groundwater sample, 20.16 ng/L of total PFAS were detected, including PFOA (1.3 J ng/L) and PFOS (0.87 J ng/L) along with seven other compounds. PFOA and PFOS were both below the MCL.
- MW-11 contained 1.50 ng/L of total PFAS, with only two analytes detected including PFOS at a concentration of 0.30 J ng/L, which is below the MCL for the compound. PFOA was not detected.
- MW-12 contained 17.1 ng/L of total PFAS in June 2021, with nine analytes detected including PFOA (2.2 ng/L) and PFOS (1.1 J ng/L). In December 2018, the groundwater sample collected from MW-12 contained 20.4 ng/L of total PFAS, consisting of five analytes including PFOA with a concentration of 3.1 ng/L. Neither PFOA nor PFOS exceeded the MCLs in either sample.
- Sample MW-13 exhibited a total PFAS concentration of 5.95 ng/L with six analytes detected, including PFOA (1.9 J ng/L) and PFOS (1.7 JI ng/L), which were both below the MCL.
- Groundwater collected from MW-14 contained 14.61 ng/L of total PFAS, with seven compounds detected including PFOA (4.6 ng/L) and PFOS (0.67 JI ng/L), which were both below the MCL.
- MW-15 contained a total PFAS concentration of 7.41 ng/L with seven analytes detected, including PFOA (1.1 J ng/L) and PFOS (0.31 J ng/L). In December 2018, MW-15 contained a total PFAS concentration of 115.2 ng/L, with detections of three analytes including PFOA (2.6 ng/L). Neither PFOA nor PFOS exceeded the MCL in either sample.
- The groundwater sample collected from MW-16 exhibited 7.91 ng/L of total PFAS with detections of seven analytes including PFOA (1.3 J ng/L) and PFOS (1.1 J ng/L), neither of which exceeded the MCL for either compound.
- MW-17 contained a total PFAS concentration of 47.7 ng/L, which included detections of ten analytes. PFOA was detected at a concentration of 5.5 ng/L in the sample, while PFOS was detected at a concentration of 20 ng/L (double the MCL for the compound). This sample contained the highest concentrations of total PFAS and of PFOS during the June 2021 groundwater monitoring event.
- The sample collected from MW-18 exhibited a total PFAS concentration of 38.58 ng/L (ten analytes were detected). PFOA was found in the sample at a concentration of 5.2 ng/L while PFOS was detected at a concentration of 14 ng/L, which exceeded the MCL of 10 ng/L for the compound. The December 2018 data indicated MW-18 contained a total PFAS concentration of 155.5 ng/L (nine analytes were detected). The 2018 sample contained 79 ng/L of PFOA and 20 ng/L of PFOS, both of which were substantially higher than the MCL for the compounds.

4.0 Conclusions

The following conclusions are based on the June 2021 groundwater monitoring event and an understanding of overall Site conditions:

- Total dissolved-phase VOC concentrations decreased in eleven Site monitoring wells between December 2018 and June 2021: BR-2, MW-4, MW-5, MW-6, MW-9, MW-11, MW-12, MW-13, MW-14, MW-17, and MW-18. On the other hand, concentrations in two wells (MW-15 and MW-16) increased between 2018 and 2021. VOCs were not detected in the groundwater samples collected from seven wells (BR-1, BR-3, MW-1, MW-3, MW-7R, MW-8, and MW-10) during either event.
- In December 2018, VOCs were detected for the first time in monitoring wells BR-2 and MW-4; however, both contained concentrations below the AWQS/GV for the detected compounds. During the June 2021 event, no VOCs were detected in these two wells.
- Groundwater samples from the newest monitoring wells (MW-15 through MW-18), installed in the source area in 2013 an advance of the injection program, contained the highest reported VOC concentrations at the Site. Total VOC concentrations in June 2021 were an improvement over pre-injection results in wells MW-15, MW-17 and MW-18; however, groundwater quality remains significantly impacted in these two portions of the Site.
- MW-6 continues to exhibit the most elevated concentration of VOCs (262.3 µg/L) among the historical monitoring wells installed during the RI, while MW-17 contains the highest concentration of VOCs (145,700 µg/L) among the newer wells and for the overall Site. Concentrations at both wells remain lower than they were prior to the 2014 injection effort.
- In June 2021, all wells that were sampled for VOCs were also sampled for emerging contaminants, specifically 1,4-dioxane and PFAS (21-compound list). Well MW-6 exhibited the highest 1,4-dioxane concentration on-site with 6.6 µg/L, while MW-17 contained the highest total PFAS concentration at 47.7 ng/L and the highest PFOS concentration, with 20 ng/L, exceeding the MCL for the compound. None of the June 2021 samples contained a PFOA concentration in excess of the MCL.
- With limited data points, it can be difficult to pinpoint why certain wells show improvement between sampling events and while others do not. Increases could be related to rebounding after injection substrates become ineffective, mobilization and redistribution of contaminant mass as a result of the injection process, differences in hydrogeologic and weather conditions between sampling events, etc. Wells installed in 2013 prior to the 2014 injection program were intentionally placed in zones of source material and contain groundwater that passes through highly-impacted heterogeneous soil; therefore, some variability can be expected from event to event.
- Soil and groundwater impacts persist at the Site at high concentrations in two areas: in the vicinity of MW-15/MW-16 and in the vicinity of MW-17. This demonstrates an overall lack of natural attenuation. Based on the fairly low concentrations of VOCs reported in the GCT system influent between installation and system shutdown in 2020, this contaminant mass is not readily migrating. The mass appears to be confined to the source areas, aided by the low

permeability of Site soils and the presence of overlying impervious surfaces. However, the increases in VOC concentrations in MW-15 and MW-16 between December 2018 (when the GCT system was operational) and June 2021 (six months following system shutdown) suggest that groundwater pumping and treatment likely had an impact on groundwater VOC concentrations in this area of the Site.

5.0 Planned Activities and Recommendations

Groundwater monitoring should continue on a five-quarter basis (i.e., every 15 months) in order to document the concentrations of VOCs and emerging contaminants in the groundwater at the Site. The subsequent groundwater sampling event occurred in September 2022.

Minor repairs or modifications to the monitoring well network will be addressed during routine OM&M site visits as necessary.

Tables

Table 1
Monitoring Well Details and Groundwater Elevations
Northeast Alloys and Metals Site
Site No. 633045
Utica, New York

Monitoring Well ID	Coordinates		Well Details				June 21, 2021	
	NAD83 Northing	NAD83 Easting	Well Diameter & Construction	Installation Date	Top of Casing Elevation	MPE (ft. amsl)	Depth-to-Groundwater (ft. below MPE)	Groundwater Elevation (ft. amsl)
BR-1	1129751.5343	1193769.2041	2" PVC	9/25/2008	434.27	433.98	14.7	419.28
BR-2	1129685.1948	1193884.0210	2" PVC	9/26/2008	432.20	432.05	11.5	420.55
BR-3	1129457.9890	1193502.1229	2" PVC	9/26/2008	439.05	438.74	8.6	430.14
MW-1	1129398.4727	1193649.9991	2" PVC	8/22/1989	438.84	438.75	9.9	428.85
MW-3	1129627.5648	1193796.1151	2" PVC	8/22/1989	433.94	433.85	10.2	423.65
MW-4	1129493.7668	1193811.7344	2" PVC	8/23/1989	430.75	430.49	4.1	426.39
MW-5	1129516.5034	1193697.7638	2" PVC	1/19/1993	432.11	431.54	3.3	428.24
MW-6	1129500.0868	1193720.5677	2" PVC	1/19/1993	432.08	431.96	3.75	428.21
MW-7R	1129455.3624	1193505.7054	2" PVC	6/12/2013	439.25	438.90	10.5	428.40
MW-8	1129279.5278	1193791.3563	2" PVC	2/12/1997	435.38	435.33	7.4	427.93
MW-9	1129465.2940	1193982.8086	2" PVC	8/7/1997	432.86	432.34	8.15	424.19
MW-10	1129513.3190	1194012.1169	2" PVC	8/9/1997	431.34	430.46	6.4	424.06
MW-11	1129555.0950	1193787.0401	2" PVC	4/5/1999	433.78	433.60	9.4	424.20
MW-12	1129747.7725	1193742.2722	2" PVC	4/6/1999	433.71	432.97	12.2	420.77
MW-13	1129665.1895	1193790.4688	2" PVC	8/26/2008	432.60	432.44	8.9	423.54
MW-14	1129671.4939	1193738.0248	2" PVC	8/27/2008	432.87	432.70	9.15	423.55
MW-15	1129597.7784	1193742.3768	2" PVC	6/13/2013	434.06	433.80	8.1	425.70
MW-16	1129617.6417	1193737.8144	2" PVC	6/11/2013	434.90	434.60	7.4	427.20
MW-17	1129467.4712	1193667.7635	2" PVC	6/13/2013	435.16	434.92	6.2	428.72
MW-18	1129486.0719	1193689.0916	2" PVC	6/12/2013	432.50	432.26	3.6	428.66
TR 1	1129632.6114	1193802.5344	8" PVC	1/1/2000	433.85	433.81	NM	NA
TR 2	1129610.0118	1193813.7348	8" PVC	1/1/2000	434.13	434.00	NM	NA
TR 3	1129563.0223	1193837.0730	8" PVC	1/1/2000	434.42	433.60	NM	NA

Notes:

BR - Bedrock Well

MW - Monitoring Well

TR - Trench Well

NAD83 - North American Datum of 1983

MPE - Measuring point elevation; measured at the top of the polyvinyl chloride

ft. - feet

amsl - above mean sea level

NM - Not measured

NA - Not available

Table 2
Groundwater Analytical Results -
Volatile Organic Compounds
Northeast Alloys and Metals Site
Site No. 633045
Utica, New York

Sample ID		BR-1							BR-2							BR-3							MW-1							
Sampling Date		Oct-08	Oct-11	Jul-13	Sep-15	Sep-17	Dec-18	Jun-21	Oct-08	Oct-11	Jul-13	Sep-15	Sep-17	Dec-18	Jun-21	Oct-08	Oct-11	Jul-13	Sep-15	Sep-17	Dec-18	Jun-21	May-05	Oct-05	Oct-11	Jul-13	Sep-15	Sep-17	Dec-18	Jun-21
Analyte (µg/L)	AWQS+GV*																													
Acetone	50 (GV)	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	U	U	NR	U	NR	NR	NR
Acrolein	5	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	NR	NR	U	U	U	NR	NR	U
Acrylonitrile	5	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	NR	NR	U	U	U	NR	NR	U
Benzene	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Bromochloromethane	5	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Bromodichloromethane	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
Bromoform	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
Bromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
2-Butanone	NA	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
tert-Butyl Alcohol	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Carbon disulfide	60 (GV)	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	U	NR	NR	NR	U	NR	NR
Carbon tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
Chloroethane	5	U	U	U	U	U	U	NR	U	U	U	U	U	U	NR	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR
2-Chloroethyl vinyl ether	NA	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	NR	NR	U	U	U	NR	NR	U
Chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
Chloromethane	NA	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
Cyclohexane	NA	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dibromochloromethane	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
1,2-Dibromo-3-chloropropane	0.04	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dibromoethane	5	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichlorobenzene	3	U	U	U	U	U	U	NR	U	U	U	U	U	U	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	NR	
1,3-Dichlorobenzene	3	U	U	U	U	U	U	NR	U	U	U	U	U	U	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	NR	
1,4-Dichlorobenzene	3	U	U	U	U	U	U	NR	U	U	U	U	U	U	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	NR	
Dichlorodifluoromethane	5	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-Dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
cis-1,2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	0.37 J	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
trans-1,2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-Dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
cis-1,3-Dichloropropene	0.4	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
trans-1,3-Dichloropropene	0.4	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
Diethyl Ether	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
Ethyl Chloride	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
2-Hexanone	50	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Isopropylbenzene	5	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Acetate	NA	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylcyclohexane	NA	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylene chloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	NA	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl tert-butyl Ether	10	U	NR	NR	NR	U	U	NR	U	NR	NR	NR	U	U	NR	U	NR	NR	NR	U	U	NR	NR	NR	NR	NR	NR	U	U	NR
Styrene	5	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U
Toluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-Trichlorobenzene	5	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2,4-Trichlorobenzene	5	U	NR	NR	NR	NR	NR	NR	U																					

Notes:
All data presented in micrograms per liter (µg/L).
Volatile Organic Compounds (VOCs) analysis by EPA Method 624.
AWQS - New York State Ambient Water Quality Standards (TOGs 1.1.1); GV - guidance value.
U - Analyte included in the analysis, but not detected at or above the Method Detection Limit (MDL).
J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.
D - Data reported from a dilution.
NA - No standard or guidance value exists for the analyte.
NR - Not reported.
BOLD font in shaded cell indicates exceedances of AWQS or GV.
Columns separated with a double line indicate pre- and post-sodium injection sampling events.

Table 2
Groundwater Analytical Results -
Volatile Organic Compounds
Northeast Alloys and Metals Site
Site No. 633045
Utica, New York

Sample ID		MW-3										MW-4								MW-5												
Sampling Date		May-05	Oct-05	Aug-07	Oct-08	Oct-11	Jul-13	Sep-15	Sep-17	Dec-18	Jun-21	May-05	Oct-05	Aug-07	Oct-11	Jul-13	Sep-15	Dec-18	Jun-21	May-05	Oct-05	Aug-07	Oct-08	Oct-11	Jul-13	Aug-14	Mar-15	Jun-15	Sep-15	Sep-17	Dec-18	Jun-21
Analyte (µg/L)	AWQS+GV*																															
Acetone	50 (GV)	5.1 J	68	U	U	NR	NR	NR	17.8	NR	NR	U	U	U	NR	NR	NR	NR	NR	U	U	U	U	NR	NR	NR	NR	NR	NR	NR	NR	NR
Acrolein	5	NR	NR	NR	NR	U	U	U	NR	NR	U	NR	NR	NR	U	U	U	NR	U	NR	NR	NR	NR	U	U	U	U	U	U	NR	NR	U
Acrylonitrile	5	NR	NR	NR	NR	U	U	U	NR	NR	U	NR	NR	NR	U	U	U	NR	U	NR	U	NR	NR	U	U	U	U	U	U	NR	NR	U
Benzene	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Bromochloromethane	5	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR
Bromodichloromethane	50	NR	NR	NR	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
Bromoform	50	NR	NR	NR	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
Bromomethane	5	NR	NR	NR	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
2-Butanone	NA	NR	NR	NR	U	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR
tert-Butyl Alcohol	NA	U	U	U	NR	NR	NR	NR	NR	NR	NR	U	U	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Carbon disulfide	60 (GV)	U	U	U	U	NR	NR	NR	U	NR	NR	U	U	U	NR	NR	NR	NR	NR	U	U	U	U	NR	NR	NR	NR	NR	NR	U	NR	NR
Carbon tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Chlorobenzene	5	NR	NR	NR	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
Chloroethane	5	U	U	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	U	U	U	U	U	NR
2-Chloroethyl vinyl ether	NA	NR	NR	NR	NR	U	U	U	NR	NR	U	NR	NR	NR	U	U	U	NR	U	NR	NR	NR	NR	U	U	U	U	U	U	NR	NR	U
Chloroform	7	NR	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
Chloromethane	NA	NR	NR	NR	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
Cyclohexane	NA	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dibromochloromethane	50	NR	NR	NR	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
1,2-Dibromo-3-chloropropane	0.04	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dibromoethane	5	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichlorobenzene	3	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	NR	U	U	U	U	NR	NR	NR	NR	U	U	U	U	U	U	U	U	U	NR
1,3-Dichlorobenzene	3	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	NR	U	U	U	U	NR	NR	NR	NR	U	U	U	U	U	U	U	U	U	NR
1,4-Dichlorobenzene	3	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	NR	U	U	U	U	NR	NR	NR	NR	U	U	U	U	U	U	U	U	U	NR
Dichlorodifluoromethane	5	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	8.3	1 J	U	1.7 J	4.7 JD	17 JD	12 JD	18 JD	2.5 J	7.4 D	19	8.6
1,2-Dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0.59	0.34 J	
cis-1,2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0.29 J	U	5.5	44	5	11	10	U	510 D	240 D	410 D	41	101 D	60	53
trans-1,2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0.42 J	0.52 J	
1,2-Dichloropropane	1	NR	NR	NR	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	0.4	NR	NR	NR	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	0.4	NR	NR	NR	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
Diethyl Ether	NA	U	U	U	NR	NR	NR	NR	NR	NR	NR	U	U	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethylbenzene	5	NR	NR	NR	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	U	U	U
Ethyl Chloride	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U
2-Hexanone	50	NR	NR	NR	U	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR
Isopropylbenzene	5	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Acetate	NA	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylcyclohexane	NA	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylene chloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-Methyl-2-pentanone	NA	NR	NR	NR	U	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR
Methyl tert-butyl Ether	10	NR	NR	NR	U	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	U	NR	NR	NR	NR					

Table 2
Groundwater Analytical Results -
Volatile Organic Compounds
Northeast Alloys and Metals Site
Site No. 633045
Utica, New York

Sample ID		MW-9														MW-10								MW-11										
Sampling Date		May-05	Oct-05	Aug-07	Oct-11	Jul-13	Aug-14	Aug-14	Mar-15	Mar-15	Jun-15	Sep-15	Sep-17	Dec-18	Jun-21	May-05	Oct-05	Aug-07	Oct-11	Jul-13	Sep-15	Sep-17	Dec-18	Jun-21	May-05	Oct-05	Aug-07	Oct-11	Jul-13	Sep-15	Sep-17	Dec-18	Jun-21	
Analyte (µg/L)	AWQS+GV*	Dup							Dup																									
Acetone	50 (GV)	U	U	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	3.3 J	NR	NR	U	U	NR	NR	NR	U	NR	NR	U	U	U	U	NR	NR	NR	NR	NR	
Acrolein	5	NR	NR	NR	U	U	U	U	U	U	U	U	U	NR	NR	U	NR	NR	NR	U	U	U	NR	NR	U	NR	NR	NR	U	U	U	NR	NR	U
Acrylonitrile	5	NR	NR	NR	U	U	U	U	U	U	U	U	U	NR	NR	U	NR	NR	NR	U	U	U	NR	NR	U	NR	NR	NR	U	U	U	NR	NR	U
Benzene	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Bromochloromethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Bromodichloromethane	50	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	
Bromoform	50	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	
Bromomethane	5	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	
2-Butanone	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
tert-Butyl Alcohol	NA	19	U	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	U	U	NR	NR	NR	NR	NR	NR	
Carbon disulfide	60 (GV)	U	U	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	U	U	NR	NR	NR	U	NR	NR	0.3 J	U	U	NR	NR	NR	NR	U	NR	NR
Carbon tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Chlorobenzene	5	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	
Chloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	U	U	NR	
2-Chloroethyl vinyl ether	NA	NR	NR	NR	U	U	U	U	U	U	U	U	NR	NR	U	NR	NR	NR	U	U	U	NR	NR	U	NR	NR	NR	U	U	U	NR	NR	U	
Chloroform	7	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	
Chloromethane	NA	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	
Cyclohexane	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Dibromochloromethane	50	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	
1,2-Dibromo-3-chloropropane	0.04	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
1,2-Dibromoethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
1,2-Dichlorobenzene	3	NR	NR	NR	U	U	U	U	U	U	U	U	U	NR	NR	NR	NR	U	U	U	U	NR	NR	NR	NR	NR	NR	U	U	U	U	U	NR	
1,3-Dichlorobenzene	3	NR	NR	NR	U	U	U	U	U	U	U	U	U	NR	NR	NR	NR	U	U	U	U	U	NR	NR	NR	NR	U	U	U	U	U	U	NR	
1,4-Dichlorobenzene	3	NR	NR	NR	U	U	U	U	U	U	U	U	U	NR	NR	NR	NR	U	U	U	U	U	NR	NR	NR	NR	U	U	U	U	U	U	NR	
Dichlorodifluoromethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
1,1-Dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U		
1,2-Dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U		
1,1-Dichloroethene	5	0.3 J	0.3 J	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
cis-1,2-Dichloroethene	5	32	34 D	21 D	34	16	18	18	3.1 J	2.9 J	24	7.5	7	13	9.4	0.78 J	U	U	U	U	U	U	U	U	0.3 J	U	0.4 J	U	U	U	U	0.46 J	U	U
trans-1,2-Dichloroethene	5	4	3.1	8.8	3.3 J	U	1.3 J	1.1 J	U	U	1.6 J	U	0.8 J	0.88	0.71 J	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-Dichloropropane	1	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	
cis-1,3-Dichloropropene	0.4	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	
trans-1,3-Dichloropropene	0.4	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	
Diethyl Ether	NA	U	U	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	U	U	NR	NR	NR	NR	NR	NR	
Ethylbenzene	5	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	NR	NR	NR	U	U	U	U	U	U	U	
Ethyl Chloride	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	U
2-Hexanone	50	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Isopropylbenzene	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Methyl Acetate	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylcyclohexane	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylene chloride	5	U	0.4 J	0.3 J	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-Methyl-2-pentanone	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR>						

Table 2
Groundwater Analytical Results -
Volatile Organic Compounds
Northeast Alloys and Metals Site
Site No. 633045
Utica, New York

Sample ID		MW-12									MW-13						MW-14						MW-15										
Sampling Date		May-05	Oct-05	Aug-07	Oct-11	Jul-13	Sep-15	Sep-17	Dec-18	Jun-21	Oct-08	Oct-11	Jul-13	Sep-15	Sep-17	Dec-18	Jun-21	Oct-08	Oct-11	Jul-13	Sep-15	Sep-17	Dec-18	Jun-21	Jul-13	Aug-14	Mar-15	Jun-15	Sep-15	Sep-17	Dec-18	Jun-21	
Analyte (µg/L)	AWQS+GV*																																
Acetone	50 (GV)	U	U	5.7	NR	NR	NR	U	NR	NR	U	NR	NR	NR	1.6 J	NR	NR	21	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	
Acrolein	5	NR	NR	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	U	U	U	U	U	NR	NR	U	
Acrylonitrile	5	NR	NR	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	U	U	U	U	U	NR	NR	U	
Benzene	1	0.8 J	1.0	1.0	1.1 J	U	U	0.9 J	1.0	U	U	0.61 J	U	U	U	U	U	7.5	6.6	8	2 J	6.2 D	12	6.2	U	U	U	U	U	U	U	U	
Bromochloromethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Bromodichloromethane	50	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Bromoform	50	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	U	U	ND	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Bromomethane	5	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
2-Butanone	NA	NR	NR	NR	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
tert-Butyl Alcohol	NA	16	U	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Carbon disulfide	60 (GV)	U	U	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	3.6 JD	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR
Carbon tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Chlorobenzene	5	NR	NR	NR	U	U	U	U	U	U	U	1.7 J	U	U	0.5 J	0.29 J	U	U	3.2 J	13	U	6 D	6.7 J	17	U	U	U	U	U	U	U	U	
Chloroethane	5	U	U	U	U	U	U	U	U	NR	U	U	U	U	U	NR	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	U	NR	
2-Chloroethyl vinyl ether	NA	NR	NR	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	NR	U	U	U	NR	NR	U	U	U	U	U	U	NR	NR	U	
Chloroform	7	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0.3 J	U	U	
Chloromethane	NA	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Cyclohexane	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dibromochloromethane	50	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-Dibromo-3-chloropropane	0.04	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dibromoethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichlorobenzene	3	NR	NR	NR	U	U	U	U	U	NR	U	2.7 J	U	2 J	1.1	0.45 J	NR	6.1	4.1 J	7	1.4 J	6.4 D	11	NR	U	U	U	U	U	U	U	NR	
1,3-Dichlorobenzene	3	NR	NR	NR	U	U	U	U	U	NR	U	U	U	U	U	NR	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	U	NR	
1,4-Dichlorobenzene	3	NR	NR	NR	U	U	U	U	U	NR	U	U	U	U	U	NR	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	U	NR	
Dichlorodifluoromethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	12.9	4.4	5.4	
1,2-Dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,1-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	40 J	20.8	4.8	6.8
cis-1,2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	5,900 D	3,100 D	2,300 D	1,200 D	4,400 D	1,640 D	480	870	
trans-1,2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	19.2	3.5	5.3	
1,2-Dichloropropane	1	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
cis-1,3-Dichloropropene	0.4	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
trans-1,3-Dichloropropene	0.4	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Diethyl Ether	NA	4.1	5.6	5.2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethylbenzene	5	NR	NR	NR	U	U	U	U	U	U	U	U	U	U	U	U	U	22	16	21	4.4 J	12.2 D	25	19	U	U	U	U	U	U	U	U	
Ethyl Chloride	NA	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	U
2-Hexanone	50	NR	NR	NR	NR	NR	NR	U	NR	NR	U	NR	NR	NR	U	NR	NR	U	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Isopropylbenzene	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	13	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Acetate	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	22	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylcyclohexane	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylene chloride	5	U	0.5 JB	0.3 J	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-Methyl-2-pentanone	NA	NR	NR																														

Table 2
Groundwater Analytical Results -
Volatile Organic Compounds
Northeast Alloys and Metals Site
Site No. 633045
Utica, New York

Sample ID		MW-16								MW-17								MW-18							
Sampling Date		Jul-13	Aug-14	Mar-15	Jun-15	Sep-15	Sep-17	Dec-18	Jun-21	Jul-13	Aug-14	Mar-15	Jun-15	Sep-15	Sep-17	Dec-18	Jun-21	Jul-13	Aug-14	Mar-15	Jun-15	Sep-15	Sep-17	Dec-18	Jun-21
Analyte (µg/L)	AWQS+GV*																								
Acetone	50 (GV)	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR
Acrolein	5	U	U	U	U	U	NR	NR	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U	NR	NR	U
Acrylonitrile	5	U	U	U	U	U	NR	NR	U	U	U	U	U	U	NR	NR	U	U	U	U	U	U	NR	NR	U
Benzene	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromochloromethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Bromodichloromethane	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromoform	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Butanone	NA	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR
tert-Butyl Alcohol	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Carbon disulfide	60 (GV)	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	NR	U	NR	NR
Carbon tetrachloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	5	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR
2-Chloroethyl vinyl ether	NA	U	U	U	U	U	NR	NR	U	U	U	U	U	NR	NR	U	U	U	U	U	U	U	NR	NR	U
Chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloromethane	NA	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Cyclohexane	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dibromochloromethane	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromo-3-chloropropane	0.04	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dibromoethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2-Dichlorobenzene	3	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR
1,3-Dichlorobenzene	3	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR
1,4-Dichlorobenzene	3	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR	U	U	U	U	U	U	U	NR
Dichlorodifluoromethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1-Dichloroethane	5	U	U	12 JD	9.1 JD	U	6.6 JD	7.9 J	14	U	26,000 D	U	U	U	U	U	U	U	U	U	U	U	4 JD	3.1	3.0
1,2-Dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5	U	U	U	6.4 JD	13 JD	U	11	26	U	U	U	430 JD	U	830 D	620	520	U	U	U	U	U	8 JD	U	0.90
cis-1,2-Dichloroethene	5	3,000 D	4,300 D	1,500 D	1,300 D	2,200 D	430 D	1,400	3,500	120,000 D	100,000 D	64,000 D	72,000 D	70,000 D	115,000 D	85,000	73,000	7,700 D	2,700 D	3,800 D	5,700 D	1,600 D	118 D	150	180
trans-1,2-Dichloroethene	5	U	U	U	U	U	U	U	17	U	U	U	U	U	235 JD	150 J	180 J	U	16 JD	U	37 JD	12 JD	U	1.2	1.1
1,2-Dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	0.4	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	0.4	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Diethyl Ether	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethylbenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ethyl Chloride	NA	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U
2-Hexanone	50	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR
Isopropylbenzene	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methyl Acetate	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylcyclohexane	NA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylene chloride	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	NA	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR
Methyl tert-butyl Ether	10	NR	NR	NR	NR	NR	U	U	NR	NR	NR	NR	NR	NR	U	U	NR	NR	NR	NR	NR	NR	U	U	NR
Styrene	5	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR	NR	NR	NR	NR	NR	U	NR	NR
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Toluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,3-Trichlorobenzene	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,2,4-Trichlorobenzene	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
1,1,1-Trichloroethane	5	U	U	U	U	U	U	U	5.8 J	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	5	1,200 D	32 JD	100 D	65 D	980 D	213 D	1,100	950	130,000 D	50,000 D	34,000 D	43,000 D	47,000 D	96,700 D	88,000	70,000	790 D	U	U	U	U	U	0.55	2.4
Trichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichlorotrifluoroethane	5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Vinyl chloride	2	130 D	190 JD	490 D	340 D	330 D	179 D	130	270	3,300 JD	1,800 JD	2,500 JD	2,800 JD	2,300 JD	5,030 D	2,800	2,000	790 D	400 D	2,900 D	3,300 D	1,400 D	277 D	170	97
m&p-Xylenes	10	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
o-Xylene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

Notes:
All data presented in micrograms per liter (µg/L).
Volatile Organic Compounds (VOCs) analysis by EPA Method 624.
AWQS - New York State Ambient Water Quality Standards (TOGs 1.1.1); GV - guidance value.
U - Analyte included in the analysis, but not detected at or above the Method Detection Limit (MDL).
J - Detected above the MDL but below the Reporting Limit (RL); therefore, result is an estimated concentration.
D - Data reported from a dilution.
NA - No standard or guidance value exists for the analyte.
NR - Not reported.
BOLD font in shaded cell indicates exceedances of AWQS or GV.
Columns separated with a double line indicate pre- and post-sodium injection sampling events.

Table 3
Groundwater Analytical Results – Emerging Contaminants
Northeast Alloys and Metals Site
Site No. 633045
Utica, New York

Analyte	NYSDOH MCL ¹	Monitoring Well/Sample ID										
		BR-1		BR-2	BR-3	MW-1		MW-3	MW-4	MW-5		
		6/23/2021	6/23/2021	6/23/2021	6/21/2021	12/12/2018	6/22/2021	6/22/2021	6/23/2021	12/12/2018	12/12/2018	6/23/2021
Semivolatile Organic Compounds (µg/L)			DUP								DUP	
1,4-Dioxane	1	ND	ND	ND	ND	ND	ND	ND	ND	4.0	4.0	1.1
Fluorinated Alkyl Substances (ng/L)												
Perfluorooctanoic acid (PFOA)	10	3.2	ND	ND	ND	ND	ND	ND	2.8	9.6 J	94 J	2.1
Perfluorooctanesulfonic acid (PFOS)	10	0.60 J	ND	0.41 J	ND	ND	ND	0.40 J	0.77 J	10 J	21 J	0.50 J
Perfluorobutanoic acid (PFBA)	--	7.2	ND	2.1 J	ND	ND	1.2 J	1.2 J	7.6	ND	12 J	1.7 J
Perfluoropentanoic acid (PFPeA)	--	0.76 J	ND	ND	ND	2.5 J	ND	ND	2.4	ND	47 J	1.1 J
Perfluorohexanoic acid (PFHxA)	--	1.7 J	ND	ND	ND	ND	ND	ND	1.9 J	ND	45 J	ND
Perfluoroheptanoic acid (PFHpA)	--	0.86 J	ND	0.24 J	ND	ND	ND	0.26 J I	2.0	ND	18 J	0.29 J
Perfluorononanoic acid (PFNA)	--	0.37 J	ND	0.28 J	ND	ND	ND	ND	0.30 J	ND	4.1 J	ND
Perfluorodecanoic acid (PFDA)	--	0.88 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTriA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	--	2.8	ND	0.29 J	ND	ND	0.31 J	0.32 J I	1.2 J	3.1 J	13 J	0.38 J
Perfluorohexanesulfonic acid (PFHxS)	--	0.38 J	ND	0.34 J	ND	ND	ND	0.30 J	0.66 J	2.7 J	10 J	0.47 J
Perfluoroheptanesulfonic acid (PFHpS)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanesulfonic acid (PFDS)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctane sulfonamide (FOSA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	--	12	2.6 J	ND	1.2 J	ND	ND	ND	ND	6.6 J	ND	ND
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

¹ New York State Department of Health (NYSDOH) Maximum Contaminant Level (MCL)

µg/L - micrograms per liter

ng/L - nanograms per liter

ND - Not detected at the reporting limit

NS - Not sampled

Detected concentrations are in bold font

Results greater than or equal to the NYSDOH MCL are shaded in gray

J - The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

I - Value is EMPC (estimated maximum possible concentration).

*+ - LCS and/or LCSD is outside acceptance limits, high biased.

Table 3
Groundwater Analytical Results – Emerging Contaminants
Northeast Alloys and Metals Site
Site No. 633045
Utica, New York

Analyte	NYSDOH MCL ¹	Monitoring Well/Sample ID									
		MW-6	MW-7R	MW-8	MW-9	MW-10	MW-11	MW-12		MW-13	MW-14
		6/23/2021	6/22/2021	6/22/2021	6/22/2021	6/22/2021	6/23/2021	12/12/2018	6/23/2021	6/22/2021	6/24/2021
Semivolatile Organic Compounds (µg/L)											
1,4-Dioxane	1	6.6	ND	ND	ND	0.36	ND	ND	0.019 J	ND	ND
Fluorinated Alkyl Substances (ng/L)											
Perfluorooctanoic acid (PFOA)	10	5.5	0.55 J	0.58 J	1.0 J	1.3 J	ND	3.1	2.2	1.9 J	4.6
Perfluorooctanesulfonic acid (PFOS)	10	1.3 J	1.0 J	0.97 J	0.58 J	0.87 J	0.30 J	ND	1.1 J	1.7 J I	0.67 J I
Perfluorobutanoic acid (PFBA)	--	3.7 J	1.7 J	3.7 J	2.5 J	1.3 J	1.2 J	3.3	8.4	ND	7.0
Perfluoropentanoic acid (PFPeA)	--	1.2 J	ND	0.54 J	ND	0.99 J	ND	ND	1.2 J	ND	ND
Perfluorohexanoic acid (PFHxA)	--	1.5 J	ND	0.75 J	ND	0.83 J	ND	ND	1.7 J	ND	ND
Perfluoroheptanoic acid (PFHpA)	--	0.91 J	0.26 J I	0.73 J	0.37 J	0.65 J	ND	ND	0.86 J	0.51 J I	0.74 J I
Perfluorononanoic acid (PFNA)	--	ND	ND	0.69 J	ND	ND	ND	ND	0.38 J	0.42 J	0.28 J
Perfluorodecanoic acid (PFDA)	--	ND	ND	0.48 J	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	--	ND	ND	0.45 J*+	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTriA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	--	0.85 J	0.37 J	0.30 J	0.41 J	0.62 J I	ND	3.6	0.80 J	0.77 J I	0.46 J
Perfluorohexanesulfonic acid (PFHxS)	--	0.52 J	ND	0.32 J	0.40 J	0.60 J	ND	4.8	0.46 J	0.65 J	0.86 J
Perfluoroheptanesulfonic acid (PFHpS)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanesulfonic acid (PFDS)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctane sulfonamide (FOSA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	--	ND	ND	ND	ND	13	ND	5.6	ND	ND	ND
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

¹ New York State Department of Health (NYSDOH) Maximum Contaminant Level (MCL)

µg/L - micrograms per liter

ng/L - nanograms per liter

ND - Not detected at the reporting limit

NS - Not sampled

Detected concentrations are in bold font

Results greater than or equal to the NYSDOH MCL are shaded in gray

J - The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

I - Value is EMPC (estimated maximum possible concentration).

*+ - LCS and/or LCSD is outside acceptance limits, high biased.

Table 3
Groundwater Analytical Results – Emerging Contaminants
Northeast Alloys and Metals Site
Site No. 633045
Utica, New York

Analyte	NYSDOH MCL ¹	Monitoring Well/Sample ID									
		MW-15		MW-16	MW-17	MW-18		Field Blank		Equipment Blank	
		12/12/2018	6/24/2021	6/24/2021	6/24/2021	12/12/2018	6/23/2021	12/12/2018	6/23/2021	12/12/2018	6/23/2021
Semivolatile Organic Compounds (µg/L)											
1,4-Dioxane	1	0.56	0.92	1.0	ND	ND	0.074 J	NS	ND	NS	NS
Fluorinated Alkyl Substances (ng/L)											
Perfluorooctanoic acid (PFOA)	10	2.6	1.1 J	1.3 J	5.5	79	5.2	ND	ND	ND	ND
Perfluorooctanesulfonic acid (PFOS)	10	ND	0.31 J	1.1 J	20	20	14	ND	ND	ND	ND
Perfluorobutanoic acid (PFBA)	--	ND	3.3 J	3.2 J	14	2.9	11	ND	ND	ND	ND
Perfluoropentanoic acid (PFPeA)	--	ND	0.48 J	0.75 J	1.5 J	9.8 J	0.81 J	ND	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	--	2.6	0.64 J	0.70 J	2.8	11	2.5 I	ND	ND	ND	ND
Perfluoroheptanoic acid (PFHpA)	--	ND	0.48 J	0.45 J	1.5 J	12	1.2 J	ND	ND	ND	ND
Perfluorononanoic acid (PFNA)	--	ND	ND	0.41 J I	0.88 J	4.4 J	1.2 J I	ND	ND	ND	ND
Perfluorodecanoic acid (PFDA)	--	ND	ND	ND	0.31 J	ND	0.37 J	ND	ND	ND	ND
Perfluoroundecanoic acid (PFUnA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic acid (PFDoA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid (PFTriA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid (PFTeA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	--	ND	ND	ND	0.49 J	11	1.1 J	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	--	ND	ND	ND	0.72 J	5.4	1.2 J	ND	ND	ND	ND
Perfluoroheptanesulfonic acid (PFHpS)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorodecanesulfonic acid (PFDS)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctane sulfonamide (FOSA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	--	110	1.1 J	ND	ND	ND	ND	ND	ND	ND	ND
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

¹ New York State Department of Health (NYSDOH) Maximum Contaminant Level (MCL)

µg/L - micrograms per liter

ng/L - nanograms per liter

ND - Not detected at the reporting limit

NS - Not sampled

Detected concentrations are in bold font

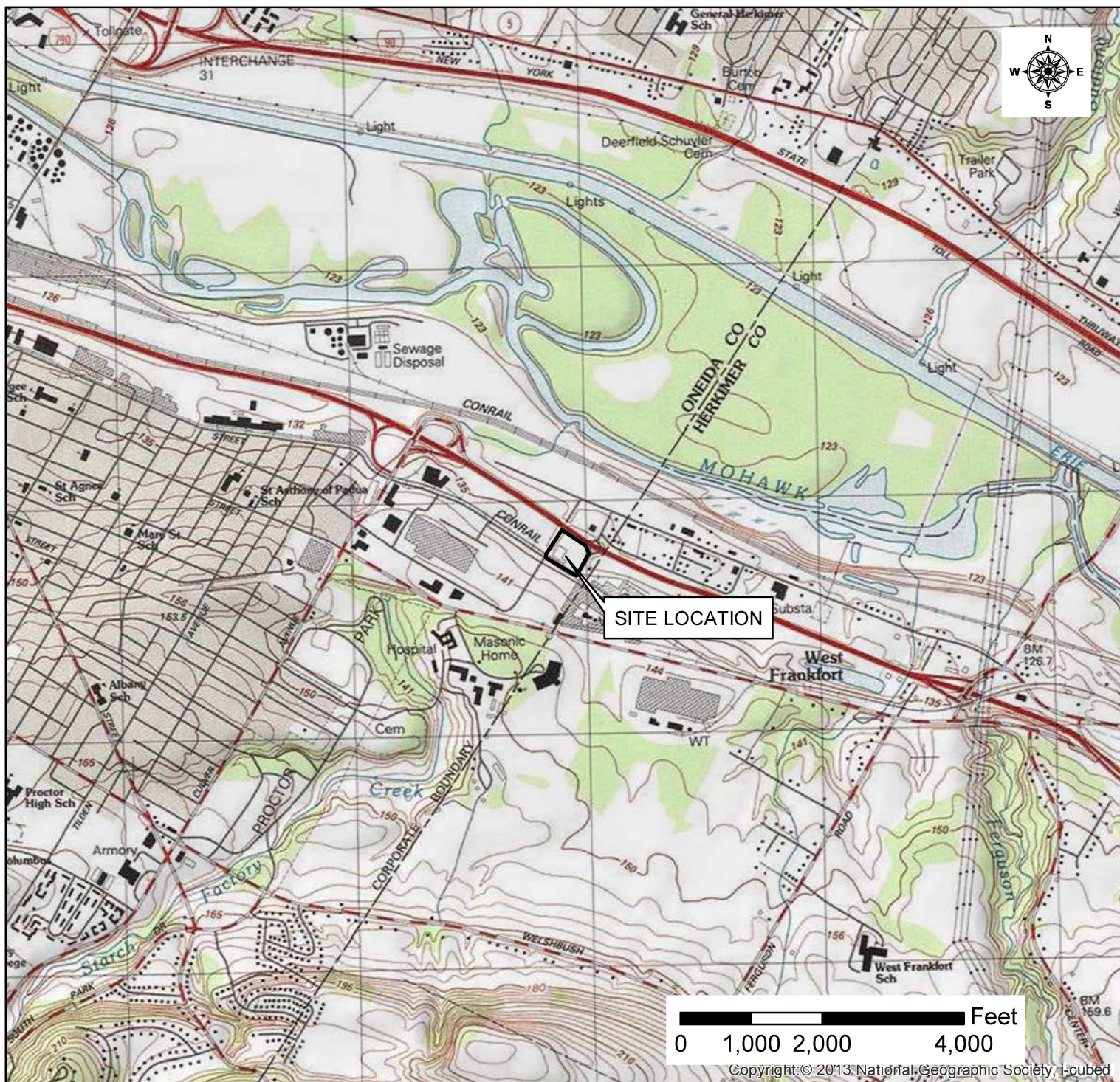
Results greater than or equal to the NYSDOH MCL are shaded in gray

J - The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

I - Value is EMPC (estimated maximum possible concentration).

*+ - LCS and/or LCSD is outside acceptance limits, high biased.

Figures



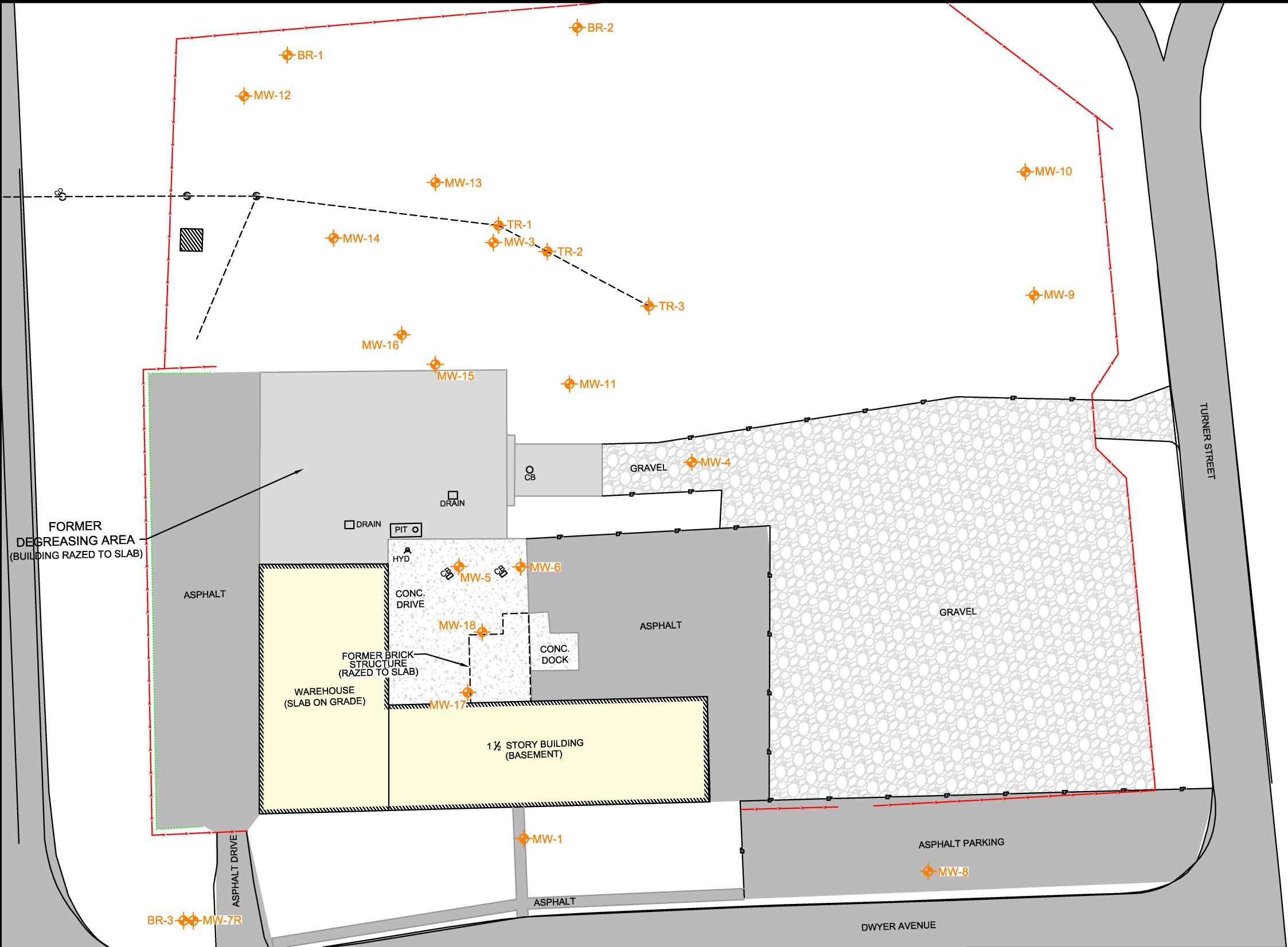
AECOM

40 British American Blvd.
Latham, NY 12110
T: (518) 951-2200

FIGURE 1

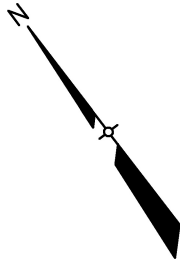
SITE LOCATION MAP

NORTHEAST ALLOYS AND METALS SITE
2145 DWYER AVENUE
UTICA, NEW YORK

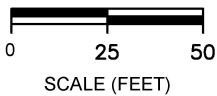


LEGEND

- MW-15 MONITORING WELL LOCATION (SURVEYED MAY 2015)
- FENCE
- BUILDING
- PAVEMENT
- GRAVEL



PLAN



AECOM

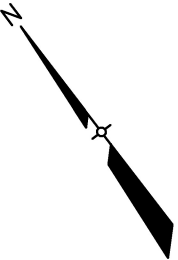
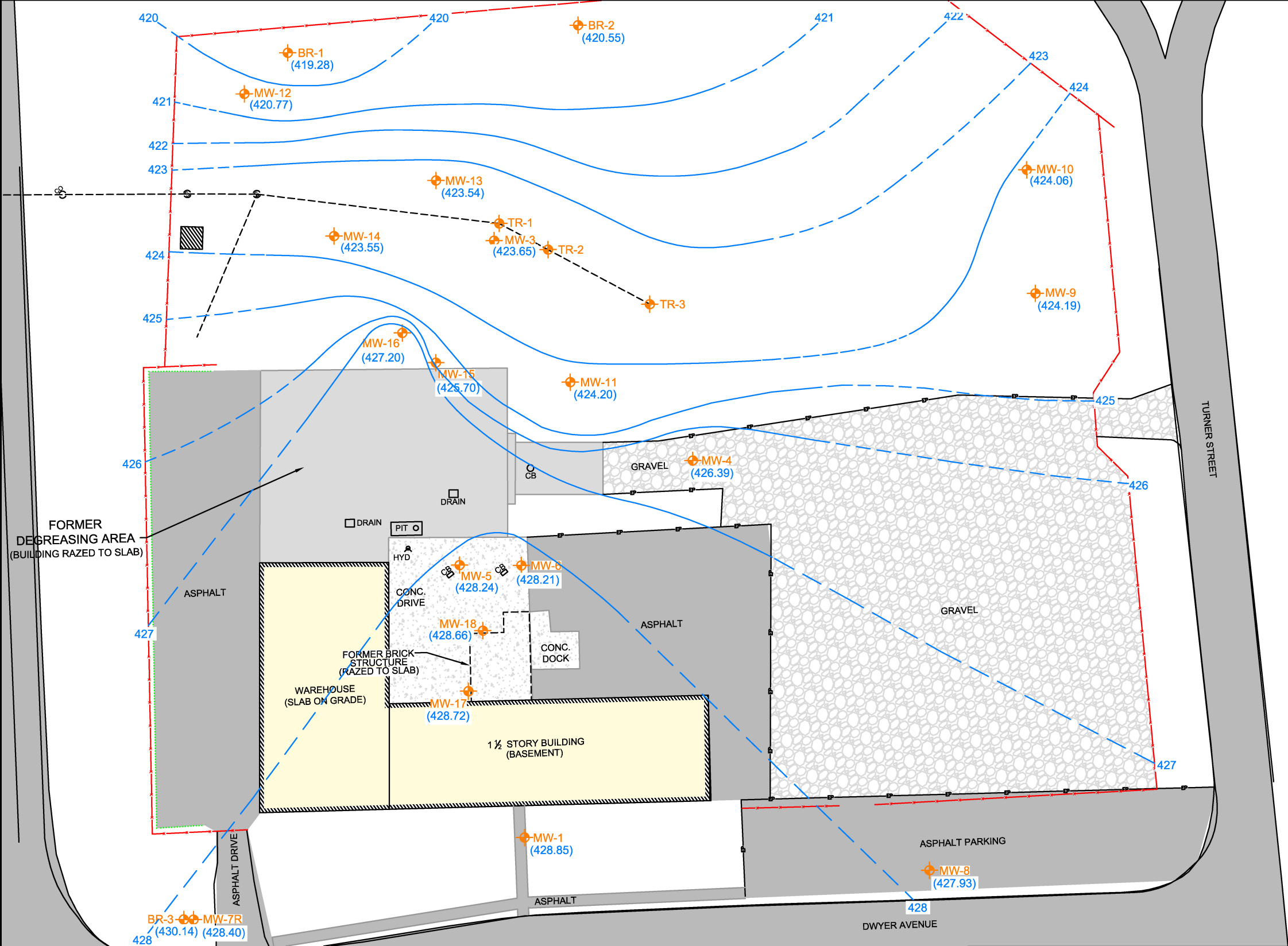
PROJ. NO: 60632323
DATE: AUGUST-2023
DRAWN: CLS
APPROVED: LMM

SHEET TITLE: SITE PLAN AND MONITORING WELL LOCATIONS

PROJECT: NORTHEAST ALLOYS AND METALS SITE
NYSDEC SITE 633045
CITY OF UTICA
ONEIDA COUNTY, NEW YORK

Drawing Reference:
1) Drawing based on Bryant Associates Engineers • Surveyors • Construction Managers, 108 W. Jefferson St., Suite 400, Syracuse, NY, 2014.
2) A field survey performed by Earthtech/AECOM, October 7, 2008.
3) Surveyed Well Locations performed by AECOM, May 2015.

FIGURE
2



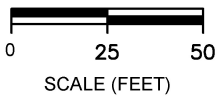
LEGEND

- MW-15 MONITORING WELL LOCATION (SURVEYED MAY 2015)
- FENCE
- BUILDING
- PAVEMENT
- GRAVEL
- 425 APPROXIMATE GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- 430.14 GROUNDWATER ELEVATION

NOTES

- CONTOUR INTERVAL = 1 FOOT.
- GROUNDWATER ELEVATION GAUGED 06/21/2021.

PLAN



PROJ. NO: 60632323
DATE: AUGUST-2023
DRAWN: CLS
APPROVED: LMM

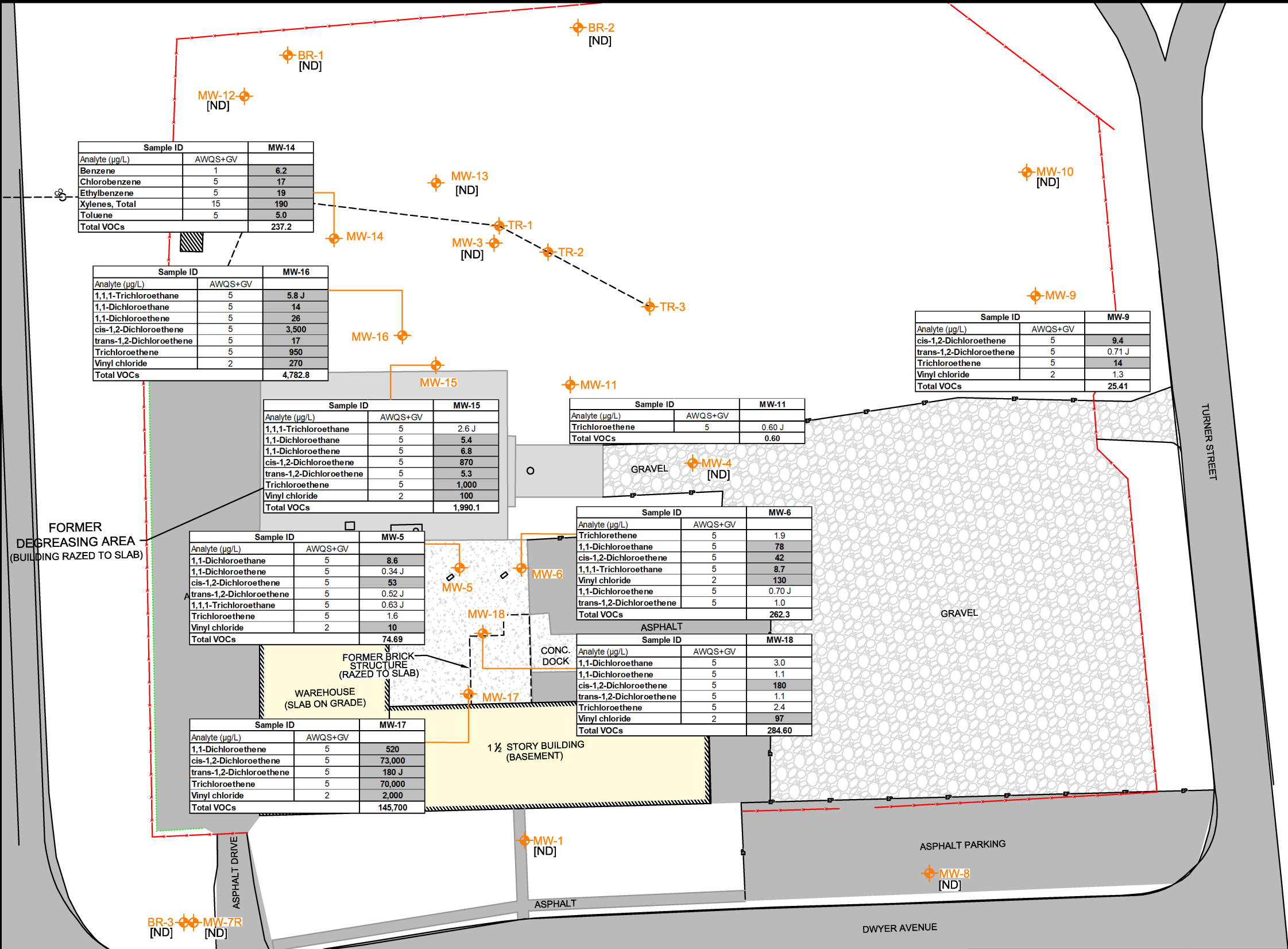


AECOM

SHEET TITLE: SHALLOW MONITORING WELL GROUNDWATER CONTOUR MAP
PROJECT: NORTHEAST ALLOYS AND METALS SITE
NYSDEC SITE 633045
CITY OF UTICA
ONEIDA COUNTY, NEW YORK

Drawing Reference:
1) Drawing based on Bryant Associates Engineers • Surveyors • Construction Managers, 108 W. Jefferson St., Suite 400, Syracuse, NY, 2014.
2) A field survey performed by Earthtech/AECOM, October 7, 2008.
3) Surveyed Well Locations performed by AECOM, May 2015.

FIGURE
3



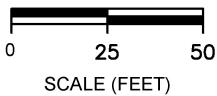
LEGEND

- MW-15 MONITORING WELL LOCATION (SURVEYED MAY 2015)
- FENCE
- BUILDING
- PAVEMENT
- GRAVEL

NOTES

- [ND] = NO ANALYTES DETECTED GREATER THAN METHOD DETECTION LIMITS.
- BOLD FONT WITH SHADED CELL INDICATES EXCEEDANCES OF AMBIENT WATER QUALITY STANDARDS AND/OR GUIDANCE VALUES.**
- J = DETECTED BUT BELOW THE REPORTING LIMIT (LOWEST CALIBRATION STANDARD); THEREFORE, RESULT IS AN ESTIMATED CONCENTRATION.
- AWQS+GV = NEW YORK STATE AMBIENT WATER QUALITY STANDARDS (TOGs 1.1:1) AND GUIDANCE VALUES.
- µg/L - MICROGRAMS PER LITER

PLAN



PROJ. NO: 60632323
DATE: AUGUST-2023
DRAWN: CLS
APPROVED: LMM



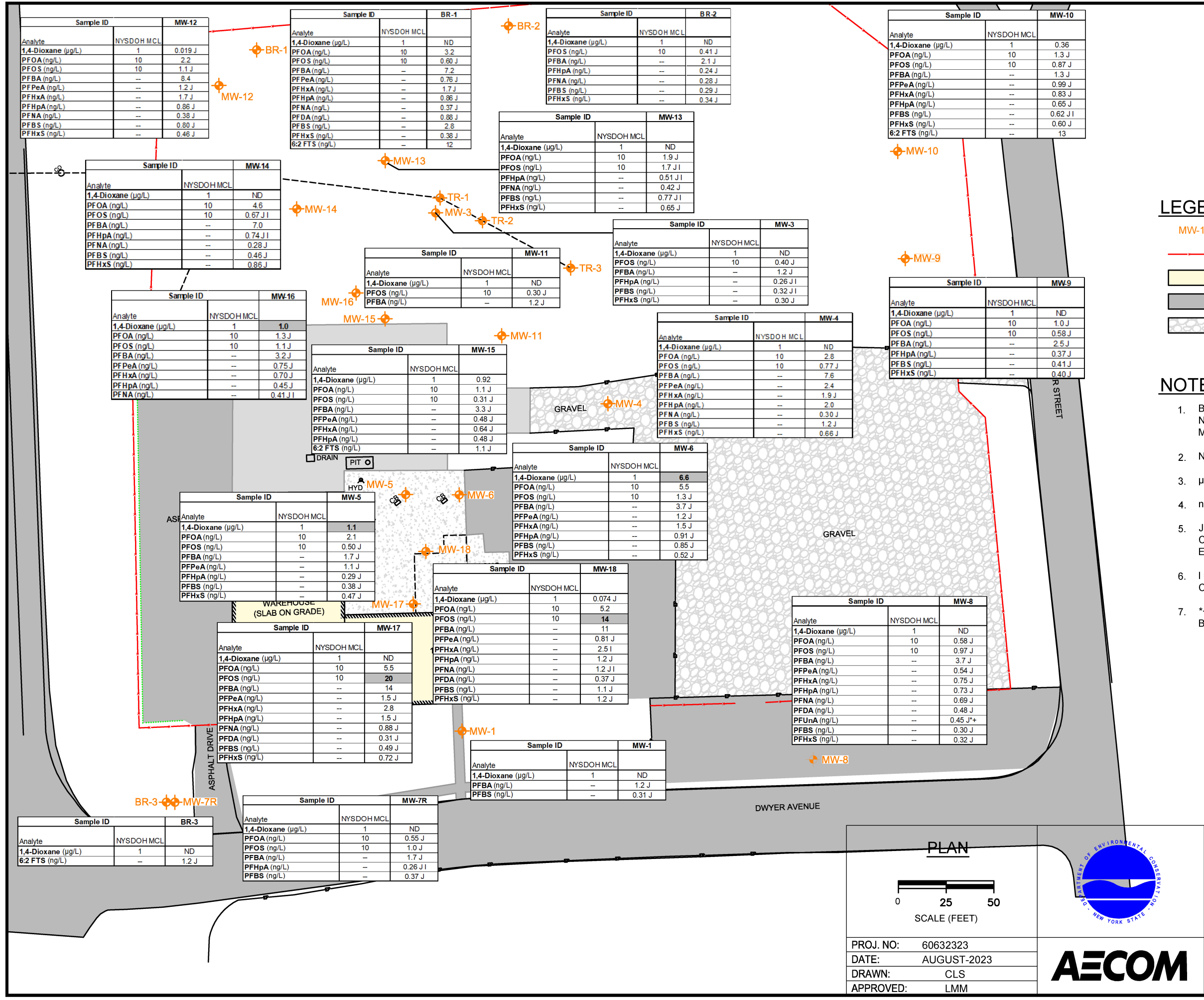
AECOM

SHEET TITLE: TOTAL VOCs IN GROUNDWATER
JUNE 21-24, 2021

PROJECT: NORTHEAST ALLOYS AND METALS SITE
NYSDEC SITE 633045
CITY OF UTICA
ONEIDA COUNTY, NEW YORK

Drawing Reference:
1) Drawing based on Bryant Associates Engineers • Surveyors • Construction Managers, 108 W. Jefferson St., Suite 400, Syracuse, NY, 2014.
2) A field survey performed by Earthtech/AECOM, October 7, 2008.
3) Surveyed Well Locations performed by AECOM, May 2015.

FIGURE
4



LEGEND

MW-15 MONITORING WELL LOCATION (SURVEYED MAY 2015)

- FENCE
- BUILDING
- PAVEMENT
- GRAVEL

NOTES

- BOLD FONT WITH SHADED CELL INDICATES EXCEEDANCE OF NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH) MAXIMUM CONTAMINANT LEVEL.
- ND - NOT DETECTED
- µg/L - MICROGRAMS PER LITER
- ng/L - NANOGRAMS PER LITER
- J = DETECTED BUT BELOW THE REPORTING LIMIT (LOWEST CALIBRATION STANDARD); THEREFORE, RESULT IS AN ESTIMATED CONCENTRATION.
- I = VALUE IS EMPC (ESTIMATED MAXIMUM POSSIBLE CONCENTRATION).
- *+ = LCS AND/OR LCSD IS OUTSIDE ACCEPTANCE LIMITS, HIGH BIASED.

SHEET TITLE: EMERGING CONTAMINANTS IN GROUNDWATER - JUNE 21-24, 2021

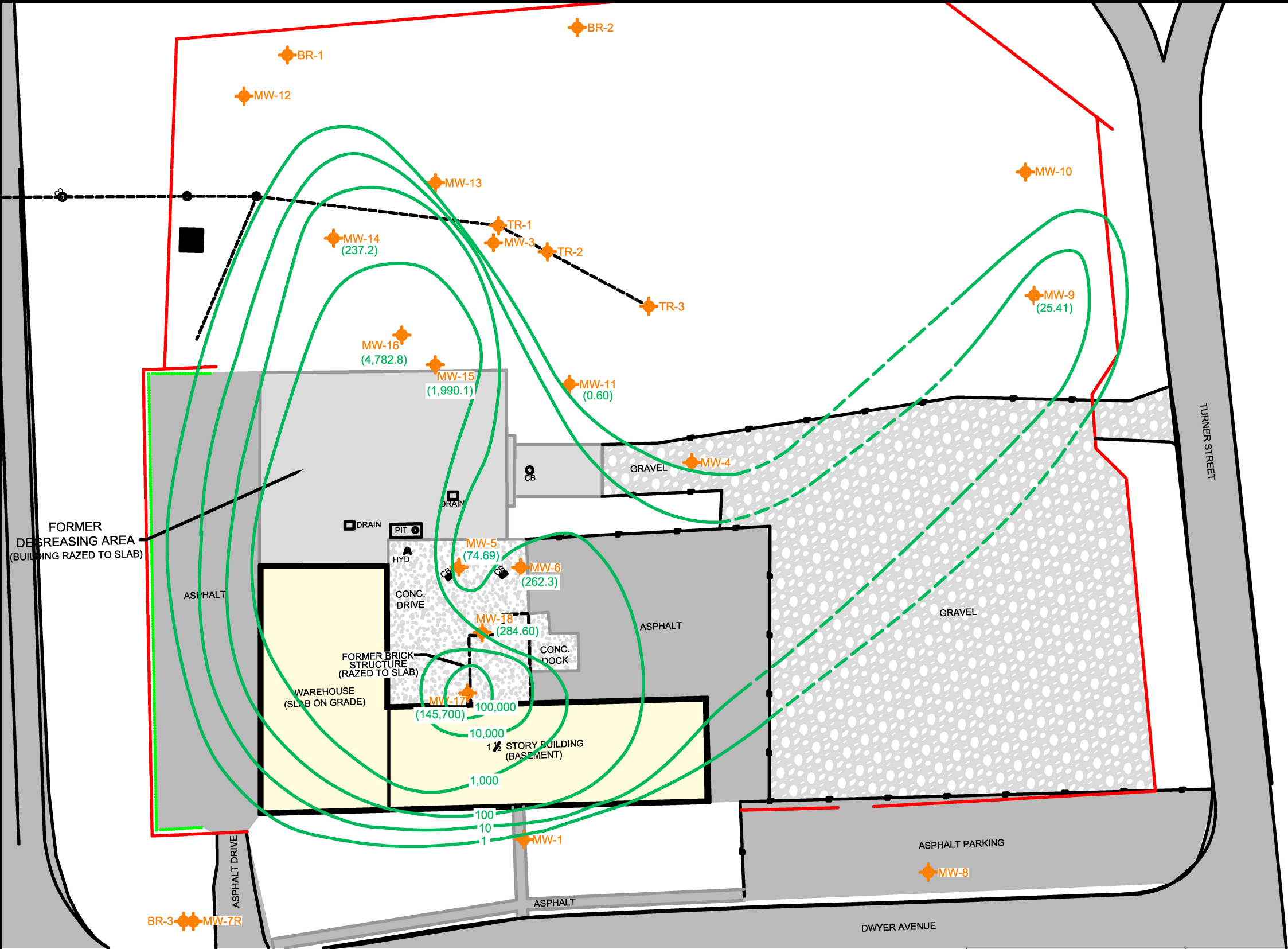
PROJECT: NORTHEAST ALLOYS AND METALS SITE
NYSDEC SITE 633045
CITY OF UTICA
ONEIDA COUNTY, NEW YORK

Drawing Reference:
1) Drawing based on Bryant Associates Engineers • Surveyors • Construction Managers, 108 W. Jefferson St., Suite 400, Syracuse, NY, 2014.
2) A field survey performed by Earthtech/AECOM, October 7, 2008.
3) Surveyed Well Locations performed by AECOM, May 2015.

FIGURE
5

PROJ. NO: 60632323
DATE: AUGUST-2023
DRAWN: CLS
APPROVED: LMM





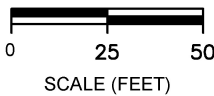
LEGEND

- MW-15 MONITORING WELL LOCATION (SURVEYED MAY 2015)
- FENCE
- BUILDING
- PAVEMENT
- GRAVEL
- 100 TOTAL VOC ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)
- (25.41) GROUNDWATER TOTAL VOC CONCENTRATION

NOTES

- RESULTS ARE PRESENTED IN MICROGRAMS PER LITER.

PLAN



PROJ. NO: 60632323
DATE: AUGUST-2023
DRAWN: CLS
APPROVED: LMM



AECOM

SHEET TITLE: TOTAL VOC ISOCONCENTRATIONS
JUNE 2021

PROJECT: NORTHEAST ALLOYS AND METALS SITE
NYSDEC SITE 633045
CITY OF UTICA
ONEIDA COUNTY, NEW YORK

Drawing Reference:
1) Drawing based on Bryant Associates Engineers • Surveyors • Construction
Managers, 108 W. Jefferson St., Suite 400, Syracuse, NY, 2014.
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3) Surveyed Well Locations performed by AECOM, May 2015.

FIGURE
6

Appendix A

Monitoring Well Purging/Sampling Forms

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

BR-1

Date:

6/23/21

Samplers:

Joe Braun

Sample Number:

BR-1 002321

QA/QC Collected?

yes

Purging / Sampling Method:

Peristaltic

1. L = Total Well Depth:

49.1 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

14.1 feet

4. C = Column of Water in Casing:

_____ feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

_____ gal

6. D2 = Pump Setting Depth (ft):

_____ feet

7. C2 = Column of water in Pump/Tubing (ft):

_____ feet

8. Tubing Volume = $C2(0.005737088)$

_____ gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & geotech turbidimeter YSI unit 6521

Parameter	Units	Readings ^{53.9}							
Time	24 hr	8:00	8:05	8:10	8:15	8:20	8:25	8:30	
Water Level (0.33)	feet	14.1	14.05	14.05	13.85	13.85	13.85		
Volume Purged	gal								
Flow Rate	mL / min	300	300	300	300	300	300	300	
Turbidity (+/- 10%)	NTU	86.9	49.8	64.7	53.9	57.1	54.7		
Dissolved Oxygen (+/- 10%)	%	6.1	2.3	2.0	3.1	3.9	4.9		
Dissolved Oxygen (+/- 10%)	mg/L	0.69	0.26	0.22	0.34	0.43	0.53		
Eh / ORP (+/- 10)	MeV	48.3	36.1	27.4	19.9	14.2	5.9		
Specific Conductivity	mS/cm ^c	—	—	—	—	—	—		
Conductivity (+/- 3%)	mS/cm	4181	4191	4192	4192	4195	4194		
pH (+/- 0.1)	pH unit	11.02	11.03	11.04	11.03	11.03	11.05		
Temp (+/- 0.5)	C	10.6	10.6	10.7	10.7	10.7	10.7		
Color	Visual	Cloudy	Clear	Clear	Clear	Clear	Clear		
Odor	Olfactory	N/A	N/A	N/A	N/A	N/A	N/A		

Comments:

Purge Start: 07:55

Purge end 8:25am

Samples: 08:35

Turbidity: 20 NTU → 18.7

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

BR-2

Date:

6/23/2021

Samplers:

Katie Tuttle

Sample Number:

BR-2062321

QA/QC Collected?

No

Purging / Sampling Method:

per peristaltic

1. L = Total Well Depth:

43.5 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

11.5 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI \$ turbidimeter

YSI unit 10288

Parameter	Units	Readings			
Time	24 hr	10:30	10:35	10:40	10:45
Water Level (0.33)	feet	11.5	12.35	12.35	12.35
Volume Purged	gal	0	~0.25	~0.75	~1.5
Flow Rate	mL / min	250	250	250	250
Turbidity (+/- 10%)	NTU	7.91	4.59	3.02	4.15
Dissolved Oxygen (+/- 10%)	%	0.6	0.2	-0.5	-0.8
Dissolved Oxygen (+/- 10%)	mg/L	0.72	0.02	-0.05	-0.09
Eh / ORP (+/- 10)	MeV	-113.8	-113.4	-113.0	-111.9
Specific Conductivity	mS/cm ^c	1.422	1.412	1.409	1.408
Conductivity (+/- 3%)	mS/cm	-	-	-	-
pH (+/- 0.1)	pH unit	6.97	6.83	6.78	6.74
Temp (+/- 0.5)	C	11.7	11.5	11.5	11.3
Color	Visual	clear	clear	clear	clear
Odor	Olfactory	none	none	none	none

Comments:

purge start time: 10:25
purge end time: 10:45

sample time 10:50

20 NTU std reads 18.8

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

BR-3

Date:

6/21/21

Samplers:

Joe Brown

Sample Number:

BR-3

QA/QC Collected?

NO

Purging / Sampling Method:

Peristaltic

1. L = Total Well Depth:

35.4 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

8.40 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI 3000 turbidimeter YSI unit 6088

Parameter	Units	Readings							
Time	24 hr	14:42	14:47	14:52	14:57	15:02	15:07	15:12	15:17
Water Level (0.33)	feet	8.58	8.80	8.74	8.80	8.8	8.72	8.79	8.74
Volume Purged	gal								
Flow Rate	mL / min	600	600	600	600	600	600	600	600
Turbidity (+/- 10%)	NTU	6.22	21.3	9.81	7.47	6.16	3.14	3.42	2.10
Dissolved Oxygen (+/- 10%)	%	9	-0.4	-1.1	-1.3	-1.6	-1.7	-1.9	-1.9
Dissolved Oxygen (+/- 10%)	mg/L	0.09	-0.04	-0.11	-0.14	-0.16	-0.18	-0.20	-0.20
Eh / ORP (+/- 10)	MeV	-167.9	-174.8	-190.2	-208.6	-232.3	-254	-264.4	-272.2
Specific Conductivity	mS/cm	1.792	1.806	1.814	1.816	1.816	1.816	1.819	1.815
Conductivity (+/- 3%)	mS/cm	1.792							
pH (+/- 0.1)	pH unit	7.01	6.98	6.93	6.87	6.88	6.91	6.87	6.85
Temp (+/- 0.5)	C	13.3	13.2	13.2	13.0	13.1	12.7	12.7	12.7
Color	Visual								
Odor	Olfactory								

Comments:

14:37 Start Purge, purge end 15:17

Sampler 15:20

Turbidity: 20 NTU reads 18.1 NTU

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

MW-1

Date:

6/22/21

Samplers:

Joe Braun

Sample Number:

MW-1

QA/QC Collected?

No

Purging / Sampling Method:

Peristaltic

1. L = Total Well Depth:

23.1 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

9.85 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & Geotech Turbidimeter YSI unit 6521

Parameter	Units	Readings							
Time	24 hr	8:35	8:40	8:45	8:50	8:55	9:00	9:05	9:10
Water Level (0.33)	feet	10.1	10.19	10.2	10.21	10.27	10.26	10.28	10.3
Volume Purged	gal								
Flow Rate	mL / min	300	300	300	300	300	300	300	300
Turbidity (+/- 10%)	NTU	11.4	10.8	10.8	10.3	10.0	9.6	9.4	11.8
Dissolved Oxygen (+/- 10%)	%	18.7	19.8	24.6	29.9	40.2	51.5	54.0	55.4
Dissolved Oxygen (+/- 10%)	mg/L	2.03	2.15	2.68	3.24	4.34	5.60	5.88	6.03
Eh / ORP (+/- 10)	MeV	58.8	69.5	35.0	35.5	63.1	81.5	89.8	98.3
Specific Conductivity	mS/cm ^c	1347							
Conductivity (+/- 3%)	mS/cm	1347	1307	1213	1170	1049	963	940	920
pH (+/- 0.1)	pH unit	7.28	7.11	7.06	7.04	7.05	7.03	7.02	7.00
Temp (+/- 0.5)	C	11.4	11.6	11.5	11.5	11.4	11.4	11.4	11.5
Color	Visual			Cloudy					
Odor	Olfactory								

Comments:

Purge Start: 8:30am

Sample Time: 10:15

Turbidity: 26 NTU reads 19.3

Purged Total: 7 gal

* Three consecutive readings within range indicates stabilization of that parameter.

9:10 9:15
10.3 10.3

300 300
11.8 20.7

55.4 56.4
6.03 6.13

98.3 104.9

920 919
7.00 6.99

11.5 11.5

9:20
10.29

300 60.1
6.85 23.5

928

6.95

11.9

Time	9:26	9:31	9:36	9:41	9:46	9:51	9:56	10:01	10:06
Water Level	10.75	11.1	11.36	11.55	11.59	11.63	11.5	11.2	10.95
Flow	300	300	300	300	300	300	300	300	300
Turbidity	171 171	89.0	76.8	17.5	133	11.7	5.35	156	41.1
DO %	64.9	64.6	61.0	62.1	52.1	52.1	51.6	48.8	46.6
DO mg/L	7.13	7.06	6.66	6.78	5.65	5.67	5.61	5.26	5.01
ORP	60.4	73.5	91.3	100.2	105.9	109.9	116.3	115.0	100.8
Conductivity	905	925	957	990	1027	1034	1054	1066	1080
pH	6.95	6.98	6.92	6.91	6.91	6.89	6.90	6.89	6.89
Temp	11.1	11.2	11.4	11.3	11.5	11.4	11.5	12.0	12.0

Time	10:11
Water Level	10.79
Flow	300
Turbidity	48.1
DO %	45.9
DO mg/L	4.93
ORP	108.0
Conductivity	1082
pH	6.89
Temp	12.0

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number: AECOM NE Alloys
 Monitoring Well Number: MW-3 Date: 10/22/2021
 Samplers: Joe Braun & Katie Tuttle
 Sample Number: MW-3 QA/QC Collected? NO
 Purging / Sampling Method: _____

1. L = Total Well Depth:
2. D = Riser Diameter (I.D.):
3. W = Static Depth to Water (TOC):
4. C = Column of Water in Casing:
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$
6. D2 = Pump Setting Depth (ft):
7. C2 = Column of water in Pump/Tubing (ft):
8. Tubing Volume = $C2(0.005737088)$

21.8 feet
0.17 feet
10.2 feet
 _____ feet
 _____ gal
 _____ feet
 _____ gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using _____

YSI unit 6521

Parameter	Units	<u>13:15</u>	Readings					
Time	24 hr	<u>13:15</u>	<u>13:20</u>	<u>13:25</u>				
Water Level (0.33)	feet	<u>4.8</u>	<u>17.22</u>	<u>20.07</u>				
Volume Purged	gal							
Flow Rate	mL / min	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>
Turbidity (+/- 10%)	NTU	<u>13.4</u>	<u>88.3</u>	<u>241</u>				
Dissolved Oxygen (+/- 10%)	%	<u>3.2</u>	<u>2.4</u>	<u>7.7</u>				
Dissolved Oxygen (+/- 10%)	mg/L	<u>0.35</u>	<u>0.27</u>	<u>.84</u>				
Eh / ORP (+/- 10)	MeV	<u>-43.6</u>	<u>-39.4</u>	<u>-40.6</u>				
Specific Conductivity	mS/cm ^c							
Conductivity (+/- 3%)	mS/cm	<u>800</u>	<u>799</u>	<u>804</u>				
pH (+/- 0.1)	pH unit	<u>6.67</u>	<u>6.57</u>	<u>6.51</u>				
Temp (+/- 0.5)	C	<u>10.9</u>	<u>10.9</u>	<u>11.0</u>				
Color	Visual							
Odor	Olfactory							

Comments:

purge start: 1:10
1:15

13:30 well dried out

Turbidity: 20NTU: 19.2

Samples Taken: 15:35

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

NE Alloys - AECOM

Monitoring Well Number:

MW-4

Date:

6/23/01

Samplers:

Joe Brown, Katie Tuttle

Sample Number:

MW-4

QA/QC Collected?

No

Purging / Sampling Method:

Peristaltic

1. L = Total Well Depth:

17.3 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

3.65 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & Geotech Turbidity unit 6088

Parameter	Units	Readings
Time	24 hr	11:40 11:45 11:50 11:55 12:00 12:05 12:10 12:15 12:20
Water Level (0.33)	feet	4.5 4.75 4.9 5.05 5.2 5.3 5.35 5.5 5.5
Volume Purged	gal	200 200 200 200 200 200 200 200 200
Flow Rate	mL / min	200 200 200 200 200 200 200 200 200
Turbidity (+/- 10%)	NTU	18.8 200 380 244 244 110 140 153 106
Dissolved Oxygen (+/- 10%)	%	1.4 0.2 -0.2 -0.5 -0.7 -0.8 -0.8 -1.0 -0.9
Dissolved Oxygen (+/- 10%)	mg/L	0.14 0.02 -0.02 -0.06 -0.07 -0.09 -0.09 -0.10 -0.1
Eh / ORP (+/- 10)	MeV	-111.2 -83.8 -66.1 -46.3 -41.6 -45.9 -59.7 -54.2 -73.5
Specific Conductivity	mS/cm ^c	— — — — — — — — —
Conductivity (+/- 3%)	mS/cm	0.562 0.555 0.552 0.548 0.547 0.545 0.552 0.563 0.565
pH (+/- 0.1)	pH unit	4.7 6.59 6.58 6.59 6.59 6.59 6.6 6.6 6.62
Temp (+/- 0.5)	C	13.6 13.5 13.4 13.4 13.5 13.8 13.8 13.6 13.8
Color	Visual	Brown Brown Brown Brown Brown clear clear clear clear
Odor	Olfactory	N/A N/A N/A N/A N/A N/A N/A N/A N/A

Comments:

Purge Start: 11:30 am
 Purge end: 13:00
 Turbidity: 20 NTU → 18.8
 Sample time 13:00

* Three consecutive readings within range indicates stabilization of that parameter.

time	12:25	12:30	12:35	12:40	12:45	12:50	12:55	13:00
Water lvl	5.6	5.62	5.65	5.72	5.7	5.8	5.8	5.8
Vol		4 Gal				6 Gal		
Flow	200	200	200	200	200	200	200	200
turbidity	84.0	26.4	9.15	7.92	20.5	14.7	12.7	11.3
DO %	-1.0	-1.1	-1.2	-1.3	-1.4	-1.5	-1.5	-1.5
DO mg/l	-0.10	-0.11	-0.13	-0.13	-0.15	-0.15	-0.15	-0.16
EH/ORP	-73.3	-73.7	-74.6	-74.9	-77.2	-77.1	-77.3	-77.6
SPC	.568	0.570	0.572	0.572	0.574	0.575	0.575	0.576
PH	6.62	6.63	6.64	6.65	6.65	6.66	6.66	6.66
TEMP	13.9	13.9	13.7	13.7	13.6	13.7	13.8	13.7
color	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
odor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Samples
13:00

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Allays

Monitoring Well Number:

MW-5

Date:

6/23/2021

Samplers:

Katie Tuttle

Sample Number:

MW-5

QA/QC Collected?

No

Purging / Sampling Method:

peristaltic

1. L = Total Well Depth:

19.0 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

3.3 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI 3 turbidimeter YSI unit 6288

Parameter	Units	Readings						
Time	24 hr	14:45	14:50	14:55	15:00	15:05	15:10	
Water Level (0.33)	feet	3.6	3.9	4.2	4.45	4.55	4.55	
Volume Purged	gal	0	~0.25	~0.5	~0.5	~0.75	~1.0	
Flow Rate	mL / min	~225	~225	~225	~225	225	225	
Turbidity (+/- 10%)	NTU	78.7	77.3	79.8	56.0	56.0	56.2	
Dissolved Oxygen (+/- 10%)	%	8.4	2.1	2.2	0.0	-0.3	-0.5	
Dissolved Oxygen (+/- 10%)	mg/L	0.82	0.2	0.20	0.00	-0.03	-0.05	
Eh / ORP (+/- 10)	MeV	-85.9	-90.5	-90.4	-91.7	-92.5	-91.8	
Specific Conductivity	mS/cm ^c	1.464	1.469	1.467	1.458	1.454	1.450	
Conductivity (+/- 3%)	mS/cm	—	—	—	—	—	—	
pH (+/- 0.1)	pH unit	6.68	6.65	6.64	6.64	6.64	6.64	
Temp (+/- 0.5)	C	15.0	16.9	14.8	14.8	14.6	14.7	
Color	Visual	Clear	Clear	Clear	Clear	"	"	
Odor	Olfactory	none	none	none	none	"	"	

Comments:

purge start time 14:40
purge end time 15:10

Sample time
15:15

20 NTU std reads 18.4 NTU

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Allouis

Monitoring Well Number:

MW-6

Date:

6/23/21

Samplers:

Joe Brown

Sample Number:

MW-6

QA/QC Collected?

No

Purging / Sampling Method:

Peristaltic

1. L = Total Well Depth:

23.3 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

3.75 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & Geotech turbidity unit 6501

Parameter	Units	Readings									
Time	24 hr	14:50	14:55	15:00	15:05	15:10	15:15	15:20	15:25	15:30	15:35
Water Level (0.33)	feet	4	4.55	4.75	5	5.3	5.6	5.75	5.8	5.85	5.9
Volume Purged	gal		1.56								
Flow Rate	mL / min	400	400	400	400	400	400	400	400	400	400
Turbidity (+/- 10%)	NTU	12.1	12.6	72.1	62.7	68.1	65.6	64.1	60.8	60.8	60.8
Dissolved Oxygen (+/- 10%)	%	2.8	2.0	1.1	0.8	0.7	1.3	0.9	0.5	0.5	0.5
Dissolved Oxygen (+/- 10%)	mg/L	0.27	0.21	0.11	0.08	0.08	0.13	0.09	0.05	0.05	0.05
Eh / ORP (+/- 10)	MeV	-151.7	-147.4	-144.8	-140.2	-136.4	-126.3	-116.0	-111	-111	-111
Specific Conductivity	mS/cm ^c										
Conductivity (+/- 3%)	mS/cm	880	875	870	873	868	861	881	913	913	913
pH (+/- 0.1)	pH unit	7.17	7.04	7.01	6.97	6.93	6.83	6.66	6.5	6.5	6.5
Temp (+/- 0.5)	C	16.4	13.5	13.7	13.9	14.3	14.8	15.0	15.1	15.1	15.1
Color	Visual	Black	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
Odor	Olfactory	N/A	N/A	N/A	Strong	Strong	Strong	Strong	Strong	Strong	Strong
Turbidity YSI		250	57	60	48	62	55				

Comments:

Purge Start: 14:41
 Purge end: 15:25 opaque color water
 Turbidity: 20 NTU → 18.5
 sample time
 15:30

* Three consecutive readings within range indicates stabilization of that parameter.

part ②

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

MW-7R Date: 6/21/2021

Samplers:

Katie Tuttle

Sample Number:

MW-7R QA/QC Collected? No

Purging / Sampling Method:

peristaltic

1. L = Total Well Depth:

15.4 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

10.5 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & portable turbidity YSI unit 6521

Parameter	Units	Readings									
Time	24 hr	14:42	14:47	14:52	14:57	15:02	15:07	15:12	15:17	15:22	
Water Level (0.33)	feet	10.2	13.4	14.4	14.6	15.1	15.2	15.2	15.2	15.2	
Volume Purged	gal	~1gal	~2gal	~4gal	~4.5	~5gal	~5gal	~5.5	~5.5	~5.5	
Flow Rate	mL / min	600	600	600	~400	~400	~400	~300	~300	~300	
Turbidity (+/- 10%)	NTU	3.7	4.2	26.2	62.5	219	77	26.4	3.8	70.6	
Dissolved Oxygen (+/- 10%)	%	2.0	1.7	2.3	3.0	5.3	6.9	7.1	7.2	7.0	
Dissolved Oxygen (+/- 10%)	mg/L	0.2	0.17	7.0	3.04	5.3	6.85	7.04	7.20	7.03	
Eh / ORP (+/- 10)	MeV	-56.8	-64.1	-66.6	-70.1	-13	-23.9	-23.0	-22.8	-22.9	
Specific Conductivity	µS/cm	6900	9658	11016	10220	10988	7429	6512	5904	6089	
Conductivity (+/- 3%)	mS/cm										
pH (+/- 0.1)	pH unit	6.83	6.83	7.00	7.00	6.95	7.14	7.12	7.12	7.12	
Temp (+/- 0.5)	C	13.3	13.0	13.7	12.9	12.9	14.7	14.9	14.8	14.6	
Color	Visual	clear	clear	clear	clear	clear	clear	clear	clear	clear	
Odor	Olfactory	none	none	none	none	none	none	none	none	none	

Comments: purge start time: 14:37
20 NTU calib. sta reads 18.8 NTU.
well dried out at 15:25.

* Three consecutive readings within range indicates stabilization of that parameter.

part ②

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

MW-7R Date: 6/22/2021

Samplers:

Kate Tuttle

Sample Number:

MW-7R QA/QC Collected?

Purging / Sampling Method:

Peristaltic / bailer for sampling

1. L = Total Well Depth:
2. D = Riser Diameter (I.D.):
3. W = Static Depth to Water (TOC):
4. C = Column of Water in Casing:
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$
6. D2 = Pump Setting Depth (ft):
7. C2 = Column of water in Pump/Tubing (ft):
8. Tubing Volume = $C2(0.005737088)$

15.4 feet
0.17 feet
10.5 feet
 feet
 gal
 feet
 feet
 gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

N/A YSI unit N/A

Parameter	Units	Readings							
Time	24 hr								
Water Level (0.33)	feet								
Volume Purged	gal								
Flow Rate	mL / min								
Turbidity (+/- 10%)	NTU								
Dissolved Oxygen (+/- 10%)	%								
Dissolved Oxygen (+/- 10%)	mg/L								
Eh / ORP (+/- 10)	MeV								
Specific Conductivity	mS/cm°								
Conductivity (+/- 3%)	mS/cm								
pH (+/- 0.1)	pH unit								
Temp (+/- 0.5)	C								
Color	Visual								
Odor	Olfactory								

Comments:

Purged well 6/21/21, well dried up.

depth to water 6/22 @ 8:15 is 10.5'

sample time 8:20

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

MW-8

Date:

6/22/2021

Samplers:

Katie Tuttle

Sample Number:

MW-8

QA/QC Collected?

No

Purging / Sampling Method:

purging with bailer

1. L = Total Well Depth:

13.8 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

7.4 feet

4. C = Column of Water in Casing:

6.4 feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

1.08 gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI \$ turbidimeter YSI unit 6288

Parameter	Units	Readings						
Time	24 hr	9:30	9:40	9:50	10:00			
Water Level (0.33)	feet	7.4	9.1	9.85	9.85			
Volume Purged	gal	0	~1 gal	~2.5	~3.5			
Flow Rate	mL / min	—	—	—	—			
Turbidity (+/- 10%)	NTU	219	252	288	201			
Dissolved Oxygen (+/- 10%)	%	48.6	34.2	40.7	32.8			
Dissolved Oxygen (+/- 10%)	mg/L	4.93	3.55	4.33	3.43			
Eh / ORP (+/- 10)	MeV	-88.9	-46.3	-23.5	-12			
Specific Conductivity	mS/cm ^c	0.184	0.212	0.268	0.324			
Conductivity (+/- 3%)	mS/cm	—	—	—	—			
pH (+/- 0.1)	pH unit	8.07	7.33	6.91	6.67			
Temp (+/- 0.5)	C	14.4	13.4	13.0	13.1			
Color	Visual	cloudy / brown	—	—	—			
Odor	Olfactory	none	none	—	—			

Comments:

tuttle

depth to water 9:30 = 7.4'

20 NTU calib std reads 18.8 NTU

purged ~4 gallons
sampled at 10:25

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

MW-9

Date:

6/22/21

Samplers:

Katie Tuttle

Sample Number:

MW-9

QA/QC Collected?

NO

Purging / Sampling Method:

Peristaltic

1. L = Total Well Depth:
2. D = Riser Diameter (I.D.):
3. W = Static Depth to Water (TOC):
4. C = Column of Water in Casing:
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$
6. D2 = Pump Setting Depth (ft):
7. C2 = Column of water in Pump/Tubing (ft):
8. Tubing Volume = $C2(0.005737088)$

feet
0.17 feet
feet
feet
gal
feet
feet
gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

VSI & Geotech turbidimeter VSI unit 6288

Parameter	Units	Readings									
Time	24 hr	13:30	13:35	13:40	13:45	13:50	13:55	14:00	14:05	14:10	
Water Level (0.33)	feet	8.35	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	
Volume Purged	gal	~0.25	~0.25	~0.25	~0.25	~0.25	~0.25	~0.25	~0.25	~0.25	
Flow Rate	mL / min	~200	~200	~200	~200	~200	~200	~200	~200	~200	
Turbidity (+/- 10%)	NTU	97.3	41.2	23.7	16.6	9.83	8.96	7.42	6.56	2.19	
Dissolved Oxygen (+/- 10%)	%	3.0	1.5	0.6	0.2	0.1	-0.4	-0.7	-0.9	-0.9	
Dissolved Oxygen (+/- 10%)	mg/L	0.33	0.15	0.07	0.02	0.01	-0.04	-0.07	-0.09	-0.10	
Eh / ORP (+/- 10)	MeV	-5.8	-7.7	-13.5	-23.4	-28.9	-30.3	-42.1	-48.0	-55.3	
Specific Conductivity	mS/cm ^c	0.898	0.938	0.944	0.958	0.963	0.971	0.981	0.989	0.990	
Conductivity (+/- 3%)	mS/cm	-	-	-	-	-	-	-	-	-	
pH (+/- 0.1)	pH unit	6.4	6.48	6.54	6.58	6.61	6.64	6.67	6.68	6.70	
Temp (+/- 0.5)	C	12.6	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	
Color	Visual	milky/beige	clear	"	"	"	"	"	"	"	
Odor	Olfactory	none	none	"	"	"	"	"	"	"	

Comments:

purge start time 13:27
purge end 14:20
20 NTU calib. std reads 18.7

Sample time:
14:25

* Three consecutive readings within range indicates stabilization of that parameter.

time	14:15	14:20
water lvl	8.45'	8.45'
ol purged	~3	~3.5
low rate	~200	~200
turbidity	3.63	1.04
DO %	-1.1	0.1
DO (mg/L)	-0.11	0.01
EH/ORP	-56.6	-59.3
specific conductivity	0.995	0.999
pH	6.71	6.73
ump	12.8	12.8
color	clear	clear
odor	none	none

200
14:15

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

MW-10

Date:

6/22/01

Samplers:

Joe Braun

Sample Number:

MW-10

QA/QC Collected?

No

Purging / Sampling Method:

peristaltic

1. L = Total Well Depth:
2. D = Riser Diameter (I.D.):
3. W = Static Depth to Water (TOC):
4. C = Column of Water in Casing:
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$
6. D2 = Pump Setting Depth (ft):
7. C2 = Column of water in Pump/Tubing (ft):
8. Tubing Volume = $C2(0.005737088)$

18.8 feet
0.17 feet
6.55 feet
feet
gal
feet
feet
gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

VSI & geotech turbidimeter VSI unit 6521

Parameter	Units	Readings									
Time	24 hr	13:55	14:00	14:05	14:10	14:15	14:20	14:25	14:30	14:35	
Water Level (0.33)	feet	6.56	6.7	6.5	6.5	6.5	6.5	6.5	6.5	6.5	
Volume Purged	gal										
Flow Rate	mL / min	300	300	300	300	300	300	300	300	300	
Turbidity (+/- 10%)	NTU	116	48.3	102	68	60.0	31.0	23.5	21.7	19.4	
Dissolved Oxygen (+/- 10%)	%	1.9	0.7	0.6	0.5	0.5	0.4	0.3	0.2	0.2	
Dissolved Oxygen (+/- 10%)	mg/L	0.20	0.08	0.06	0.05	0.05	0.04	0.03	0.02	0.02	
Eh / ORP (+/- 10)	MeV	-166.7	-180.4	-185.8	-187.2	-189.3	-189.8	-190.6	-189.2	-189.7	
Specific Conductivity	mS/cm ^c										
Conductivity (+/- 3%)	mS/cm	639	798	807	811	814	816	817	816	814	
pH (+/- 0.1)	pH unit	7.47	7.46	7.46	7.45	7.44	7.45	7.45	7.45	7.44	
Temp (+/- 0.5)	C	13.1	13.7	13.6	13.8	13.8	13.6	13.4	13.4	13.4	
Color	Visual										
Odor	Olfactory										

Comments:

Purge Start: 13:50

Samples 14:37

Turbidity: 20 NTU → 19.2 NTU

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE ALLOYS

Monitoring Well Number:

MW-11

Date:

6/23/21

Samplers:

Joe Brown

Sample Number:

MW-11

QA/QC Collected?

No

Purging / Sampling Method:

Peristaltic

1. L = Total Well Depth:

20.3 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

9.4 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & geotech turbidimeter/YSI unit 6501

Parameter	Units	Readings									
Time	24 hr	10:30	10:35	10:40	10:45	10:50	10:55	11:00	11:05		
Water Level (0.33)	feet	9.2	10.95	11.65	13.1	14.7	16.08	17.7	18.8		
Volume Purged	gal										
Flow Rate	mL / min	300	300	300	300	300	300	300	300		
Turbidity (+/- 10%)	NTU	34.6	13.2	12.0	15.3	10.9	11.1	5.35	37.4		
Dissolved Oxygen (+/- 10%)	%	3.4	1.6	1.2	4.0	5.0	5.8	16.2			
Dissolved Oxygen (+/- 10%)	mg/L	0.38	0.18	0.13	0.42	0.53	0.62	1.70			
Eh / ORP (+/- 10)	MeV	24.5	30.9	60.9	74.1	72.9	70.1	87.6	123.9		
Specific Conductivity	mS/cm°										
Conductivity (+/- 3%)	mS/cm	760	761	759	747	770	767	760	758		
pH (+/- 0.1)	pH unit	6.71	6.55	6.55	6.54	6.56	6.56	6.59	6.71		
Temp (+/- 0.5)	C	11.6	11.9	11.9	12.2	12.4	12.1	12.0	12.0		
Color	Visual	Cloudy	Clear	Clear	Clear	Clear	Clear	Clear	Clear		
Odor	Olfactory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

Comments:

Purge Start: 10:27

Dried Out: 11:05 am

Turbidity: 20 NTU → 18.8

Sample time
12:30

* Three consecutive readings within range indicates stabilization of that parameter.

12:05 depth to water 15.1' (0.88gal)

12:25 depth to water 13.5' (1.15gal)

11

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Allays

Monitoring Well Number:

MW-12

Date:

6/23/2021

Samplers:

Katie Tuttle

Sample Number:

MW-12

QA/QC Collected?

No

Purging / Sampling Method:

Peristaltic

1. L = Total Well Depth:
2. D = Riser Diameter (I.D.):
3. W = Static Depth to Water (TOC):
4. C = Column of Water in Casing:
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$
6. D2 = Pump Setting Depth (ft):
7. C2 = Column of water in Pump/Tubing (ft):
8. Tubing Volume = $C2(0.005737088)$

22.2 feet
0.17 feet
12.2 feet
feet
gal
feet
feet
gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI B turbidimeter YSI unit 6288

Parameter	Units	Readings									
Time	24 hr	8:05	8:10	8:15	8:20	8:25	8:30	8:35	8:40	8:45	
Water Level (0.33)	feet	12.4'	12.7'	13.0'	13.0'	13.1'	13.1'	13.1'	13.2'	13.2'	
Volume Purged	gal	0	~0.25	~0.5	~1 gal	~1.5	~2	~2.5	~3	~3.5 gal	
Flow Rate	mL / min	~350	~350	~350	~350	~350	~350	~350	~350	~350	
Turbidity (+/- 10%)	NTU	73.2	44.2	116	132	122	65.1	23.1	12.4	7.51	
Dissolved Oxygen (+/- 10%)	%	12.0	3.2	1.6	0.4	0.0	-0.3	-0.8	-1.0	-1.1	
Dissolved Oxygen (+/- 10%)	mg/L	1.3	0.35	0.18	0.04	0.00	-0.03	-0.08	-0.11	-0.12	
Eh / ORP (+/- 10)	MeV	-126.7	-163.9	-166.4	-165.3	-166.6	-168.4	-170.2	-168.8	-168.8	
Specific Conductivity	mS/cm°	1.213	1.212	1.206	1.203	1.205	1.208	1.208	1.207	1.206	
Conductivity (+/- 3%)	mS/cm										
pH (+/- 0.1)	pH unit	7.06	7.09	7.11	7.13	7.13	7.14	7.17	7.15	7.15	
Temp (+/- 0.5)	C	11.0	11.1	11.2	11.1	11.2	11.2	11.2	11.3	11.3	
Color	Visual	clear	clear	clear	clear	clear	clear	clear	"	"	
Odor	Olfactory	none	none	none	none	none	none	none	"	"	

Comments:

purge start time 8am purge end time: 9:05 w/ ~4.5gal
20 NTU calib std reads 18.8 sample time 9:10

* Three consecutive readings within range indicates stabilization of that parameter.

time	8:50	8:55	9:00	9:05
water lvl	13.3'	13.3'	13.3'	13.4'
vol purged	3.75	~4	~4.25	~4.5
flow	~350	~350	~350	~350
turbidity	5.47	4.88	2.97	3.66
DO %	-1.3	-1.3	-1.4	-1.5
DO mg/L	-0.14	-0.15	-0.15	-0.16
ENIORP	-166.6	-166.8	-167.0	-166.5
SPC	1.209	1.209	1.210	1.211
PH	7.15	7.16	7.16	7.17
temp	11.4	11.4	11.4	11.4
color	clear	clear	clear	clear
smell	none	none	none	none

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

MW-13

Date:

6/22/21

Samplers:

Katie Tuttle & Joe Brown

Sample Number:

MW-13

QA/QC Collected?

No

Purging / Sampling Method:

peristaltic

1. L = Total Well Depth:

20.8 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

8.10 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & turbidimeter YSI unit 6288

Parameter	Units	Readings						
Time	24 hr	4:05	4:10	4:15	4:20			
Water Level (0.33)	feet	8.6	9.7	9.7	9.3			
Volume Purged	gal	~1	~1.2	~1.2	~1.3			
Flow Rate	mL / min	~300	~300	~300	~300			
Turbidity (+/- 10%)	NTU	17.9	16.2	16.5	16.5			
Dissolved Oxygen (+/- 10%)	%	6.1	2.3	0.2	0.0			
Dissolved Oxygen (+/- 10%)	mg/L	0.67	0.26	0.02	0.00			
Eh / ORP (+/- 10)	MeV	-104.8	-113.4	-123.7	-118.6			
Specific Conductivity	mS/cm ^c	0.757	0.672	0.758	0.735			
Conductivity (+/- 3%)	mS/cm							
pH (+/- 0.1)	pH unit	6.88	6.72	6.73	6.73			
Temp (+/- 0.5)	C	10.4	11.0	10.9	10.8			
Color	Visual	clear	murky	murky	murky			
Odor	Olfactory	none	none	none	none			

Comments:

Purge start time 10:00, purge ended at 16:20 with approx 1.75 gal.

20 NTU calib std reads 19 NTU

Sample time 16:28

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Allays

Monitoring Well Number:

MW-14

Date:

6/24/21

Samplers:

Joe Braun, Katie Tuttle

Sample Number:

MW-14

QA/QC Collected?

No

Purging / Sampling Method:

Peristaltic

1. L = Total Well Depth:

21.3 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

9.15 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & geotech turbidimeter / YSI unit 6521

Parameter	Units	Readings					
Time	24 hr	10:25	10:30	10:35	10:40	10:45	
Water Level (0.33)	feet	9.75	10.15	10.5	10.74	11.05	
Volume Purged	gal	0	~0.5	~0.75	~1	~1.5	
Flow Rate	mL / min	~300	~300	~300	~300	~300	
Turbidity (+/- 10%)	NTU	11.0	10.6	11.2	10.9	11.7	
Dissolved Oxygen (+/- 10%)	%	1.1	0.6	0.3	0.1	0.0	
Dissolved Oxygen (+/- 10%)	mg/L	0.11	0.07	0.03	0.01	0.00	
Eh / ORP (+/- 10)	MeV	-254.4	-265.8	-277.7	-280.7	-287.7	
Specific Conductivity	mS/cm°	0.533	0.530	0.531	0.534	0.510	
Conductivity (+/- 3%)	mS/cm						
pH (+/- 0.1)	pH unit	8.47	8.49	8.48	8.43	8.41	
Temp (+/- 0.5)	C	13.0	13.1	13.0	13.1	13.2	
Color	Visual	clear	clear	clear	clear	clear	
Odor	Olfactory	none	none	none	none	none	

Comments:

purge start time: 10:20
purge end time: 10:45

sample time:
10:50

20 NTU calib. std. reads: 18.8

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Allays

Monitoring Well Number:

MW-15

Date:

6/24/2021

Samplers:

Kate Tuttle

Sample Number:

MW-15

QA/QC Collected?

No

Purging / Sampling Method:

peristaltic

1. L = Total Well Depth:

15.7 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

8.1 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & geotech turbidimeter YSI unit 6288

Parameter	Units	Readings									
Time	24 hr	8:20	8:25	8:30	8:35	8:40	8:45	8:50	8:55	9:00	
Water Level (0.33)	feet	8.4	9.15	9.4	10.0	10.3	10.75	11.0	11.4	11.6	
Volume Purged	gal	0	~0.25	~0.5	~1.94	1.5	~2	~2.5	~3	~3.5	
Flow Rate	mL / min	~250	~250	~250	~250	~250	~250	~250	~250	~250	
Turbidity (+/- 10%)	NTU	27.2	19.5	7.34	2.24	1.28	1.90	1.93	0.10	0.02	
Dissolved Oxygen (+/- 10%)	%	45.8	40.6	46.0	35.1	20.0	10.4	12.2	10.2	7.9	
Dissolved Oxygen (+/- 10%)	mg/L	4.98	4.38	4.94	3.71	2.13	1.11	1.31	1.12	0.86	
Eh / ORP (+/- 10)	MeV	+113.2	+111.8	+111.3	+111.0	+110.6	+110.0	+105.2	+107.2	+107.9	
Specific Conductivity	mS/cm ^c	0.684	0.677	0.700	0.692	0.666	0.639	0.637	0.629	0.619	
Conductivity (+/- 3%)	mS/cm	-	-	-	-	-	-	-	-	-	
pH (+/- 0.1)	pH unit	7.16	7.03	7.00	6.98	6.94	6.91	6.89	6.88	6.83	
Temp (+/- 0.5)	C	11.7	11.8	12.1	12.1	12.0	11.9	11.8	11.7	11.6	
Color	Visual	clear	clear	clear	clear	clear	clear	clear	clear	clear	
Odor	Olfactory	none	none	none	none	none	none	none	none	none	

Comments:

purge start time: 8:15 purge end time: 9:15

20 NTU calibration std reads 18.1 sample time:
9:25

* Three consecutive readings within range indicates stabilization of that parameter.

time	9:05	9:10	9:15
Water	11.9	12.1	12.2
#01	~3.5	~4.0	~4.5
flow	~250	~250	~250
turbidity	0.02	0.7	2.6
DO %	6.7	6.2	6.2
DO mg/L	0.73	0.67	0.67
Eh/ORP	+108	+107.7	+107.3
SPC	0.613	0.610	0.625
pH	6.81	6.80	6.81
temp	11.6	11.7	12.0
Color	clear	clear	clear
odor	none	none	none

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Allouys

Monitoring Well Number:

MW-16

Date:

6/24/21

Samplers:

Joe Braun

Sample Number:

MW-16

QA/QC Collected?

No

Purging / Sampling Method:

Peristaltic

1. L = Total Well Depth:

15.1 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

7.4 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & Geotech Turbidimeter YSI 6521

Parameter	Units	Readings							
Time	24 hr	8:15	8:20	8:25	8:30	8:35	8:40		
Water Level (0.33)	feet	8	8.3	8.46	8.9	9.25	9.4		
Volume Purged	gal					2.56			
Flow Rate	mL / min	300	300	300	300	300	300	300	300
Turbidity (+/- 10%)	NTU	57.8	43.1	9.60	3.96	2.20	1.50		
Dissolved Oxygen (+/- 10%)	%	8.0	3.7	2.5	2.0	1.6	1.5		
Dissolved Oxygen (+/- 10%)	mg/L	0.90	0.41	0.27	0.22	0.18	0.17		
Eh / ORP (+/- 10)	MeV	81.5	47.5	-14.3	-25.0	-28.7	-30.0		
Specific Conductivity	mS/cm°	—	—	—	—	—	—		
Conductivity (+/- 3%)	mS/cm	676	641	625	626	627	627		
pH (+/- 0.1)	pH unit	6.43	6.68	6.64	6.62	6.61	6.60		
Temp (+/- 0.5)	C	11.3	11.3	11.3	11.4	11.4	11.4		
Color	Visual	Clear	Clear	Clear	Clear	Clear	Clear		
Odor	Olfactory	N/A	N/A	N/A	N/A	N/A	N/A		

Comments:

Purge Starts 8:11 am

Samples: 8:40am

Turbidity: 20 NTU → 18.6

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Alloys

Monitoring Well Number:

MW-17

Date: 6/24/2021

Samplers:

Katie Tuttle & Joe Braun

Sample Number:

MW-17

QA/QC Collected?

No

Purging / Sampling Method:

peristaltic

1. L = Total Well Depth:

15.9 feet

2. D = Riser Diameter (I.D.):

0.17 feet

3. W = Static Depth to Water (TOC):

6.2 feet

4. C = Column of Water in Casing:

feet

5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$

gal

6. D2 = Pump Setting Depth (ft):

feet

7. C2 = Column of water in Pump/Tubing (ft):

feet

8. Tubing Volume = $C2(0.005737088)$

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & geotech turbidimeter / SI unit + 6288

Parameter	Units	Readings									
Time	24 hr	11:25	11:30	11:35	11:40	11:45	11:50	11:55	12:00	12:05	
Water Level (0.33)	feet	6.4	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.6	
Volume Purged	gal	0	~0.5	~1	~1.5	~2	~2.8	~3.0	~3.5	~4.0	
Flow Rate	mL / min	~300	~300	~300	~300	~300	~300	~300	~300	~300	
Turbidity (+/- 10%)	NTU	113	34.1	31.0	27.5	24.8	8.14	9.91	3.64	4.97	
Dissolved Oxygen (+/- 10%)	%	2.4	0.6	-0.5	-0.7	-1.0	-1.2	-1.5	-1.6	-1.7	
Dissolved Oxygen (+/- 10%)	mg/L	0.26	0.06	-0.06	-0.08	-0.10	-0.13	-0.15	-0.17	-0.19	
Eh / ORP (+/- 10)	MeV	+98.8	+85.5	+88	+88.5	+87.5	+84.1	+79.7	76.5	72.5	
Specific Conductivity	mS/cm°	0.985	0.997	1.041	1.056	1.085	1.100	1.113	1.123	1.127	
Conductivity (+/- 3%)	mS/cm										
pH (+/- 0.1)	pH unit	6.96	6.92	6.81	6.79	6.75	6.73	6.72	6.71	6.70	
Temp (+/- 0.5)	C	12.8	13.3	13.3	13.3	13.1	12.7	12.7	12.6	12.4	
Color	Visual	clear	clear	clear	clear	clear	clear	clear	clear	clear	
Odor	Olfactory	none	none	none	none	none	none	none	none	none	

Comments:

purge start time: 11:20

purge end time: 12:20

20 NTU calib. std reads 18.7

sample time:

12:25

* Three consecutive readings within range indicates stabilization of that parameter.

[illegible]

Monitoring Well Purging/Sampling Form (Low-Flow Sampling)

Project Name and Number:

AECOM NE Allots

Monitoring Well Number:

MW-18

Date:

6/23/21

Samplers:

Katie Tuttle

Sample Number:

MW-18

QA/QC Collected?

No

Purging / Sampling Method:

peristaltic

1. L = Total Well Depth:
2. D = Riser Diameter (I.D.):
3. W = Static Depth to Water (TOC):
4. C = Column of Water in Casing:
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$
6. D2 = Pump Setting Depth (ft):
7. C2 = Column of water in Pump/Tubing (ft):
8. Tubing Volume = $C2(0.005737088)$

10.3 feet

0.17 feet

3.65 feet

feet

gal

feet

feet

gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using

YSI & turbidimeter YSI unit 6288

Parameter	Units	15:38	15:42	15:48	15:53	15:58	16:03	16:08
Time	24 hr	15:38	15:42	15:48	15:53	15:58	16:03	16:08
Water Level (0.33)	feet	3.65	5.1	5.1	5.1	5.1	5.1	5.1
Volume Purged	gal	0	~0.5	~1	~1.5	~2	~2.5	~3
Flow Rate	mL / min	~250	~250	~250	~230	~280	~250	~250
Turbidity (+/- 10%)	NTU	6.2	18.3	7.99	6.15	4.37	3.06	2.96
Dissolved Oxygen (+/- 10%)	%	7.80	0.5	-0.2	-0.4	-0.7	-1.0	-1.1
Dissolved Oxygen (+/- 10%)	mg/L	0.77	0.05	-0.02	-0.04	-0.07	-0.10	-0.11
Eh / ORP (+/- 10)	MeV	-108.6	-115.5	-123.2	-127.9	-127.7	-127.2	-126.7
Specific Conductivity	mS/cm ^c	—	—	—	—	—	—	—
Conductivity (+/- 3%)	mS/cm	0.660	0.642	0.653	0.671	0.665	0.658	0.660
pH (+/- 0.1)	pH unit	7.32	7.28	7.28	7.28	7.27	7.26	7.26
Temp (+/- 0.5)	C	14.8	15.1	15.5	15.4	15.4	15.4	15.4
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	none	none	none	none	none	none	none

Comments:

purge start 15:33

purge end time 16:08

Sample time:

16:10

20 NTU calib std reads 18.8 NTU

* Three consecutive readings within range indicates stabilization of that parameter.

Appendix B

Laboratory Reports and Data Usability Summary Reports

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-237444-1

Client Project/Site: Northeast Alloys & Metals #633045

For:

New York State D.E.C.
625 Broadway
4th Floor
Albany, New York 12233

Attn: Mr. Payson Long



Authorized for release by:
7/6/2021 6:46:16 PM

Judy Stone, Senior Project Manager
(484)685-0868
Judy.Stone@Eurofinset.com

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

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

- 1
- 2
- 3
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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.



Judy Stone
Senior Project Manager
7/6/2021 6:46:16 PM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	9
Surrogate Summary	30
Isotope Dilution Summary	31
QC Sample Results	33
QC Association Summary	42
Lab Chronicle	44
Certification Summary	47
Method Summary	48
Sample Summary	49
Chain of Custody	50
Receipt Checklists	56



Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi 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.

LCMS

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Job ID: 460-237444-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative 460-237444-1

Receipt

The samples were received on 6/25/2021 9:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.1° C, 2.9° C and 3.8° C.

GC/MS VOA

Method 624.1: The continuing calibration verification (CCV) associated with batch 460-787015 recovered above the upper control limit for Acrolein. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Method 624.1: The laboratory control sample (LCS) for analytical batch 460-787015 recovered outside control limits for the following analyte: Acrolein. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA

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

LCMS

Method 537 (modified): The "I" qualifier associated with sample MW-18 062321 (460-237444-8) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

Method 537 (modified): 13C2 PFTeDA Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: BR-1 062321 (460-237444-1). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

Method 537 (modified): M2-8:2 FTS Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: MW-18 062321 (460-237444-8). 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

No analytical or quality issues were noted, other than those described 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: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: BR-1 062321

Lab Sample ID: 460-237444-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.2		4.9	0.88	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.76	J	2.0	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.7	J	2.0	0.45	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.86	J	2.0	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.2		2.0	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.37	J	2.0	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.88	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.8		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.38	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.60	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA
6:2 FTS	12		4.9	1.1	ng/L	1		537 (modified)	Total/NA

Client Sample ID: BR-2 062321

Lab Sample ID: 460-237444-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.1	J	4.8	0.86	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.24	J	1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.28	J	1.9	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.29	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.34	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.41	J	1.9	0.28	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-4 062321

Lab Sample ID: 460-237444-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.6		4.9	0.88	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.4		2.0	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.9	J	2.0	0.45	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.0		2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.8		2.0	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.30	J	2.0	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.2	J	2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.66	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.77	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-5 062321

Lab Sample ID: 460-237444-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	10		1.0	0.34	ug/L	1		624.1	Total/NA
1,1-Dichloroethene	0.34	J	1.0	0.12	ug/L	1		624.1	Total/NA
1,1-Dichloroethane	8.6		1.0	0.26	ug/L	1		624.1	Total/NA
trans-1,2-Dichloroethene	0.52	J	1.0	0.24	ug/L	1		624.1	Total/NA
cis-1,2-Dichloroethene	53		1.0	0.22	ug/L	1		624.1	Total/NA
1,1,1-Trichloroethane	0.63	J	1.0	0.24	ug/L	1		624.1	Total/NA
Trichloroethene	1.6		1.0	0.31	ug/L	1		624.1	Total/NA
1,4-Dioxane	1.1		0.20	0.016	ug/L	1		8270E SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	1.7	J	4.9	0.88	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.1	J	2.0	0.47	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.29	J	2.0	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.1		2.0	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.38	J	2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.47	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Detection Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-5 062321 (Continued)

Lab Sample ID: 460-237444-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	0.50	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-6 062321

Lab Sample ID: 460-237444-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	130		1.0	0.34	ug/L	1		624.1	Total/NA
1,1-Dichloroethene	0.70	J	1.0	0.12	ug/L	1		624.1	Total/NA
1,1-Dichloroethane	78		1.0	0.26	ug/L	1		624.1	Total/NA
trans-1,2-Dichloroethene	1.0		1.0	0.24	ug/L	1		624.1	Total/NA
cis-1,2-Dichloroethene	42		1.0	0.22	ug/L	1		624.1	Total/NA
1,1,1-Trichloroethane	8.7		1.0	0.24	ug/L	1		624.1	Total/NA
Trichloroethene	1.9		1.0	0.31	ug/L	1		624.1	Total/NA
1,4-Dioxane	6.6		0.20	0.016	ug/L	1		8270E SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	3.7	J	4.9	0.87	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.2	J	2.0	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.5	J	2.0	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.91	J	2.0	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.5		2.0	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.85	J	2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.52	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.3	J	2.0	0.28	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-11 062321

Lab Sample ID: 460-237444-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.60	J	1.0	0.31	ug/L	1		624.1	Total/NA
Perfluorobutanoic acid (PFBA)	1.2	J	4.9	0.88	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.30	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-12 062321

Lab Sample ID: 460-237444-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.019	J	0.20	0.016	ug/L	1		8270E SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	8.4		5.1	0.91	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.2	J	2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.7	J	2.0	0.46	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.86	J	2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.2		2.0	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.38	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.80	J	2.0	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.46	J	2.0	0.31	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.1	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-18 062321

Lab Sample ID: 460-237444-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	97		1.0	0.34	ug/L	1		624.1	Total/NA
1,1-Dichloroethene	1.1		1.0	0.12	ug/L	1		624.1	Total/NA
1,1-Dichloroethane	3.0		1.0	0.26	ug/L	1		624.1	Total/NA
trans-1,2-Dichloroethene	1.1		1.0	0.24	ug/L	1		624.1	Total/NA
cis-1,2-Dichloroethene	180		1.0	0.22	ug/L	1		624.1	Total/NA
Trichloroethene	2.4		1.0	0.31	ug/L	1		624.1	Total/NA
1,4-Dioxane	0.074	J	0.20	0.016	ug/L	1		8270E SIM ID	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Detection Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-18 062321 (Continued)

Lab Sample ID: 460-237444-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	11		4.8	0.86	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.81	J	1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.5	I	1.9	0.44	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.2	J	1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.2		1.9	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.2	J I	1.9	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.37	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.2	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		1.9	0.28	ng/L	1		537 (modified)	Total/NA

Client Sample ID: DUP 062321

Lab Sample ID: 460-237444-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
6:2 FTS	2.6	J	4.7	1.0	ng/L	1		537 (modified)	Total/NA

Client Sample ID: Trip-B3 062321

Lab Sample ID: 460-237444-10

No Detections.

Client Sample ID: Field BI. 062321

Lab Sample ID: 460-237444-11

No Detections.

Client Sample ID: Equip BI. 062321

Lab Sample ID: 460-237444-12

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: BR-1 062321

Lab Sample ID: 460-237444-1

Date Collected: 06/23/21 08:35

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 11:29	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 11:29	1
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 11:29	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 11:29	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 11:29	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 11:29	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 11:29	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 11:29	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 11:29	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 11:29	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 11:29	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 11:29	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 11:29	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 11:29	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 11:29	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 11:29	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 11:29	1
Trichloroethene	ND		1.0	0.31	ug/L			06/28/21 11:29	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 11:29	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 11:29	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 11:29	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 11:29	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 11:29	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 11:29	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 11:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 11:29	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 11:29	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 11:29	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 11:29	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 11:29	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 11:29	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 11:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		60 - 140		06/28/21 11:29	1
Toluene-d8 (Surr)	92		60 - 140		06/28/21 11:29	1
Bromofluorobenzene	97		60 - 140		06/28/21 11:29	1
Dibromofluoromethane (Surr)	105		60 - 140		06/28/21 11:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:47	06/29/21 15:50	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	44		10 - 150				06/29/21 09:47	06/29/21 15:50	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.2		4.9	0.88	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluoropentanoic acid (PFPeA)	0.76	J	2.0	0.47	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorohexanoic acid (PFHxA)	1.7	J	2.0	0.45	ng/L		06/29/21 15:14	06/30/21 18:18	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: BR-1 062321

Lab Sample ID: 460-237444-1

Date Collected: 06/23/21 08:35

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.86	J	2.0	0.23	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorooctanoic acid (PFOA)	3.2		2.0	0.42	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorononanoic acid (PFNA)	0.37	J	2.0	0.28	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorodecanoic acid (PFDA)	0.88	J	2.0	0.30	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorobutanesulfonic acid (PFBS)	2.8		2.0	0.25	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorohexanesulfonic acid (PFHxS)	0.38	J	2.0	0.30	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorooctanesulfonic acid (PFOS)	0.60	J	2.0	0.29	ng/L		06/29/21 15:14	06/30/21 18:18	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57	ng/L		06/29/21 15:14	06/30/21 18:18	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.89	ng/L		06/29/21 15:14	06/30/21 18:18	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73	ng/L		06/29/21 15:14	06/30/21 18:18	1
6:2 FTS	12		4.9	1.1	ng/L		06/29/21 15:14	06/30/21 18:18	1
8:2 FTS	ND		2.0	0.38	ng/L		06/29/21 15:14	06/30/21 18:18	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	85		25 - 150	06/29/21 15:14	06/30/21 18:18	1
13C4 PFBA	80		25 - 150	06/29/21 15:14	06/30/21 18:18	1
13C5 PFPeA	98		25 - 150	06/29/21 15:14	06/30/21 18:18	1
13C2 PFHxA	100		50 - 150	06/29/21 15:14	06/30/21 18:18	1
13C4 PFHpA	100		50 - 150	06/29/21 15:14	06/30/21 18:18	1
13C4 PFOA	100		50 - 150	06/29/21 15:14	06/30/21 18:18	1
13C5 PFNA	98		50 - 150	06/29/21 15:14	06/30/21 18:18	1
13C2 PFDA	96		50 - 150	06/29/21 15:14	06/30/21 18:18	1
13C2 PFUnA	89		50 - 150	06/29/21 15:14	06/30/21 18:18	1
13C2 PFDoA	79		50 - 150	06/29/21 15:14	06/30/21 18:18	1
13C2 PFTeDA	36	*5-	50 - 150	06/29/21 15:14	06/30/21 18:18	1
13C3 PFBS	87		50 - 150	06/29/21 15:14	06/30/21 18:18	1
18O2 PFHxS	86		50 - 150	06/29/21 15:14	06/30/21 18:18	1
13C4 PFOS	82		50 - 150	06/29/21 15:14	06/30/21 18:18	1
d3-NMeFOSAA	82		50 - 150	06/29/21 15:14	06/30/21 18:18	1
d5-NEtFOSAA	77		50 - 150	06/29/21 15:14	06/30/21 18:18	1
M2-6:2 FTS	84		25 - 150	06/29/21 15:14	06/30/21 18:18	1
M2-8:2 FTS	87		25 - 150	06/29/21 15:14	06/30/21 18:18	1

Client Sample ID: BR-2 062321

Lab Sample ID: 460-237444-2

Date Collected: 06/23/21 10:50

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 11:52	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: BR-2 062321

Lab Sample ID: 460-237444-2

Date Collected: 06/23/21 10:50

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 11:52	1
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 11:52	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 11:52	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 11:52	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 11:52	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 11:52	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 11:52	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 11:52	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 11:52	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 11:52	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 11:52	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 11:52	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 11:52	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 11:52	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 11:52	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 11:52	1
Trichloroethene	ND		1.0	0.31	ug/L			06/28/21 11:52	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 11:52	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 11:52	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 11:52	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 11:52	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 11:52	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 11:52	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 11:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 11:52	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 11:52	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 11:52	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 11:52	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 11:52	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 11:52	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 11:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		60 - 140		06/28/21 11:52	1
Toluene-d8 (Surr)	85		60 - 140		06/28/21 11:52	1
Bromofluorobenzene	88		60 - 140		06/28/21 11:52	1
Dibromofluoromethane (Surr)	95		60 - 140		06/28/21 11:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:47	06/29/21 16:06	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	41		10 - 150				06/29/21 09:47	06/29/21 16:06	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	2.1	J	4.8	0.86	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.46	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.44	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluoroheptanoic acid (PFHpA)	0.24	J	1.9	0.23	ng/L		06/29/21 15:14	06/30/21 18:51	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: BR-2 062321

Lab Sample ID: 460-237444-2

Date Collected: 06/23/21 10:50

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		1.9	0.41	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorononanoic acid (PFNA)	0.28	J	1.9	0.27	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorotridecanoic acid (PFTrIA)	ND		1.9	0.42	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorobutanesulfonic acid (PFBS)	0.29	J	1.9	0.24	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorohexanesulfonic acid (PFHxS)	0.34	J	1.9	0.29	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.23	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorooctanesulfonic acid (PFOS)	0.41	J	1.9	0.28	ng/L		06/29/21 15:14	06/30/21 18:51	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.56	ng/L		06/29/21 15:14	06/30/21 18:51	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	0.87	ng/L		06/29/21 15:14	06/30/21 18:51	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	0.72	ng/L		06/29/21 15:14	06/30/21 18:51	1
6:2 FTS	ND		4.8	1.1	ng/L		06/29/21 15:14	06/30/21 18:51	1
8:2 FTS	ND		1.9	0.38	ng/L		06/29/21 15:14	06/30/21 18:51	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	76		25 - 150	06/29/21 15:14	06/30/21 18:51	1
13C4 PFBA	85		25 - 150	06/29/21 15:14	06/30/21 18:51	1
13C5 PFPeA	92		25 - 150	06/29/21 15:14	06/30/21 18:51	1
13C2 PFHxA	93		50 - 150	06/29/21 15:14	06/30/21 18:51	1
13C4 PFHpA	90		50 - 150	06/29/21 15:14	06/30/21 18:51	1
13C4 PFOA	93		50 - 150	06/29/21 15:14	06/30/21 18:51	1
13C5 PFNA	92		50 - 150	06/29/21 15:14	06/30/21 18:51	1
13C2 PFDA	93		50 - 150	06/29/21 15:14	06/30/21 18:51	1
13C2 PFUnA	84		50 - 150	06/29/21 15:14	06/30/21 18:51	1
13C2 PFDoA	77		50 - 150	06/29/21 15:14	06/30/21 18:51	1
13C2 PFTeDA	77		50 - 150	06/29/21 15:14	06/30/21 18:51	1
13C3 PFBS	83		50 - 150	06/29/21 15:14	06/30/21 18:51	1
18O2 PFHxS	82		50 - 150	06/29/21 15:14	06/30/21 18:51	1
13C4 PFOS	83		50 - 150	06/29/21 15:14	06/30/21 18:51	1
d3-NMeFOSAA	81		50 - 150	06/29/21 15:14	06/30/21 18:51	1
d5-NEtFOSAA	86		50 - 150	06/29/21 15:14	06/30/21 18:51	1
M2-6:2 FTS	85		25 - 150	06/29/21 15:14	06/30/21 18:51	1
M2-8:2 FTS	94		25 - 150	06/29/21 15:14	06/30/21 18:51	1

Client Sample ID: MW-4 062321

Lab Sample ID: 460-237444-3

Date Collected: 06/23/21 13:00

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 12:15	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 12:15	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-4 062321

Lab Sample ID: 460-237444-3

Date Collected: 06/23/21 13:00

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 12:15	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 12:15	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 12:15	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 12:15	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 12:15	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 12:15	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 12:15	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 12:15	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 12:15	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 12:15	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 12:15	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 12:15	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 12:15	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 12:15	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 12:15	1
Trichloroethene	ND		1.0	0.31	ug/L			06/28/21 12:15	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 12:15	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 12:15	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 12:15	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 12:15	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 12:15	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 12:15	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 12:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 12:15	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 12:15	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 12:15	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 12:15	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 12:15	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 12:15	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 12:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		60 - 140		06/28/21 12:15	1
Toluene-d8 (Surr)	85		60 - 140		06/28/21 12:15	1
Bromofluorobenzene	92		60 - 140		06/28/21 12:15	1
Dibromofluoromethane (Surr)	97		60 - 140		06/28/21 12:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:47	06/29/21 16:22	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	45		10 - 150				06/29/21 09:47	06/29/21 16:22	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.6		4.9	0.88	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluoropentanoic acid (PFPeA)	2.4		2.0	0.47	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorohexanoic acid (PFHxA)	1.9	J	2.0	0.45	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluoroheptanoic acid (PFHpA)	2.0		2.0	0.24	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorooctanoic acid (PFOA)	2.8		2.0	0.42	ng/L		06/29/21 15:14	06/30/21 18:59	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-4 062321

Lab Sample ID: 460-237444-3

Date Collected: 06/23/21 13:00

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	0.30	J	2.0	0.28	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorobutanesulfonic acid (PFBS)	1.2	J	2.0	0.25	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorohexanesulfonic acid (PFHxS)	0.66	J	2.0	0.30	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorooctanesulfonic acid (PFOS)	0.77	J	2.0	0.29	ng/L		06/29/21 15:14	06/30/21 18:59	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57	ng/L		06/29/21 15:14	06/30/21 18:59	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.89	ng/L		06/29/21 15:14	06/30/21 18:59	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73	ng/L		06/29/21 15:14	06/30/21 18:59	1
6:2 FTS	ND		4.9	1.1	ng/L		06/29/21 15:14	06/30/21 18:59	1
8:2 FTS	ND		2.0	0.39	ng/L		06/29/21 15:14	06/30/21 18:59	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	77		25 - 150				06/29/21 15:14	06/30/21 18:59	1
13C4 PFBA	74		25 - 150				06/29/21 15:14	06/30/21 18:59	1
13C5 PFPeA	89		25 - 150				06/29/21 15:14	06/30/21 18:59	1
13C2 PFHxA	90		50 - 150				06/29/21 15:14	06/30/21 18:59	1
13C4 PFHpA	92		50 - 150				06/29/21 15:14	06/30/21 18:59	1
13C4 PFOA	92		50 - 150				06/29/21 15:14	06/30/21 18:59	1
13C5 PFNA	92		50 - 150				06/29/21 15:14	06/30/21 18:59	1
13C2 PFDA	94		50 - 150				06/29/21 15:14	06/30/21 18:59	1
13C2 PFUnA	85		50 - 150				06/29/21 15:14	06/30/21 18:59	1
13C2 PFDoA	78		50 - 150				06/29/21 15:14	06/30/21 18:59	1
13C2 PFTeDA	76		50 - 150				06/29/21 15:14	06/30/21 18:59	1
13C3 PFBS	79		50 - 150				06/29/21 15:14	06/30/21 18:59	1
18O2 PFHxS	83		50 - 150				06/29/21 15:14	06/30/21 18:59	1
13C4 PFOS	81		50 - 150				06/29/21 15:14	06/30/21 18:59	1
d3-NMeFOSAA	81		50 - 150				06/29/21 15:14	06/30/21 18:59	1
d5-NEtFOSAA	80		50 - 150				06/29/21 15:14	06/30/21 18:59	1
M2-6:2 FTS	88		25 - 150				06/29/21 15:14	06/30/21 18:59	1
M2-8:2 FTS	91		25 - 150				06/29/21 15:14	06/30/21 18:59	1

Client Sample ID: MW-5 062321

Lab Sample ID: 460-237444-4

Date Collected: 06/23/21 15:15

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 12:37	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 12:37	1
Vinyl chloride	10		1.0	0.34	ug/L			06/28/21 12:37	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-5 062321

Lab Sample ID: 460-237444-4

Date Collected: 06/23/21 15:15

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 12:37	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 12:37	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 12:37	1
1,1-Dichloroethene	0.34	J	1.0	0.12	ug/L			06/28/21 12:37	1
1,1-Dichloroethane	8.6		1.0	0.26	ug/L			06/28/21 12:37	1
trans-1,2-Dichloroethene	0.52	J	1.0	0.24	ug/L			06/28/21 12:37	1
cis-1,2-Dichloroethene	53		1.0	0.22	ug/L			06/28/21 12:37	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 12:37	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 12:37	1
1,1,1-Trichloroethane	0.63	J	1.0	0.24	ug/L			06/28/21 12:37	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 12:37	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 12:37	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 12:37	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 12:37	1
Trichloroethene	1.6		1.0	0.31	ug/L			06/28/21 12:37	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 12:37	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 12:37	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 12:37	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 12:37	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 12:37	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 12:37	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 12:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 12:37	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 12:37	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 12:37	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 12:37	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 12:37	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 12:37	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 12:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		60 - 140		06/28/21 12:37	1
Toluene-d8 (Surr)	81		60 - 140		06/28/21 12:37	1
Bromofluorobenzene	84		60 - 140		06/28/21 12:37	1
Dibromofluoromethane (Surr)	93		60 - 140		06/28/21 12:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.1		0.20	0.016	ug/L		06/29/21 09:47	06/29/21 16:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	41		10 - 150				06/29/21 09:47	06/29/21 16:38	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.7	J	4.9	0.88	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluoropentanoic acid (PFPeA)	1.1	J	2.0	0.47	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.45	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluoroheptanoic acid (PFHpA)	0.29	J	2.0	0.23	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorooctanoic acid (PFOA)	2.1		2.0	0.42	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.28	ng/L		06/29/21 15:14	06/30/21 19:08	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-5 062321

Lab Sample ID: 460-237444-4

Date Collected: 06/23/21 15:15

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorobutanesulfonic acid (PFBS)	0.38	J	2.0	0.25	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorohexanesulfonic acid (PFHxS)	0.47	J	2.0	0.30	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorooctanesulfonic acid (PFOS)	0.50	J	2.0	0.29	ng/L		06/29/21 15:14	06/30/21 19:08	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57	ng/L		06/29/21 15:14	06/30/21 19:08	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.89	ng/L		06/29/21 15:14	06/30/21 19:08	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73	ng/L		06/29/21 15:14	06/30/21 19:08	1
6:2 FTS	ND		4.9	1.1	ng/L		06/29/21 15:14	06/30/21 19:08	1
8:2 FTS	ND		2.0	0.38	ng/L		06/29/21 15:14	06/30/21 19:08	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	80		25 - 150	06/29/21 15:14	06/30/21 19:08	1
13C4 PFBA	85		25 - 150	06/29/21 15:14	06/30/21 19:08	1
13C5 PFPeA	100		25 - 150	06/29/21 15:14	06/30/21 19:08	1
13C2 PFHxA	102		50 - 150	06/29/21 15:14	06/30/21 19:08	1
13C4 PFHpA	96		50 - 150	06/29/21 15:14	06/30/21 19:08	1
13C4 PFOA	97		50 - 150	06/29/21 15:14	06/30/21 19:08	1
13C5 PFNA	94		50 - 150	06/29/21 15:14	06/30/21 19:08	1
13C2 PFDA	96		50 - 150	06/29/21 15:14	06/30/21 19:08	1
13C2 PFUnA	101		50 - 150	06/29/21 15:14	06/30/21 19:08	1
13C2 PFDoA	94		50 - 150	06/29/21 15:14	06/30/21 19:08	1
13C2 PFTeDA	83		50 - 150	06/29/21 15:14	06/30/21 19:08	1
13C3 PFBS	87		50 - 150	06/29/21 15:14	06/30/21 19:08	1
18O2 PFHxS	88		50 - 150	06/29/21 15:14	06/30/21 19:08	1
13C4 PFOS	86		50 - 150	06/29/21 15:14	06/30/21 19:08	1
d3-NMeFOSAA	82		50 - 150	06/29/21 15:14	06/30/21 19:08	1
d5-NEtFOSAA	96		50 - 150	06/29/21 15:14	06/30/21 19:08	1
M2-6:2 FTS	98		25 - 150	06/29/21 15:14	06/30/21 19:08	1
M2-8:2 FTS	100		25 - 150	06/29/21 15:14	06/30/21 19:08	1

Client Sample ID: MW-6 062321

Lab Sample ID: 460-237444-5

Date Collected: 06/23/21 15:30

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 13:00	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 13:00	1
Vinyl chloride	130		1.0	0.34	ug/L			06/28/21 13:00	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 13:00	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-6 062321

Lab Sample ID: 460-237444-5

Date Collected: 06/23/21 15:30

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 13:00	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 13:00	1
1,1-Dichloroethene	0.70	J	1.0	0.12	ug/L			06/28/21 13:00	1
1,1-Dichloroethane	78		1.0	0.26	ug/L			06/28/21 13:00	1
trans-1,2-Dichloroethene	1.0		1.0	0.24	ug/L			06/28/21 13:00	1
cis-1,2-Dichloroethene	42		1.0	0.22	ug/L			06/28/21 13:00	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 13:00	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 13:00	1
1,1,1-Trichloroethane	8.7		1.0	0.24	ug/L			06/28/21 13:00	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 13:00	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 13:00	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 13:00	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 13:00	1
Trichloroethene	1.9		1.0	0.31	ug/L			06/28/21 13:00	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 13:00	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 13:00	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 13:00	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 13:00	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 13:00	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 13:00	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 13:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 13:00	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 13:00	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 13:00	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 13:00	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 13:00	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 13:00	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 13:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		60 - 140		06/28/21 13:00	1
Toluene-d8 (Surr)	92		60 - 140		06/28/21 13:00	1
Bromofluorobenzene	92		60 - 140		06/28/21 13:00	1
Dibromofluoromethane (Surr)	107		60 - 140		06/28/21 13:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.6		0.20	0.016	ug/L		06/29/21 09:47	06/29/21 16:55	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	39		10 - 150				06/29/21 09:47	06/29/21 16:55	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.7	J	4.9	0.87	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluoropentanoic acid (PFPeA)	1.2	J	2.0	0.46	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorohexanoic acid (PFHxA)	1.5	J	2.0	0.44	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluoroheptanoic acid (PFHpA)	0.91	J	2.0	0.23	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorooctanoic acid (PFOA)	5.5		2.0	0.41	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/29/21 15:14	06/30/21 19:16	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-6 062321

Lab Sample ID: 460-237444-5

Date Collected: 06/23/21 15:30

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorotridecanoic acid (PFTrIA)	ND		2.0	0.42	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorobutanesulfonic acid (PFBS)	0.85	J	2.0	0.24	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorohexanesulfonic acid (PFHxS)	0.52	J	2.0	0.30	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorooctanesulfonic acid (PFOS)	1.3	J	2.0	0.28	ng/L		06/29/21 15:14	06/30/21 19:16	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.56	ng/L		06/29/21 15:14	06/30/21 19:16	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.88	ng/L		06/29/21 15:14	06/30/21 19:16	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73	ng/L		06/29/21 15:14	06/30/21 19:16	1
6:2 FTS	ND		4.9	1.1	ng/L		06/29/21 15:14	06/30/21 19:16	1
8:2 FTS	ND		2.0	0.38	ng/L		06/29/21 15:14	06/30/21 19:16	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	84		25 - 150				06/29/21 15:14	06/30/21 19:16	1
13C4 PFBA	87		25 - 150				06/29/21 15:14	06/30/21 19:16	1
13C5 PFPeA	100		25 - 150				06/29/21 15:14	06/30/21 19:16	1
13C2 PFHxA	104		50 - 150				06/29/21 15:14	06/30/21 19:16	1
13C4 PFHpA	101		50 - 150				06/29/21 15:14	06/30/21 19:16	1
13C4 PFOA	100		50 - 150				06/29/21 15:14	06/30/21 19:16	1
13C5 PFNA	101		50 - 150				06/29/21 15:14	06/30/21 19:16	1
13C2 PFDA	105		50 - 150				06/29/21 15:14	06/30/21 19:16	1
13C2 PFUnA	96		50 - 150				06/29/21 15:14	06/30/21 19:16	1
13C2 PFDoA	92		50 - 150				06/29/21 15:14	06/30/21 19:16	1
13C2 PFTeDA	92		50 - 150				06/29/21 15:14	06/30/21 19:16	1
13C3 PFBS	90		50 - 150				06/29/21 15:14	06/30/21 19:16	1
18O2 PFHxS	98		50 - 150				06/29/21 15:14	06/30/21 19:16	1
13C4 PFOS	90		50 - 150				06/29/21 15:14	06/30/21 19:16	1
d3-NMeFOSAA	99		50 - 150				06/29/21 15:14	06/30/21 19:16	1
d5-NEtFOSAA	96		50 - 150				06/29/21 15:14	06/30/21 19:16	1
M2-6:2 FTS	96		25 - 150				06/29/21 15:14	06/30/21 19:16	1
M2-8:2 FTS	108		25 - 150				06/29/21 15:14	06/30/21 19:16	1

Client Sample ID: MW-11 062321

Lab Sample ID: 460-237444-6

Date Collected: 06/23/21 12:30

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 13:22	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 13:22	1
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 13:22	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 13:22	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 13:22	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-11 062321

Lab Sample ID: 460-237444-6

Date Collected: 06/23/21 12:30

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 13:22	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 13:22	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 13:22	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 13:22	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 13:22	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 13:22	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 13:22	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 13:22	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 13:22	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 13:22	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 13:22	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 13:22	1
Trichloroethene	0.60	J	1.0	0.31	ug/L			06/28/21 13:22	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 13:22	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 13:22	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 13:22	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 13:22	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 13:22	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 13:22	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 13:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 13:22	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 13:22	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 13:22	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 13:22	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 13:22	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 13:22	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		60 - 140		06/28/21 13:22	1
Toluene-d8 (Surr)	89		60 - 140		06/28/21 13:22	1
Bromofluorobenzene	92		60 - 140		06/28/21 13:22	1
Dibromofluoromethane (Surr)	101		60 - 140		06/28/21 13:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:47	06/29/21 17:11	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	37		10 - 150				06/29/21 09:47	06/29/21 17:11	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.2	J	4.9	0.88	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.47	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.44	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.23	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.42	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.28	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/29/21 15:14	06/30/21 19:24	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-11 062321

Lab Sample ID: 460-237444-6

Date Collected: 06/23/21 12:30

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorotridecanoic acid (PFTrIA)	ND		2.0	0.43	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.25	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.30	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorooctanesulfonic acid (PFOS)	0.30	J	2.0	0.29	ng/L		06/29/21 15:14	06/30/21 19:24	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57	ng/L		06/29/21 15:14	06/30/21 19:24	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.89	ng/L		06/29/21 15:14	06/30/21 19:24	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73	ng/L		06/29/21 15:14	06/30/21 19:24	1
6:2 FTS	ND		4.9	1.1	ng/L		06/29/21 15:14	06/30/21 19:24	1
8:2 FTS	ND		2.0	0.38	ng/L		06/29/21 15:14	06/30/21 19:24	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	82		25 - 150	06/29/21 15:14	06/30/21 19:24	1
13C4 PFBA	77		25 - 150	06/29/21 15:14	06/30/21 19:24	1
13C5 PFPeA	92		25 - 150	06/29/21 15:14	06/30/21 19:24	1
13C2 PFHxA	96		50 - 150	06/29/21 15:14	06/30/21 19:24	1
13C4 PFHpA	95		50 - 150	06/29/21 15:14	06/30/21 19:24	1
13C4 PFOA	96		50 - 150	06/29/21 15:14	06/30/21 19:24	1
13C5 PFNA	97		50 - 150	06/29/21 15:14	06/30/21 19:24	1
13C2 PFDA	100		50 - 150	06/29/21 15:14	06/30/21 19:24	1
13C2 PFUnA	86		50 - 150	06/29/21 15:14	06/30/21 19:24	1
13C2 PFDoA	82		50 - 150	06/29/21 15:14	06/30/21 19:24	1
13C2 PFTeDA	78		50 - 150	06/29/21 15:14	06/30/21 19:24	1
13C3 PFBS	83		50 - 150	06/29/21 15:14	06/30/21 19:24	1
18O2 PFHxS	86		50 - 150	06/29/21 15:14	06/30/21 19:24	1
13C4 PFOS	85		50 - 150	06/29/21 15:14	06/30/21 19:24	1
d3-NMeFOSAA	87		50 - 150	06/29/21 15:14	06/30/21 19:24	1
d5-NEtFOSAA	86		50 - 150	06/29/21 15:14	06/30/21 19:24	1
M2-6:2 FTS	91		25 - 150	06/29/21 15:14	06/30/21 19:24	1
M2-8:2 FTS	98		25 - 150	06/29/21 15:14	06/30/21 19:24	1

Client Sample ID: MW-12 062321

Lab Sample ID: 460-237444-7

Date Collected: 06/23/21 09:10

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 13:45	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 13:45	1
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 13:45	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 13:45	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 13:45	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 13:45	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 13:45	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 13:45	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-12 062321

Lab Sample ID: 460-237444-7

Date Collected: 06/23/21 09:10

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 13:45	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 13:45	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 13:45	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 13:45	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 13:45	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 13:45	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 13:45	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 13:45	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 13:45	1
Trichloroethene	ND		1.0	0.31	ug/L			06/28/21 13:45	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 13:45	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 13:45	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 13:45	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 13:45	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 13:45	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 13:45	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 13:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 13:45	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 13:45	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 13:45	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 13:45	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 13:45	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 13:45	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		60 - 140		06/28/21 13:45	1
Toluene-d8 (Surr)	80		60 - 140		06/28/21 13:45	1
Bromofluorobenzene	86		60 - 140		06/28/21 13:45	1
Dibromofluoromethane (Surr)	93		60 - 140		06/28/21 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.019	J	0.20	0.016	ug/L		06/29/21 09:47	06/29/21 17:27	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	46		10 - 150				06/29/21 09:47	06/29/21 17:27	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	8.4		5.1	0.91	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluoropentanoic acid (PFPeA)	1.2	J	2.0	0.48	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorohexanoic acid (PFHxA)	1.7	J	2.0	0.46	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluoroheptanoic acid (PFHpA)	0.86	J	2.0	0.24	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorooctanoic acid (PFOA)	2.2		2.0	0.43	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorononanoic acid (PFNA)	0.38	J	2.0	0.29	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.35	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.39	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.44	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.65	ng/L		06/29/21 15:14	06/30/21 19:33	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-12 062321

Lab Sample ID: 460-237444-7

Date Collected: 06/23/21 09:10

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	0.80	J	2.0	0.26	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorohexanesulfonic acid (PFHxS)	0.46	J	2.0	0.31	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.24	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorooctanesulfonic acid (PFOS)	1.1	J	2.0	0.30	ng/L		06/29/21 15:14	06/30/21 19:33	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.59	ng/L		06/29/21 15:14	06/30/21 19:33	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.1	0.92	ng/L		06/29/21 15:14	06/30/21 19:33	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.1	0.76	ng/L		06/29/21 15:14	06/30/21 19:33	1
6:2 FTS	ND		5.1	1.1	ng/L		06/29/21 15:14	06/30/21 19:33	1
8:2 FTS	ND		2.0	0.40	ng/L		06/29/21 15:14	06/30/21 19:33	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	69		25 - 150				06/29/21 15:14	06/30/21 19:33	1
13C4 PFBA	62		25 - 150				06/29/21 15:14	06/30/21 19:33	1
13C5 PFPeA	81		25 - 150				06/29/21 15:14	06/30/21 19:33	1
13C2 PFHxA	91		50 - 150				06/29/21 15:14	06/30/21 19:33	1
13C4 PFHpA	90		50 - 150				06/29/21 15:14	06/30/21 19:33	1
13C4 PFOA	99		50 - 150				06/29/21 15:14	06/30/21 19:33	1
13C5 PFNA	105		50 - 150				06/29/21 15:14	06/30/21 19:33	1
13C2 PFDA	107		50 - 150				06/29/21 15:14	06/30/21 19:33	1
13C2 PFUnA	104		50 - 150				06/29/21 15:14	06/30/21 19:33	1
13C2 PFDoA	100		50 - 150				06/29/21 15:14	06/30/21 19:33	1
13C2 PFTeDA	95		50 - 150				06/29/21 15:14	06/30/21 19:33	1
13C3 PFBS	84		50 - 150				06/29/21 15:14	06/30/21 19:33	1
18O2 PFHxS	86		50 - 150				06/29/21 15:14	06/30/21 19:33	1
13C4 PFOS	91		50 - 150				06/29/21 15:14	06/30/21 19:33	1
d3-NMeFOSAA	106		50 - 150				06/29/21 15:14	06/30/21 19:33	1
d5-NEtFOSAA	112		50 - 150				06/29/21 15:14	06/30/21 19:33	1
M2-6:2 FTS	129		25 - 150				06/29/21 15:14	06/30/21 19:33	1
M2-8:2 FTS	136		25 - 150				06/29/21 15:14	06/30/21 19:33	1

Client Sample ID: MW-18 062321

Lab Sample ID: 460-237444-8

Date Collected: 06/23/21 16:10

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 14:08	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 14:08	1
Vinyl chloride	97		1.0	0.34	ug/L			06/28/21 14:08	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 14:08	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 14:08	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 14:08	1
1,1-Dichloroethene	1.1		1.0	0.12	ug/L			06/28/21 14:08	1
1,1-Dichloroethane	3.0		1.0	0.26	ug/L			06/28/21 14:08	1
trans-1,2-Dichloroethene	1.1		1.0	0.24	ug/L			06/28/21 14:08	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-18 062321

Lab Sample ID: 460-237444-8

Date Collected: 06/23/21 16:10

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	180		1.0	0.22	ug/L			06/28/21 14:08	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 14:08	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 14:08	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 14:08	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 14:08	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 14:08	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 14:08	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 14:08	1
Trichloroethene	2.4		1.0	0.31	ug/L			06/28/21 14:08	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 14:08	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 14:08	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 14:08	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 14:08	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 14:08	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 14:08	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 14:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 14:08	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 14:08	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 14:08	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 14:08	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 14:08	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 14:08	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 14:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		60 - 140		06/28/21 14:08	1
Toluene-d8 (Surr)	83		60 - 140		06/28/21 14:08	1
Bromofluorobenzene	88		60 - 140		06/28/21 14:08	1
Dibromofluoromethane (Surr)	95		60 - 140		06/28/21 14:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.074	J	0.20	0.016	ug/L		06/29/21 09:47	06/29/21 17:44	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	41		10 - 150				06/29/21 09:47	06/29/21 17:44	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	11		4.8	0.86	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluoropentanoic acid (PFPeA)	0.81	J	1.9	0.46	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorohexanoic acid (PFHxA)	2.5	I	1.9	0.44	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluoroheptanoic acid (PFHpA)	1.2	J	1.9	0.23	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorooctanoic acid (PFOA)	5.2		1.9	0.41	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorononanoic acid (PFNA)	1.2	J I	1.9	0.27	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorodecanoic acid (PFDA)	0.37	J	1.9	0.29	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.42	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61	ng/L		06/29/21 15:14	06/30/21 19:41	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-18 062321

Lab Sample ID: 460-237444-8

Date Collected: 06/23/21 16:10

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.9	0.24	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorohexanesulfonic acid (PFHxS)	1.2	J	1.9	0.29	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.23	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorooctanesulfonic acid (PFOS)	14		1.9	0.28	ng/L		06/29/21 15:14	06/30/21 19:41	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.56	ng/L		06/29/21 15:14	06/30/21 19:41	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	0.87	ng/L		06/29/21 15:14	06/30/21 19:41	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	0.72	ng/L		06/29/21 15:14	06/30/21 19:41	1
6:2 FTS	ND		4.8	1.1	ng/L		06/29/21 15:14	06/30/21 19:41	1
8:2 FTS	ND		1.9	0.38	ng/L		06/29/21 15:14	06/30/21 19:41	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	75		25 - 150				06/29/21 15:14	06/30/21 19:41	1
13C4 PFBA	58		25 - 150				06/29/21 15:14	06/30/21 19:41	1
13C5 PFPeA	85		25 - 150				06/29/21 15:14	06/30/21 19:41	1
13C2 PFHxA	90		50 - 150				06/29/21 15:14	06/30/21 19:41	1
13C4 PFHpA	93		50 - 150				06/29/21 15:14	06/30/21 19:41	1
13C4 PFOA	102		50 - 150				06/29/21 15:14	06/30/21 19:41	1
13C5 PFNA	109		50 - 150				06/29/21 15:14	06/30/21 19:41	1
13C2 PFDA	115		50 - 150				06/29/21 15:14	06/30/21 19:41	1
13C2 PFUnA	113		50 - 150				06/29/21 15:14	06/30/21 19:41	1
13C2 PFDoA	115		50 - 150				06/29/21 15:14	06/30/21 19:41	1
13C2 PFTeDA	111		50 - 150				06/29/21 15:14	06/30/21 19:41	1
13C3 PFBS	83		50 - 150				06/29/21 15:14	06/30/21 19:41	1
18O2 PFHxS	84		50 - 150				06/29/21 15:14	06/30/21 19:41	1
13C4 PFOS	96		50 - 150				06/29/21 15:14	06/30/21 19:41	1
d3-NMeFOSAA	116		50 - 150				06/29/21 15:14	06/30/21 19:41	1
d5-NEtFOSAA	129		50 - 150				06/29/21 15:14	06/30/21 19:41	1
M2-6:2 FTS	140		25 - 150				06/29/21 15:14	06/30/21 19:41	1
M2-8:2 FTS	153	*5+	25 - 150				06/29/21 15:14	06/30/21 19:41	1

Client Sample ID: DUP 062321

Lab Sample ID: 460-237444-9

Date Collected: 06/23/21 08:35

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 14:30	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 14:30	1
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 14:30	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 14:30	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 14:30	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 14:30	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 14:30	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 14:30	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 14:30	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: DUP 062321

Lab Sample ID: 460-237444-9

Date Collected: 06/23/21 08:35

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 14:30	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 14:30	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 14:30	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 14:30	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 14:30	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 14:30	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 14:30	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 14:30	1
Trichloroethene	ND		1.0	0.31	ug/L			06/28/21 14:30	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 14:30	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 14:30	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 14:30	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 14:30	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 14:30	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 14:30	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 14:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 14:30	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 14:30	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 14:30	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 14:30	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 14:30	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 14:30	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 14:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		60 - 140		06/28/21 14:30	1
Toluene-d8 (Surr)	81		60 - 140		06/28/21 14:30	1
Bromofluorobenzene	86		60 - 140		06/28/21 14:30	1
Dibromofluoromethane (Surr)	94		60 - 140		06/28/21 14:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:47	06/29/21 18:00	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	44		10 - 150				06/29/21 09:47	06/29/21 18:00	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.7	0.85	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.45	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.43	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.23	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.40	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.27	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.41	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.60	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.24	ng/L		06/29/21 15:14	06/30/21 19:49	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: DUP 062321

Lab Sample ID: 460-237444-9

Date Collected: 06/23/21 08:35

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.28	ng/L		06/29/21 15:14	06/30/21 19:49	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.55	ng/L		06/29/21 15:14	06/30/21 19:49	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.7	0.86	ng/L		06/29/21 15:14	06/30/21 19:49	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.7	0.71	ng/L		06/29/21 15:14	06/30/21 19:49	1
6:2 FTS	2.6	J	4.7	1.0	ng/L		06/29/21 15:14	06/30/21 19:49	1
8:2 FTS	ND		1.9	0.37	ng/L		06/29/21 15:14	06/30/21 19:49	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	86		25 - 150	06/29/21 15:14	06/30/21 19:49	1
13C4 PFBA	97		25 - 150	06/29/21 15:14	06/30/21 19:49	1
13C5 PFPeA	102		25 - 150	06/29/21 15:14	06/30/21 19:49	1
13C2 PFHxA	94		50 - 150	06/29/21 15:14	06/30/21 19:49	1
13C4 PFHpA	98		50 - 150	06/29/21 15:14	06/30/21 19:49	1
13C4 PFOA	98		50 - 150	06/29/21 15:14	06/30/21 19:49	1
13C5 PFNA	99		50 - 150	06/29/21 15:14	06/30/21 19:49	1
13C2 PFDA	105		50 - 150	06/29/21 15:14	06/30/21 19:49	1
13C2 PFUnA	94		50 - 150	06/29/21 15:14	06/30/21 19:49	1
13C2 PFDaA	96		50 - 150	06/29/21 15:14	06/30/21 19:49	1
13C2 PFTeDA	89		50 - 150	06/29/21 15:14	06/30/21 19:49	1
13C3 PFBS	91		50 - 150	06/29/21 15:14	06/30/21 19:49	1
18O2 PFHxS	91		50 - 150	06/29/21 15:14	06/30/21 19:49	1
13C4 PFOS	88		50 - 150	06/29/21 15:14	06/30/21 19:49	1
d3-NMeFOSAA	92		50 - 150	06/29/21 15:14	06/30/21 19:49	1
d5-NEtFOSAA	86		50 - 150	06/29/21 15:14	06/30/21 19:49	1
M2-6:2 FTS	90		25 - 150	06/29/21 15:14	06/30/21 19:49	1
M2-8:2 FTS	102		25 - 150	06/29/21 15:14	06/30/21 19:49	1

Client Sample ID: Trip-B3 062321

Lab Sample ID: 460-237444-10

Date Collected: 06/23/21 00:00

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 10:44	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 10:44	1
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 10:44	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 10:44	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 10:44	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 10:44	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 10:44	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 10:44	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 10:44	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 10:44	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 10:44	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 10:44	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: Trip-B3 062321

Lab Sample ID: 460-237444-10

Date Collected: 06/23/21 00:00

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 10:44	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 10:44	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 10:44	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 10:44	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 10:44	1
Trichloroethene	ND		1.0	0.31	ug/L			06/28/21 10:44	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 10:44	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 10:44	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 10:44	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 10:44	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 10:44	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 10:44	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 10:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 10:44	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 10:44	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 10:44	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 10:44	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 10:44	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 10:44	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 10:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		60 - 140		06/28/21 10:44	1
Toluene-d8 (Surr)	80		60 - 140		06/28/21 10:44	1
Bromofluorobenzene	82		60 - 140		06/28/21 10:44	1
Dibromofluoromethane (Surr)	93		60 - 140		06/28/21 10:44	1

Client Sample ID: Field BI. 062321

Lab Sample ID: 460-237444-11

Date Collected: 06/23/21 10:00

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:47	06/29/21 18:16	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	39		10 - 150				06/29/21 09:47	06/29/21 18:16	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.8	0.85	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.45	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.43	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.23	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.40	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.27	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.41	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.60	ng/L		06/29/21 15:14	06/30/21 19:57	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: Field BI. 062321

Lab Sample ID: 460-237444-11

Date Collected: 06/23/21 10:00

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.24	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.28	ng/L		06/29/21 15:14	06/30/21 19:57	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.55	ng/L		06/29/21 15:14	06/30/21 19:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	0.86	ng/L		06/29/21 15:14	06/30/21 19:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	0.71	ng/L		06/29/21 15:14	06/30/21 19:57	1
6:2 FTS	ND		4.8	1.0	ng/L		06/29/21 15:14	06/30/21 19:57	1
8:2 FTS	ND		1.9	0.37	ng/L		06/29/21 15:14	06/30/21 19:57	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	69		25 - 150	06/29/21 15:14	06/30/21 19:57	1
13C4 PFBA	100		25 - 150	06/29/21 15:14	06/30/21 19:57	1
13C5 PFPeA	103		25 - 150	06/29/21 15:14	06/30/21 19:57	1
13C2 PFHxA	100		50 - 150	06/29/21 15:14	06/30/21 19:57	1
13C4 PFHpA	99		50 - 150	06/29/21 15:14	06/30/21 19:57	1
13C4 PFOA	99		50 - 150	06/29/21 15:14	06/30/21 19:57	1
13C5 PFNA	101		50 - 150	06/29/21 15:14	06/30/21 19:57	1
13C2 PFDA	103		50 - 150	06/29/21 15:14	06/30/21 19:57	1
13C2 PFUnA	97		50 - 150	06/29/21 15:14	06/30/21 19:57	1
13C2 PFDoA	89		50 - 150	06/29/21 15:14	06/30/21 19:57	1
13C2 PFTeDA	79		50 - 150	06/29/21 15:14	06/30/21 19:57	1
13C3 PFBS	89		50 - 150	06/29/21 15:14	06/30/21 19:57	1
18O2 PFHxS	89		50 - 150	06/29/21 15:14	06/30/21 19:57	1
13C4 PFOS	88		50 - 150	06/29/21 15:14	06/30/21 19:57	1
d3-NMeFOSAA	92		50 - 150	06/29/21 15:14	06/30/21 19:57	1
d5-NEtFOSAA	88		50 - 150	06/29/21 15:14	06/30/21 19:57	1
M2-6:2 FTS	88		25 - 150	06/29/21 15:14	06/30/21 19:57	1
M2-8:2 FTS	107		25 - 150	06/29/21 15:14	06/30/21 19:57	1

Client Sample ID: Equip BI. 062321

Lab Sample ID: 460-237444-12

Date Collected: 06/23/21 11:05

Matrix: Water

Date Received: 06/25/21 09:25

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.8	0.85	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.45	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.43	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.23	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.41	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.27	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.42	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.60	ng/L		06/29/21 15:14	06/30/21 20:06	1

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Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: Equip BI. 062321

Lab Sample ID: 460-237444-12

Date Collected: 06/23/21 11:05

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.24	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.28	ng/L		06/29/21 15:14	06/30/21 20:06	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.55	ng/L		06/29/21 15:14	06/30/21 20:06	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	0.86	ng/L		06/29/21 15:14	06/30/21 20:06	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	0.71	ng/L		06/29/21 15:14	06/30/21 20:06	1
6:2 FTS	ND		4.8	1.0	ng/L		06/29/21 15:14	06/30/21 20:06	1
8:2 FTS	ND		1.9	0.37	ng/L		06/29/21 15:14	06/30/21 20:06	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	71		25 - 150	06/29/21 15:14	06/30/21 20:06	1
13C4 PFBA	72		25 - 150	06/29/21 15:14	06/30/21 20:06	1
13C5 PFPeA	98		25 - 150	06/29/21 15:14	06/30/21 20:06	1
13C2 PFHxA	100		50 - 150	06/29/21 15:14	06/30/21 20:06	1
13C4 PFHpA	102		50 - 150	06/29/21 15:14	06/30/21 20:06	1
13C4 PFOA	102		50 - 150	06/29/21 15:14	06/30/21 20:06	1
13C5 PFNA	100		50 - 150	06/29/21 15:14	06/30/21 20:06	1
13C2 PFDA	100		50 - 150	06/29/21 15:14	06/30/21 20:06	1
13C2 PFUnA	92		50 - 150	06/29/21 15:14	06/30/21 20:06	1
13C2 PFDoA	89		50 - 150	06/29/21 15:14	06/30/21 20:06	1
13C2 PFTeDA	79		50 - 150	06/29/21 15:14	06/30/21 20:06	1
13C3 PFBS	89		50 - 150	06/29/21 15:14	06/30/21 20:06	1
18O2 PFHxS	89		50 - 150	06/29/21 15:14	06/30/21 20:06	1
13C4 PFOS	90		50 - 150	06/29/21 15:14	06/30/21 20:06	1
d3-NMeFOSAA	87		50 - 150	06/29/21 15:14	06/30/21 20:06	1
d5-NEtFOSAA	88		50 - 150	06/29/21 15:14	06/30/21 20:06	1
M2-6:2 FTS	87		25 - 150	06/29/21 15:14	06/30/21 20:06	1
M2-8:2 FTS	101		25 - 150	06/29/21 15:14	06/30/21 20:06	1

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (60-140)	TOL (60-140)	BFB (60-140)	DBFM (60-140)
460-237444-1	BR-1 062321	99	92	97	105
460-237444-2	BR-2 062321	91	85	88	95
460-237444-3	MW-4 062321	92	85	92	97
460-237444-4	MW-5 062321	88	81	84	93
460-237444-5	MW-6 062321	100	92	92	107
460-237444-6	MW-11 062321	98	89	92	101
460-237444-7	MW-12 062321	88	80	86	93
460-237444-8	MW-18 062321	87	83	88	95
460-237444-9	DUP 062321	89	81	86	94
460-237444-10	Trip-B3 062321	89	80	82	93
LCS 460-787015/4	Lab Control Sample	90	90	94	97
LCSD 460-787015/5	Lab Control Sample Dup	85	86	93	91
MB 460-787015/9	Method Blank	88	83	89	95

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = Bromofluorobenzene

DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	DXE (10-150)
460-237444-1	BR-1 062321	44
460-237444-1 MS	BR-1 062321	34
460-237444-1 MSD	BR-1 062321	40
460-237444-2	BR-2 062321	41
460-237444-3	MW-4 062321	45
460-237444-4	MW-5 062321	41
460-237444-5	MW-6 062321	39
460-237444-6	MW-11 062321	37
460-237444-7	MW-12 062321	46
460-237444-8	MW-18 062321	41
460-237444-9	DUP 062321	44
460-237444-11	Field Bl. 062321	39
LCS 460-787278/2-A	Lab Control Sample	29
LCSD 460-787278/3-A	Lab Control Sample Dup	32
MB 460-787278/1-A	Method Blank	34
Surrogate Legend		
DXE = 1,4-Dioxane-d8		

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	PFOSA (25-150)	PFBA (25-150)	PFPeA (25-150)	PFHxA (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFNA (50-150)	PFDA (50-150)
460-237444-1	BR-1 062321	85	80	98	100	100	100	98	96
460-237444-1 MS	BR-1 062321	84	103	102	104	96	97	99	98
460-237444-1 MSD	BR-1 062321	82	99	102	108	98	102	101	100
460-237444-2	BR-2 062321	76	85	92	93	90	93	92	93
460-237444-3	MW-4 062321	77	74	89	90	92	92	92	94
460-237444-4	MW-5 062321	80	85	100	102	96	97	94	96
460-237444-5	MW-6 062321	84	87	100	104	101	100	101	105
460-237444-6	MW-11 062321	82	77	92	96	95	96	97	100
460-237444-7	MW-12 062321	69	62	81	91	90	99	105	107
460-237444-8	MW-18 062321	75	58	85	90	93	102	109	115
460-237444-9	DUP 062321	86	97	102	94	98	98	99	105
460-237444-11	Field Bl. 062321	69	100	103	100	99	99	101	103
460-237444-12	Equip Bl. 062321	71	72	98	100	102	102	100	100
LCS 200-168567/2-A	Lab Control Sample	69	103	102	110	97	97	99	105
MB 200-168567/1-A	Method Blank	72	100	105	101	95	96	96	104
Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFTDA (50-150)	C3PFBS (50-150)	PFHxS (50-150)	PFOS (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)
460-237444-1	BR-1 062321	89	79	36 *5-	87	86	82	82	77
460-237444-1 MS	BR-1 062321	90	92	85	91	91	86	87	87
460-237444-1 MSD	BR-1 062321	99	96	88	92	93	95	92	83
460-237444-2	BR-2 062321	84	77	77	83	82	83	81	86
460-237444-3	MW-4 062321	85	78	76	79	83	81	81	80
460-237444-4	MW-5 062321	101	94	83	87	88	86	82	96
460-237444-5	MW-6 062321	96	92	92	90	98	90	99	96

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Isotope Dilution Summary

Client: New York State D.E.C.

Job ID: 460-237444-1

Project/Site: Northeast Alloys & Metals #633045

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PfUnA (50-150)	PfDoA (50-150)	PfTDA (50-150)	C3PFBS (50-150)	PfHxS (50-150)	PfOS (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)
460-237444-6	MW-11 062321	86	82	78	83	86	85	87	86
460-237444-7	MW-12 062321	104	100	95	84	86	91	106	112
460-237444-8	MW-18 062321	113	115	111	83	84	96	116	129
460-237444-9	DUP 062321	94	96	89	91	91	88	92	86
460-237444-11	Field Bl. 062321	97	89	79	89	89	88	92	88
460-237444-12	Equip Bl. 062321	92	89	79	89	89	90	87	88
LCS 200-168567/2-A	Lab Control Sample	92	87	80	89	89	91	94	88
MB 200-168567/1-A	Method Blank	92	84	79	89	87	89	93	90

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
460-237444-1	BR-1 062321	84	87
460-237444-1 MS	BR-1 062321	89	102
460-237444-1 MSD	BR-1 062321	87	103
460-237444-2	BR-2 062321	85	94
460-237444-3	MW-4 062321	88	91
460-237444-4	MW-5 062321	98	100
460-237444-5	MW-6 062321	96	108
460-237444-6	MW-11 062321	91	98
460-237444-7	MW-12 062321	129	136
460-237444-8	MW-18 062321	140	153 *5+
460-237444-9	DUP 062321	90	102
460-237444-11	Field Bl. 062321	88	107
460-237444-12	Equip Bl. 062321	87	101
LCS 200-168567/2-A	Lab Control Sample	90	104
MB 200-168567/1-A	Method Blank	94	100

Surrogate Legend

PFOSA = 13C8 FOSA
 PFBA = 13C4 PFBA
 PFPeA = 13C5 PFPeA
 PFHxA = 13C2 PFHxA
 C4PFHA = 13C4 PFHpA
 PFOA = 13C4 PFOA
 PFNA = 13C5 PFNA
 PFDA = 13C2 PFDA
 PFUnA = 13C2 PFUnA
 PFDaA = 13C2 PFDaA
 PFTDA = 13C2 PFTeDA
 C3PFBS = 13C3 PFBS
 PFHxS = 18O2 PFHxS
 PFOS = 13C4 PFOS
 d3NMFOS = d3-NMeFOSAA
 d5NEFOS = d5-NEtFOSAA
 M262FTS = M2-6:2 FTS
 M282FTS = M2-8:2 FTS

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-787015/9

Matrix: Water

Analysis Batch: 787015

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 09:59	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 09:59	1
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 09:59	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 09:59	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 09:59	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 09:59	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 09:59	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 09:59	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 09:59	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 09:59	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 09:59	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 09:59	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 09:59	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 09:59	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 09:59	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 09:59	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 09:59	1
Trichloroethene	ND		1.0	0.31	ug/L			06/28/21 09:59	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 09:59	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 09:59	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 09:59	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 09:59	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 09:59	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 09:59	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 09:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 09:59	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 09:59	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 09:59	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 09:59	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 09:59	1
Acrolein	ND		4.0	1.1	ug/L			06/28/21 09:59	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 09:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		60 - 140		06/28/21 09:59	1
Toluene-d8 (Surr)	83		60 - 140		06/28/21 09:59	1
Bromofluorobenzene	89		60 - 140		06/28/21 09:59	1
Dibromofluoromethane (Surr)	95		60 - 140		06/28/21 09:59	1

Lab Sample ID: LCS 460-787015/4

Matrix: Water

Analysis Batch: 787015

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	20.0	18.5		ug/L		92	0.1 - 205
Bromomethane	20.0	19.6		ug/L		98	15 - 185
Vinyl chloride	20.0	18.4		ug/L		92	5 - 195
Ethyl Chloride	20.0	18.8		ug/L		94	40 - 160

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QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-787015/4

Matrix: Water

Analysis Batch: 787015

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	20.0	20.7		ug/L		104	60 - 140
Trichlorofluoromethane	20.0	22.8		ug/L		114	50 - 150
1,1-Dichloroethene	20.0	20.5		ug/L		102	50 - 150
1,1-Dichloroethane	20.0	19.0		ug/L		95	70 - 130
trans-1,2-Dichloroethene	20.0	18.7		ug/L		94	70 - 130
cis-1,2-Dichloroethene	20.0	19.4		ug/L		97	60 - 140
Chloroform	20.0	19.4		ug/L		97	70 - 135
1,2-Dichloroethane	20.0	18.8		ug/L		94	70 - 130
1,1,1-Trichloroethane	20.0	19.6		ug/L		98	70 - 130
Carbon tetrachloride	20.0	21.8		ug/L		109	70 - 130
Bromodichloromethane	20.0	19.1		ug/L		96	65 - 135
1,2-Dichloropropane	20.0	18.0		ug/L		90	35 - 165
cis-1,3-Dichloropropene	20.0	18.6		ug/L		93	25 - 175
Trichloroethene	20.0	19.7		ug/L		99	65 - 135
Dibromochloromethane	20.0	22.0		ug/L		110	70 - 135
1,1,2-Trichloroethane	20.0	18.9		ug/L		95	70 - 130
Benzene	20.0	18.8		ug/L		94	65 - 135
trans-1,3-Dichloropropene	20.0	18.4		ug/L		92	50 - 150
2-Chloroethyl vinyl ether	20.0	16.3		ug/L		81	0.1 - 225
Bromoform	20.0	20.7		ug/L		103	70 - 130
Tetrachloroethene	20.0	21.1		ug/L		106	70 - 130
1,1,2,2-Tetrachloroethane	20.0	17.8		ug/L		89	60 - 140
Toluene	20.0	18.8		ug/L		94	70 - 130
Chlorobenzene	20.0	20.0		ug/L		100	65 - 135
Ethylbenzene	20.0	20.0		ug/L		100	60 - 140
Xylenes, Total	40.0	38.1		ug/L		95	60 - 140
Acrolein	40.6	62.5	*+	ug/L		154	10 - 150
Acrylonitrile	200	194		ug/L		97	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		60 - 140
Toluene-d8 (Surr)	90		60 - 140
Bromofluorobenzene	94		60 - 140
Dibromofluoromethane (Surr)	97		60 - 140

Lab Sample ID: LCSD 460-787015/5

Matrix: Water

Analysis Batch: 787015

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloromethane	20.0	16.8		ug/L		84	0.1 - 205	9	60
Bromomethane	20.0	18.4		ug/L		92	15 - 185	6	61
Vinyl chloride	20.0	16.2		ug/L		81	5 - 195	13	66
Ethyl Chloride	20.0	16.3		ug/L		81	40 - 160	14	78
Methylene Chloride	20.0	19.2		ug/L		96	60 - 140	7	28
Trichlorofluoromethane	20.0	21.4		ug/L		107	50 - 150	6	84
1,1-Dichloroethene	20.0	19.3		ug/L		96	50 - 150	6	32
1,1-Dichloroethane	20.0	18.9		ug/L		94	70 - 130	1	40

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-787015/5

Matrix: Water

Analysis Batch: 787015

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
trans-1,2-Dichloroethene	20.0	19.1		ug/L		96	70 - 130	2	45
cis-1,2-Dichloroethene	20.0	19.1		ug/L		96	60 - 140	1	50
Chloroform	20.0	19.8		ug/L		99	70 - 135	2	54
1,2-Dichloroethane	20.0	19.0		ug/L		95	70 - 130	1	49
1,1,1-Trichloroethane	20.0	19.1		ug/L		95	70 - 130	3	36
Carbon tetrachloride	20.0	20.7		ug/L		104	70 - 130	5	41
Bromodichloromethane	20.0	18.8		ug/L		94	65 - 135	2	56
1,2-Dichloropropane	20.0	18.1		ug/L		90	35 - 165	1	55
cis-1,3-Dichloropropene	20.0	18.2		ug/L		91	25 - 175	2	58
Trichloroethene	20.0	19.0		ug/L		95	65 - 135	4	48
Dibromochloromethane	20.0	21.8		ug/L		109	70 - 135	1	50
1,1,2-Trichloroethane	20.0	18.3		ug/L		92	70 - 130	3	45
Benzene	20.0	19.4		ug/L		97	65 - 135	3	61
trans-1,3-Dichloropropene	20.0	17.4		ug/L		87	50 - 150	5	86
2-Chloroethyl vinyl ether	20.0	15.8		ug/L		79	0.1 - 225	3	71
Bromoform	20.0	20.0		ug/L		100	70 - 130	3	42
Tetrachloroethene	20.0	19.7		ug/L		99	70 - 130	7	39
1,1,2,2-Tetrachloroethane	20.0	16.8		ug/L		84	60 - 140	6	61
Toluene	20.0	18.1		ug/L		91	70 - 130	4	41
Chlorobenzene	20.0	20.0		ug/L		100	65 - 135	0	53
Ethylbenzene	20.0	18.7		ug/L		93	60 - 140	7	63
Xylenes, Total	40.0	37.4		ug/L		94	60 - 140	2	50
Acrolein	40.6	56.9		ug/L		140	10 - 150	9	60
Acrylonitrile	200	201		ug/L		100	60 - 140	3	60

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		60 - 140
Toluene-d8 (Surr)	86		60 - 140
Bromofluorobenzene	93		60 - 140
Dibromofluoromethane (Surr)	91		60 - 140

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

Lab Sample ID: MB 460-787278/1-A

Matrix: Water

Analysis Batch: 787336

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 787278

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:47	06/29/21 15:01	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	34		10 - 150				06/29/21 09:47	06/29/21 15:01	1

Lab Sample ID: LCS 460-787278/2-A

Matrix: Water

Analysis Batch: 787336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 787278

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	1.60	1.68		ug/L		105	50 - 142

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

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

<i>Isotope Dilution</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>
1,4-Dioxane-d8	29		10 - 150

Lab Sample ID: LCSD 460-787278/3-A
Matrix: Water
Analysis Batch: 787336

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 787278

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,4-Dioxane	1.60	1.68		ug/L		105	50 - 142	0	20
<i>Isotope Dilution</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>						
1,4-Dioxane-d8	32		10 - 150						

Lab Sample ID: 460-237444-1 MS
Matrix: Water
Analysis Batch: 787336

Client Sample ID: BR-1 062321
Prep Type: Total/NA
Prep Batch: 787278

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,4-Dioxane	ND		1.60	1.72		ug/L		108	50 - 142		
<i>Isotope Dilution</i>	<i>MS</i> <i>%Recovery</i>	<i>MS</i> <i>Qualifier</i>	<i>Limits</i>								
1,4-Dioxane-d8	34		10 - 150								

Lab Sample ID: 460-237444-1 MSD
Matrix: Water
Analysis Batch: 787336

Client Sample ID: BR-1 062321
Prep Type: Total/NA
Prep Batch: 787278

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,4-Dioxane	ND		1.60	1.71		ug/L		107	50 - 142	1	20
<i>Isotope Dilution</i>	<i>MSD</i> <i>%Recovery</i>	<i>MSD</i> <i>Qualifier</i>	<i>Limits</i>								
1,4-Dioxane-d8	40		10 - 150								

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-168567/1-A
Matrix: Water
Analysis Batch: 168613

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 168567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	0.89	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.47	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.45	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.24	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.42	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.28	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.39	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.25	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.30	ng/L		06/29/21 15:13	06/30/21 17:03	1

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

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

Lab Sample ID: MB 200-168567/1-A

Matrix: Water

Analysis Batch: 168613

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 168567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.29	ng/L		06/29/21 15:13	06/30/21 17:03	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.58	ng/L		06/29/21 15:13	06/30/21 17:03	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90	ng/L		06/29/21 15:13	06/30/21 17:03	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74	ng/L		06/29/21 15:13	06/30/21 17:03	1
6:2 FTS	ND		5.0	1.1	ng/L		06/29/21 15:13	06/30/21 17:03	1
8:2 FTS	ND		2.0	0.39	ng/L		06/29/21 15:13	06/30/21 17:03	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	72		25 - 150	06/29/21 15:13	06/30/21 17:03	1
13C4 PFBA	100		25 - 150	06/29/21 15:13	06/30/21 17:03	1
13C5 PFPeA	105		25 - 150	06/29/21 15:13	06/30/21 17:03	1
13C2 PFHxA	101		50 - 150	06/29/21 15:13	06/30/21 17:03	1
13C4 PFHpA	95		50 - 150	06/29/21 15:13	06/30/21 17:03	1
13C4 PFOA	96		50 - 150	06/29/21 15:13	06/30/21 17:03	1
13C5 PFNA	96		50 - 150	06/29/21 15:13	06/30/21 17:03	1
13C2 PFDA	104		50 - 150	06/29/21 15:13	06/30/21 17:03	1
13C2 PFUnA	92		50 - 150	06/29/21 15:13	06/30/21 17:03	1
13C2 PFDoA	84		50 - 150	06/29/21 15:13	06/30/21 17:03	1
13C2 PFTeDA	79		50 - 150	06/29/21 15:13	06/30/21 17:03	1
13C3 PFBS	89		50 - 150	06/29/21 15:13	06/30/21 17:03	1
18O2 PFHxS	87		50 - 150	06/29/21 15:13	06/30/21 17:03	1
13C4 PFOS	89		50 - 150	06/29/21 15:13	06/30/21 17:03	1
d3-NMeFOSAA	93		50 - 150	06/29/21 15:13	06/30/21 17:03	1
d5-NEtFOSAA	90		50 - 150	06/29/21 15:13	06/30/21 17:03	1
M2-6:2 FTS	94		25 - 150	06/29/21 15:13	06/30/21 17:03	1
M2-8:2 FTS	100		25 - 150	06/29/21 15:13	06/30/21 17:03	1

Lab Sample ID: LCS 200-168567/2-A

Matrix: Water

Analysis Batch: 168613

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 168567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	38.8		ng/L		97	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	38.8		ng/L		97	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	35.3		ng/L		88	70 - 130
Perfluoroheptanoic acid (PFHpA)	40.0	40.0		ng/L		100	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	41.5		ng/L		104	70 - 130
Perfluorononanoic acid (PFNA)	40.0	39.2		ng/L		98	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	36.7		ng/L		92	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	40.3		ng/L		101	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	35.0		ng/L		88	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	34.0		ng/L		85	70 - 130

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

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

Lab Sample ID: LCS 200-168567/2-A

Matrix: Water

Analysis Batch: 168613

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 168567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorotetradecanoic acid (PFTeA)	40.0	34.7		ng/L		87	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	36.2		ng/L		102	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.9		ng/L		101	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.6		ng/L		99	50 - 150
Perfluorodecanesulfonic acid (PFDS)	38.6	34.1		ng/L		88	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	36.1		ng/L		97	70 - 130
Perfluorooctanesulfonamide (FOSA)	40.0	33.9		ng/L		85	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	38.3		ng/L		96	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	34.6		ng/L		86	70 - 130
6:2 FTS	37.9	40.0		ng/L		105	50 - 150
8:2 FTS	38.3	38.1		ng/L		100	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C8 FOSA	69		25 - 150
13C4 PFBA	103		25 - 150
13C5 PFPeA	102		25 - 150
13C2 PFHxA	110		50 - 150
13C4 PFHpA	97		50 - 150
13C4 PFOA	97		50 - 150
13C5 PFNA	99		50 - 150
13C2 PFDA	105		50 - 150
13C2 PFUnA	92		50 - 150
13C2 PFDoA	87		50 - 150
13C2 PFTeDA	80		50 - 150
13C3 PFBS	89		50 - 150
18O2 PFHxS	89		50 - 150
13C4 PFOS	91		50 - 150
d3-NMeFOSAA	94		50 - 150
d5-NEtFOSAA	88		50 - 150
M2-6:2 FTS	90		25 - 150
M2-8:2 FTS	104		25 - 150

Lab Sample ID: 460-237444-1 MS

Matrix: Water

Analysis Batch: 168613

Client Sample ID: BR-1 062321

Prep Type: Total/NA

Prep Batch: 168567

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	7.2		38.0	38.3		ng/L		82	40 - 160
Perfluoropentanoic acid (PFPeA)	0.76	J	38.0	38.7		ng/L		100	40 - 160
Perfluorohexanoic acid (PFHxA)	1.7	J	38.0	36.2		ng/L		91	40 - 160
Perfluoroheptanoic acid (PFHpA)	0.86	J	38.0	39.8		ng/L		102	40 - 160
Perfluorooctanoic acid (PFOA)	3.2		38.0	39.9		ng/L		96	40 - 160

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

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

Lab Sample ID: 460-237444-1 MS

Matrix: Water

Analysis Batch: 168613

Client Sample ID: BR-1 062321

Prep Type: Total/NA

Prep Batch: 168567

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorononanoic acid (PFNA)	0.37	J	38.0	38.5		ng/L		100	40 - 160
Perfluorodecanoic acid (PFDA)	0.88	J	38.0	39.4		ng/L		101	40 - 160
Perfluoroundecanoic acid (PFUnA)	ND		38.0	39.6		ng/L		104	40 - 160
Perfluorododecanoic acid (PFDoA)	ND		38.0	36.7		ng/L		96	40 - 160
Perfluorotridecanoic acid (PFTriA)	ND		38.0	34.7		ng/L		91	40 - 160
Perfluorotetradecanoic acid (PFTeA)	ND		38.0	36.7		ng/L		96	40 - 160
Perfluorobutanesulfonic acid (PFBS)	2.8		33.6	35.0		ng/L		96	40 - 160
Perfluorohexanesulfonic acid (PFHxS)	0.38	J	34.6	35.0		ng/L		100	40 - 160
Perfluoroheptanesulfonic Acid (PFHpS)	ND		36.2	38.4		ng/L		106	40 - 160
Perfluorodecanesulfonic acid (PFDS)	ND		36.7	35.2		ng/L		96	40 - 160
Perfluorooctanesulfonic acid (PFOS)	0.60	J	35.3	37.0		ng/L		103	40 - 160
Perfluorooctanesulfonamide (FOSA)	ND		38.0	37.8		ng/L		99	40 - 160
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		38.0	38.3		ng/L		101	40 - 160
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		38.0	35.7		ng/L		94	40 - 160
6:2 FTS	12		36.1	38.5		ng/L		74	40 - 160
8:2 FTS	ND		36.4	34.4		ng/L		94	40 - 160

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C8 FOSA	84		25 - 150
13C4 PFBA	103		25 - 150
13C5 PFPeA	102		25 - 150
13C2 PFHxA	104		50 - 150
13C4 PFHpA	96		50 - 150
13C4 PFOA	97		50 - 150
13C5 PFNA	99		50 - 150
13C2 PFDA	98		50 - 150
13C2 PFUnA	90		50 - 150
13C2 PFDoA	92		50 - 150
13C2 PFTeDA	85		50 - 150
13C3 PFBS	91		50 - 150
18O2 PFHxS	91		50 - 150
13C4 PFOS	86		50 - 150
d3-NMeFOSAA	87		50 - 150
d5-NEtFOSAA	87		50 - 150
M2-6:2 FTS	89		25 - 150
M2-8:2 FTS	102		25 - 150

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

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

Lab Sample ID: 460-237444-1 MSD

Matrix: Water

Analysis Batch: 168613

Client Sample ID: BR-1 062321

Prep Type: Total/NA

Prep Batch: 168567

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	7.2		38.6	39.2		ng/L		83	40 - 160	2	30
Perfluoropentanoic acid (PFPeA)	0.76	J	38.6	39.0		ng/L		99	40 - 160	1	30
Perfluorohexanoic acid (PFHxA)	1.7	J	38.6	36.6		ng/L		91	40 - 160	1	20
Perfluoroheptanoic acid (PFHpA)	0.86	J	38.6	38.7		ng/L		98	40 - 160	3	20
Perfluorooctanoic acid (PFOA)	3.2		38.6	37.7		ng/L		89	40 - 160	6	20
Perfluorononanoic acid (PFNA)	0.37	J	38.6	37.9		ng/L		97	40 - 160	2	20
Perfluorodecanoic acid (PFDA)	0.88	J	38.6	38.0		ng/L		96	40 - 160	4	20
Perfluoroundecanoic acid (PFUnA)	ND		38.6	37.2		ng/L		96	40 - 160	6	20
Perfluorododecanoic acid (PFDoA)	ND		38.6	38.1		ng/L		99	40 - 160	4	20
Perfluorotridecanoic acid (PFTriA)	ND		38.6	36.4		ng/L		94	40 - 160	5	20
Perfluorotetradecanoic acid (PFTeA)	ND		38.6	40.2		ng/L		104	40 - 160	9	20
Perfluorobutanesulfonic acid (PFBS)	2.8		34.1	34.9		ng/L		94	40 - 160	0	20
Perfluorohexanesulfonic acid (PFHxS)	0.38	J	35.1	35.0		ng/L		99	40 - 160	0	20
Perfluoroheptanesulfonic Acid (PFHpS)	ND		36.7	35.5		ng/L		97	40 - 160	8	30
Perfluorodecanesulfonic acid (PFDS)	ND		37.2	32.6		ng/L		88	40 - 160	8	30
Perfluorooctanesulfonic acid (PFOS)	0.60	J	35.8	33.5		ng/L		92	40 - 160	10	20
Perfluorooctanesulfonamide (FOSA)	ND		38.6	38.9		ng/L		101	40 - 160	3	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		38.6	36.9		ng/L		96	40 - 160	4	20
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		38.6	37.6		ng/L		98	40 - 160	5	20
6:2 FTS	12		36.5	42.6		ng/L		84	40 - 160	10	30
8:2 FTS	ND		36.9	37.9		ng/L		103	40 - 160	10	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C8 FOSA	82		25 - 150
13C4 PFBA	99		25 - 150
13C5 PFPeA	102		25 - 150
13C2 PFHxA	108		50 - 150
13C4 PFHpA	98		50 - 150
13C4 PFOA	102		50 - 150
13C5 PFNA	101		50 - 150
13C2 PFDA	100		50 - 150
13C2 PFUnA	99		50 - 150
13C2 PFDoA	96		50 - 150
13C2 PFTeDA	88		50 - 150
13C3 PFBS	92		50 - 150
18O2 PFHxS	93		50 - 150
13C4 PFOS	95		50 - 150
d3-NMeFOSAA	92		50 - 150
d5-NEtFOSAA	83		50 - 150

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

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

Lab Sample ID: 460-237444-1 MSD

Matrix: Water

Analysis Batch: 168613

Client Sample ID: BR-1 062321

Prep Type: Total/NA

Prep Batch: 168567

<i>Isotope Dilution</i>	<i>MSD MSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
M2-6:2 FTS	87		25 - 150
M2-8:2 FTS	103		25 - 150

QC Association Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

GC/MS VOA

Analysis Batch: 787015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237444-1	BR-1 062321	Total/NA	Water	624.1	
460-237444-2	BR-2 062321	Total/NA	Water	624.1	
460-237444-3	MW-4 062321	Total/NA	Water	624.1	
460-237444-4	MW-5 062321	Total/NA	Water	624.1	
460-237444-5	MW-6 062321	Total/NA	Water	624.1	
460-237444-6	MW-11 062321	Total/NA	Water	624.1	
460-237444-7	MW-12 062321	Total/NA	Water	624.1	
460-237444-8	MW-18 062321	Total/NA	Water	624.1	
460-237444-9	DUP 062321	Total/NA	Water	624.1	
460-237444-10	Trip-B3 062321	Total/NA	Water	624.1	
MB 460-787015/9	Method Blank	Total/NA	Water	624.1	
LCS 460-787015/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 460-787015/5	Lab Control Sample Dup	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 787278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237444-1	BR-1 062321	Total/NA	Water	3510C	
460-237444-2	BR-2 062321	Total/NA	Water	3510C	
460-237444-3	MW-4 062321	Total/NA	Water	3510C	
460-237444-4	MW-5 062321	Total/NA	Water	3510C	
460-237444-5	MW-6 062321	Total/NA	Water	3510C	
460-237444-6	MW-11 062321	Total/NA	Water	3510C	
460-237444-7	MW-12 062321	Total/NA	Water	3510C	
460-237444-8	MW-18 062321	Total/NA	Water	3510C	
460-237444-9	DUP 062321	Total/NA	Water	3510C	
460-237444-11	Field Bl. 062321	Total/NA	Water	3510C	
MB 460-787278/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-787278/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-787278/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
460-237444-1 MS	BR-1 062321	Total/NA	Water	3510C	
460-237444-1 MSD	BR-1 062321	Total/NA	Water	3510C	

Analysis Batch: 787336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237444-1	BR-1 062321	Total/NA	Water	8270E SIM ID	787278
460-237444-2	BR-2 062321	Total/NA	Water	8270E SIM ID	787278
460-237444-3	MW-4 062321	Total/NA	Water	8270E SIM ID	787278
460-237444-4	MW-5 062321	Total/NA	Water	8270E SIM ID	787278
460-237444-5	MW-6 062321	Total/NA	Water	8270E SIM ID	787278
460-237444-6	MW-11 062321	Total/NA	Water	8270E SIM ID	787278
460-237444-7	MW-12 062321	Total/NA	Water	8270E SIM ID	787278
460-237444-8	MW-18 062321	Total/NA	Water	8270E SIM ID	787278
460-237444-9	DUP 062321	Total/NA	Water	8270E SIM ID	787278
460-237444-11	Field Bl. 062321	Total/NA	Water	8270E SIM ID	787278
MB 460-787278/1-A	Method Blank	Total/NA	Water	8270E SIM ID	787278
LCS 460-787278/2-A	Lab Control Sample	Total/NA	Water	8270E SIM ID	787278
LCSD 460-787278/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM ID	787278
460-237444-1 MS	BR-1 062321	Total/NA	Water	8270E SIM ID	787278
460-237444-1 MSD	BR-1 062321	Total/NA	Water	8270E SIM ID	787278

Eurofins TestAmerica, Edison

QC Association Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

LCMS

Prep Batch: 168567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237444-1	BR-1 062321	Total/NA	Water	3535	
460-237444-2	BR-2 062321	Total/NA	Water	3535	
460-237444-3	MW-4 062321	Total/NA	Water	3535	
460-237444-4	MW-5 062321	Total/NA	Water	3535	
460-237444-5	MW-6 062321	Total/NA	Water	3535	
460-237444-6	MW-11 062321	Total/NA	Water	3535	
460-237444-7	MW-12 062321	Total/NA	Water	3535	
460-237444-8	MW-18 062321	Total/NA	Water	3535	
460-237444-9	DUP 062321	Total/NA	Water	3535	
460-237444-11	Field Bl. 062321	Total/NA	Water	3535	
460-237444-12	Equip Bl. 062321	Total/NA	Water	3535	
MB 200-168567/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-168567/2-A	Lab Control Sample	Total/NA	Water	3535	
460-237444-1 MS	BR-1 062321	Total/NA	Water	3535	
460-237444-1 MSD	BR-1 062321	Total/NA	Water	3535	

Analysis Batch: 168613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237444-1	BR-1 062321	Total/NA	Water	537 (modified)	168567
460-237444-2	BR-2 062321	Total/NA	Water	537 (modified)	168567
460-237444-3	MW-4 062321	Total/NA	Water	537 (modified)	168567
460-237444-4	MW-5 062321	Total/NA	Water	537 (modified)	168567
460-237444-5	MW-6 062321	Total/NA	Water	537 (modified)	168567
460-237444-6	MW-11 062321	Total/NA	Water	537 (modified)	168567
460-237444-7	MW-12 062321	Total/NA	Water	537 (modified)	168567
460-237444-8	MW-18 062321	Total/NA	Water	537 (modified)	168567
460-237444-9	DUP 062321	Total/NA	Water	537 (modified)	168567
460-237444-11	Field Bl. 062321	Total/NA	Water	537 (modified)	168567
460-237444-12	Equip Bl. 062321	Total/NA	Water	537 (modified)	168567
MB 200-168567/1-A	Method Blank	Total/NA	Water	537 (modified)	168567
LCS 200-168567/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	168567
460-237444-1 MS	BR-1 062321	Total/NA	Water	537 (modified)	168567
460-237444-1 MSD	BR-1 062321	Total/NA	Water	537 (modified)	168567

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: BR-1 062321

Lab Sample ID: 460-237444-1

Date Collected: 06/23/21 08:35

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 11:29	CJM	TAL EDI
Total/NA	Prep	3510C			787278	06/29/21 09:47	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787336	06/29/21 15:50	CAZ	TAL EDI
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 18:18	BWC	TAL BUR

Client Sample ID: BR-2 062321

Lab Sample ID: 460-237444-2

Date Collected: 06/23/21 10:50

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 11:52	CJM	TAL EDI
Total/NA	Prep	3510C			787278	06/29/21 09:47	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787336	06/29/21 16:06	CAZ	TAL EDI
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 18:51	BWC	TAL BUR

Client Sample ID: MW-4 062321

Lab Sample ID: 460-237444-3

Date Collected: 06/23/21 13:00

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 12:15	CJM	TAL EDI
Total/NA	Prep	3510C			787278	06/29/21 09:47	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787336	06/29/21 16:22	CAZ	TAL EDI
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 18:59	BWC	TAL BUR

Client Sample ID: MW-5 062321

Lab Sample ID: 460-237444-4

Date Collected: 06/23/21 15:15

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 12:37	CJM	TAL EDI
Total/NA	Prep	3510C			787278	06/29/21 09:47	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787336	06/29/21 16:38	CAZ	TAL EDI
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 19:08	BWC	TAL BUR

Client Sample ID: MW-6 062321

Lab Sample ID: 460-237444-5

Date Collected: 06/23/21 15:30

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 13:00	CJM	TAL EDI

Eurofins TestAmerica, Edison

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: MW-6 062321

Lab Sample ID: 460-237444-5

Date Collected: 06/23/21 15:30

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			787278	06/29/21 09:47	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787336	06/29/21 16:55	CAZ	TAL EDI
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 19:16	BWC	TAL BUR

Client Sample ID: MW-11 062321

Lab Sample ID: 460-237444-6

Date Collected: 06/23/21 12:30

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 13:22	CJM	TAL EDI
Total/NA	Prep	3510C			787278	06/29/21 09:47	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787336	06/29/21 17:11	CAZ	TAL EDI
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 19:24	BWC	TAL BUR

Client Sample ID: MW-12 062321

Lab Sample ID: 460-237444-7

Date Collected: 06/23/21 09:10

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 13:45	CJM	TAL EDI
Total/NA	Prep	3510C			787278	06/29/21 09:47	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787336	06/29/21 17:27	CAZ	TAL EDI
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 19:33	BWC	TAL BUR

Client Sample ID: MW-18 062321

Lab Sample ID: 460-237444-8

Date Collected: 06/23/21 16:10

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 14:08	CJM	TAL EDI
Total/NA	Prep	3510C			787278	06/29/21 09:47	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787336	06/29/21 17:44	CAZ	TAL EDI
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 19:41	BWC	TAL BUR

Client Sample ID: DUP 062321

Lab Sample ID: 460-237444-9

Date Collected: 06/23/21 08:35

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 14:30	CJM	TAL EDI

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Client Sample ID: DUP 062321

Lab Sample ID: 460-237444-9

Date Collected: 06/23/21 08:35

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			787278	06/29/21 09:47	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787336	06/29/21 18:00	CAZ	TAL EDI
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 19:49	BWC	TAL BUR

Client Sample ID: Trip-B3 062321

Lab Sample ID: 460-237444-10

Date Collected: 06/23/21 00:00

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 10:44	CJM	TAL EDI

Client Sample ID: Field BI. 062321

Lab Sample ID: 460-237444-11

Date Collected: 06/23/21 10:00

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			787278	06/29/21 09:47	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787336	06/29/21 18:16	CAZ	TAL EDI
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 19:57	BWC	TAL BUR

Client Sample ID: Equip BI. 062321

Lab Sample ID: 460-237444-12

Date Collected: 06/23/21 11:05

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			168567	06/29/21 15:14	EK	TAL BUR
Total/NA	Analysis	537 (modified)		1	168613	06/30/21 20:06	BWC	TAL BUR

Laboratory References:

TAL BUR = Eurofins TestAmerica, Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL EDI = Eurofins 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: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Laboratory: Eurofins TestAmerica, Edison

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11452	04-01-22

Laboratory: Eurofins TestAmerica, Burlington

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-23
Connecticut	State	PH-0751	09-30-21
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-17-22
Florida	NELAP	E87467	06-30-21
Minnesota	NELAP	050-999-436	12-31-21
New Hampshire	NELAP	2006	12-18-21
New Jersey	NELAP	VT972	06-30-21
New York	NELAP	10391	04-01-22
Pennsylvania	NELAP	68-00489	04-30-22
Rhode Island	State	LAO00298	12-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-22
Virginia	NELAP	460209	12-14-21
Wisconsin	State	399133350	08-31-21

Method Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL EDI
8270E SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

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 BUR = Eurofins TestAmerica, Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

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

Sample Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237444-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-237444-1	BR-1 062321	Water	06/23/21 08:35	06/25/21 09:25	
460-237444-2	BR-2 062321	Water	06/23/21 10:50	06/25/21 09:25	
460-237444-3	MW-4 062321	Water	06/23/21 13:00	06/25/21 09:25	
460-237444-4	MW-5 062321	Water	06/23/21 15:15	06/25/21 09:25	
460-237444-5	MW-6 062321	Water	06/23/21 15:30	06/25/21 09:25	
460-237444-6	MW-11 062321	Water	06/23/21 12:30	06/25/21 09:25	
460-237444-7	MW-12 062321	Water	06/23/21 09:10	06/25/21 09:25	
460-237444-8	MW-18 062321	Water	06/23/21 16:10	06/25/21 09:25	
460-237444-9	DUP 062321	Water	06/23/21 08:35	06/25/21 09:25	
460-237444-10	Trip-B3 062321	Water	06/23/21 00:00	06/25/21 09:25	
460-237444-11	Field Bl. 062321	Water	06/23/21 10:00	06/25/21 09:25	
460-237444-12	Equip Bl. 062321	Water	06/23/21 11:05	06/25/21 09:25	

2014

IR Gun #

2

Cooler Temperatures

[illegible]

If pH adjustments are required record the information below:

Volume of Preservative used (ml):

Expiration Date:

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials:

Date: 6/25/21.

Amherst, NY 14228-2223
phone 716.691.2600 fax 716.691.7991

#224

Regulatory Program:

☐ RCRA ☐ NPDES ☐ DW ☐ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact - Rachel Farnum EnviroSpec Engineering, PLLC 349 Northern Blvd Suite 3 Albany, NY 12204 518-402-9625 rfarnum@envirospeceng.com Project Name: Northeast Alloys and Metals #633045 Project #: 48021991 P O #: Callout ID: 138004		Project Manager: Stone, Judy L Email: Judy.Stone@Eurofinset.com Tel/Fax:		Site Contact: Lab Contact:		Date: Carrier:		COC No: 1 of 2 COCs			
Analysis Turnaround Time ☐ CALENDAR DAYS ☐ WORKING DAYS TAT if different from Below ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix		# of Cont.	
BR-1 062321		6/23/21		8:35		G		Water			
BR-2 062321		6/23/21		10:50		G					
MW-4 062321		6/23/21		13:00		G					
MW-5 062321		6/23/21		15:15		G					
MW-6 062321		6/23/21		15:30		G					
MW-11 062321		6/23/21		12:30		G					
MW-12 062321		6/23/21		9:10		G					
MW-18 062321		6/23/21		16:10		G					
MS 062321		6/23/21		8:35		G					
MSD 062321		6/23/21		8:35		G					
DUP 062321		6/23/21		8:35		G					
Trip -B3 0102321		6/23/21									
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: Category B / NYSDEC 4-fie EDD											
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Cor'd:		Therm ID No.:			
Relinquished by: H. Shy		Company: EnviroSpec		Date/Time: 6/24/21 08:50		Received by: Mark Jordan		Company: EnviroSpec		Date/Time: 6/24/21 08:50	
Relinquished by: Mark Jordan		Company: EnviroSpec		Date/Time: 6/24/21 17:00		Received by: Taylor Whitehouse		Company: EnviroSpec		Date/Time: 6/25/21 10:15	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:	

Do Not Lift Using This Tag

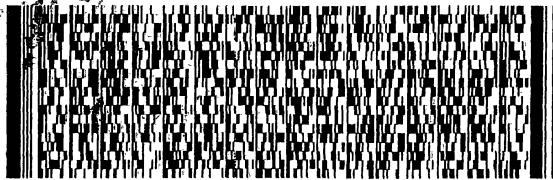
FROM: (518) 43
TIM KNOLLMEYER
TESTAMERICA LAB INC
25 KRAFT AVE
ALBANY NY 12205
US

TO SAMPLE RECEIVING
TESTAMERICA - BURLING
30 COMMUNITY DRIVE, SU

BURLINGTON VT 05403

(US)

(802) 560-1990
REF: ENVIROSPEC



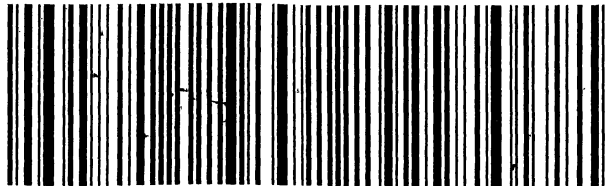
FedEx
Ground



TRK# 5013 1604 9671

05403

9622 0417 3 (000 000 0000) 0 00 5013 1604 9671



Part # 156148-434 RIT EXP 11/21

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-237444-1

Login Number: 237444

List Source: Eurofins TestAmerica, Edison

List Number: 1

Creator: Rivera, Kenneth

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	1595434
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-237444-1

Login Number: 237444

List Number: 2

Creator: Khudaier, Zahraa

List Source: Eurofins TestAmerica, Burlington

List Creation: 06/26/21 02:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1595432
Sample custody seals, if present, are 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	3.2°C
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	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.	N/A	
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	

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-237446-1

Client Project/Site: Northeast Alloys & Metals #633045

For:

New York State D.E.C.
625 Broadway
4th Floor
Albany, New York 12233

Attn: Mr. Payson Long



Authorized for release by:
7/9/2021 6:14:51 PM

Judy Stone, Senior Project Manager
(484)685-0868
Judy.Stone@Eurofinset.com

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

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

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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.



Judy Stone
Senior Project Manager
7/9/2021 6:14:51 PM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	8
Surrogate Summary	17
Isotope Dilution Summary	18
QC Sample Results	20
QC Association Summary	29
Lab Chronicle	31
Certification Summary	33
Method Summary	34
Sample Summary	35
Chain of Custody	36
Receipt Checklists	38



Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

LCMS

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
G	The reported quantitation limit has been raised due to an exhibited elevated noise or matrix interference
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Job ID: 460-237446-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative 460-237446-1

Receipt

The samples were received on 6/25/2021 9:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2° C.

GC/MS VOA

Method 624.1: The continuing calibration verification (CCV) associated with batch 460-787015 recovered above the upper control limit for Acrolein. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 624.1: The laboratory control sample (LCS) for analytical batch 460-787015 recovered outside control limits for the following analyte: Acrolein. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 624.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-15 062421 (460-237446-2), MW-16 062421 (460-237446-3) and MW-17 062421 (460-237446-4). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA

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

LCMS

Method 537 (modified): Method 537 (modified): The "I" qualifier associated with samples MW-14 062421 (460-237446-1) and MW-16 062421 (460-237446-3) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

Method 537 (modified): 13C2 PFTeDA Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: MW-14 062421 (460-237446-1). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

Method 537 (modified): M2-8:2 FTS Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: MW-14 062421 (460-237446-1). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method 537 (modified): The following samples exhibited elevated noise or matrix interferences for Perfluorohexanoic acid (PFHxA) causing elevation of the detection limit (EDL): MW-14 062421 (460-237446-1). The reporting limit (RL) for Perfluorohexanoic acid (PFHxA) has been raised to be equal to the EDL, and a "G" qualifier applied.

Method 537 (modified): M2-6:2 FTS Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: MW-14 062421 (460-237446-1). 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

No analytical or quality issues were noted, other than those described 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: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-14 062421

Lab Sample ID: 460-237446-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.2		1.0	0.43	ug/L	1		624.1	Total/NA
Toluene	5.0		1.0	0.38	ug/L	1		624.1	Total/NA
Chlorobenzene	17		1.0	0.38	ug/L	1		624.1	Total/NA
Ethylbenzene	19		1.0	0.30	ug/L	1		624.1	Total/NA
Xylenes, Total	190		2.0	0.65	ug/L	1		624.1	Total/NA
Perfluorobutanoic acid (PFBA)	7.0		4.8	0.86	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.74	J I	1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.6		1.9	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.28	J	1.9	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.46	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.86	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.67	J I	1.9	0.28	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-15 062421

Lab Sample ID: 460-237446-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	100		5.0	1.7	ug/L	5		624.1	Total/NA
1,1-Dichloroethene	6.8		5.0	0.59	ug/L	5		624.1	Total/NA
1,1-Dichloroethane	5.4		5.0	1.3	ug/L	5		624.1	Total/NA
trans-1,2-Dichloroethene	5.3		5.0	1.2	ug/L	5		624.1	Total/NA
cis-1,2-Dichloroethene	870		5.0	1.1	ug/L	5		624.1	Total/NA
1,1,1-Trichloroethane	2.6	J	5.0	1.2	ug/L	5		624.1	Total/NA
Trichloroethene	1000		5.0	1.6	ug/L	5		624.1	Total/NA
1,4-Dioxane	0.92		0.20	0.016	ug/L	1		8270E SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	3.3	J	5.0	0.89	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.48	J	2.0	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.64	J	2.0	0.45	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.48	J	2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.1	J	2.0	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.31	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA
6:2 FTS	1.1	J	5.0	1.1	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-16 062421

Lab Sample ID: 460-237446-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	270		10	3.4	ug/L	10		624.1	Total/NA
1,1-Dichloroethene	26		10	1.2	ug/L	10		624.1	Total/NA
1,1-Dichloroethane	14		10	2.6	ug/L	10		624.1	Total/NA
trans-1,2-Dichloroethene	17		10	2.4	ug/L	10		624.1	Total/NA
cis-1,2-Dichloroethene	3500		10	2.2	ug/L	10		624.1	Total/NA
1,1,1-Trichloroethane	5.8	J	10	2.4	ug/L	10		624.1	Total/NA
Trichloroethene	950		10	3.1	ug/L	10		624.1	Total/NA
1,4-Dioxane	1.0		0.20	0.016	ug/L	1		8270E SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	3.2	J	5.0	0.89	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.75	J	2.0	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.70	J	2.0	0.45	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.45	J	2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.3	J	2.0	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.41	J I	2.0	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.1	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Detection Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-17 062421

Lab Sample ID: 460-237446-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	2000		200	68	ug/L	200		624.1	Total/NA
1,1-Dichloroethene	520		200	23	ug/L	200		624.1	Total/NA
trans-1,2-Dichloroethene	180	J	200	47	ug/L	200		624.1	Total/NA
cis-1,2-Dichloroethene	73000		200	44	ug/L	200		624.1	Total/NA
Trichloroethene	70000		200	63	ug/L	200		624.1	Total/NA
Perfluorobutanoic acid (PFBA)	14		4.6	0.82	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.5	J	1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.8		1.8	0.42	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.5	J	1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.5		1.8	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.88	J	1.8	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.31	J	1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.49	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.72	J	1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	20		1.8	0.27	ng/L	1		537 (modified)	Total/NA

Client Sample ID: Trip B-4 062421

Lab Sample ID: 460-237446-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-14 062421

Lab Sample ID: 460-237446-1

Date Collected: 06/24/21 10:50

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 14:53	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 14:53	1
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 14:53	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 14:53	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 14:53	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 14:53	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 14:53	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 14:53	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 14:53	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 14:53	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 14:53	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 14:53	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 14:53	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 14:53	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 14:53	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 14:53	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 14:53	1
Trichloroethene	ND		1.0	0.31	ug/L			06/28/21 14:53	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 14:53	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 14:53	1
Benzene	6.2		1.0	0.43	ug/L			06/28/21 14:53	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 14:53	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 14:53	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 14:53	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 14:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 14:53	1
Toluene	5.0		1.0	0.38	ug/L			06/28/21 14:53	1
Chlorobenzene	17		1.0	0.38	ug/L			06/28/21 14:53	1
Ethylbenzene	19		1.0	0.30	ug/L			06/28/21 14:53	1
Xylenes, Total	190		2.0	0.65	ug/L			06/28/21 14:53	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 14:53	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 14:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		60 - 140		06/28/21 14:53	1
Toluene-d8 (Surr)	83		60 - 140		06/28/21 14:53	1
Bromofluorobenzene	91		60 - 140		06/28/21 14:53	1
Dibromofluoromethane (Surr)	93		60 - 140		06/28/21 14:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:54	06/30/21 01:54	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	24		10 - 150				06/29/21 09:54	06/30/21 01:54	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.0		4.8	0.86	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.45	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorohexanoic acid (PFHxA)	ND	G	4.8	4.8	ng/L		06/30/21 08:44	06/30/21 21:29	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-14 062421

Lab Sample ID: 460-237446-1

Date Collected: 06/24/21 10:50

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.74	J I	1.9	0.23	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorooctanoic acid (PFOA)	4.6		1.9	0.41	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorononanoic acid (PFNA)	0.28	J	1.9	0.27	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.29	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.42	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorobutanesulfonic acid (PFBS)	0.46	J	1.9	0.24	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorohexanesulfonic acid (PFHxS)	0.86	J	1.9	0.29	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorooctanesulfonic acid (PFOS)	0.67	J I	1.9	0.28	ng/L		06/30/21 08:44	06/30/21 21:29	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.55	ng/L		06/30/21 08:44	06/30/21 21:29	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	0.87	ng/L		06/30/21 08:44	06/30/21 21:29	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	0.71	ng/L		06/30/21 08:44	06/30/21 21:29	1
6:2 FTS	ND		4.8	1.1	ng/L		06/30/21 08:44	07/01/21 13:46	1
8:2 FTS	ND		1.9	0.37	ng/L		06/30/21 08:44	06/30/21 21:29	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	68		25 - 150	06/30/21 08:44	06/30/21 21:29	1
13C4 PFBA	70		25 - 150	06/30/21 08:44	06/30/21 21:29	1
13C5 PFPeA	87		25 - 150	06/30/21 08:44	06/30/21 21:29	1
13C2 PFHxA	91		50 - 150	06/30/21 08:44	06/30/21 21:29	1
13C4 PFHpA	98		50 - 150	06/30/21 08:44	06/30/21 21:29	1
13C4 PFOA	105		50 - 150	06/30/21 08:44	06/30/21 21:29	1
13C5 PFNA	111		50 - 150	06/30/21 08:44	06/30/21 21:29	1
13C2 PFDA	119		50 - 150	06/30/21 08:44	06/30/21 21:29	1
13C2 PFUnA	110		50 - 150	06/30/21 08:44	06/30/21 21:29	1
13C2 PFDoA	92		50 - 150	06/30/21 08:44	06/30/21 21:29	1
13C2 PFTeDA	43	*5-	50 - 150	06/30/21 08:44	06/30/21 21:29	1
13C3 PFBS	89		50 - 150	06/30/21 08:44	06/30/21 21:29	1
18O2 PFHxS	86		50 - 150	06/30/21 08:44	06/30/21 21:29	1
13C4 PFOS	94		50 - 150	06/30/21 08:44	06/30/21 21:29	1
d3-NMeFOSAA	133		50 - 150	06/30/21 08:44	06/30/21 21:29	1
d5-NEtFOSAA	144		50 - 150	06/30/21 08:44	06/30/21 21:29	1
M2-6:2 FTS	166	*5+	25 - 150	06/30/21 08:44	07/01/21 13:46	1
M2-8:2 FTS	184	*5+	25 - 150	06/30/21 08:44	06/30/21 21:29	1

Client Sample ID: MW-15 062421

Lab Sample ID: 460-237446-2

Date Collected: 06/24/21 09:25

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		5.0	2.2	ug/L			07/01/21 18:05	5

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-15 062421

Lab Sample ID: 460-237446-2

Date Collected: 06/24/21 09:25

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		5.0	2.3	ug/L			07/01/21 18:05	5
Vinyl chloride	100		5.0	1.7	ug/L			07/01/21 18:05	5
Ethyl Chloride	ND		5.0	1.6	ug/L			07/01/21 18:05	5
Methylene Chloride	ND		5.0	1.6	ug/L			07/01/21 18:05	5
Trichlorofluoromethane	ND		5.0	0.72	ug/L			07/01/21 18:05	5
1,1-Dichloroethene	6.8		5.0	0.59	ug/L			07/01/21 18:05	5
1,1-Dichloroethane	5.4		5.0	1.3	ug/L			07/01/21 18:05	5
trans-1,2-Dichloroethene	5.3		5.0	1.2	ug/L			07/01/21 18:05	5
cis-1,2-Dichloroethene	870		5.0	1.1	ug/L			07/01/21 18:05	5
Chloroform	ND		5.0	1.6	ug/L			07/01/21 18:05	5
1,2-Dichloroethane	ND		5.0	4.2	ug/L			07/01/21 18:05	5
1,1,1-Trichloroethane	2.6 J		5.0	1.2	ug/L			07/01/21 18:05	5
Carbon tetrachloride	ND		5.0	1.0	ug/L			07/01/21 18:05	5
Bromodichloromethane	ND		5.0	1.7	ug/L			07/01/21 18:05	5
1,2-Dichloropropane	ND		5.0	1.8	ug/L			07/01/21 18:05	5
cis-1,3-Dichloropropene	ND		5.0	2.3	ug/L			07/01/21 18:05	5
Trichloroethene	1000		5.0	1.6	ug/L			07/01/21 18:05	5
Dibromochloromethane	ND		5.0	0.66	ug/L			07/01/21 18:05	5
1,1,2-Trichloroethane	ND		5.0	0.74	ug/L			07/01/21 18:05	5
Benzene	ND		5.0	2.1	ug/L			07/01/21 18:05	5
trans-1,3-Dichloropropene	ND		5.0	1.1	ug/L			07/01/21 18:05	5
2-Chloroethyl vinyl ether	ND		5.0	4.6	ug/L			07/01/21 18:05	5
Bromoform	ND		5.0	2.7	ug/L			07/01/21 18:05	5
Tetrachloroethene	ND		5.0	1.2	ug/L			07/01/21 18:05	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.8	ug/L			07/01/21 18:05	5
Toluene	ND		5.0	1.9	ug/L			07/01/21 18:05	5
Chlorobenzene	ND		5.0	1.9	ug/L			07/01/21 18:05	5
Ethylbenzene	ND		5.0	1.5	ug/L			07/01/21 18:05	5
Xylenes, Total	ND		10	3.3	ug/L			07/01/21 18:05	5
Acrolein	ND		20	5.6	ug/L			07/01/21 18:05	5
Acrylonitrile	ND		10	3.8	ug/L			07/01/21 18:05	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		60 - 140		07/01/21 18:05	5
Toluene-d8 (Surr)	84		60 - 140		07/01/21 18:05	5
Bromofluorobenzene	86		60 - 140		07/01/21 18:05	5
Dibromofluoromethane (Surr)	106		60 - 140		07/01/21 18:05	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.92		0.20	0.016	ug/L		06/29/21 09:54	06/30/21 02:10	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	34		10 - 150				06/29/21 09:54	06/30/21 02:10	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.3 J		5.0	0.89	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluoropentanoic acid (PFPeA)	0.48 J		2.0	0.47	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorohexanoic acid (PFHxA)	0.64 J		2.0	0.45	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluoroheptanoic acid (PFHpA)	0.48 J		2.0	0.24	ng/L		06/30/21 08:44	06/30/21 21:37	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-15 062421

Lab Sample ID: 460-237446-2

Date Collected: 06/24/21 09:25

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	1.1	J	2.0	0.42	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.28	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.25	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.30	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorooctanesulfonic acid (PFOS)	0.31	J	2.0	0.29	ng/L		06/30/21 08:44	06/30/21 21:37	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57	ng/L		06/30/21 08:44	06/30/21 21:37	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90	ng/L		06/30/21 08:44	06/30/21 21:37	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74	ng/L		06/30/21 08:44	06/30/21 21:37	1
6:2 FTS	1.1	J	5.0	1.1	ng/L		06/30/21 08:44	06/30/21 21:37	1
8:2 FTS	ND		2.0	0.39	ng/L		06/30/21 08:44	06/30/21 21:37	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	83		25 - 150	06/30/21 08:44	06/30/21 21:37	1
13C4 PFBA	88		25 - 150	06/30/21 08:44	06/30/21 21:37	1
13C5 PFPeA	94		25 - 150	06/30/21 08:44	06/30/21 21:37	1
13C2 PFHxA	100		50 - 150	06/30/21 08:44	06/30/21 21:37	1
13C4 PFHpA	93		50 - 150	06/30/21 08:44	06/30/21 21:37	1
13C4 PFOA	104		50 - 150	06/30/21 08:44	06/30/21 21:37	1
13C5 PFNA	101		50 - 150	06/30/21 08:44	06/30/21 21:37	1
13C2 PFDA	102		50 - 150	06/30/21 08:44	06/30/21 21:37	1
13C2 PFUnA	85		50 - 150	06/30/21 08:44	06/30/21 21:37	1
13C2 PFDoA	80		50 - 150	06/30/21 08:44	06/30/21 21:37	1
13C2 PFTeDA	81		50 - 150	06/30/21 08:44	06/30/21 21:37	1
13C3 PFBS	88		50 - 150	06/30/21 08:44	06/30/21 21:37	1
18O2 PFHxS	88		50 - 150	06/30/21 08:44	06/30/21 21:37	1
13C4 PFOS	89		50 - 150	06/30/21 08:44	06/30/21 21:37	1
d3-NMeFOSAA	85		50 - 150	06/30/21 08:44	06/30/21 21:37	1
d5-NEtFOSAA	84		50 - 150	06/30/21 08:44	06/30/21 21:37	1
M2-6:2 FTS	91		25 - 150	06/30/21 08:44	06/30/21 21:37	1
M2-8:2 FTS	100		25 - 150	06/30/21 08:44	06/30/21 21:37	1

Client Sample ID: MW-16 062421

Lab Sample ID: 460-237446-3

Date Collected: 06/24/21 08:40

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		10	4.3	ug/L			07/01/21 17:43	10
Bromomethane	ND		10	4.5	ug/L			07/01/21 17:43	10
Vinyl chloride	270		10	3.4	ug/L			07/01/21 17:43	10
Ethyl Chloride	ND		10	3.2	ug/L			07/01/21 17:43	10

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-16 062421

Lab Sample ID: 460-237446-3

Date Collected: 06/24/21 08:40

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		10	3.2	ug/L			07/01/21 17:43	10
Trichlorofluoromethane	ND		10	1.4	ug/L			07/01/21 17:43	10
1,1-Dichloroethene	26		10	1.2	ug/L			07/01/21 17:43	10
1,1-Dichloroethane	14		10	2.6	ug/L			07/01/21 17:43	10
trans-1,2-Dichloroethene	17		10	2.4	ug/L			07/01/21 17:43	10
cis-1,2-Dichloroethene	3500		10	2.2	ug/L			07/01/21 17:43	10
Chloroform	ND		10	3.3	ug/L			07/01/21 17:43	10
1,2-Dichloroethane	ND		10	8.4	ug/L			07/01/21 17:43	10
1,1,1-Trichloroethane	5.8	J	10	2.4	ug/L			07/01/21 17:43	10
Carbon tetrachloride	ND		10	2.1	ug/L			07/01/21 17:43	10
Bromodichloromethane	ND		10	3.4	ug/L			07/01/21 17:43	10
1,2-Dichloropropane	ND		10	3.5	ug/L			07/01/21 17:43	10
cis-1,3-Dichloropropene	ND		10	4.6	ug/L			07/01/21 17:43	10
Trichloroethene	950		10	3.1	ug/L			07/01/21 17:43	10
Dibromochloromethane	ND		10	1.3	ug/L			07/01/21 17:43	10
1,1,2-Trichloroethane	ND		10	1.5	ug/L			07/01/21 17:43	10
Benzene	ND		10	4.3	ug/L			07/01/21 17:43	10
trans-1,3-Dichloropropene	ND		10	2.2	ug/L			07/01/21 17:43	10
2-Chloroethyl vinyl ether	ND		10	9.1	ug/L			07/01/21 17:43	10
Bromoform	ND		10	5.4	ug/L			07/01/21 17:43	10
Tetrachloroethene	ND		10	2.5	ug/L			07/01/21 17:43	10
1,1,2,2-Tetrachloroethane	ND		10	3.7	ug/L			07/01/21 17:43	10
Toluene	ND		10	3.8	ug/L			07/01/21 17:43	10
Chlorobenzene	ND		10	3.8	ug/L			07/01/21 17:43	10
Ethylbenzene	ND		10	3.0	ug/L			07/01/21 17:43	10
Xylenes, Total	ND		20	6.5	ug/L			07/01/21 17:43	10
Acrolein	ND		40	11	ug/L			07/01/21 17:43	10
Acrylonitrile	ND		20	7.7	ug/L			07/01/21 17:43	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		60 - 140		07/01/21 17:43	10
Toluene-d8 (Surr)	84		60 - 140		07/01/21 17:43	10
Bromofluorobenzene	90		60 - 140		07/01/21 17:43	10
Dibromofluoromethane (Surr)	108		60 - 140		07/01/21 17:43	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.0		0.20	0.016	ug/L		06/29/21 09:54	06/30/21 02:26	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	31		10 - 150				06/29/21 09:54	06/30/21 02:26	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.2	J	5.0	0.89	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluoropentanoic acid (PFPeA)	0.75	J	2.0	0.47	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorohexanoic acid (PFHxA)	0.70	J	2.0	0.45	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluoroheptanoic acid (PFHpA)	0.45	J	2.0	0.24	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorooctanoic acid (PFOA)	1.3	J	2.0	0.42	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorononanoic acid (PFNA)	0.41	J I	2.0	0.28	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/30/21 08:44	06/30/21 21:45	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-16 062421

Lab Sample ID: 460-237446-3

Date Collected: 06/24/21 08:40

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.25	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.30	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorooctanesulfonic acid (PFOS)	1.1	J	2.0	0.29	ng/L		06/30/21 08:44	06/30/21 21:45	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57	ng/L		06/30/21 08:44	06/30/21 21:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90	ng/L		06/30/21 08:44	06/30/21 21:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74	ng/L		06/30/21 08:44	06/30/21 21:45	1
6:2 FTS	ND		5.0	1.1	ng/L		06/30/21 08:44	06/30/21 21:45	1
8:2 FTS	ND		2.0	0.39	ng/L		06/30/21 08:44	06/30/21 21:45	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	76		25 - 150				06/30/21 08:44	06/30/21 21:45	1
13C4 PFBA	77		25 - 150				06/30/21 08:44	06/30/21 21:45	1
13C5 PFPeA	91		25 - 150				06/30/21 08:44	06/30/21 21:45	1
13C2 PFHxA	96		50 - 150				06/30/21 08:44	06/30/21 21:45	1
13C4 PFHpA	93		50 - 150				06/30/21 08:44	06/30/21 21:45	1
13C4 PFOA	98		50 - 150				06/30/21 08:44	06/30/21 21:45	1
13C5 PFNA	97		50 - 150				06/30/21 08:44	06/30/21 21:45	1
13C2 PFDA	91		50 - 150				06/30/21 08:44	06/30/21 21:45	1
13C2 PFUnA	82		50 - 150				06/30/21 08:44	06/30/21 21:45	1
13C2 PFDoA	79		50 - 150				06/30/21 08:44	06/30/21 21:45	1
13C2 PFTeDA	74		50 - 150				06/30/21 08:44	06/30/21 21:45	1
13C3 PFBS	85		50 - 150				06/30/21 08:44	06/30/21 21:45	1
18O2 PFHxS	88		50 - 150				06/30/21 08:44	06/30/21 21:45	1
13C4 PFOS	78		50 - 150				06/30/21 08:44	06/30/21 21:45	1
d3-NMeFOSAA	80		50 - 150				06/30/21 08:44	06/30/21 21:45	1
d5-NEtFOSAA	76		50 - 150				06/30/21 08:44	06/30/21 21:45	1
M2-6:2 FTS	88		25 - 150				06/30/21 08:44	06/30/21 21:45	1
M2-8:2 FTS	93		25 - 150				06/30/21 08:44	06/30/21 21:45	1

Client Sample ID: MW-17 062421

Lab Sample ID: 460-237446-4

Date Collected: 06/24/21 12:25

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		200	87	ug/L			07/01/21 17:20	200
Bromomethane	ND		200	90	ug/L			07/01/21 17:20	200
Vinyl chloride	2000		200	68	ug/L			07/01/21 17:20	200
Ethyl Chloride	ND		200	64	ug/L			07/01/21 17:20	200
Methylene Chloride	ND		200	63	ug/L			07/01/21 17:20	200
Trichlorofluoromethane	ND		200	29	ug/L			07/01/21 17:20	200
1,1-Dichloroethene	520		200	23	ug/L			07/01/21 17:20	200

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-17 062421

Lab Sample ID: 460-237446-4

Date Collected: 06/24/21 12:25

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		200	53	ug/L			07/01/21 17:20	200
trans-1,2-Dichloroethene	180	J	200	47	ug/L			07/01/21 17:20	200
cis-1,2-Dichloroethene	73000		200	44	ug/L			07/01/21 17:20	200
Chloroform	ND		200	65	ug/L			07/01/21 17:20	200
1,2-Dichloroethane	ND		200	170	ug/L			07/01/21 17:20	200
1,1,1-Trichloroethane	ND		200	48	ug/L			07/01/21 17:20	200
Carbon tetrachloride	ND		200	42	ug/L			07/01/21 17:20	200
Bromodichloromethane	ND		200	69	ug/L			07/01/21 17:20	200
1,2-Dichloropropane	ND		200	71	ug/L			07/01/21 17:20	200
cis-1,3-Dichloropropene	ND		200	91	ug/L			07/01/21 17:20	200
Trichloroethene	70000		200	63	ug/L			07/01/21 17:20	200
Dibromochloromethane	ND		200	26	ug/L			07/01/21 17:20	200
1,1,2-Trichloroethane	ND		200	30	ug/L			07/01/21 17:20	200
Benzene	ND		200	86	ug/L			07/01/21 17:20	200
trans-1,3-Dichloropropene	ND		200	43	ug/L			07/01/21 17:20	200
2-Chloroethyl vinyl ether	ND		200	180	ug/L			07/01/21 17:20	200
Bromoform	ND		200	110	ug/L			07/01/21 17:20	200
Tetrachloroethene	ND		200	50	ug/L			07/01/21 17:20	200
1,1,2,2-Tetrachloroethane	ND		200	73	ug/L			07/01/21 17:20	200
Toluene	ND		200	76	ug/L			07/01/21 17:20	200
Chlorobenzene	ND		200	75	ug/L			07/01/21 17:20	200
Ethylbenzene	ND		200	60	ug/L			07/01/21 17:20	200
Xylenes, Total	ND		400	130	ug/L			07/01/21 17:20	200
Acrolein	ND		800	220	ug/L			07/01/21 17:20	200
Acrylonitrile	ND		400	150	ug/L			07/01/21 17:20	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		60 - 140		07/01/21 17:20	200
Toluene-d8 (Surr)	89		60 - 140		07/01/21 17:20	200
Bromofluorobenzene	96		60 - 140		07/01/21 17:20	200
Dibromofluoromethane (Surr)	116		60 - 140		07/01/21 17:20	200

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:54	06/30/21 02:42	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	40		10 - 150				06/29/21 09:54	06/30/21 02:42	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	14		4.6	0.82	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluoropentanoic acid (PFPeA)	1.5	J	1.8	0.44	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorohexanoic acid (PFHxA)	2.8		1.8	0.42	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluoroheptanoic acid (PFHpA)	1.5	J	1.8	0.22	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorooctanoic acid (PFOA)	5.5		1.8	0.39	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorononanoic acid (PFNA)	0.88	J	1.8	0.26	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorodecanoic acid (PFDA)	0.31	J	1.8	0.28	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.32	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.35	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.40	ng/L		06/30/21 08:44	06/30/21 21:54	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-17 062421

Lab Sample ID: 460-237446-4

Date Collected: 06/24/21 12:25

Matrix: Water

Date Received: 06/25/21 09:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.58	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorobutanesulfonic acid (PFBS)	0.49	J	1.8	0.23	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorohexanesulfonic acid (PFHxS)	0.72	J	1.8	0.28	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.22	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorooctanesulfonic acid (PFOS)	20		1.8	0.27	ng/L		06/30/21 08:44	06/30/21 21:54	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.53	ng/L		06/30/21 08:44	06/30/21 21:54	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.6	0.83	ng/L		06/30/21 08:44	06/30/21 21:54	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.6	0.68	ng/L		06/30/21 08:44	06/30/21 21:54	1
6:2 FTS	ND		4.6	1.0	ng/L		06/30/21 08:44	06/30/21 21:54	1
8:2 FTS	ND		1.8	0.36	ng/L		06/30/21 08:44	06/30/21 21:54	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	71		25 - 150				06/30/21 08:44	06/30/21 21:54	1
13C4 PFBA	58		25 - 150				06/30/21 08:44	06/30/21 21:54	1
13C5 PFPeA	81		25 - 150				06/30/21 08:44	06/30/21 21:54	1
13C2 PFHxA	91		50 - 150				06/30/21 08:44	06/30/21 21:54	1
13C4 PFHpA	91		50 - 150				06/30/21 08:44	06/30/21 21:54	1
13C4 PFOA	100		50 - 150				06/30/21 08:44	06/30/21 21:54	1
13C5 PFNA	99		50 - 150				06/30/21 08:44	06/30/21 21:54	1
13C2 PFDA	98		50 - 150				06/30/21 08:44	06/30/21 21:54	1
13C2 PFUnA	93		50 - 150				06/30/21 08:44	06/30/21 21:54	1
13C2 PFDoA	85		50 - 150				06/30/21 08:44	06/30/21 21:54	1
13C2 PFTeDA	82		50 - 150				06/30/21 08:44	06/30/21 21:54	1
13C3 PFBS	81		50 - 150				06/30/21 08:44	06/30/21 21:54	1
18O2 PFHxS	81		50 - 150				06/30/21 08:44	06/30/21 21:54	1
13C4 PFOS	86		50 - 150				06/30/21 08:44	06/30/21 21:54	1
d3-NMeFOSAA	104		50 - 150				06/30/21 08:44	06/30/21 21:54	1
d5-NEtFOSAA	97		50 - 150				06/30/21 08:44	06/30/21 21:54	1
M2-6:2 FTS	113		25 - 150				06/30/21 08:44	06/30/21 21:54	1
M2-8:2 FTS	101		25 - 150				06/30/21 08:44	06/30/21 21:54	1

Client Sample ID: Trip B-4 062421

Lab Sample ID: 460-237446-5

Date Collected: 06/24/21 00:00

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 10:21	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 10:21	1
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 10:21	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 10:21	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 10:21	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 10:21	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 10:21	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 10:21	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: Trip B-4 062421

Lab Sample ID: 460-237446-5

Date Collected: 06/24/21 00:00

Matrix: Water

Date Received: 06/25/21 09:25

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 10:21	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 10:21	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 10:21	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 10:21	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 10:21	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 10:21	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 10:21	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 10:21	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 10:21	1
Trichloroethene	ND		1.0	0.31	ug/L			06/28/21 10:21	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 10:21	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 10:21	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 10:21	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 10:21	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 10:21	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 10:21	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 10:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 10:21	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 10:21	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 10:21	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 10:21	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 10:21	1
Acrolein	ND	+	4.0	1.1	ug/L			06/28/21 10:21	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 10:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		60 - 140		06/28/21 10:21	1
Toluene-d8 (Surr)	83		60 - 140		06/28/21 10:21	1
Bromofluorobenzene	87		60 - 140		06/28/21 10:21	1
Dibromofluoromethane (Surr)	96		60 - 140		06/28/21 10:21	1

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (60-140)	TOL (60-140)	BFB (60-140)	DBFM (60-140)
460-237446-1	MW-14 062421	88	83	91	93
460-237446-2	MW-15 062421	98	84	86	106
460-237446-3	MW-16 062421	100	84	90	108
460-237446-4	MW-17 062421	105	89	96	116
460-237446-5	Trip B-4 062421	89	83	87	96
LCS 460-787015/4	Lab Control Sample	90	90	94	97
LCS 460-787755/4	Lab Control Sample	103	91	101	113
LCSD 460-787015/5	Lab Control Sample Dup	85	86	93	91
LCSD 460-787755/5	Lab Control Sample Dup	93	85	94	98
MB 460-787015/9	Method Blank	88	83	89	95
MB 460-787755/9	Method Blank	97	84	87	103

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = Bromofluorobenzene

DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DXE (10-150)
460-237446-1	MW-14 062421	24
460-237446-2	MW-15 062421	34
460-237446-3	MW-16 062421	31
460-237446-4	MW-17 062421	40
LCS 460-787279/2-A	Lab Control Sample	38
LCS 460-787279/3-A	Lab Control Sample Dup	40
MB 460-787279/1-A	Method Blank	32

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFOSA (25-150)	PFBA (25-150)	PFPeA (25-150)	PFHxA (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFNA (50-150)	PFDA (50-150)
460-237446-1	MW-14 062421	68	70	87	91	98	105	111	119
460-237446-1	MW-14 062421								
460-237446-2	MW-15 062421	83	88	94	100	93	104	101	102
460-237446-3	MW-16 062421	76	77	91	96	93	98	97	91
460-237446-4	MW-17 062421	71	58	81	91	91	100	99	98
LCS 200-168585/2-A	Lab Control Sample	67	103	101	102	98	97	99	103
MB 200-168585/1-A	Method Blank	56	97	98	97	92	94	93	92

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFTDA (50-150)	C3PFBS (50-150)	PFHxS (50-150)	PFOS (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)
460-237446-1	MW-14 062421	110	92	43 *5-	89	86	94	133	144
460-237446-1	MW-14 062421								
460-237446-2	MW-15 062421	85	80	81	88	88	89	85	84
460-237446-3	MW-16 062421	82	79	74	85	88	78	80	76
460-237446-4	MW-17 062421	93	85	82	81	81	86	104	97
LCS 200-168585/2-A	Lab Control Sample	91	79	74	89	92	93	97	80
MB 200-168585/1-A	Method Blank	75	69	63	86	84	82	79	74

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
460-237446-1	MW-14 062421		184 *5+
460-237446-1	MW-14 062421	166 *5+	
460-237446-2	MW-15 062421	91	100
460-237446-3	MW-16 062421	88	93
460-237446-4	MW-17 062421	113	101
LCS 200-168585/2-A	Lab Control Sample	89	100
MB 200-168585/1-A	Method Blank	85	95

Surrogate Legend

PFOSA = 13C8 FOSA

PFBA = 13C4 PFBA

PFPeA = 13C5 PFPeA

PFHxA = 13C2 PFHxA

Eurofins TestAmerica, Edison

Isotope Dilution Summary

Client: New York State D.E.C.

Job ID: 460-237446-1

Project/Site: Northeast Alloys & Metals #633045

C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-787015/9

Matrix: Water

Analysis Batch: 787015

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			06/28/21 09:59	1
Bromomethane	ND		1.0	0.45	ug/L			06/28/21 09:59	1
Vinyl chloride	ND		1.0	0.34	ug/L			06/28/21 09:59	1
Ethyl Chloride	ND		1.0	0.32	ug/L			06/28/21 09:59	1
Methylene Chloride	ND		1.0	0.32	ug/L			06/28/21 09:59	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			06/28/21 09:59	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			06/28/21 09:59	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			06/28/21 09:59	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			06/28/21 09:59	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			06/28/21 09:59	1
Chloroform	ND		1.0	0.33	ug/L			06/28/21 09:59	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			06/28/21 09:59	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			06/28/21 09:59	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			06/28/21 09:59	1
Bromodichloromethane	ND		1.0	0.34	ug/L			06/28/21 09:59	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			06/28/21 09:59	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			06/28/21 09:59	1
Trichloroethene	ND		1.0	0.31	ug/L			06/28/21 09:59	1
Dibromochloromethane	ND		1.0	0.13	ug/L			06/28/21 09:59	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			06/28/21 09:59	1
Benzene	ND		1.0	0.43	ug/L			06/28/21 09:59	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/28/21 09:59	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			06/28/21 09:59	1
Bromoform	ND		1.0	0.54	ug/L			06/28/21 09:59	1
Tetrachloroethene	ND		1.0	0.25	ug/L			06/28/21 09:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			06/28/21 09:59	1
Toluene	ND		1.0	0.38	ug/L			06/28/21 09:59	1
Chlorobenzene	ND		1.0	0.38	ug/L			06/28/21 09:59	1
Ethylbenzene	ND		1.0	0.30	ug/L			06/28/21 09:59	1
Xylenes, Total	ND		2.0	0.65	ug/L			06/28/21 09:59	1
Acrolein	ND		4.0	1.1	ug/L			06/28/21 09:59	1
Acrylonitrile	ND		2.0	0.77	ug/L			06/28/21 09:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		60 - 140		06/28/21 09:59	1
Toluene-d8 (Surr)	83		60 - 140		06/28/21 09:59	1
Bromofluorobenzene	89		60 - 140		06/28/21 09:59	1
Dibromofluoromethane (Surr)	95		60 - 140		06/28/21 09:59	1

Lab Sample ID: LCS 460-787015/4

Matrix: Water

Analysis Batch: 787015

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	20.0	18.5		ug/L		92	0.1 - 205
Bromomethane	20.0	19.6		ug/L		98	15 - 185
Vinyl chloride	20.0	18.4		ug/L		92	5 - 195
Ethyl Chloride	20.0	18.8		ug/L		94	40 - 160

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-787015/4

Matrix: Water

Analysis Batch: 787015

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	20.0	20.7		ug/L		104	60 - 140
Trichlorofluoromethane	20.0	22.8		ug/L		114	50 - 150
1,1-Dichloroethene	20.0	20.5		ug/L		102	50 - 150
1,1-Dichloroethane	20.0	19.0		ug/L		95	70 - 130
trans-1,2-Dichloroethene	20.0	18.7		ug/L		94	70 - 130
cis-1,2-Dichloroethene	20.0	19.4		ug/L		97	60 - 140
Chloroform	20.0	19.4		ug/L		97	70 - 135
1,2-Dichloroethane	20.0	18.8		ug/L		94	70 - 130
1,1,1-Trichloroethane	20.0	19.6		ug/L		98	70 - 130
Carbon tetrachloride	20.0	21.8		ug/L		109	70 - 130
Bromodichloromethane	20.0	19.1		ug/L		96	65 - 135
1,2-Dichloropropane	20.0	18.0		ug/L		90	35 - 165
cis-1,3-Dichloropropene	20.0	18.6		ug/L		93	25 - 175
Trichloroethene	20.0	19.7		ug/L		99	65 - 135
Dibromochloromethane	20.0	22.0		ug/L		110	70 - 135
1,1,2-Trichloroethane	20.0	18.9		ug/L		95	70 - 130
Benzene	20.0	18.8		ug/L		94	65 - 135
trans-1,3-Dichloropropene	20.0	18.4		ug/L		92	50 - 150
2-Chloroethyl vinyl ether	20.0	16.3		ug/L		81	0.1 - 225
Bromoform	20.0	20.7		ug/L		103	70 - 130
Tetrachloroethene	20.0	21.1		ug/L		106	70 - 130
1,1,2,2-Tetrachloroethane	20.0	17.8		ug/L		89	60 - 140
Toluene	20.0	18.8		ug/L		94	70 - 130
Chlorobenzene	20.0	20.0		ug/L		100	65 - 135
Ethylbenzene	20.0	20.0		ug/L		100	60 - 140
Xylenes, Total	40.0	38.1		ug/L		95	60 - 140
Acrolein	40.6	62.5	*+	ug/L		154	10 - 150
Acrylonitrile	200	194		ug/L		97	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		60 - 140
Toluene-d8 (Surr)	90		60 - 140
Bromofluorobenzene	94		60 - 140
Dibromofluoromethane (Surr)	97		60 - 140

Lab Sample ID: LCSD 460-787015/5

Matrix: Water

Analysis Batch: 787015

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloromethane	20.0	16.8		ug/L		84	0.1 - 205	9	60
Bromomethane	20.0	18.4		ug/L		92	15 - 185	6	61
Vinyl chloride	20.0	16.2		ug/L		81	5 - 195	13	66
Ethyl Chloride	20.0	16.3		ug/L		81	40 - 160	14	78
Methylene Chloride	20.0	19.2		ug/L		96	60 - 140	7	28
Trichlorofluoromethane	20.0	21.4		ug/L		107	50 - 150	6	84
1,1-Dichloroethene	20.0	19.3		ug/L		96	50 - 150	6	32
1,1-Dichloroethane	20.0	18.9		ug/L		94	70 - 130	1	40

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-787015/5

Matrix: Water

Analysis Batch: 787015

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
trans-1,2-Dichloroethene	20.0	19.1		ug/L		96	70 - 130	2	45
cis-1,2-Dichloroethene	20.0	19.1		ug/L		96	60 - 140	1	50
Chloroform	20.0	19.8		ug/L		99	70 - 135	2	54
1,2-Dichloroethane	20.0	19.0		ug/L		95	70 - 130	1	49
1,1,1-Trichloroethane	20.0	19.1		ug/L		95	70 - 130	3	36
Carbon tetrachloride	20.0	20.7		ug/L		104	70 - 130	5	41
Bromodichloromethane	20.0	18.8		ug/L		94	65 - 135	2	56
1,2-Dichloropropane	20.0	18.1		ug/L		90	35 - 165	1	55
cis-1,3-Dichloropropene	20.0	18.2		ug/L		91	25 - 175	2	58
Trichloroethene	20.0	19.0		ug/L		95	65 - 135	4	48
Dibromochloromethane	20.0	21.8		ug/L		109	70 - 135	1	50
1,1,2-Trichloroethane	20.0	18.3		ug/L		92	70 - 130	3	45
Benzene	20.0	19.4		ug/L		97	65 - 135	3	61
trans-1,3-Dichloropropene	20.0	17.4		ug/L		87	50 - 150	5	86
2-Chloroethyl vinyl ether	20.0	15.8		ug/L		79	0.1 - 225	3	71
Bromoform	20.0	20.0		ug/L		100	70 - 130	3	42
Tetrachloroethene	20.0	19.7		ug/L		99	70 - 130	7	39
1,1,2,2-Tetrachloroethane	20.0	16.8		ug/L		84	60 - 140	6	61
Toluene	20.0	18.1		ug/L		91	70 - 130	4	41
Chlorobenzene	20.0	20.0		ug/L		100	65 - 135	0	53
Ethylbenzene	20.0	18.7		ug/L		93	60 - 140	7	63
Xylenes, Total	40.0	37.4		ug/L		94	60 - 140	2	50
Acrolein	40.6	56.9		ug/L		140	10 - 150	9	60
Acrylonitrile	200	201		ug/L		100	60 - 140	3	60

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		60 - 140
Toluene-d8 (Surr)	86		60 - 140
Bromofluorobenzene	93		60 - 140
Dibromofluoromethane (Surr)	91		60 - 140

Lab Sample ID: MB 460-787755/9

Matrix: Water

Analysis Batch: 787755

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/01/21 10:10	1
Bromomethane	ND		1.0	0.45	ug/L			07/01/21 10:10	1
Vinyl chloride	ND		1.0	0.34	ug/L			07/01/21 10:10	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/01/21 10:10	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/01/21 10:10	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/01/21 10:10	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/01/21 10:10	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/01/21 10:10	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/01/21 10:10	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/01/21 10:10	1
Chloroform	ND		1.0	0.33	ug/L			07/01/21 10:10	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/01/21 10:10	1

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 460-787755/9

Matrix: Water

Analysis Batch: 787755

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	0.24	ug/L			07/01/21 10:10	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/01/21 10:10	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/01/21 10:10	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/01/21 10:10	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/01/21 10:10	1
Trichloroethene	ND		1.0	0.31	ug/L			07/01/21 10:10	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/01/21 10:10	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/01/21 10:10	1
Benzene	ND		1.0	0.43	ug/L			07/01/21 10:10	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/01/21 10:10	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/01/21 10:10	1
Bromoform	ND		1.0	0.54	ug/L			07/01/21 10:10	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/01/21 10:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/01/21 10:10	1
Toluene	ND		1.0	0.38	ug/L			07/01/21 10:10	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/01/21 10:10	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/01/21 10:10	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/01/21 10:10	1
Acrolein	ND		4.0	1.1	ug/L			07/01/21 10:10	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/01/21 10:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		60 - 140		07/01/21 10:10	1
Toluene-d8 (Surr)	84		60 - 140		07/01/21 10:10	1
Bromofluorobenzene	87		60 - 140		07/01/21 10:10	1
Dibromofluoromethane (Surr)	103		60 - 140		07/01/21 10:10	1

Lab Sample ID: LCS 460-787755/4

Matrix: Water

Analysis Batch: 787755

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	20.0	18.2		ug/L		91	0.1 - 205
Bromomethane	20.0	20.9		ug/L		104	15 - 185
Vinyl chloride	20.0	19.7		ug/L		99	5 - 195
Ethyl Chloride	20.0	20.5		ug/L		103	40 - 160
Methylene Chloride	20.0	20.6		ug/L		103	60 - 140
Trichlorofluoromethane	20.0	24.2		ug/L		121	50 - 150
1,1-Dichloroethene	20.0	21.2		ug/L		106	50 - 150
1,1-Dichloroethane	20.0	20.1		ug/L		100	70 - 130
trans-1,2-Dichloroethene	20.0	21.0		ug/L		105	70 - 130
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	60 - 140
Chloroform	20.0	20.9		ug/L		104	70 - 135
1,2-Dichloroethane	20.0	20.9		ug/L		104	70 - 130
1,1,1-Trichloroethane	20.0	20.3		ug/L		101	70 - 130
Carbon tetrachloride	20.0	22.1		ug/L		111	70 - 130
Bromodichloromethane	20.0	20.2		ug/L		101	65 - 135
1,2-Dichloropropane	20.0	19.2		ug/L		96	35 - 165

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-787755/4

Matrix: Water

Analysis Batch: 787755

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	20.0	16.9		ug/L		85	25 - 175
Trichloroethene	20.0	20.0		ug/L		100	65 - 135
Dibromochloromethane	20.0	19.5		ug/L		97	70 - 135
1,1,2-Trichloroethane	20.0	18.1		ug/L		91	70 - 130
Benzene	20.0	17.7		ug/L		89	65 - 135
trans-1,3-Dichloropropene	20.0	16.8		ug/L		84	50 - 150
2-Chloroethyl vinyl ether	20.0	15.7		ug/L		78	0.1 - 225
Bromoform	20.0	18.8		ug/L		94	70 - 130
Tetrachloroethene	20.0	19.4		ug/L		97	70 - 130
1,1,2,2-Tetrachloroethane	20.0	16.2		ug/L		81	60 - 140
Toluene	20.0	17.1		ug/L		86	70 - 130
Chlorobenzene	20.0	18.5		ug/L		92	65 - 135
Ethylbenzene	20.0	17.8		ug/L		89	60 - 140
Xylenes, Total	40.0	35.3		ug/L		88	60 - 140
Acrolein	40.6	54.8		ug/L		135	10 - 150
Acrylonitrile	200	185		ug/L		92	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		60 - 140
Toluene-d8 (Surr)	91		60 - 140
Bromofluorobenzene	101		60 - 140
Dibromofluoromethane (Surr)	113		60 - 140

Lab Sample ID: LCSD 460-787755/5

Matrix: Water

Analysis Batch: 787755

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	20.0	17.4		ug/L		87	0.1 - 205	4	60
Bromomethane	20.0	21.1		ug/L		105	15 - 185	1	61
Vinyl chloride	20.0	20.3		ug/L		101	5 - 195	3	66
Ethyl Chloride	20.0	20.6		ug/L		103	40 - 160	1	78
Methylene Chloride	20.0	20.9		ug/L		104	60 - 140	2	28
Trichlorofluoromethane	20.0	23.9		ug/L		120	50 - 150	1	84
1,1-Dichloroethene	20.0	21.3		ug/L		106	50 - 150	0	32
1,1-Dichloroethane	20.0	20.0		ug/L		100	70 - 130	0	40
trans-1,2-Dichloroethene	20.0	20.5		ug/L		103	70 - 130	2	45
cis-1,2-Dichloroethene	20.0	21.0		ug/L		105	60 - 140	6	50
Chloroform	20.0	21.3		ug/L		107	70 - 135	2	54
1,2-Dichloroethane	20.0	19.7		ug/L		99	70 - 130	6	49
1,1,1-Trichloroethane	20.0	21.0		ug/L		105	70 - 130	3	36
Carbon tetrachloride	20.0	22.4		ug/L		112	70 - 130	1	41
Bromodichloromethane	20.0	20.4		ug/L		102	65 - 135	1	56
1,2-Dichloropropane	20.0	19.4		ug/L		97	35 - 165	1	55
cis-1,3-Dichloropropene	20.0	17.7		ug/L		89	25 - 175	5	58
Trichloroethene	20.0	20.7		ug/L		103	65 - 135	3	48
Dibromochloromethane	20.0	20.2		ug/L		101	70 - 135	4	50
1,1,2-Trichloroethane	20.0	17.8		ug/L		89	70 - 130	2	45

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-787755/5

Matrix: Water

Analysis Batch: 787755

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
Benzene	20.0	18.2		ug/L		91	65 - 135	3	61
trans-1,3-Dichloropropene	20.0	17.5		ug/L		87	50 - 150	4	86
2-Chloroethyl vinyl ether	20.0	17.3		ug/L		86	0.1 - 225	10	71
Bromoform	20.0	19.1		ug/L		95	70 - 130	1	42
Tetrachloroethene	20.0	19.2		ug/L		96	70 - 130	1	39
1,1,2,2-Tetrachloroethane	20.0	16.0		ug/L		80	60 - 140	1	61
Toluene	20.0	18.0		ug/L		90	70 - 130	5	41
Chlorobenzene	20.0	19.5		ug/L		97	65 - 135	5	53
Ethylbenzene	20.0	19.2		ug/L		96	60 - 140	7	63
Xylenes, Total	40.0	37.0		ug/L		93	60 - 140	5	50
Acrolein	40.6	47.9		ug/L		118	10 - 150	13	60
Acrylonitrile	200	189		ug/L		95	60 - 140	2	60

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		60 - 140
Toluene-d8 (Surr)	85		60 - 140
Bromofluorobenzene	94		60 - 140
Dibromofluoromethane (Surr)	98		60 - 140

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

Lab Sample ID: MB 460-787279/1-A

Matrix: Water

Analysis Batch: 787432

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 787279

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:53	06/30/21 00:34	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	32		10 - 150				06/29/21 09:53	06/30/21 00:34	1

Lab Sample ID: LCS 460-787279/2-A

Matrix: Water

Analysis Batch: 787432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 787279

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
1,4-Dioxane			1.60	1.44		ug/L		90	50 - 142		

Lab Sample ID: LCSD 460-787279/3-A

Matrix: Water

Analysis Batch: 787432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 787279

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	1.60	1.47		ug/L		92	50 - 142	1	20

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

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

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
1,4-Dioxane-d8	40		10 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-168585/1-A
Matrix: Water
Analysis Batch: 168615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 168585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	0.89	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.47	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.45	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.24	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.42	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.28	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.39	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.25	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.30	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.29	ng/L		06/30/21 08:44	06/30/21 20:31	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.58	ng/L		06/30/21 08:44	06/30/21 20:31	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90	ng/L		06/30/21 08:44	06/30/21 20:31	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74	ng/L		06/30/21 08:44	06/30/21 20:31	1
6:2 FTS	ND		5.0	1.1	ng/L		06/30/21 08:44	06/30/21 20:31	1
8:2 FTS	ND		2.0	0.39	ng/L		06/30/21 08:44	06/30/21 20:31	1

Isotope Dilution	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C8 FOSA	56		25 - 150	06/30/21 08:44	06/30/21 20:31	1
13C4 PFBA	97		25 - 150	06/30/21 08:44	06/30/21 20:31	1
13C5 PFPeA	98		25 - 150	06/30/21 08:44	06/30/21 20:31	1
13C2 PFHxA	97		50 - 150	06/30/21 08:44	06/30/21 20:31	1
13C4 PFHpA	92		50 - 150	06/30/21 08:44	06/30/21 20:31	1
13C4 PFOA	94		50 - 150	06/30/21 08:44	06/30/21 20:31	1
13C5 PFNA	93		50 - 150	06/30/21 08:44	06/30/21 20:31	1
13C2 PFDA	92		50 - 150	06/30/21 08:44	06/30/21 20:31	1
13C2 PFUnA	75		50 - 150	06/30/21 08:44	06/30/21 20:31	1
13C2 PFDoA	69		50 - 150	06/30/21 08:44	06/30/21 20:31	1
13C2 PFTeA	63		50 - 150	06/30/21 08:44	06/30/21 20:31	1
13C3 PFBS	86		50 - 150	06/30/21 08:44	06/30/21 20:31	1
18O2 PFHxS	84		50 - 150	06/30/21 08:44	06/30/21 20:31	1
13C4 PFOS	82		50 - 150	06/30/21 08:44	06/30/21 20:31	1
d3-NMeFOSAA	79		50 - 150	06/30/21 08:44	06/30/21 20:31	1
d5-NEtFOSAA	74		50 - 150	06/30/21 08:44	06/30/21 20:31	1
M2-6:2 FTS	85		25 - 150	06/30/21 08:44	06/30/21 20:31	1

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

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

Lab Sample ID: MB 200-168585/1-A

Matrix: Water

Analysis Batch: 168615

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 168585

Isotope Dilution	MB MB %Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-8:2 FTS	95	25 - 150	06/30/21 08:44	06/30/21 20:31	1

Lab Sample ID: LCS 200-168585/2-A

Matrix: Water

Analysis Batch: 168615

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 168585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	40.3		ng/L		101	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	41.8		ng/L		105	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	40.1		ng/L		100	70 - 130
Perfluoroheptanoic acid (PFHpA)	40.0	42.1		ng/L		105	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	42.4		ng/L		106	70 - 130
Perfluorononanoic acid (PFNA)	40.0	39.3		ng/L		98	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	39.3		ng/L		98	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	40.0		ng/L		100	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	41.5		ng/L		104	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	37.2		ng/L		93	70 - 130
Perfluorotetradecanoic acid (PFTeA)	40.0	40.8		ng/L		102	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	36.6		ng/L		104	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.8		ng/L		98	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	36.2		ng/L		95	50 - 150
Perfluorodecanesulfonic acid (PFDS)	38.6	33.0		ng/L		85	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	36.7		ng/L		99	70 - 130
Perfluorooctanesulfonamide (FOSA)	40.0	38.2		ng/L		96	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	34.7		ng/L		87	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	41.2		ng/L		103	70 - 130
6:2 FTS	37.9	41.0		ng/L		108	50 - 150
8:2 FTS	38.3	37.8		ng/L		99	50 - 150

Isotope Dilution	LCS LCS %Recovery Qualifier	Limits
13C8 FOSA	67	25 - 150
13C4 PFBA	103	25 - 150
13C5 PFPeA	101	25 - 150
13C2 PFHxA	102	50 - 150
13C4 PFHpA	98	50 - 150
13C4 PFOA	97	50 - 150
13C5 PFNA	99	50 - 150
13C2 PFDA	103	50 - 150
13C2 PFUnA	91	50 - 150
13C2 PFDoA	79	50 - 150

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

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

Lab Sample ID: LCS 200-168585/2-A

Matrix: Water

Analysis Batch: 168615

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 168585

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
13C2 PFTeDA	74		50 - 150
13C3 PFBS	89		50 - 150
18O2 PFHxS	92		50 - 150
13C4 PFOS	93		50 - 150
d3-NMeFOSAA	97		50 - 150
d5-NEtFOSAA	80		50 - 150
M2-6:2 FTS	89		25 - 150
M2-8:2 FTS	100		25 - 150

QC Association Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

GC/MS VOA

Analysis Batch: 787015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237446-1	MW-14 062421	Total/NA	Water	624.1	
460-237446-5	Trip B-4 062421	Total/NA	Water	624.1	
MB 460-787015/9	Method Blank	Total/NA	Water	624.1	
LCS 460-787015/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 460-787015/5	Lab Control Sample Dup	Total/NA	Water	624.1	

Analysis Batch: 787755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237446-2	MW-15 062421	Total/NA	Water	624.1	
460-237446-3	MW-16 062421	Total/NA	Water	624.1	
460-237446-4	MW-17 062421	Total/NA	Water	624.1	
MB 460-787755/9	Method Blank	Total/NA	Water	624.1	
LCS 460-787755/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 460-787755/5	Lab Control Sample Dup	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 787279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237446-1	MW-14 062421	Total/NA	Water	3510C	
460-237446-2	MW-15 062421	Total/NA	Water	3510C	
460-237446-3	MW-16 062421	Total/NA	Water	3510C	
460-237446-4	MW-17 062421	Total/NA	Water	3510C	
MB 460-787279/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-787279/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-787279/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 787432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237446-1	MW-14 062421	Total/NA	Water	8270E SIM ID	787279
460-237446-2	MW-15 062421	Total/NA	Water	8270E SIM ID	787279
460-237446-3	MW-16 062421	Total/NA	Water	8270E SIM ID	787279
460-237446-4	MW-17 062421	Total/NA	Water	8270E SIM ID	787279
MB 460-787279/1-A	Method Blank	Total/NA	Water	8270E SIM ID	787279
LCS 460-787279/2-A	Lab Control Sample	Total/NA	Water	8270E SIM ID	787279
LCSD 460-787279/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM ID	787279

LCMS

Prep Batch: 168585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237446-1	MW-14 062421	Total/NA	Water	3535	
460-237446-2	MW-15 062421	Total/NA	Water	3535	
460-237446-3	MW-16 062421	Total/NA	Water	3535	
460-237446-4	MW-17 062421	Total/NA	Water	3535	
MB 200-168585/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-168585/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 168615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237446-1	MW-14 062421	Total/NA	Water	537 (modified)	168585
460-237446-2	MW-15 062421	Total/NA	Water	537 (modified)	168585

Eurofins TestAmerica, Edison

QC Association Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

LCMS (Continued)

Analysis Batch: 168615 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237446-3	MW-16 062421	Total/NA	Water	537 (modified)	168585
460-237446-4	MW-17 062421	Total/NA	Water	537 (modified)	168585
MB 200-168585/1-A	Method Blank	Total/NA	Water	537 (modified)	168585
LCS 200-168585/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	168585

Analysis Batch: 168637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237446-1	MW-14 062421	Total/NA	Water	537 (modified)	168585

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: MW-14 062421

Lab Sample ID: 460-237446-1

Date Collected: 06/24/21 10:50

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 14:53	CJM	TAL EDI
Total/NA	Prep	3510C			787279	06/29/21 09:54	OTS	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787432	06/30/21 01:54	MME	TAL EDI
Total/NA	Prep	3535			168585	06/30/21 08:44	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168615	06/30/21 21:29	BWC	TAL BUR
Total/NA	Prep	3535			168585	06/30/21 08:44	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168637	07/01/21 13:46	BWC	TAL BUR

Client Sample ID: MW-15 062421

Lab Sample ID: 460-237446-2

Date Collected: 06/24/21 09:25

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		5	787755	07/01/21 18:05	CJM	TAL EDI
Total/NA	Prep	3510C			787279	06/29/21 09:54	OTS	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787432	06/30/21 02:10	MME	TAL EDI
Total/NA	Prep	3535			168585	06/30/21 08:44	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168615	06/30/21 21:37	BWC	TAL BUR

Client Sample ID: MW-16 062421

Lab Sample ID: 460-237446-3

Date Collected: 06/24/21 08:40

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		10	787755	07/01/21 17:43	CJM	TAL EDI
Total/NA	Prep	3510C			787279	06/29/21 09:54	OTS	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787432	06/30/21 02:26	MME	TAL EDI
Total/NA	Prep	3535			168585	06/30/21 08:44	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168615	06/30/21 21:45	BWC	TAL BUR

Client Sample ID: MW-17 062421

Lab Sample ID: 460-237446-4

Date Collected: 06/24/21 12:25

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		200	787755	07/01/21 17:20	CJM	TAL EDI
Total/NA	Prep	3510C			787279	06/29/21 09:54	OTS	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787432	06/30/21 02:42	MME	TAL EDI
Total/NA	Prep	3535			168585	06/30/21 08:44	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168615	06/30/21 21:54	BWC	TAL BUR

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Client Sample ID: Trip B-4 062421

Lab Sample ID: 460-237446-5

Date Collected: 06/24/21 00:00

Matrix: Water

Date Received: 06/25/21 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787015	06/28/21 10:21	CJM	TAL EDI

Laboratory References:

TAL BUR = Eurofins TestAmerica, Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL EDI = Eurofins 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: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Laboratory: Eurofins TestAmerica, Edison

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11452	04-01-22

Laboratory: Eurofins TestAmerica, Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10391	04-01-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	6:2 FTS
537 (modified)	3535	Water	8:2 FTS
537 (modified)	3535	Water	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
537 (modified)	3535	Water	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
537 (modified)	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	3535	Water	Perfluorobutanoic acid (PFBA)
537 (modified)	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)
537 (modified)	3535	Water	Perfluorododecanoic acid (PFDoA)
537 (modified)	3535	Water	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	3535	Water	Perfluoroheptanoic acid (PFHpA)
537 (modified)	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	3535	Water	Perfluorohexanoic acid (PFHxA)
537 (modified)	3535	Water	Perfluorononanoic acid (PFNA)
537 (modified)	3535	Water	Perfluorooctanesulfonamide (FOSA)
537 (modified)	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	3535	Water	Perfluorooctanoic acid (PFOA)
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)
537 (modified)	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	3535	Water	Perfluorotridecanoic acid (PFTriA)
537 (modified)	3535	Water	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL EDI
8270E SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

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 BUR = Eurofins TestAmerica, Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

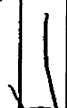
TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237446-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-237446-1	MW-14 062421	Water	06/24/21 10:50	06/25/21 09:25	
460-237446-2	MW-15 062421	Water	06/24/21 09:25	06/25/21 09:25	
460-237446-3	MW-16 062421	Water	06/24/21 08:40	06/25/21 09:25	
460-237446-4	MW-17 062421	Water	06/24/21 12:25	06/25/21 09:25	
460-237446-5	Trip B-4 062421	Water	06/24/21 00:00	06/25/21 09:25	

Client Information Client Contact: Rachel Farnum Company: EnviroSpec Engineering, PLLC Address: 9349 Northern Blvd Suite 3 City: Albany State, Zip: NY, 12204 Phone: 518-402-9625 (Tel) Email: rarnum@envirospaceng.com Project Name: Northeast Alloys & Metals #633045 Site:		Sample Information Sampler: K Tuttle EnviroSpec Phone: 518-453-2203 Lab Pmt: Stone, Judy L E-Mail: Judy.Stone@EuroInset.com Project #: 48021991 SSOW#:		Analysis Requested Due Date Requested: TAT Requested (days): 1-2 weeks Compliance Project: ☐ Yes ☐ No PO #: Callout ID: 138004 WO #: Project #: SSOW#:		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - NaOH R - Na2S2O3 S - H2SO4 G - Anion T - TSP Dodecahydrate H - Ascorbic Acid I - Ice J - DI Water U - Acetone K - EDTA V - MCAA W - pH 4-5 L - EDA Z - other (specify) Other:	
Sample Identification MW-14 062421 MW-15 062421 MW-16 062421 MW-17 062421 Trip B-4 062421		Sample Date 6/24/21 10:30 6/24/21 9:35 6/24/21 8:40 6/24/21 12:35 6/24/21 -		Sample Type G G G G -		Matrix (W=Water, S=solid, O=overseal, G=grab) Water Water Water Water Water	
Sample Instructions/Note:		Field Filled Sample (Yes or No) 624.1 PREC - Priority Pollutant List - VOA - 624.1 6270D_SIM_MS_ID - SIM List		Field Filled Sample (Yes or No) 624.1 PREC - Priority Pollutant List - VOA - 624.1 6270D_SIM_MS_ID - SIM List		Special Instructions/Note:	
Barcode  460-237446 Chain of Custody		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months		Special Instructions/OC Requirements:		Method of Shipment:	
Relinquished by:  Relinquished by: Mark Good Relinquished by:		Date: 6/24/21 14:55 6/25/21 17:00 Date:		Date/Time: 6/24/21 14:55 6/25/21 17:00 Date/Time:		Date/Time: 6/24/21 14:55 6/25/21 17:00 Date/Time:	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Company: EnviroSpec Company: EnviroSpec Company: EnviroSpec		Company: EnviroSpec Company: EnviroSpec Company: EnviroSpec	

ORIGIN ID:DSVA (518) 438-8140
TIM KNOLLMEYER
TESTAMERICA LAB INC
25 KRAFT AVE

SHIP DATE: 25JUN21
ACTWGT: 48.70 LB
CAD: 0886598/CAGE3409

ALBANY, NY 12205
UNITED STATES US

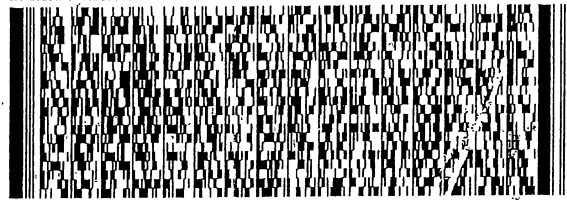
BILL THIRD PARTY

TO **SAMPLE RECEIVING**
TESTAMERICA - BURLINGTON
30 COMMUNITY DRIVE, SUITE 11

BURLINGTON VT 05403

(887) 555-1990

REF: ENVIRO/AECOM PFAS



FedEx
Express



J201120121801uv

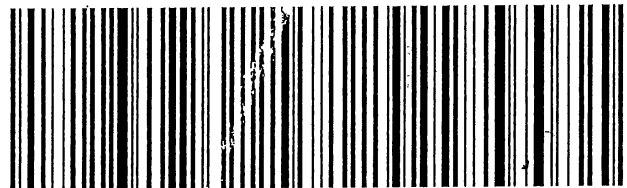
TRK# 5013 1604 9785
0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO BTVA

05403
VT-US BTV

Part # 156148-034 RIT EXP 11/21



Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-237446-1

Login Number: 237446

List Source: Eurofins TestAmerica, Edison

List Number: 1

Creator: Rivera, Kenneth

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	1632020
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-237446-1

Login Number: 237446

List Number: 2

Creator: Lavigne, Scott M

List Source: Eurofins TestAmerica, Burlington

List Creation: 06/27/21 10:08 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1632037
Sample custody seals, if present, are 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	2.2°C
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.	N/A	
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	

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-237479-1

Client Project/Site: Northeast Alloys & Metals #633045

For:

New York State D.E.C.
625 Broadway
4th Floor
Albany, New York 12233

Attn: Mr. Payson Long



Authorized for release by:
7/8/2021 2:45:42 PM

Judy Stone, Senior Project Manager
(484)685-0868
Judy.Stone@Eurofinset.com

LINKS

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results through

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

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

- 1
- 2
- 3
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- 14
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- 16

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.



Judy Stone
Senior Project Manager
7/8/2021 2:45:42 PM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Surrogate Summary	16
Isotope Dilution Summary	17
QC Sample Results	19
QC Association Summary	25
Lab Chronicle	27
Certification Summary	29
Method Summary	30
Sample Summary	31
Chain of Custody	32
Receipt Checklists	38



Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

LCMS

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Job ID: 460-237479-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative 460-237479-1

Comments

No additional comments.

Receipt

The samples were received on 6/23/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.0° C.

GC/MS VOA

Method 624.1: The laboratory control sample (LCS) for analytical batch 460-787937 recovered outside control limits for the following analyte: Acrolein. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA

Method 8270E SIM ID: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 460-786875 and analytical batch 460-786952 recovered outside control limits for the following analyte: 1,4-Dioxane.

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

LCMS

Method 537 (modified): The laboratory control sample (LCS) associated with preparation batch 200-168535 and analytical batch 200-168576 was above acceptance criteria for Perfluoroundecanoic acid (PFUnA). The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 537 (modified): Method 537 (modified): The "I" qualifier associated with sample MW-7R 062221 (460-237479-1) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

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

Organic Prep

No analytical or quality issues were noted, other than those described 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: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: MW-7R 062221

Lab Sample ID: 460-237479-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.7	J	4.9	0.87	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.26	J I	1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.55	J	1.9	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.37	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.0	J	1.9	0.28	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-1 062221

Lab Sample ID: 460-237479-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.2	J	4.5	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.31	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-8 062221

Lab Sample ID: 460-237479-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.7	J	5.0	0.89	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.54	J	2.0	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.75	J	2.0	0.45	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.73	J	2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.58	J	2.0	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.69	J	2.0	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.48	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.45	J *+	2.0	0.34	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.30	J	2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.32	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.97	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA

Client Sample ID: Trip Blank B1-062221

Lab Sample ID: 460-237479-4

No Detections.

Client Sample ID: BR-3 062121

Lab Sample ID: 460-237479-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
6:2 FTS	1.2	J	4.6	1.0	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: MW-7R 062221

Lab Sample ID: 460-237479-1

Date Collected: 06/22/21 08:20

Matrix: Water

Date Received: 06/23/21 09:30

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/02/21 04:16	1
Bromomethane	ND		1.0	0.45	ug/L			07/02/21 04:16	1
Vinyl chloride	ND		1.0	0.34	ug/L			07/02/21 04:16	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/02/21 04:16	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/02/21 04:16	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/02/21 04:16	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/02/21 04:16	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/02/21 04:16	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/02/21 04:16	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/02/21 04:16	1
Chloroform	ND		1.0	0.33	ug/L			07/02/21 04:16	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/02/21 04:16	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/02/21 04:16	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/02/21 04:16	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/02/21 04:16	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/02/21 04:16	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/02/21 04:16	1
Trichloroethene	ND		1.0	0.31	ug/L			07/02/21 04:16	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/02/21 04:16	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/02/21 04:16	1
Benzene	ND		1.0	0.43	ug/L			07/02/21 04:16	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/02/21 04:16	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/02/21 04:16	1
Bromoform	ND		1.0	0.54	ug/L			07/02/21 04:16	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/02/21 04:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/02/21 04:16	1
Toluene	ND		1.0	0.38	ug/L			07/02/21 04:16	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/02/21 04:16	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/02/21 04:16	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/02/21 04:16	1
Acrolein	ND	+	4.0	1.1	ug/L			07/02/21 04:16	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/02/21 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		60 - 140		07/02/21 04:16	1
Toluene-d8 (Surr)	105		60 - 140		07/02/21 04:16	1
Bromofluorobenzene	98		60 - 140		07/02/21 04:16	1
Dibromofluoromethane (Surr)	100		60 - 140		07/02/21 04:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND	*1	0.20	0.016	ug/L		06/28/21 16:09	06/29/21 00:32	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	44		10 - 150				06/28/21 16:09	06/29/21 00:32	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.7	J	4.9	0.87	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.46	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.44	ng/L		06/29/21 10:16	06/29/21 19:08	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: MW-7R 062221

Lab Sample ID: 460-237479-1

Date Collected: 06/22/21 08:20

Matrix: Water

Date Received: 06/23/21 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.26	J I	1.9	0.23	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorooctanoic acid (PFOA)	0.55	J	1.9	0.41	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.27	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.30	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluoroundecanoic acid (PFUnA)	ND	+	1.9	0.33	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.42	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorobutanesulfonic acid (PFBS)	0.37	J	1.9	0.24	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.29	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.23	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorooctanesulfonic acid (PFOS)	1.0	J	1.9	0.28	ng/L		06/29/21 10:16	06/29/21 19:08	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.56	ng/L		06/29/21 10:16	06/29/21 19:08	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.88	ng/L		06/29/21 10:16	06/29/21 19:08	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.72	ng/L		06/29/21 10:16	06/29/21 19:08	1
6:2 FTS	ND		4.9	1.1	ng/L		06/29/21 10:16	06/29/21 19:08	1
8:2 FTS	ND		1.9	0.38	ng/L		06/29/21 10:16	06/29/21 19:08	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	78		25 - 150				06/29/21 10:16	06/29/21 19:08	1
13C4 PFBA	92		25 - 150				06/29/21 10:16	06/29/21 19:08	1
13C5 PFPeA	105		25 - 150				06/29/21 10:16	06/29/21 19:08	1
13C2 PFHxA	105		50 - 150				06/29/21 10:16	06/29/21 19:08	1
13C4 PFHpA	101		50 - 150				06/29/21 10:16	06/29/21 19:08	1
13C4 PFOA	102		50 - 150				06/29/21 10:16	06/29/21 19:08	1
13C5 PFNA	92		50 - 150				06/29/21 10:16	06/29/21 19:08	1
13C2 PFDA	88		50 - 150				06/29/21 10:16	06/29/21 19:08	1
13C2 PFUnA	84		50 - 150				06/29/21 10:16	06/29/21 19:08	1
13C2 PFDoA	85		50 - 150				06/29/21 10:16	06/29/21 19:08	1
13C2 PFTeDA	77		50 - 150				06/29/21 10:16	06/29/21 19:08	1
13C3 PFBS	92		50 - 150				06/29/21 10:16	06/29/21 19:08	1
18O2 PFHxS	89		50 - 150				06/29/21 10:16	06/29/21 19:08	1
13C4 PFOS	87		50 - 150				06/29/21 10:16	06/29/21 19:08	1
d3-NMeFOSAA	77		50 - 150				06/29/21 10:16	06/29/21 19:08	1
d5-NEtFOSAA	86		50 - 150				06/29/21 10:16	06/29/21 19:08	1
M2-6:2 FTS	94		25 - 150				06/29/21 10:16	06/29/21 19:08	1
M2-8:2 FTS	92		25 - 150				06/29/21 10:16	06/29/21 19:08	1

Client Sample ID: MW-1 062221

Lab Sample ID: 460-237479-2

Date Collected: 06/22/21 10:15

Matrix: Water

Date Received: 06/23/21 09:30

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/02/21 04:39	1
Bromomethane	ND		1.0	0.45	ug/L			07/02/21 04:39	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: MW-1 062221

Lab Sample ID: 460-237479-2

Date Collected: 06/22/21 10:15

Matrix: Water

Date Received: 06/23/21 09:30

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.34	ug/L			07/02/21 04:39	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/02/21 04:39	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/02/21 04:39	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/02/21 04:39	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/02/21 04:39	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/02/21 04:39	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/02/21 04:39	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/02/21 04:39	1
Chloroform	ND		1.0	0.33	ug/L			07/02/21 04:39	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/02/21 04:39	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/02/21 04:39	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/02/21 04:39	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/02/21 04:39	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/02/21 04:39	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/02/21 04:39	1
Trichloroethene	ND		1.0	0.31	ug/L			07/02/21 04:39	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/02/21 04:39	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/02/21 04:39	1
Benzene	ND		1.0	0.43	ug/L			07/02/21 04:39	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/02/21 04:39	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/02/21 04:39	1
Bromoform	ND		1.0	0.54	ug/L			07/02/21 04:39	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/02/21 04:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/02/21 04:39	1
Toluene	ND		1.0	0.38	ug/L			07/02/21 04:39	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/02/21 04:39	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/02/21 04:39	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/02/21 04:39	1
Acrolein	ND	+	4.0	1.1	ug/L			07/02/21 04:39	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/02/21 04:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		60 - 140		07/02/21 04:39	1
Toluene-d8 (Surr)	105		60 - 140		07/02/21 04:39	1
Bromofluorobenzene	95		60 - 140		07/02/21 04:39	1
Dibromofluoromethane (Surr)	102		60 - 140		07/02/21 04:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND	*1	0.20	0.016	ug/L		06/28/21 16:09	06/29/21 00:48	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	50		10 - 150				06/28/21 16:09	06/29/21 00:48	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.2	J	4.5	0.81	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.43	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.41	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.38	ng/L		06/29/21 10:16	06/29/21 19:16	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: MW-1 062221

Lab Sample ID: 460-237479-2

Date Collected: 06/22/21 10:15

Matrix: Water

Date Received: 06/23/21 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		1.8	0.25	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.28	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluoroundecanoic acid (PFUnA)	ND	+	1.8	0.31	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.35	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.39	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.57	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorobutanesulfonic acid (PFBS)	0.31	J	1.8	0.23	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.27	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.21	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.26	ng/L		06/29/21 10:16	06/29/21 19:16	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.52	ng/L		06/29/21 10:16	06/29/21 19:16	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.5	0.82	ng/L		06/29/21 10:16	06/29/21 19:16	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.5	0.67	ng/L		06/29/21 10:16	06/29/21 19:16	1
6:2 FTS	ND		4.5	0.99	ng/L		06/29/21 10:16	06/29/21 19:16	1
8:2 FTS	ND		1.8	0.35	ng/L		06/29/21 10:16	06/29/21 19:16	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	81		25 - 150	06/29/21 10:16	06/29/21 19:16	1
13C4 PFBA	102		25 - 150	06/29/21 10:16	06/29/21 19:16	1
13C5 PFPeA	107		25 - 150	06/29/21 10:16	06/29/21 19:16	1
13C2 PFHxA	106		50 - 150	06/29/21 10:16	06/29/21 19:16	1
13C4 PFHpA	100		50 - 150	06/29/21 10:16	06/29/21 19:16	1
13C4 PFOA	100		50 - 150	06/29/21 10:16	06/29/21 19:16	1
13C5 PFNA	96		50 - 150	06/29/21 10:16	06/29/21 19:16	1
13C2 PFDA	87		50 - 150	06/29/21 10:16	06/29/21 19:16	1
13C2 PFUnA	64		50 - 150	06/29/21 10:16	06/29/21 19:16	1
13C2 PFDoA	57		50 - 150	06/29/21 10:16	06/29/21 19:16	1
13C2 PFTeDA	57		50 - 150	06/29/21 10:16	06/29/21 19:16	1
13C3 PFBS	95		50 - 150	06/29/21 10:16	06/29/21 19:16	1
18O2 PFHxS	91		50 - 150	06/29/21 10:16	06/29/21 19:16	1
13C4 PFOS	86		50 - 150	06/29/21 10:16	06/29/21 19:16	1
d3-NMeFOSAA	62		50 - 150	06/29/21 10:16	06/29/21 19:16	1
d5-NEtFOSAA	57		50 - 150	06/29/21 10:16	06/29/21 19:16	1
M2-6:2 FTS	91		25 - 150	06/29/21 10:16	06/29/21 19:16	1
M2-8:2 FTS	88		25 - 150	06/29/21 10:16	06/29/21 19:16	1

Client Sample ID: MW-8 062221

Lab Sample ID: 460-237479-3

Date Collected: 06/22/21 10:25

Matrix: Water

Date Received: 06/23/21 09:30

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/02/21 05:01	1
Bromomethane	ND		1.0	0.45	ug/L			07/02/21 05:01	1
Vinyl chloride	ND		1.0	0.34	ug/L			07/02/21 05:01	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/02/21 05:01	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/02/21 05:01	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: MW-8 062221

Lab Sample ID: 460-237479-3

Date Collected: 06/22/21 10:25

Matrix: Water

Date Received: 06/23/21 09:30

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/02/21 05:01	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/02/21 05:01	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/02/21 05:01	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/02/21 05:01	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/02/21 05:01	1
Chloroform	ND		1.0	0.33	ug/L			07/02/21 05:01	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/02/21 05:01	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/02/21 05:01	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/02/21 05:01	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/02/21 05:01	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/02/21 05:01	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/02/21 05:01	1
Trichloroethene	ND		1.0	0.31	ug/L			07/02/21 05:01	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/02/21 05:01	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/02/21 05:01	1
Benzene	ND		1.0	0.43	ug/L			07/02/21 05:01	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/02/21 05:01	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/02/21 05:01	1
Bromoform	ND		1.0	0.54	ug/L			07/02/21 05:01	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/02/21 05:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/02/21 05:01	1
Toluene	ND		1.0	0.38	ug/L			07/02/21 05:01	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/02/21 05:01	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/02/21 05:01	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/02/21 05:01	1
Acrolein	ND	+	4.0	1.1	ug/L			07/02/21 05:01	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/02/21 05:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		60 - 140		07/02/21 05:01	1
Toluene-d8 (Surr)	104		60 - 140		07/02/21 05:01	1
Bromofluorobenzene	99		60 - 140		07/02/21 05:01	1
Dibromofluoromethane (Surr)	103		60 - 140		07/02/21 05:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND	*1	0.20	0.016	ug/L		06/28/21 16:09	06/29/21 01:03	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	38		10 - 150				06/28/21 16:09	06/29/21 01:03	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.7	J	5.0	0.89	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluoropentanoic acid (PFPeA)	0.54	J	2.0	0.47	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorohexanoic acid (PFHxA)	0.75	J	2.0	0.45	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluoroheptanoic acid (PFHpA)	0.73	J	2.0	0.24	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorooctanoic acid (PFOA)	0.58	J	2.0	0.42	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorononanoic acid (PFNA)	0.69	J	2.0	0.28	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorodecanoic acid (PFDA)	0.48	J	2.0	0.30	ng/L		06/29/21 10:16	06/29/21 19:24	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: MW-8 062221

Lab Sample ID: 460-237479-3

Date Collected: 06/22/21 10:25

Matrix: Water

Date Received: 06/23/21 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	0.45	J**	2.0	0.34	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.39	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorobutanesulfonic acid (PFBS)	0.30	J	2.0	0.25	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorohexanesulfonic acid (PFHxS)	0.32	J	2.0	0.30	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorooctanesulfonic acid (PFOS)	0.97	J	2.0	0.29	ng/L		06/29/21 10:16	06/29/21 19:24	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.58	ng/L		06/29/21 10:16	06/29/21 19:24	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90	ng/L		06/29/21 10:16	06/29/21 19:24	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74	ng/L		06/29/21 10:16	06/29/21 19:24	1
6:2 FTS	ND		5.0	1.1	ng/L		06/29/21 10:16	06/29/21 19:24	1
8:2 FTS	ND		2.0	0.39	ng/L		06/29/21 10:16	06/29/21 19:24	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	60		25 - 150				06/29/21 10:16	06/29/21 19:24	1
13C4 PFBA	82		25 - 150				06/29/21 10:16	06/29/21 19:24	1
13C5 PFPeA	94		25 - 150				06/29/21 10:16	06/29/21 19:24	1
13C2 PFHxA	98		50 - 150				06/29/21 10:16	06/29/21 19:24	1
13C4 PFHpA	93		50 - 150				06/29/21 10:16	06/29/21 19:24	1
13C4 PFOA	92		50 - 150				06/29/21 10:16	06/29/21 19:24	1
13C5 PFNA	86		50 - 150				06/29/21 10:16	06/29/21 19:24	1
13C2 PFDA	69		50 - 150				06/29/21 10:16	06/29/21 19:24	1
13C2 PFUnA	66		50 - 150				06/29/21 10:16	06/29/21 19:24	1
13C2 PFDoA	71		50 - 150				06/29/21 10:16	06/29/21 19:24	1
13C2 PFTeDA	81		50 - 150				06/29/21 10:16	06/29/21 19:24	1
13C3 PFBS	89		50 - 150				06/29/21 10:16	06/29/21 19:24	1
18O2 PFHxS	86		50 - 150				06/29/21 10:16	06/29/21 19:24	1
13C4 PFOS	63		50 - 150				06/29/21 10:16	06/29/21 19:24	1
d3-NMeFOSAA	61		50 - 150				06/29/21 10:16	06/29/21 19:24	1
d5-NEtFOSAA	56		50 - 150				06/29/21 10:16	06/29/21 19:24	1
M2-6:2 FTS	96		25 - 150				06/29/21 10:16	06/29/21 19:24	1
M2-8:2 FTS	73		25 - 150				06/29/21 10:16	06/29/21 19:24	1

Client Sample ID: Trip Blank B1-062221

Lab Sample ID: 460-237479-4

Date Collected: 06/22/21 00:00

Matrix: Water

Date Received: 06/23/21 09:30

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/01/21 23:22	1
Bromomethane	ND		1.0	0.45	ug/L			07/01/21 23:22	1
Vinyl chloride	ND		1.0	0.34	ug/L			07/01/21 23:22	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/01/21 23:22	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: Trip Blank B1-062221

Lab Sample ID: 460-237479-4

Date Collected: 06/22/21 00:00

Matrix: Water

Date Received: 06/23/21 09:30

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0	0.32	ug/L			07/01/21 23:22	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/01/21 23:22	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/01/21 23:22	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/01/21 23:22	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/01/21 23:22	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/01/21 23:22	1
Chloroform	ND		1.0	0.33	ug/L			07/01/21 23:22	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/01/21 23:22	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/01/21 23:22	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/01/21 23:22	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/01/21 23:22	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/01/21 23:22	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/01/21 23:22	1
Trichloroethene	ND		1.0	0.31	ug/L			07/01/21 23:22	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/01/21 23:22	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/01/21 23:22	1
Benzene	ND		1.0	0.43	ug/L			07/01/21 23:22	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/01/21 23:22	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/01/21 23:22	1
Bromoform	ND		1.0	0.54	ug/L			07/01/21 23:22	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/01/21 23:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/01/21 23:22	1
Toluene	ND		1.0	0.38	ug/L			07/01/21 23:22	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/01/21 23:22	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/01/21 23:22	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/01/21 23:22	1
Acrolein	ND	+	4.0	1.1	ug/L			07/01/21 23:22	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/01/21 23:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		60 - 140		07/01/21 23:22	1
Toluene-d8 (Surr)	103		60 - 140		07/01/21 23:22	1
Bromofluorobenzene	98		60 - 140		07/01/21 23:22	1
Dibromofluoromethane (Surr)	104		60 - 140		07/01/21 23:22	1

Client Sample ID: BR-3 062121

Lab Sample ID: 460-237479-5

Date Collected: 06/21/21 15:20

Matrix: Water

Date Received: 06/23/21 09:30

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/02/21 05:23	1
Bromomethane	ND		1.0	0.45	ug/L			07/02/21 05:23	1
Vinyl chloride	ND		1.0	0.34	ug/L			07/02/21 05:23	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/02/21 05:23	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/02/21 05:23	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/02/21 05:23	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/02/21 05:23	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/02/21 05:23	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/02/21 05:23	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: BR-3 062121

Lab Sample ID: 460-237479-5

Date Collected: 06/21/21 15:20

Matrix: Water

Date Received: 06/23/21 09:30

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/02/21 05:23	1
Chloroform	ND		1.0	0.33	ug/L			07/02/21 05:23	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/02/21 05:23	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/02/21 05:23	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/02/21 05:23	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/02/21 05:23	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/02/21 05:23	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/02/21 05:23	1
Trichloroethene	ND		1.0	0.31	ug/L			07/02/21 05:23	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/02/21 05:23	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/02/21 05:23	1
Benzene	ND		1.0	0.43	ug/L			07/02/21 05:23	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/02/21 05:23	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/02/21 05:23	1
Bromoform	ND		1.0	0.54	ug/L			07/02/21 05:23	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/02/21 05:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/02/21 05:23	1
Toluene	ND		1.0	0.38	ug/L			07/02/21 05:23	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/02/21 05:23	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/02/21 05:23	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/02/21 05:23	1
Acrolein	ND	+	4.0	1.1	ug/L			07/02/21 05:23	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/02/21 05:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		60 - 140		07/02/21 05:23	1
Toluene-d8 (Surr)	104		60 - 140		07/02/21 05:23	1
Bromofluorobenzene	97		60 - 140		07/02/21 05:23	1
Dibromofluoromethane (Surr)	102		60 - 140		07/02/21 05:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND	*1	0.20	0.016	ug/L		06/28/21 16:09	06/29/21 01:19	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	44		10 - 150				06/28/21 16:09	06/29/21 01:19	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.6	0.83	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.44	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.42	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.22	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.39	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.26	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.28	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluoroundecanoic acid (PFUnA)	ND	+	1.9	0.32	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.36	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.40	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.59	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.23	ng/L		06/29/21 10:16	06/29/21 19:33	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: BR-3 062121

Lab Sample ID: 460-237479-5

Date Collected: 06/21/21 15:20

Matrix: Water

Date Received: 06/23/21 09:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.28	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.28	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.27	ng/L		06/29/21 10:16	06/29/21 19:33	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.54	ng/L		06/29/21 10:16	06/29/21 19:33	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.6	0.84	ng/L		06/29/21 10:16	06/29/21 19:33	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.6	0.69	ng/L		06/29/21 10:16	06/29/21 19:33	1
6:2 FTS	1.2	J	4.6	1.0	ng/L		06/29/21 10:16	06/29/21 19:33	1
8:2 FTS	ND		1.9	0.36	ng/L		06/29/21 10:16	06/29/21 19:33	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	83		25 - 150	06/29/21 10:16	06/29/21 19:33	1
13C4 PFBA	100		25 - 150	06/29/21 10:16	06/29/21 19:33	1
13C5 PFPeA	106		25 - 150	06/29/21 10:16	06/29/21 19:33	1
13C2 PFHxA	101		50 - 150	06/29/21 10:16	06/29/21 19:33	1
13C4 PFHpA	97		50 - 150	06/29/21 10:16	06/29/21 19:33	1
13C4 PFOA	98		50 - 150	06/29/21 10:16	06/29/21 19:33	1
13C5 PFNA	95		50 - 150	06/29/21 10:16	06/29/21 19:33	1
13C2 PFDA	90		50 - 150	06/29/21 10:16	06/29/21 19:33	1
13C2 PFUnA	83		50 - 150	06/29/21 10:16	06/29/21 19:33	1
13C2 PFDoA	80		50 - 150	06/29/21 10:16	06/29/21 19:33	1
13C2 PFTeDA	76		50 - 150	06/29/21 10:16	06/29/21 19:33	1
13C3 PFBS	90		50 - 150	06/29/21 10:16	06/29/21 19:33	1
18O2 PFHxS	88		50 - 150	06/29/21 10:16	06/29/21 19:33	1
13C4 PFOS	91		50 - 150	06/29/21 10:16	06/29/21 19:33	1
d3-NMeFOSAA	79		50 - 150	06/29/21 10:16	06/29/21 19:33	1
d5-NEtFOSAA	75		50 - 150	06/29/21 10:16	06/29/21 19:33	1
M2-6:2 FTS	90		25 - 150	06/29/21 10:16	06/29/21 19:33	1
M2-8:2 FTS	96		25 - 150	06/29/21 10:16	06/29/21 19:33	1

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (60-140)	TOL (60-140)	BFB (60-140)	DBFM (60-140)
460-237479-1	MW-7R 062221	101	105	98	100
460-237479-2	MW-1 062221	98	105	95	102
460-237479-3	MW-8 062221	100	104	99	103
460-237479-4	Trip Blank B1-062221	98	103	98	104
460-237479-5	BR-3 062121	99	104	97	102
LCS 460-787937/4	Lab Control Sample	97	109	92	97
LCSD 460-787937/5	Lab Control Sample Dup	96	108	92	99
MB 460-787937/8	Method Blank	96	103	99	103

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = Bromofluorobenzene

DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DXE (10-150)
460-237479-1	MW-7R 062221	44
460-237479-2	MW-1 062221	50
460-237479-3	MW-8 062221	38
460-237479-5	BR-3 062121	44
LCS 460-786875/2-A	Lab Control Sample	55
LCS 460-786875/3-A	Lab Control Sample Dup	55
MB 460-786875/1-A	Method Blank	59

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFOSA (25-150)	PFBA (25-150)	PFPeA (25-150)	PFHxA (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFNA (50-150)	PFDA (50-150)
460-237479-1	MW-7R 062221	78	92	105	105	101	102	92	88
460-237479-2	MW-1 062221	81	102	107	106	100	100	96	87
460-237479-3	MW-8 062221	60	82	94	98	93	92	86	69
460-237479-5	BR-3 062121	83	100	106	101	97	98	95	90
LCS 200-168535/2-A	Lab Control Sample	67	108	107	110	102	103	101	104
MB 200-168535/1-A	Method Blank	57	103	105	102	98	101	99	97

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFTDA (50-150)	C3PFBS (50-150)	PFHxS (50-150)	PFOS (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)
460-237479-1	MW-7R 062221	84	85	77	92	89	87	77	86
460-237479-2	MW-1 062221	64	57	57	95	91	86	62	57
460-237479-3	MW-8 062221	66	71	81	89	86	63	61	56
460-237479-5	BR-3 062121	83	80	76	90	88	91	79	75
LCS 200-168535/2-A	Lab Control Sample	86	71	63	98	94	97	84	80
MB 200-168535/1-A	Method Blank	90	69	57	92	91	95	84	78

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
460-237479-1	MW-7R 062221	94	92
460-237479-2	MW-1 062221	91	88
460-237479-3	MW-8 062221	96	73
460-237479-5	BR-3 062121	90	96
LCS 200-168535/2-A	Lab Control Sample	100	108
MB 200-168535/1-A	Method Blank	92	101

Surrogate Legend

PFOSA = 13C8 FOSA
PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA

Eurofins TestAmerica, Edison

Isotope Dilution Summary

Client: New York State D.E.C.

Job ID: 460-237479-1

Project/Site: Northeast Alloys & Metals #633045

PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-787937/8

Matrix: Water

Analysis Batch: 787937

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/01/21 22:59	1
Bromomethane	ND		1.0	0.45	ug/L			07/01/21 22:59	1
Vinyl chloride	ND		1.0	0.34	ug/L			07/01/21 22:59	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/01/21 22:59	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/01/21 22:59	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/01/21 22:59	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/01/21 22:59	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/01/21 22:59	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/01/21 22:59	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/01/21 22:59	1
Chloroform	ND		1.0	0.33	ug/L			07/01/21 22:59	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/01/21 22:59	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/01/21 22:59	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/01/21 22:59	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/01/21 22:59	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/01/21 22:59	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/01/21 22:59	1
Trichloroethene	ND		1.0	0.31	ug/L			07/01/21 22:59	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/01/21 22:59	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/01/21 22:59	1
Benzene	ND		1.0	0.43	ug/L			07/01/21 22:59	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/01/21 22:59	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/01/21 22:59	1
Bromoform	ND		1.0	0.54	ug/L			07/01/21 22:59	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/01/21 22:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/01/21 22:59	1
Toluene	ND		1.0	0.38	ug/L			07/01/21 22:59	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/01/21 22:59	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/01/21 22:59	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/01/21 22:59	1
Acrolein	ND		4.0	1.1	ug/L			07/01/21 22:59	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/01/21 22:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		60 - 140		07/01/21 22:59	1
Toluene-d8 (Surr)	103		60 - 140		07/01/21 22:59	1
Bromofluorobenzene	99		60 - 140		07/01/21 22:59	1
Dibromofluoromethane (Surr)	103		60 - 140		07/01/21 22:59	1

Lab Sample ID: LCS 460-787937/4

Matrix: Water

Analysis Batch: 787937

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	20.0	25.4		ug/L		127	0.1 - 205
Bromomethane	20.0	21.4		ug/L		107	15 - 185
Vinyl chloride	20.0	23.3		ug/L		117	5 - 195
Ethyl Chloride	20.0	25.6		ug/L		128	40 - 160

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-787937/4

Matrix: Water

Analysis Batch: 787937

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	20.0	23.3		ug/L		116	60 - 140
Trichlorofluoromethane	20.0	17.1		ug/L		85	50 - 150
1,1-Dichloroethene	20.0	21.8		ug/L		109	50 - 150
1,1-Dichloroethane	20.0	22.8		ug/L		114	70 - 130
trans-1,2-Dichloroethene	20.0	21.8		ug/L		109	70 - 130
cis-1,2-Dichloroethene	20.0	20.4		ug/L		102	60 - 140
Chloroform	20.0	19.8		ug/L		99	70 - 135
1,2-Dichloroethane	20.0	20.1		ug/L		100	70 - 130
1,1,1-Trichloroethane	20.0	18.2		ug/L		91	70 - 130
Carbon tetrachloride	20.0	17.8		ug/L		89	70 - 130
Bromodichloromethane	20.0	17.4		ug/L		87	65 - 135
1,2-Dichloropropane	20.0	21.3		ug/L		106	35 - 165
cis-1,3-Dichloropropene	20.0	20.8		ug/L		104	25 - 175
Trichloroethene	20.0	18.3		ug/L		92	65 - 135
Dibromochloromethane	20.0	16.9		ug/L		84	70 - 135
1,1,2-Trichloroethane	20.0	21.0		ug/L		105	70 - 130
Benzene	20.0	22.1		ug/L		111	65 - 135
trans-1,3-Dichloropropene	20.0	20.1		ug/L		100	50 - 150
2-Chloroethyl vinyl ether	20.0	19.1		ug/L		95	0.1 - 225
Bromoform	20.0	16.3		ug/L		82	70 - 130
Tetrachloroethene	20.0	16.3		ug/L		82	70 - 130
1,1,2,2-Tetrachloroethane	20.0	25.1		ug/L		126	60 - 140
Toluene	20.0	20.4		ug/L		102	70 - 130
Chlorobenzene	20.0	20.6		ug/L		103	65 - 135
Ethylbenzene	20.0	20.6		ug/L		103	60 - 140
Xylenes, Total	40.0	40.7		ug/L		102	60 - 140
Acrolein	40.6	63.6	*+	ug/L		157	10 - 150
Acrylonitrile	200	255		ug/L		127	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		60 - 140
Toluene-d8 (Surr)	109		60 - 140
Bromofluorobenzene	92		60 - 140
Dibromofluoromethane (Surr)	97		60 - 140

Lab Sample ID: LCSD 460-787937/5

Matrix: Water

Analysis Batch: 787937

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloromethane	20.0	23.5		ug/L		118	0.1 - 205	7	60
Bromomethane	20.0	18.3		ug/L		92	15 - 185	15	61
Vinyl chloride	20.0	21.4		ug/L		107	5 - 195	8	66
Ethyl Chloride	20.0	24.0		ug/L		120	40 - 160	7	78
Methylene Chloride	20.0	22.7		ug/L		114	60 - 140	2	28
Trichlorofluoromethane	20.0	15.6		ug/L		78	50 - 150	9	84
1,1-Dichloroethene	20.0	21.5		ug/L		108	50 - 150	1	32
1,1-Dichloroethane	20.0	22.6		ug/L		113	70 - 130	1	40

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-787937/5

Matrix: Water

Analysis Batch: 787937

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
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	70 - 130	2	45
cis-1,2-Dichloroethene	20.0	20.8		ug/L		104	60 - 140	2	50
Chloroform	20.0	19.7		ug/L		98	70 - 135	1	54
1,2-Dichloroethane	20.0	19.0		ug/L		95	70 - 130	5	49
1,1,1-Trichloroethane	20.0	17.4		ug/L		87	70 - 130	4	36
Carbon tetrachloride	20.0	17.0		ug/L		85	70 - 130	5	41
Bromodichloromethane	20.0	17.2		ug/L		86	65 - 135	1	56
1,2-Dichloropropane	20.0	20.2		ug/L		101	35 - 165	5	55
cis-1,3-Dichloropropene	20.0	21.1		ug/L		106	25 - 175	1	58
Trichloroethene	20.0	18.5		ug/L		93	65 - 135	1	48
Dibromochloromethane	20.0	16.2		ug/L		81	70 - 135	4	50
1,1,2-Trichloroethane	20.0	19.4		ug/L		97	70 - 130	8	45
Benzene	20.0	22.2		ug/L		111	65 - 135	0	61
trans-1,3-Dichloropropene	20.0	19.2		ug/L		96	50 - 150	5	86
2-Chloroethyl vinyl ether	20.0	17.2		ug/L		86	0.1 - 225	10	71
Bromoform	20.0	15.4		ug/L		77	70 - 130	6	42
Tetrachloroethene	20.0	16.9		ug/L		85	70 - 130	4	39
1,1,2,2-Tetrachloroethane	20.0	24.0		ug/L		120	60 - 140	5	61
Toluene	20.0	20.4		ug/L		102	70 - 130	0	41
Chlorobenzene	20.0	19.8		ug/L		99	65 - 135	4	53
Ethylbenzene	20.0	19.9		ug/L		100	60 - 140	3	63
Xylenes, Total	40.0	39.3		ug/L		98	60 - 140	4	50
Acrolein	40.6	58.4		ug/L		144	10 - 150	9	60
Acrylonitrile	200	241		ug/L		121	60 - 140	6	60

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		60 - 140
Toluene-d8 (Surr)	108		60 - 140
Bromofluorobenzene	92		60 - 140
Dibromofluoromethane (Surr)	99		60 - 140

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

Lab Sample ID: MB 460-786875/1-A

Matrix: Water

Analysis Batch: 786952

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 786875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/27/21 07:10	06/27/21 16:47	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	59		10 - 150				06/27/21 07:10	06/27/21 16:47	1

Lab Sample ID: LCS 460-786875/2-A

Matrix: Water

Analysis Batch: 786952

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 786875

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	1.60	1.04		ug/L		65	50 - 142

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

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

Isotope Dilution		LCS %Recovery	LCS Qualifier								
1,4-Dioxane-d8		55									
Lab Sample ID: LCSD 460-786875/3-A											
Matrix: Water											
Analysis Batch: 786952											
Client Sample ID: Lab Control Sample Dup											
Prep Type: Total/NA											
Prep Batch: 786875											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			1.60	1.30	*1	ug/L		81	50 - 142	22	20
Isotope Dilution		LCSD %Recovery	LCSD Qualifier								
1,4-Dioxane-d8		55									

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-168535/1-A Matrix: Water Analysis Batch: 168576 Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 168535											
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Perfluorobutanoic acid (PFBA)	ND		5.0	0.89	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.47	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.45	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.24	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorooctanoic acid (PFOA)	ND		2.0	0.42	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorononanoic acid (PFNA)	ND		2.0	0.28	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.39	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.25	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.30	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.29	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.58	ng/L		06/29/21 10:15	06/29/21 18:26	1		
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90	ng/L		06/29/21 10:15	06/29/21 18:26	1		
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74	ng/L		06/29/21 10:15	06/29/21 18:26	1		
6:2 FTS	ND		5.0	1.1	ng/L		06/29/21 10:15	06/29/21 18:26	1		
8:2 FTS	ND		2.0	0.39	ng/L		06/29/21 10:15	06/29/21 18:26	1		
Isotope Dilution		MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac		
13C8 FOSA		57		25 - 150			06/29/21 10:15	06/29/21 18:26	1		
13C4 PFBA		103		25 - 150			06/29/21 10:15	06/29/21 18:26	1		
13C5 PFPeA		105		25 - 150			06/29/21 10:15	06/29/21 18:26	1		
13C2 PFHxA		102		50 - 150			06/29/21 10:15	06/29/21 18:26	1		
13C4 PFHpA		98		50 - 150			06/29/21 10:15	06/29/21 18:26	1		
13C4 PFOA		101		50 - 150			06/29/21 10:15	06/29/21 18:26	1		
13C5 PFNA		99		50 - 150			06/29/21 10:15	06/29/21 18:26	1		

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

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

Lab Sample ID: MB 200-168535/1-A

Matrix: Water

Analysis Batch: 168576

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 168535

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	97		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFUnA	90		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFDoA	69		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFTeDA	57		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C3 PFBS	92		50 - 150	06/29/21 10:15	06/29/21 18:26	1
18O2 PFHxS	91		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C4 PFOS	95		50 - 150	06/29/21 10:15	06/29/21 18:26	1
d3-NMeFOSAA	84		50 - 150	06/29/21 10:15	06/29/21 18:26	1
d5-NEtFOSAA	78		50 - 150	06/29/21 10:15	06/29/21 18:26	1
M2-6:2 FTS	92		25 - 150	06/29/21 10:15	06/29/21 18:26	1
M2-8:2 FTS	101		25 - 150	06/29/21 10:15	06/29/21 18:26	1

Lab Sample ID: LCS 200-168535/2-A

Matrix: Water

Analysis Batch: 168576

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 168535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	46.4		ng/L		116	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	47.2		ng/L		118	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	45.4		ng/L		114	70 - 130
Perfluoroheptanoic acid (PFHpA)	40.0	44.7		ng/L		112	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	45.6		ng/L		114	70 - 130
Perfluorononanoic acid (PFNA)	40.0	46.7		ng/L		117	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	42.9		ng/L		107	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	52.6	*+	ng/L		131	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	49.6		ng/L		124	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	45.5		ng/L		114	70 - 130
Perfluorotetradecanoic acid (PFTeA)	40.0	51.2		ng/L		128	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	41.1		ng/L		116	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	42.4		ng/L		117	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	44.3		ng/L		116	50 - 150
Perfluorodecanesulfonic acid (PFDS)	38.6	36.4		ng/L		94	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	41.3		ng/L		111	70 - 130
Perfluorooctanesulfonamide (FOSA)	40.0	43.2		ng/L		108	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	45.3		ng/L		113	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	44.2		ng/L		110	70 - 130
6:2 FTS	37.9	43.6		ng/L		115	50 - 150
8:2 FTS	38.3	43.5		ng/L		113	50 - 150

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

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

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
13C8 FOSA	67		25 - 150
13C4 PFBA	108		25 - 150
13C5 PFPeA	107		25 - 150
13C2 PFHxA	110		50 - 150
13C4 PFHpA	102		50 - 150
13C4 PFOA	103		50 - 150
13C5 PFNA	101		50 - 150
13C2 PFDA	104		50 - 150
13C2 PFUnA	86		50 - 150
13C2 PFDoA	71		50 - 150
13C2 PFTeDA	63		50 - 150
13C3 PFBS	98		50 - 150
18O2 PFHxS	94		50 - 150
13C4 PFOS	97		50 - 150
d3-NMeFOSAA	84		50 - 150
d5-NEtFOSAA	80		50 - 150
M2-6:2 FTS	100		25 - 150
M2-8:2 FTS	108		25 - 150

QC Association Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

GC/MS VOA

Analysis Batch: 787937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237479-1	MW-7R 062221	Total/NA	Water	624.1	
460-237479-2	MW-1 062221	Total/NA	Water	624.1	
460-237479-3	MW-8 062221	Total/NA	Water	624.1	
460-237479-4	Trip Blank B1-062221	Total/NA	Water	624.1	
460-237479-5	BR-3 062121	Total/NA	Water	624.1	
MB 460-787937/8	Method Blank	Total/NA	Water	624.1	
LCS 460-787937/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 460-787937/5	Lab Control Sample Dup	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 786875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237479-1	MW-7R 062221	Total/NA	Water	3510C	
460-237479-2	MW-1 062221	Total/NA	Water	3510C	
460-237479-3	MW-8 062221	Total/NA	Water	3510C	
460-237479-5	BR-3 062121	Total/NA	Water	3510C	
MB 460-786875/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-786875/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-786875/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 786952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-786875/1-A	Method Blank	Total/NA	Water	8270E SIM ID	786875
LCS 460-786875/2-A	Lab Control Sample	Total/NA	Water	8270E SIM ID	786875
LCSD 460-786875/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM ID	786875

Analysis Batch: 787166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237479-1	MW-7R 062221	Total/NA	Water	8270E SIM ID	786875
460-237479-2	MW-1 062221	Total/NA	Water	8270E SIM ID	786875
460-237479-3	MW-8 062221	Total/NA	Water	8270E SIM ID	786875
460-237479-5	BR-3 062121	Total/NA	Water	8270E SIM ID	786875

LCMS

Prep Batch: 168535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237479-1	MW-7R 062221	Total/NA	Water	3535	
460-237479-2	MW-1 062221	Total/NA	Water	3535	
460-237479-3	MW-8 062221	Total/NA	Water	3535	
460-237479-5	BR-3 062121	Total/NA	Water	3535	
MB 200-168535/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-168535/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 168576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237479-1	MW-7R 062221	Total/NA	Water	537 (modified)	168535
460-237479-2	MW-1 062221	Total/NA	Water	537 (modified)	168535
460-237479-3	MW-8 062221	Total/NA	Water	537 (modified)	168535
460-237479-5	BR-3 062121	Total/NA	Water	537 (modified)	168535
MB 200-168535/1-A	Method Blank	Total/NA	Water	537 (modified)	168535

Eurofins TestAmerica, Edison

QC Association Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

LCMS (Continued)

Analysis Batch: 168576 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 200-168535/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	168535

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Client Sample ID: MW-7R 062221

Lab Sample ID: 460-237479-1

Date Collected: 06/22/21 08:20

Matrix: Water

Date Received: 06/23/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787937	07/02/21 04:16	VBP	TAL EDI
Total/NA	Prep	3510C			786875	06/28/21 16:09	DXD	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787166	06/29/21 00:32	MME	TAL EDI
Total/NA	Prep	3535			168535	06/29/21 10:16	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168576	06/29/21 19:08	BWC	TAL BUR

Client Sample ID: MW-1 062221

Lab Sample ID: 460-237479-2

Date Collected: 06/22/21 10:15

Matrix: Water

Date Received: 06/23/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787937	07/02/21 04:39	VBP	TAL EDI
Total/NA	Prep	3510C			786875	06/28/21 16:09	DXD	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787166	06/29/21 00:48	MME	TAL EDI
Total/NA	Prep	3535			168535	06/29/21 10:16	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168576	06/29/21 19:16	BWC	TAL BUR

Client Sample ID: MW-8 062221

Lab Sample ID: 460-237479-3

Date Collected: 06/22/21 10:25

Matrix: Water

Date Received: 06/23/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787937	07/02/21 05:01	VBP	TAL EDI
Total/NA	Prep	3510C			786875	06/28/21 16:09	DXD	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787166	06/29/21 01:03	MME	TAL EDI
Total/NA	Prep	3535			168535	06/29/21 10:16	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168576	06/29/21 19:24	BWC	TAL BUR

Client Sample ID: Trip Blank B1-062221

Lab Sample ID: 460-237479-4

Date Collected: 06/22/21 00:00

Matrix: Water

Date Received: 06/23/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787937	07/01/21 23:22	VBP	TAL EDI

Client Sample ID: BR-3 062121

Lab Sample ID: 460-237479-5

Date Collected: 06/21/21 15:20

Matrix: Water

Date Received: 06/23/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	787937	07/02/21 05:23	VBP	TAL EDI
Total/NA	Prep	3510C			786875	06/28/21 16:09	DXD	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787166	06/29/21 01:19	MME	TAL EDI
Total/NA	Prep	3535			168535	06/29/21 10:16	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168576	06/29/21 19:33	BWC	TAL BUR

Eurofins TestAmerica, Edison

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Laboratory References:

TAL BUR = Eurofins TestAmerica, Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

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Accreditation/Certification Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Laboratory: Eurofins TestAmerica, Edison

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11452	04-01-22

Laboratory: Eurofins TestAmerica, Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10391	04-01-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	6:2 FTS
537 (modified)	3535	Water	8:2 FTS
537 (modified)	3535	Water	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
537 (modified)	3535	Water	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
537 (modified)	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	3535	Water	Perfluorobutanoic acid (PFBA)
537 (modified)	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)
537 (modified)	3535	Water	Perfluorododecanoic acid (PFDoA)
537 (modified)	3535	Water	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	3535	Water	Perfluoroheptanoic acid (PFHpA)
537 (modified)	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	3535	Water	Perfluorohexanoic acid (PFHxA)
537 (modified)	3535	Water	Perfluorononanoic acid (PFNA)
537 (modified)	3535	Water	Perfluorooctanesulfonamide (FOSA)
537 (modified)	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	3535	Water	Perfluorooctanoic acid (PFOA)
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)
537 (modified)	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	3535	Water	Perfluorotridecanoic acid (PFTriA)
537 (modified)	3535	Water	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL EDI
8270E SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

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 BUR = Eurofins TestAmerica, Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

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

Sample Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-237479-1	MW-7R 062221	Water	06/22/21 08:20	06/23/21 09:30	
460-237479-2	MW-1 062221	Water	06/22/21 10:15	06/23/21 09:30	
460-237479-3	MW-8 062221	Water	06/22/21 10:25	06/23/21 09:30	
460-237479-4	Trip Blank B1-062221	Water	06/22/21 00:00	06/23/21 09:30	
460-237479-5	BR-3 062121	Water	06/21/21 15:20	06/23/21 09:30	

Client Information		Sampler: K. Tattler EnviroSpec		Lab PIV: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-162099-35610.1
Client Contact: Rachel Farnum		Phone: 518-453-2203		E-Mail: Judy.Stone@Eurofinset.com	State of Origin:	Page: 1 of 1
Company: EnviroSpec Engineering, PLLC		PWSID:		Job #: 221499		
Address: 349 Northern Blvd Suite 3		Due Date Requested:		Analysis Requested		
City: Albany		TAT Requested (days): 1-2 weeks		Preservation Chain of Custody		
State: NY		Compliance Project: ☐ Yes ☒ No		Barcode: 		
Phone: 518-402-9625(Tel)		PO #: Callout ID: 138004		460-237479 Chain of Custody		
Email: rfarnum@envirospeceng.com		WO #:		date		
Project Name: Northeast Alloys & Metals #633045		Project #: 48021991		J - DI Water V - MCAA W - pH 4-5 K - EDTA L - EDA Z - other (specify) Other:		
Site: Utica		SSOW#:		Special Instructions/Note:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624.1_PREC - Priority Pollutant List - VOA - 624.1	PFC, LDA - PFAS, Standard List (21 Analytes)	8270D_SIM_MS_ID - SIM List	Total Number of Containers	Special Instructions/Note:
MW-TR 062222	6/22/21	8:00	G	Water	N		X	X	N	7	1
MW-1 062221	6/22/21	10:15	G	Water	N		X	X		7	2
MW-8 062221	6/22/21	10:25	G	Water	N		X	X		7	3
Trip B1-062221	6/22/21	-	-	Water			X			1	4
BE-3 062221	6/22/21	15:20	G	Water	N		X	X		7	5
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify) **Category BINVSPEC4 - file EDD**

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ **Date:** _____ **Method of Shipment:** _____

Relinquished by: **Stacy** **Date/Time:** **6/22/21 1530** **Company:** **EnviroSpec**

Relinquished by: **Northeast** **Date/Time:** **6/22/21 1700** **Company:** **EnviroSpec**

Relinquished by: _____ **Date/Time:** _____ **Company:** _____

Custody Seal Intact: ☒ Yes ☐ No **Custody Seal No.:** **1595411**

Relinquished by: **Northeast** **Date/Time:** **6/22/21 1530** **Company:** **EnviroSpec**

Relinquished by: **Via FedEx** **Date/Time:** **6/23/21 09:30** **Company:** **EnviroSpec**

Relinquished by: _____ **Date/Time:** _____ **Company:** _____

Cooler Temperature(s) °C and Other Remarks: **FD#9-**

Number of Coolers:

IR Gun #

Cooler Temperatures

CORRECTED		RAW	
Cooler #1:	40.3	40.3	40.3
Cooler #2:	℃	℃	℃
Cooler #3:	℃	℃	℃
Cooler #4:	℃	℃	℃
Cooler #5:	℃	℃	℃
Cooler #6:	℃	℃	℃
Cooler #7:	℃	℃	℃
Cooler #8:	℃	℃	℃
Cooler #9:	℃	℃	℃

TALS Sample Number	Ammonia	COD	Nitrate Nitrite	Metals [*]	Hardness	Pest	EPH or			TKN	TOC	Total Cyanide	Total Phos	Other
							QAM	Phenols	Sulfide					
(pH<2)	(pH<2)	(pH<2)	(pH<2)	(pH<2)	(pH<2)	(pH 5-9)	(pH<2)	(pH<2)	(pH>9)	(pH<2)	(pH<2)	(pH>12)	(pH<2)	

If pH adjustments are required record the information below:

Sample No(s). adjusted:

Preservative Name/Conc.:

Volume of Preservative used (ml):

Lot # of Preservative(s):

Expiration Date:

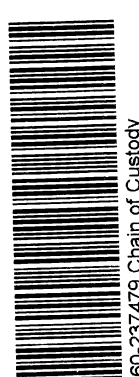
The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

• Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

EDS-WI-038, Rev 4.1
10/22/2019

Initials:

Date: 6/23/21

Client Information Client Contact: Rachel Farnum Company: EnviroSpec Engineering, PLLC Address: 349 Northern Blvd Suite 3 City: Albany State, Zip: NY, 12204 Phone: 518-402-9625(Tel) Email: rfarnum@envirospeceng.com Project Name: Northeast Alloys & Metals #633045 Site: Utica		Sampler: K-TITLE EnviroSpec Lab PM: Stone, Judy L Phone: 518-453-2203 E-Mail: Judy.Stone@Eurofinset.com PWSID:		Carrier Tracking No(s): 480-162099-35610.1 State of Origin: Page 1 of 1		COC No: 480-162099-35610.1															
Due Date Requested: TAT Requested (days): 1-2 weeks Compliance Project: ☐ Yes ☒ No PO #: 518-402-9625(Tel) WO #: 48021991 Project #: 48021991 SSOW#:		Analysis Requested																			
Sample Identification MW-TR 062222 MW-1 062221 MW-8 062221 Trip BL-062221 BE-3 062221		Sample Date 6/22/21 6/22/21 6/22/21 6/22/21 6/22/21		Sample Time 8:00 10:15 10:25 - 15:20		Sample Type (G=comp, G=grab) G G G - G		Matrix (Water, Soil, Other) Water Water Water Water Water		Field Filtered Sample (Yes or No) N N N N N		Perform (S.M.S.P. #39 of No) X X X X X		624.1 PREC - Priority Pollutant List - VOA - 624.1 X X X X X		6270D_SIM_MS_ID - SIM List X X X X X		Total Number of Containers 7 7 7 1 7		Special Instructions/Note:	
Barcode:  460-237479 Chain of Custody		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify) Category B INVISPEC4 - file EDD Empty Kit Relinquished by:																			
Relinquished by: <i>[Signature]</i> Relinquished by: <i>[Signature]</i> Relinquished by:		Date/Time: 6/22/21 15:30 Date/Time: 6/23/21 17:00 Date/Time:		Date/Time: 6/22/21 15:30 Date/Time: 6/23/21 17:00 Date/Time:		Date/Time: 6/22/21 15:30 Date/Time: 6/23/21 17:00 Date/Time:		Date/Time: 6/22/21 15:30 Date/Time: 6/23/21 17:00 Date/Time:		Date/Time: 6/22/21 15:30 Date/Time: 6/23/21 17:00 Date/Time:		Date/Time: 6/22/21 15:30 Date/Time: 6/23/21 17:00 Date/Time:		Date/Time: 6/22/21 15:30 Date/Time: 6/23/21 17:00 Date/Time:		Date/Time: 6/22/21 15:30 Date/Time: 6/23/21 17:00 Date/Time:		Date/Time: 6/22/21 15:30 Date/Time: 6/23/21 17:00 Date/Time:			
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FROM: (518) 438-8140
R. KNOLLMEYER
TESTAMERICA LAB INC
25 KRAFT AVE

ALBANY NY 12205
US

BILL 3rd PARTY

56DC3/B387/0582

SHIP DATE: 23JUN21
ACTWT: 21.25 LB
CAD: 0886598/CAFE3409

TO **SAMPLE RECEIVING**

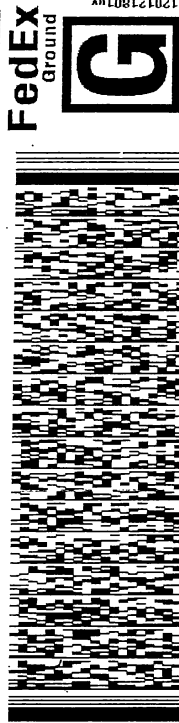
TESTAMERICA - BURLINGTON
30 COMMUNITY DRIVE, SUITE 11

BURLINGTON VT 05403

(US)

(802) 660-1990

REF: ENVIROSPEC PFAS

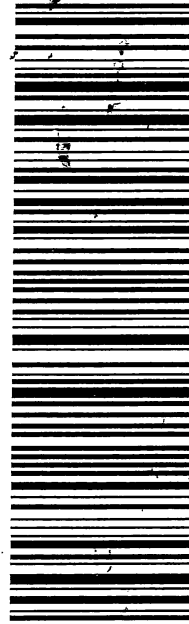


J201120121801uv

TRK# **5013 1604 9590**

05403

9622 0417 3 (000 000 0000) 0 00 5013 1604 9590



Part # 156148-434 RIT EXP 11/21

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-237479-1

Login Number: 237479

List Source: Eurofins TestAmerica, Edison

List Number: 1

Creator: Meyers, Gary

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	1595411
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-237479-1

Login Number: 237479

List Number: 2

Creator: Lavigne, Scott M

List Source: Eurofins TestAmerica, Burlington

List Creation: 06/28/21 10:56 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1595417
Sample custody seals, if present, are 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	3.2°C
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.	N/A	
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	

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-237488-1

Client Project/Site: Northeast Alloys & Metals #633045

For:

New York State D.E.C.
625 Broadway
4th Floor
Albany, New York 12233

Attn: Mr. Payson Long



Authorized for release by:

7/9/2021 1:02:41 PM

Wyatt Watson, Project Management Assistant I

Wyatt.Watson@Eurofinset.com

Designee for

Judy Stone, Senior Project Manager

(484)685-0868

Judy.Stone@Eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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.



Wyatt Watson
Project Management Assistant I
7/9/2021 1:02:41 PM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Surrogate Summary	16
Isotope Dilution Summary	17
QC Sample Results	19
QC Association Summary	25
Lab Chronicle	27
Certification Summary	29
Method Summary	30
Sample Summary	31
Chain of Custody	32
Receipt Checklists	36



Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

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.

GC/MS Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

LCMS

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Job ID: 460-237488-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative 460-237488-1

Comments

No additional comments.

Receipt

The samples were received on 6/24/2021 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.1° C.

GC/MS VOA

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

GC/MS Semi VOA

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

LCMS

Method 537 (modified): The laboratory control sample (LCS) associated with preparation batch 200-168535 and analytical batch 200-168576 was above acceptance criteria for Perfluoroundecanoic acid (PFUnA). The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 537 (modified): Method 537 (modified): The "I" qualifier associated with samples MW-10 062221 (460-237488-2), MW-3 062221 (460-237488-3) and MW-13 062221 (460-237488-4) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

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

Organic Prep

No analytical or quality issues were noted, other than those described 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: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: MW-9 062221

Lab Sample ID: 460-237488-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.3		1.0	0.34	ug/L	1		624.1	Total/NA
trans-1,2-Dichloroethene	0.71	J	1.0	0.24	ug/L	1		624.1	Total/NA
cis-1,2-Dichloroethene	9.4		1.0	0.22	ug/L	1		624.1	Total/NA
Trichloroethene	14		1.0	0.31	ug/L	1		624.1	Total/NA
Perfluorobutanoic acid (PFBA)	2.5	J	4.9	0.87	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.37	J	2.0	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.0	J	2.0	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.41	J	2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.40	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.58	J	2.0	0.28	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-10 062221

Lab Sample ID: 460-237488-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.36		0.20	0.016	ug/L	1		8270E SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	1.3	J	4.7	0.85	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.99	J	1.9	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.83	J	1.9	0.43	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.65	J	1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.3	J	1.9	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.62	J I	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.60	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.87	J	1.9	0.28	ng/L	1		537 (modified)	Total/NA
6:2 FTS	13		4.7	1.0	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-3 062221

Lab Sample ID: 460-237488-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.2	J	5.0	0.90	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.26	J I	2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.32	J I	2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.30	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.40	J	2.0	0.29	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-13 062221

Lab Sample ID: 460-237488-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.51	J I	2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.9	J	2.0	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.42	J	2.0	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.77	J I	2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.65	J	2.0	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.7	J I	2.0	0.29	ng/L	1		537 (modified)	Total/NA

Client Sample ID: Trip B2-062221

Lab Sample ID: 460-237488-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: MW-9 062221

Lab Sample ID: 460-237488-1

Date Collected: 06/22/21 14:25

Matrix: Water

Date Received: 06/24/21 09:35

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/03/21 20:25	1
Bromomethane	ND		1.0	0.45	ug/L			07/03/21 20:25	1
Vinyl chloride	1.3		1.0	0.34	ug/L			07/03/21 20:25	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/03/21 20:25	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/03/21 20:25	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/03/21 20:25	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/03/21 20:25	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/03/21 20:25	1
trans-1,2-Dichloroethene	0.71	J	1.0	0.24	ug/L			07/03/21 20:25	1
cis-1,2-Dichloroethene	9.4		1.0	0.22	ug/L			07/03/21 20:25	1
Chloroform	ND		1.0	0.33	ug/L			07/03/21 20:25	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/03/21 20:25	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/03/21 20:25	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/03/21 20:25	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/03/21 20:25	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/03/21 20:25	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/03/21 20:25	1
Trichloroethene	14		1.0	0.31	ug/L			07/03/21 20:25	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/03/21 20:25	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/03/21 20:25	1
Benzene	ND		1.0	0.43	ug/L			07/03/21 20:25	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/03/21 20:25	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/03/21 20:25	1
Bromoform	ND		1.0	0.54	ug/L			07/03/21 20:25	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/03/21 20:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/03/21 20:25	1
Toluene	ND		1.0	0.38	ug/L			07/03/21 20:25	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/03/21 20:25	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/03/21 20:25	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/03/21 20:25	1
Acrolein	ND		4.0	1.1	ug/L			07/03/21 20:25	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/03/21 20:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		60 - 140		07/03/21 20:25	1
Toluene-d8 (Surr)	104		60 - 140		07/03/21 20:25	1
Bromofluorobenzene	82		60 - 140		07/03/21 20:25	1
Dibromofluoromethane (Surr)	93		60 - 140		07/03/21 20:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND	H	0.20	0.016	ug/L		06/30/21 07:18	06/30/21 10:18	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	52		10 - 150				06/30/21 07:18	06/30/21 10:18	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	2.5	J	4.9	0.87	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.46	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.44	ng/L		06/29/21 10:16	06/29/21 21:37	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: MW-9 062221

Lab Sample ID: 460-237488-1

Date Collected: 06/22/21 14:25

Matrix: Water

Date Received: 06/24/21 09:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	0.37	J	2.0	0.23	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorooctanoic acid (PFOA)	1.0	J	2.0	0.41	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluoroundecanoic acid (PFUnA)	ND	+	2.0	0.34	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.42	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorobutanesulfonic acid (PFBS)	0.41	J	2.0	0.24	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorohexanesulfonic acid (PFHxS)	0.40	J	2.0	0.30	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorooctanesulfonic acid (PFOS)	0.58	J	2.0	0.28	ng/L		06/29/21 10:16	06/29/21 21:37	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.56	ng/L		06/29/21 10:16	06/29/21 21:37	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.88	ng/L		06/29/21 10:16	06/29/21 21:37	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73	ng/L		06/29/21 10:16	06/29/21 21:37	1
6:2 FTS	ND		4.9	1.1	ng/L		06/29/21 10:16	06/29/21 21:37	1
8:2 FTS	ND		2.0	0.38	ng/L		06/29/21 10:16	06/29/21 21:37	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	77		25 - 150	06/29/21 10:16	06/29/21 21:37	1
13C4 PFBA	81		25 - 150	06/29/21 10:16	06/29/21 21:37	1
13C5 PFPeA	94		25 - 150	06/29/21 10:16	06/29/21 21:37	1
13C2 PFHxA	98		50 - 150	06/29/21 10:16	06/29/21 21:37	1
13C4 PFHpA	95		50 - 150	06/29/21 10:16	06/29/21 21:37	1
13C4 PFOA	100		50 - 150	06/29/21 10:16	06/29/21 21:37	1
13C5 PFNA	91		50 - 150	06/29/21 10:16	06/29/21 21:37	1
13C2 PFDA	88		50 - 150	06/29/21 10:16	06/29/21 21:37	1
13C2 PFUnA	82		50 - 150	06/29/21 10:16	06/29/21 21:37	1
13C2 PFDoA	82		50 - 150	06/29/21 10:16	06/29/21 21:37	1
13C2 PFTeDA	81		50 - 150	06/29/21 10:16	06/29/21 21:37	1
13C3 PFBS	91		50 - 150	06/29/21 10:16	06/29/21 21:37	1
18O2 PFHxS	88		50 - 150	06/29/21 10:16	06/29/21 21:37	1
13C4 PFOS	83		50 - 150	06/29/21 10:16	06/29/21 21:37	1
d3-NMeFOSAA	81		50 - 150	06/29/21 10:16	06/29/21 21:37	1
d5-NEtFOSAA	80		50 - 150	06/29/21 10:16	06/29/21 21:37	1
M2-6:2 FTS	97		25 - 150	06/29/21 10:16	06/29/21 21:37	1
M2-8:2 FTS	91		25 - 150	06/29/21 10:16	06/29/21 21:37	1

Client Sample ID: MW-10 062221

Lab Sample ID: 460-237488-2

Date Collected: 06/22/21 14:37

Matrix: Water

Date Received: 06/24/21 09:35

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/03/21 20:47	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: MW-10 062221

Lab Sample ID: 460-237488-2

Date Collected: 06/22/21 14:37

Matrix: Water

Date Received: 06/24/21 09:35

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.45	ug/L			07/03/21 20:47	1
Vinyl chloride	ND		1.0	0.34	ug/L			07/03/21 20:47	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/03/21 20:47	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/03/21 20:47	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/03/21 20:47	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/03/21 20:47	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/03/21 20:47	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/03/21 20:47	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/03/21 20:47	1
Chloroform	ND		1.0	0.33	ug/L			07/03/21 20:47	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/03/21 20:47	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/03/21 20:47	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/03/21 20:47	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/03/21 20:47	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/03/21 20:47	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/03/21 20:47	1
Trichloroethene	ND		1.0	0.31	ug/L			07/03/21 20:47	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/03/21 20:47	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/03/21 20:47	1
Benzene	ND		1.0	0.43	ug/L			07/03/21 20:47	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/03/21 20:47	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/03/21 20:47	1
Bromoform	ND		1.0	0.54	ug/L			07/03/21 20:47	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/03/21 20:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/03/21 20:47	1
Toluene	ND		1.0	0.38	ug/L			07/03/21 20:47	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/03/21 20:47	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/03/21 20:47	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/03/21 20:47	1
Acrolein	ND		4.0	1.1	ug/L			07/03/21 20:47	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/03/21 20:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		60 - 140		07/03/21 20:47	1
Toluene-d8 (Surr)	90		60 - 140		07/03/21 20:47	1
Bromofluorobenzene	89		60 - 140		07/03/21 20:47	1
Dibromofluoromethane (Surr)	98		60 - 140		07/03/21 20:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.36		0.20	0.016	ug/L		06/29/21 09:54	06/30/21 03:14	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	42		10 - 150				06/29/21 09:54	06/30/21 03:14	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.3	J	4.7	0.85	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluoropentanoic acid (PFPeA)	0.99	J	1.9	0.45	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorohexanoic acid (PFHxA)	0.83	J	1.9	0.43	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluoroheptanoic acid (PFHpA)	0.65	J	1.9	0.23	ng/L		06/29/21 10:16	06/29/21 21:45	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: MW-10 062221

Lab Sample ID: 460-237488-2

Date Collected: 06/22/21 14:37

Matrix: Water

Date Received: 06/24/21 09:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	1.3	J	1.9	0.40	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.27	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.29	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluoroundecanoic acid (PFUnA)	ND	+	1.9	0.33	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.36	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.41	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.60	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorobutanesulfonic acid (PFBS)	0.62	J I	1.9	0.24	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorohexanesulfonic acid (PFHxS)	0.60	J	1.9	0.29	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorooctanesulfonic acid (PFOS)	0.87	J	1.9	0.28	ng/L		06/29/21 10:16	06/29/21 21:45	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.55	ng/L		06/29/21 10:16	06/29/21 21:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.7	0.85	ng/L		06/29/21 10:16	06/29/21 21:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.7	0.70	ng/L		06/29/21 10:16	06/29/21 21:45	1
6:2 FTS	13		4.7	1.0	ng/L		06/29/21 10:16	06/29/21 21:45	1
8:2 FTS	ND		1.9	0.37	ng/L		06/29/21 10:16	06/29/21 21:45	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	61		25 - 150				06/29/21 10:16	06/29/21 21:45	1
13C4 PFBA	74		25 - 150				06/29/21 10:16	06/29/21 21:45	1
13C5 PFPeA	91		25 - 150				06/29/21 10:16	06/29/21 21:45	1
13C2 PFHxA	99		50 - 150				06/29/21 10:16	06/29/21 21:45	1
13C4 PFHpA	98		50 - 150				06/29/21 10:16	06/29/21 21:45	1
13C4 PFOA	98		50 - 150				06/29/21 10:16	06/29/21 21:45	1
13C5 PFNA	90		50 - 150				06/29/21 10:16	06/29/21 21:45	1
13C2 PFDA	86		50 - 150				06/29/21 10:16	06/29/21 21:45	1
13C2 PFUnA	93		50 - 150				06/29/21 10:16	06/29/21 21:45	1
13C2 PFDoA	90		50 - 150				06/29/21 10:16	06/29/21 21:45	1
13C2 PFTeDA	82		50 - 150				06/29/21 10:16	06/29/21 21:45	1
13C3 PFBS	86		50 - 150				06/29/21 10:16	06/29/21 21:45	1
18O2 PFHxS	85		50 - 150				06/29/21 10:16	06/29/21 21:45	1
13C4 PFOS	77		50 - 150				06/29/21 10:16	06/29/21 21:45	1
d3-NMeFOSAA	93		50 - 150				06/29/21 10:16	06/29/21 21:45	1
d5-NEtFOSAA	99		50 - 150				06/29/21 10:16	06/29/21 21:45	1
M2-6:2 FTS	113		25 - 150				06/29/21 10:16	06/29/21 21:45	1
M2-8:2 FTS	110		25 - 150				06/29/21 10:16	06/29/21 21:45	1

Client Sample ID: MW-3 062221

Lab Sample ID: 460-237488-3

Date Collected: 06/22/21 15:35

Matrix: Water

Date Received: 06/24/21 09:35

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/03/21 21:10	1
Bromomethane	ND		1.0	0.45	ug/L			07/03/21 21:10	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: MW-3 062221

Lab Sample ID: 460-237488-3

Date Collected: 06/22/21 15:35

Matrix: Water

Date Received: 06/24/21 09:35

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.34	ug/L			07/03/21 21:10	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/03/21 21:10	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/03/21 21:10	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/03/21 21:10	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/03/21 21:10	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/03/21 21:10	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/03/21 21:10	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/03/21 21:10	1
Chloroform	ND		1.0	0.33	ug/L			07/03/21 21:10	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/03/21 21:10	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/03/21 21:10	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/03/21 21:10	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/03/21 21:10	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/03/21 21:10	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/03/21 21:10	1
Trichloroethene	ND		1.0	0.31	ug/L			07/03/21 21:10	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/03/21 21:10	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/03/21 21:10	1
Benzene	ND		1.0	0.43	ug/L			07/03/21 21:10	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/03/21 21:10	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/03/21 21:10	1
Bromoform	ND		1.0	0.54	ug/L			07/03/21 21:10	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/03/21 21:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/03/21 21:10	1
Toluene	ND		1.0	0.38	ug/L			07/03/21 21:10	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/03/21 21:10	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/03/21 21:10	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/03/21 21:10	1
Acrolein	ND		4.0	1.1	ug/L			07/03/21 21:10	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/03/21 21:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		60 - 140		07/03/21 21:10	1
Toluene-d8 (Surr)	89		60 - 140		07/03/21 21:10	1
Bromofluorobenzene	86		60 - 140		07/03/21 21:10	1
Dibromofluoromethane (Surr)	95		60 - 140		07/03/21 21:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:54	06/30/21 03:30	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	45		10 - 150				06/29/21 09:54	06/30/21 03:30	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.2	J	5.0	0.90	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.48	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.46	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluoroheptanoic acid (PFHpA)	0.26	J I	2.0	0.24	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.43	ng/L		06/29/21 10:16	06/29/21 21:54	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: MW-3 062221

Lab Sample ID: 460-237488-3

Date Collected: 06/22/21 15:35

Matrix: Water

Date Received: 06/24/21 09:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		2.0	0.28	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluoroundecanoic acid (PFUnA)	ND	+	2.0	0.35	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.39	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorotridecanoic acid (PFTrIA)	ND		2.0	0.44	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.64	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorobutanesulfonic acid (PFBS)	0.32	J I	2.0	0.25	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorohexanesulfonic acid (PFHxS)	0.30	J	2.0	0.30	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.24	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorooctanesulfonic acid (PFOS)	0.40	J	2.0	0.29	ng/L		06/29/21 10:16	06/29/21 21:54	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.58	ng/L		06/29/21 10:16	06/29/21 21:54	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.91	ng/L		06/29/21 10:16	06/29/21 21:54	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.75	ng/L		06/29/21 10:16	06/29/21 21:54	1
6:2 FTS	ND		5.0	1.1	ng/L		06/29/21 10:16	06/29/21 21:54	1
8:2 FTS	ND		2.0	0.39	ng/L		06/29/21 10:16	06/29/21 21:54	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	77		25 - 150	06/29/21 10:16	06/29/21 21:54	1
13C4 PFBA	72		25 - 150	06/29/21 10:16	06/29/21 21:54	1
13C5 PFPeA	88		25 - 150	06/29/21 10:16	06/29/21 21:54	1
13C2 PFHxA	94		50 - 150	06/29/21 10:16	06/29/21 21:54	1
13C4 PFHpA	98		50 - 150	06/29/21 10:16	06/29/21 21:54	1
13C4 PFOA	98		50 - 150	06/29/21 10:16	06/29/21 21:54	1
13C5 PFNA	99		50 - 150	06/29/21 10:16	06/29/21 21:54	1
13C2 PFDA	91		50 - 150	06/29/21 10:16	06/29/21 21:54	1
13C2 PFUnA	99		50 - 150	06/29/21 10:16	06/29/21 21:54	1
13C2 PFDoA	102		50 - 150	06/29/21 10:16	06/29/21 21:54	1
13C2 PFTeDA	85		50 - 150	06/29/21 10:16	06/29/21 21:54	1
13C3 PFBS	88		50 - 150	06/29/21 10:16	06/29/21 21:54	1
18O2 PFHxS	90		50 - 150	06/29/21 10:16	06/29/21 21:54	1
13C4 PFOS	88		50 - 150	06/29/21 10:16	06/29/21 21:54	1
d3-NMeFOSAA	76		50 - 150	06/29/21 10:16	06/29/21 21:54	1
d5-NEtFOSAA	85		50 - 150	06/29/21 10:16	06/29/21 21:54	1
M2-6:2 FTS	100		25 - 150	06/29/21 10:16	06/29/21 21:54	1
M2-8:2 FTS	97		25 - 150	06/29/21 10:16	06/29/21 21:54	1

Client Sample ID: MW-13 062221

Lab Sample ID: 460-237488-4

Date Collected: 06/22/21 16:25

Matrix: Water

Date Received: 06/24/21 09:35

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/03/21 21:32	1
Bromomethane	ND		1.0	0.45	ug/L			07/03/21 21:32	1
Vinyl chloride	ND		1.0	0.34	ug/L			07/03/21 21:32	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: MW-13 062221

Lab Sample ID: 460-237488-4

Date Collected: 06/22/21 16:25

Matrix: Water

Date Received: 06/24/21 09:35

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl Chloride	ND		1.0	0.32	ug/L			07/03/21 21:32	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/03/21 21:32	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/03/21 21:32	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/03/21 21:32	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/03/21 21:32	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/03/21 21:32	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/03/21 21:32	1
Chloroform	ND		1.0	0.33	ug/L			07/03/21 21:32	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/03/21 21:32	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/03/21 21:32	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/03/21 21:32	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/03/21 21:32	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/03/21 21:32	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/03/21 21:32	1
Trichloroethene	ND		1.0	0.31	ug/L			07/03/21 21:32	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/03/21 21:32	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/03/21 21:32	1
Benzene	ND		1.0	0.43	ug/L			07/03/21 21:32	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/03/21 21:32	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/03/21 21:32	1
Bromoform	ND		1.0	0.54	ug/L			07/03/21 21:32	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/03/21 21:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/03/21 21:32	1
Toluene	ND		1.0	0.38	ug/L			07/03/21 21:32	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/03/21 21:32	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/03/21 21:32	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/03/21 21:32	1
Acrolein	ND		4.0	1.1	ug/L			07/03/21 21:32	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/03/21 21:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		60 - 140					07/03/21 21:32	1
Toluene-d8 (Surr)	115		60 - 140					07/03/21 21:32	1
Bromofluorobenzene	96		60 - 140					07/03/21 21:32	1
Dibromofluoromethane (Surr)	100		60 - 140					07/03/21 21:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:54	06/30/21 03:46	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	40		10 - 150				06/29/21 09:54	06/30/21 03:46	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	0.89	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.47	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.45	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluoroheptanoic acid (PFHpA)	0.51	J I	2.0	0.24	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorooctanoic acid (PFOA)	1.9	J	2.0	0.42	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorononanoic acid (PFNA)	0.42	J	2.0	0.28	ng/L		06/29/21 10:16	06/29/21 22:02	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: MW-13 062221

Lab Sample ID: 460-237488-4

Date Collected: 06/22/21 16:25

Matrix: Water

Date Received: 06/24/21 09:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluoroundecanoic acid (PFUnA)	ND	++	2.0	0.34	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorobutanesulfonic acid (PFBS)	0.77	J I	2.0	0.25	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorohexanesulfonic acid (PFHxS)	0.65	J	2.0	0.30	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorooctanesulfonic acid (PFOS)	1.7	J I	2.0	0.29	ng/L		06/29/21 10:16	06/29/21 22:02	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57	ng/L		06/29/21 10:16	06/29/21 22:02	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90	ng/L		06/29/21 10:16	06/29/21 22:02	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74	ng/L		06/29/21 10:16	06/29/21 22:02	1
6:2 FTS	ND		5.0	1.1	ng/L		06/29/21 10:16	06/29/21 22:02	1
8:2 FTS	ND		2.0	0.39	ng/L		06/29/21 10:16	06/29/21 22:02	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	42		25 - 150	06/29/21 10:16	06/29/21 22:02	1
13C4 PFBA	54		25 - 150	06/29/21 10:16	06/29/21 22:02	1
13C5 PFPeA	78		25 - 150	06/29/21 10:16	06/29/21 22:02	1
13C2 PFHxA	85		50 - 150	06/29/21 10:16	06/29/21 22:02	1
13C4 PFHpA	87		50 - 150	06/29/21 10:16	06/29/21 22:02	1
13C4 PFOA	87		50 - 150	06/29/21 10:16	06/29/21 22:02	1
13C5 PFNA	78		50 - 150	06/29/21 10:16	06/29/21 22:02	1
13C2 PFDA	60		50 - 150	06/29/21 10:16	06/29/21 22:02	1
13C2 PFUnA	56		50 - 150	06/29/21 10:16	06/29/21 22:02	1
13C2 PFDoA	66		50 - 150	06/29/21 10:16	06/29/21 22:02	1
13C2 PFTeDA	91		50 - 150	06/29/21 10:16	06/29/21 22:02	1
13C3 PFBS	85		50 - 150	06/29/21 10:16	06/29/21 22:02	1
18O2 PFHxS	83		50 - 150	06/29/21 10:16	06/29/21 22:02	1
13C4 PFOS	60		50 - 150	06/29/21 10:16	06/29/21 22:02	1
d3-NMeFOSAA	71		50 - 150	06/29/21 10:16	06/29/21 22:02	1
d5-NEtFOSAA	73		50 - 150	06/29/21 10:16	06/29/21 22:02	1
M2-6:2 FTS	136		25 - 150	06/29/21 10:16	06/29/21 22:02	1
M2-8:2 FTS	83		25 - 150	06/29/21 10:16	06/29/21 22:02	1

Client Sample ID: Trip B2-062221

Lab Sample ID: 460-237488-5

Date Collected: 06/22/21 00:00

Matrix: Water

Date Received: 06/24/21 09:35

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/03/21 19:16	1
Bromomethane	ND		1.0	0.45	ug/L			07/03/21 19:16	1
Vinyl chloride	ND		1.0	0.34	ug/L			07/03/21 19:16	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/03/21 19:16	1

Eurofins TestAmerica, Edison

Client Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: Trip B2-062221

Lab Sample ID: 460-237488-5

Date Collected: 06/22/21 00:00

Matrix: Water

Date Received: 06/24/21 09:35

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0	0.32	ug/L			07/03/21 19:16	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/03/21 19:16	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/03/21 19:16	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/03/21 19:16	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/03/21 19:16	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/03/21 19:16	1
Chloroform	ND		1.0	0.33	ug/L			07/03/21 19:16	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/03/21 19:16	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/03/21 19:16	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/03/21 19:16	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/03/21 19:16	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/03/21 19:16	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/03/21 19:16	1
Trichloroethene	ND		1.0	0.31	ug/L			07/03/21 19:16	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/03/21 19:16	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/03/21 19:16	1
Benzene	ND		1.0	0.43	ug/L			07/03/21 19:16	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/03/21 19:16	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/03/21 19:16	1
Bromoform	ND		1.0	0.54	ug/L			07/03/21 19:16	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/03/21 19:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/03/21 19:16	1
Toluene	ND		1.0	0.38	ug/L			07/03/21 19:16	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/03/21 19:16	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/03/21 19:16	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/03/21 19:16	1
Acrolein	ND		4.0	1.1	ug/L			07/03/21 19:16	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/03/21 19:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		60 - 140					07/03/21 19:16	1
Toluene-d8 (Surr)	85		60 - 140					07/03/21 19:16	1
Bromofluorobenzene	84		60 - 140					07/03/21 19:16	1
Dibromofluoromethane (Surr)	92		60 - 140					07/03/21 19:16	1

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (60-140)	TOL (60-140)	BFB (60-140)	DBFM (60-140)
460-237488-1	MW-9 062221	88	104	82	93
460-237488-2	MW-10 062221	92	90	89	98
460-237488-3	MW-3 062221	91	89	86	95
460-237488-4	MW-13 062221	95	115	96	100
460-237488-5	Trip B2-062221	88	85	84	92
LCS 460-788392/4	Lab Control Sample	84	88	86	88
LCSD 460-788392/5	Lab Control Sample Dup	86	98	102	90
MB 460-788392/9	Method Blank	89	87	85	94

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = Bromofluorobenzene

DBFM = Dibromofluoromethane (Surr)

Isotope Dilution Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DXE (10-150)
460-237488-1	MW-9 062221	52
460-237488-2	MW-10 062221	42
460-237488-3	MW-3 062221	45
460-237488-4	MW-13 062221	40
LCS 460-787278/2-A	Lab Control Sample	29
LCS 460-787279/2-A	Lab Control Sample	38
LCSD 460-787278/3-A	Lab Control Sample Dup	32
LCSD 460-787279/3-A	Lab Control Sample Dup	40
MB 460-787278/1-A	Method Blank	34
MB 460-787279/1-A	Method Blank	32

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFOSA (25-150)	PFBA (25-150)	PFPeA (25-150)	PFHxA (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFNA (50-150)	PFDA (50-150)
460-237488-1	MW-9 062221	77	81	94	98	95	100	91	88
460-237488-2	MW-10 062221	61	74	91	99	98	98	90	86
460-237488-3	MW-3 062221	77	72	88	94	98	98	99	91
460-237488-4	MW-13 062221	42	54	78	85	87	87	78	60
LCS 200-168535/2-A	Lab Control Sample	67	108	107	110	102	103	101	104
MB 200-168535/1-A	Method Blank	57	103	105	102	98	101	99	97

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFTDA (50-150)	C3PFBS (50-150)	PFHxS (50-150)	PFOS (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)
460-237488-1	MW-9 062221	82	82	81	91	88	83	81	80
460-237488-2	MW-10 062221	93	90	82	86	85	77	93	99
460-237488-3	MW-3 062221	99	102	85	88	90	88	76	85
460-237488-4	MW-13 062221	56	66	91	85	83	60	71	73
LCS 200-168535/2-A	Lab Control Sample	86	71	63	98	94	97	84	80
MB 200-168535/1-A	Method Blank	90	69	57	92	91	95	84	78

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
460-237488-1	MW-9 062221	97	91
460-237488-2	MW-10 062221	113	110
460-237488-3	MW-3 062221	100	97
460-237488-4	MW-13 062221	136	83
LCS 200-168535/2-A	Lab Control Sample	100	108
MB 200-168535/1-A	Method Blank	92	101

Surrogate Legend

PFOSA = 13C8 FOSA

PFBA = 13C4 PFBA

PFPeA = 13C5 PFPeA

PFHxA = 13C2 PFHxA

Eurofins TestAmerica, Edison

Isotope Dilution Summary

Client: New York State D.E.C.

Job ID: 460-237488-1

Project/Site: Northeast Alloys & Metals #633045

C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 460-788392/9

Matrix: Water

Analysis Batch: 788392

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.43	ug/L			07/03/21 18:53	1
Bromomethane	ND		1.0	0.45	ug/L			07/03/21 18:53	1
Vinyl chloride	ND		1.0	0.34	ug/L			07/03/21 18:53	1
Ethyl Chloride	ND		1.0	0.32	ug/L			07/03/21 18:53	1
Methylene Chloride	ND		1.0	0.32	ug/L			07/03/21 18:53	1
Trichlorofluoromethane	ND		1.0	0.14	ug/L			07/03/21 18:53	1
1,1-Dichloroethene	ND		1.0	0.12	ug/L			07/03/21 18:53	1
1,1-Dichloroethane	ND		1.0	0.26	ug/L			07/03/21 18:53	1
trans-1,2-Dichloroethene	ND		1.0	0.24	ug/L			07/03/21 18:53	1
cis-1,2-Dichloroethene	ND		1.0	0.22	ug/L			07/03/21 18:53	1
Chloroform	ND		1.0	0.33	ug/L			07/03/21 18:53	1
1,2-Dichloroethane	ND		1.0	0.84	ug/L			07/03/21 18:53	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/L			07/03/21 18:53	1
Carbon tetrachloride	ND		1.0	0.21	ug/L			07/03/21 18:53	1
Bromodichloromethane	ND		1.0	0.34	ug/L			07/03/21 18:53	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			07/03/21 18:53	1
cis-1,3-Dichloropropene	ND		1.0	0.46	ug/L			07/03/21 18:53	1
Trichloroethene	ND		1.0	0.31	ug/L			07/03/21 18:53	1
Dibromochloromethane	ND		1.0	0.13	ug/L			07/03/21 18:53	1
1,1,2-Trichloroethane	ND		1.0	0.15	ug/L			07/03/21 18:53	1
Benzene	ND		1.0	0.43	ug/L			07/03/21 18:53	1
trans-1,3-Dichloropropene	ND		1.0	0.22	ug/L			07/03/21 18:53	1
2-Chloroethyl vinyl ether	ND		1.0	0.91	ug/L			07/03/21 18:53	1
Bromoform	ND		1.0	0.54	ug/L			07/03/21 18:53	1
Tetrachloroethene	ND		1.0	0.25	ug/L			07/03/21 18:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.37	ug/L			07/03/21 18:53	1
Toluene	ND		1.0	0.38	ug/L			07/03/21 18:53	1
Chlorobenzene	ND		1.0	0.38	ug/L			07/03/21 18:53	1
Ethylbenzene	ND		1.0	0.30	ug/L			07/03/21 18:53	1
Xylenes, Total	ND		2.0	0.65	ug/L			07/03/21 18:53	1
Acrolein	ND		4.0	1.1	ug/L			07/03/21 18:53	1
Acrylonitrile	ND		2.0	0.77	ug/L			07/03/21 18:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		60 - 140		07/03/21 18:53	1
Toluene-d8 (Surr)	87		60 - 140		07/03/21 18:53	1
Bromofluorobenzene	85		60 - 140		07/03/21 18:53	1
Dibromofluoromethane (Surr)	94		60 - 140		07/03/21 18:53	1

Lab Sample ID: LCS 460-788392/4

Matrix: Water

Analysis Batch: 788392

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	20.0	16.5		ug/L		82	0.1 - 205
Bromomethane	20.0	14.1		ug/L		71	15 - 185
Vinyl chloride	20.0	14.0		ug/L		70	5 - 195
Ethyl Chloride	20.0	14.2		ug/L		71	40 - 160

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 460-788392/4

Matrix: Water

Analysis Batch: 788392

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	20.0	18.4		ug/L		92	60 - 140
Trichlorofluoromethane	20.0	16.3		ug/L		81	50 - 150
1,1-Dichloroethene	20.0	18.8		ug/L		94	50 - 150
1,1-Dichloroethane	20.0	18.1		ug/L		91	70 - 130
trans-1,2-Dichloroethene	20.0	17.7		ug/L		89	70 - 130
cis-1,2-Dichloroethene	20.0	18.0		ug/L		90	60 - 140
Chloroform	20.0	18.7		ug/L		94	70 - 135
1,2-Dichloroethane	20.0	18.0		ug/L		90	70 - 130
1,1,1-Trichloroethane	20.0	17.5		ug/L		87	70 - 130
Carbon tetrachloride	20.0	18.5		ug/L		92	70 - 130
Bromodichloromethane	20.0	17.6		ug/L		88	65 - 135
1,2-Dichloropropane	20.0	17.3		ug/L		87	35 - 165
cis-1,3-Dichloropropene	20.0	17.6		ug/L		88	25 - 175
Trichloroethene	20.0	17.9		ug/L		90	65 - 135
Dibromochloromethane	20.0	20.3		ug/L		101	70 - 135
1,1,2-Trichloroethane	20.0	18.8		ug/L		94	70 - 130
Benzene	20.0	18.2		ug/L		91	65 - 135
trans-1,3-Dichloropropene	20.0	17.7		ug/L		89	50 - 150
2-Chloroethyl vinyl ether	20.0	15.5		ug/L		77	0.1 - 225
Bromoform	20.0	19.2		ug/L		96	70 - 130
Tetrachloroethene	20.0	17.8		ug/L		89	70 - 130
1,1,2,2-Tetrachloroethane	20.0	17.8		ug/L		89	60 - 140
Toluene	20.0	18.2		ug/L		91	70 - 130
Chlorobenzene	20.0	19.3		ug/L		96	65 - 135
Ethylbenzene	20.0	18.4		ug/L		92	60 - 140
Xylenes, Total	40.0	34.8		ug/L		87	60 - 140
Acrolein	40.6	58.5		ug/L		144	10 - 150
Acrylonitrile	200	195		ug/L		98	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	84		60 - 140
Toluene-d8 (Surr)	88		60 - 140
Bromofluorobenzene	86		60 - 140
Dibromofluoromethane (Surr)	88		60 - 140

Lab Sample ID: LCSD 460-788392/5

Matrix: Water

Analysis Batch: 788392

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloromethane	20.0	18.2		ug/L		91	0.1 - 205	10	60
Bromomethane	20.0	15.1		ug/L		76	15 - 185	7	61
Vinyl chloride	20.0	14.8		ug/L		74	5 - 195	6	66
Ethyl Chloride	20.0	14.6		ug/L		73	40 - 160	3	78
Methylene Chloride	20.0	18.8		ug/L		94	60 - 140	2	28
Trichlorofluoromethane	20.0	16.7		ug/L		84	50 - 150	3	84
1,1-Dichloroethene	20.0	19.2		ug/L		96	50 - 150	2	32
1,1-Dichloroethane	20.0	18.3		ug/L		92	70 - 130	1	40

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 460-788392/5

Matrix: Water

Analysis Batch: 788392

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
trans-1,2-Dichloroethene	20.0	19.0		ug/L		95	70 - 130	7	45
cis-1,2-Dichloroethene	20.0	18.8		ug/L		94	60 - 140	4	50
Chloroform	20.0	18.9		ug/L		95	70 - 135	1	54
1,2-Dichloroethane	20.0	17.5		ug/L		88	70 - 130	3	49
1,1,1-Trichloroethane	20.0	18.5		ug/L		92	70 - 130	5	36
Carbon tetrachloride	20.0	18.7		ug/L		94	70 - 130	1	41
Bromodichloromethane	20.0	18.0		ug/L		90	65 - 135	2	56
1,2-Dichloropropane	20.0	18.0		ug/L		90	35 - 165	4	55
cis-1,3-Dichloropropene	20.0	20.2		ug/L		101	25 - 175	14	58
Trichloroethene	20.0	18.6		ug/L		93	65 - 135	4	48
Dibromochloromethane	20.0	18.6		ug/L		93	70 - 135	9	50
1,1,2-Trichloroethane	20.0	21.0		ug/L		105	70 - 130	11	45
Benzene	20.0	20.9		ug/L		104	65 - 135	13	61
trans-1,3-Dichloropropene	20.0	20.2		ug/L		101	50 - 150	13	86
2-Chloroethyl vinyl ether	20.0	14.9		ug/L		74	0.1 - 225	4	71
Bromoform	20.0	18.7		ug/L		94	70 - 130	3	42
Tetrachloroethene	20.0	20.8		ug/L		104	70 - 130	16	39
1,1,2,2-Tetrachloroethane	20.0	17.0		ug/L		85	60 - 140	4	61
Toluene	20.0	20.3		ug/L		102	70 - 130	11	41
Chlorobenzene	20.0	19.8		ug/L		99	65 - 135	3	53
Ethylbenzene	20.0	19.7		ug/L		99	60 - 140	7	63
Xylenes, Total	40.0	42.0		ug/L		105	60 - 140	19	50
Acrolein	40.6	56.0		ug/L		138	10 - 150	4	60
Acrylonitrile	200	197		ug/L		99	60 - 140	1	60

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		60 - 140
Toluene-d8 (Surr)	98		60 - 140
Bromofluorobenzene	102		60 - 140
Dibromofluoromethane (Surr)	90		60 - 140

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

Lab Sample ID: MB 460-787278/1-A

Matrix: Water

Analysis Batch: 787336

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 787278

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.016	ug/L		06/29/21 09:47	06/29/21 15:01	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	34		10 - 150				06/29/21 09:47	06/29/21 15:01	1

Lab Sample ID: LCS 460-787278/2-A

Matrix: Water

Analysis Batch: 787336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 787278

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	1.60	1.68		ug/L		105	50 - 142

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

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

		LCS	LCS										
Isotope Dilution		%Recovery	Qualifier	Limits									
1,4-Dioxane-d8		29		10 - 150									
Lab Sample ID: LCSD 460-787278/3-A						Client Sample ID: Lab Control Sample Dup							
Matrix: Water						Prep Type: Total/NA							
Analysis Batch: 787336						Prep Batch: 787278							
Analyte				Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit	
1,4-Dioxane				1.60	1.68		ug/L		105	50 - 142	0	20	
		LCS	LCS										
Isotope Dilution		%Recovery	Qualifier	Limits									
1,4-Dioxane-d8		32		10 - 150									
Lab Sample ID: MB 460-787279/1-A						Client Sample ID: Method Blank							
Matrix: Water						Prep Type: Total/NA							
Analysis Batch: 787432						Prep Batch: 787279							
Analyte		MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac			
1,4-Dioxane		ND		0.20	0.016	ug/L		06/29/21 09:53	06/30/21 00:34	1			
		MB	MB										
Isotope Dilution		%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac			
1,4-Dioxane-d8		32		10 - 150				06/29/21 09:53	06/30/21 00:34	1			
Lab Sample ID: LCS 460-787279/2-A						Client Sample ID: Lab Control Sample							
Matrix: Water						Prep Type: Total/NA							
Analysis Batch: 787432						Prep Batch: 787279							
Analyte				Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit	
1,4-Dioxane				1.60	1.44		ug/L		90	50 - 142			
		LCS	LCS										
Isotope Dilution		%Recovery	Qualifier	Limits									
1,4-Dioxane-d8		38		10 - 150									
Lab Sample ID: LCSD 460-787279/3-A						Client Sample ID: Lab Control Sample Dup							
Matrix: Water						Prep Type: Total/NA							
Analysis Batch: 787432						Prep Batch: 787279							
Analyte				Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit	
1,4-Dioxane				1.60	1.47		ug/L		92	50 - 142	1	20	
		LCS	LCS										
Isotope Dilution		%Recovery	Qualifier	Limits									
1,4-Dioxane-d8		40		10 - 150									

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-168535/1-A						Client Sample ID: Method Blank							
Matrix: Water						Prep Type: Total/NA							
Analysis Batch: 168576						Prep Batch: 168535							
Analyte		MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac			
Perfluorobutanoic acid (PFBA)		ND		5.0	0.89	ng/L		06/29/21 10:15	06/29/21 18:26	1			
Perfluoropentanoic acid (PFPeA)		ND		2.0	0.47	ng/L		06/29/21 10:15	06/29/21 18:26	1			
Perfluorohexanoic acid (PFHxA)		ND		2.0	0.45	ng/L		06/29/21 10:15	06/29/21 18:26	1			

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

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

Lab Sample ID: MB 200-168535/1-A

Matrix: Water

Analysis Batch: 168576

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 168535

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.24	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.42	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.28	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.30	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.39	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.25	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.30	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.29	ng/L		06/29/21 10:15	06/29/21 18:26	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.58	ng/L		06/29/21 10:15	06/29/21 18:26	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90	ng/L		06/29/21 10:15	06/29/21 18:26	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74	ng/L		06/29/21 10:15	06/29/21 18:26	1
6:2 FTS	ND		5.0	1.1	ng/L		06/29/21 10:15	06/29/21 18:26	1
8:2 FTS	ND		2.0	0.39	ng/L		06/29/21 10:15	06/29/21 18:26	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	57		25 - 150	06/29/21 10:15	06/29/21 18:26	1
13C4 PFBA	103		25 - 150	06/29/21 10:15	06/29/21 18:26	1
13C5 PFPeA	105		25 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFHxA	102		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C4 PFHpA	98		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C4 PFOA	101		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C5 PFNA	99		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFDA	97		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFUnA	90		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFDoA	69		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFTeDA	57		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C3 PFBS	92		50 - 150	06/29/21 10:15	06/29/21 18:26	1
18O2 PFHxS	91		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C4 PFOS	95		50 - 150	06/29/21 10:15	06/29/21 18:26	1
d3-NMeFOSAA	84		50 - 150	06/29/21 10:15	06/29/21 18:26	1
d5-NEtFOSAA	78		50 - 150	06/29/21 10:15	06/29/21 18:26	1
M2-6:2 FTS	92		25 - 150	06/29/21 10:15	06/29/21 18:26	1
M2-8:2 FTS	101		25 - 150	06/29/21 10:15	06/29/21 18:26	1

Lab Sample ID: LCS 200-168535/2-A

Matrix: Water

Analysis Batch: 168576

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 168535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	46.4		ng/L		116	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	47.2		ng/L		118	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	45.4		ng/L		114	70 - 130

Eurofins TestAmerica, Edison

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

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

Lab Sample ID: LCS 200-168535/2-A

Matrix: Water

Analysis Batch: 168576

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 168535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanoic acid (PFHpA)	40.0	44.7		ng/L		112	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	45.6		ng/L		114	70 - 130
Perfluorononanoic acid (PFNA)	40.0	46.7		ng/L		117	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	42.9		ng/L		107	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	52.6	*+	ng/L		131	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	49.6		ng/L		124	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	45.5		ng/L		114	70 - 130
Perfluorotetradecanoic acid (PFTeA)	40.0	51.2		ng/L		128	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	41.1		ng/L		116	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	42.4		ng/L		117	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	44.3		ng/L		116	50 - 150
Perfluorodecanesulfonic acid (PFDS)	38.6	36.4		ng/L		94	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	41.3		ng/L		111	70 - 130
Perfluorooctanesulfonamide (FOSA)	40.0	43.2		ng/L		108	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	45.3		ng/L		113	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	44.2		ng/L		110	70 - 130
6:2 FTS	37.9	43.6		ng/L		115	50 - 150
8:2 FTS	38.3	43.5		ng/L		113	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C8 FOSA	67		25 - 150
13C4 PFBA	108		25 - 150
13C5 PFPeA	107		25 - 150
13C2 PFHxA	110		50 - 150
13C4 PFHpA	102		50 - 150
13C4 PFOA	103		50 - 150
13C5 PFNA	101		50 - 150
13C2 PFDA	104		50 - 150
13C2 PFUnA	86		50 - 150
13C2 PFDoA	71		50 - 150
13C2 PFTeDA	63		50 - 150
13C3 PFBS	98		50 - 150
18O2 PFHxS	94		50 - 150
13C4 PFOS	97		50 - 150
d3-NMeFOSAA	84		50 - 150
d5-NEtFOSAA	80		50 - 150
M2-6:2 FTS	100		25 - 150
M2-8:2 FTS	108		25 - 150

Eurofins TestAmerica, Edison

QC Association Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

GC/MS VOA

Analysis Batch: 788392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237488-1	MW-9 062221	Total/NA	Water	624.1	
460-237488-2	MW-10 062221	Total/NA	Water	624.1	
460-237488-3	MW-3 062221	Total/NA	Water	624.1	
460-237488-4	MW-13 062221	Total/NA	Water	624.1	
460-237488-5	Trip B2-062221	Total/NA	Water	624.1	
MB 460-788392/9	Method Blank	Total/NA	Water	624.1	
LCS 460-788392/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 460-788392/5	Lab Control Sample Dup	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 787278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237488-1	MW-9 062221	Total/NA	Water	3510C	
MB 460-787278/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-787278/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-787278/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 787279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237488-2	MW-10 062221	Total/NA	Water	3510C	
460-237488-3	MW-3 062221	Total/NA	Water	3510C	
460-237488-4	MW-13 062221	Total/NA	Water	3510C	
MB 460-787279/1-A	Method Blank	Total/NA	Water	3510C	
LCS 460-787279/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 460-787279/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 787336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-787278/1-A	Method Blank	Total/NA	Water	8270E SIM ID	787278
LCS 460-787278/2-A	Lab Control Sample	Total/NA	Water	8270E SIM ID	787278
LCSD 460-787278/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM ID	787278

Analysis Batch: 787432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237488-1	MW-9 062221	Total/NA	Water	8270E SIM ID	787278
460-237488-2	MW-10 062221	Total/NA	Water	8270E SIM ID	787279
460-237488-3	MW-3 062221	Total/NA	Water	8270E SIM ID	787279
460-237488-4	MW-13 062221	Total/NA	Water	8270E SIM ID	787279
MB 460-787279/1-A	Method Blank	Total/NA	Water	8270E SIM ID	787279
LCS 460-787279/2-A	Lab Control Sample	Total/NA	Water	8270E SIM ID	787279
LCSD 460-787279/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM ID	787279

LCMS

Prep Batch: 168535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237488-1	MW-9 062221	Total/NA	Water	3535	
460-237488-2	MW-10 062221	Total/NA	Water	3535	
460-237488-3	MW-3 062221	Total/NA	Water	3535	
460-237488-4	MW-13 062221	Total/NA	Water	3535	
MB 200-168535/1-A	Method Blank	Total/NA	Water	3535	

Eurofins TestAmerica, Edison

QC Association Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

LCMS (Continued)

Prep Batch: 168535 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 200-168535/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 168576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-237488-1	MW-9 062221	Total/NA	Water	537 (modified)	168535
460-237488-2	MW-10 062221	Total/NA	Water	537 (modified)	168535
460-237488-3	MW-3 062221	Total/NA	Water	537 (modified)	168535
460-237488-4	MW-13 062221	Total/NA	Water	537 (modified)	168535
MB 200-168535/1-A	Method Blank	Total/NA	Water	537 (modified)	168535
LCS 200-168535/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	168535

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Client Sample ID: MW-9 062221

Lab Sample ID: 460-237488-1

Date Collected: 06/22/21 14:25

Matrix: Water

Date Received: 06/24/21 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	788392	07/03/21 20:25	AMS	TAL EDI
Total/NA	Prep	3510C			787278	06/30/21 07:18	ATF	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787432	06/30/21 10:18	MME	TAL EDI
Total/NA	Prep	3535			168535	06/29/21 10:16	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168576	06/29/21 21:37	BWC	TAL BUR

Client Sample ID: MW-10 062221

Lab Sample ID: 460-237488-2

Date Collected: 06/22/21 14:37

Matrix: Water

Date Received: 06/24/21 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	788392	07/03/21 20:47	AMS	TAL EDI
Total/NA	Prep	3510C			787279	06/29/21 09:54	OTS	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787432	06/30/21 03:14	MME	TAL EDI
Total/NA	Prep	3535			168535	06/29/21 10:16	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168576	06/29/21 21:45	BWC	TAL BUR

Client Sample ID: MW-3 062221

Lab Sample ID: 460-237488-3

Date Collected: 06/22/21 15:35

Matrix: Water

Date Received: 06/24/21 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	788392	07/03/21 21:10	AMS	TAL EDI
Total/NA	Prep	3510C			787279	06/29/21 09:54	OTS	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787432	06/30/21 03:30	MME	TAL EDI
Total/NA	Prep	3535			168535	06/29/21 10:16	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168576	06/29/21 21:54	BWC	TAL BUR

Client Sample ID: MW-13 062221

Lab Sample ID: 460-237488-4

Date Collected: 06/22/21 16:25

Matrix: Water

Date Received: 06/24/21 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	788392	07/03/21 21:32	AMS	TAL EDI
Total/NA	Prep	3510C			787279	06/29/21 09:54	OTS	TAL EDI
Total/NA	Analysis	8270E SIM ID		1	787432	06/30/21 03:46	MME	TAL EDI
Total/NA	Prep	3535			168535	06/29/21 10:16	KFW	TAL BUR
Total/NA	Analysis	537 (modified)		1	168576	06/29/21 22:02	BWC	TAL BUR

Client Sample ID: Trip B2-062221

Lab Sample ID: 460-237488-5

Date Collected: 06/22/21 00:00

Matrix: Water

Date Received: 06/24/21 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	788392	07/03/21 19:16	AMS	TAL EDI

Eurofins TestAmerica, Edison

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Laboratory References:

TAL BUR = Eurofins TestAmerica, Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

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Accreditation/Certification Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Laboratory: Eurofins TestAmerica, Edison

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11452	04-01-22

Laboratory: Eurofins TestAmerica, Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10391	04-01-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	6:2 FTS
537 (modified)	3535	Water	8:2 FTS
537 (modified)	3535	Water	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
537 (modified)	3535	Water	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
537 (modified)	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	3535	Water	Perfluorobutanoic acid (PFBA)
537 (modified)	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)
537 (modified)	3535	Water	Perfluorododecanoic acid (PFDoA)
537 (modified)	3535	Water	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	3535	Water	Perfluoroheptanoic acid (PFHpA)
537 (modified)	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	3535	Water	Perfluorohexanoic acid (PFHxA)
537 (modified)	3535	Water	Perfluorononanoic acid (PFNA)
537 (modified)	3535	Water	Perfluorooctanesulfonamide (FOSA)
537 (modified)	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	3535	Water	Perfluorooctanoic acid (PFOA)
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)
537 (modified)	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	3535	Water	Perfluorotridecanoic acid (PFTriA)
537 (modified)	3535	Water	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL EDI
8270E SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL EDI
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL EDI
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

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 BUR = Eurofins TestAmerica, Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

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

Sample Summary

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-237488-1	MW-9 062221	Water	06/22/21 14:25	06/24/21 09:35	
460-237488-2	MW-10 062221	Water	06/22/21 14:37	06/24/21 09:35	
460-237488-3	MW-3 062221	Water	06/22/21 15:35	06/24/21 09:35	
460-237488-4	MW-13 062221	Water	06/22/21 16:25	06/24/21 09:35	
460-237488-5	Trip B2-062221	Water	06/22/21 00:00	06/24/21 09:35	

Job Number:

237488

Number of Coolers:

AIR Gun #

Cooler Temperatures

	RAW		CORRECTED	
Cooler #1:	18	20	1	1
Cooler #2:		2		
Cooler #3:				
Cooler #4:				
Cooler #5:				
Cooler #6:				
Cooler #7:				
Cooler #8:				
Cooler #9:				

[illegible]

If pH adjustments are required record the information below:

Sample No(s). adjusted:

Preservative Name/Conc.:

Volume of Preservative used (ml):

Lot # of Preservative(s):

Expiration Date:

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

EDS-WI-038, Rev 4.1
10/22/2019

Initials:

Date:

6/24/21

[illegible]

FROM: (518) 438-8140
TIM KNOLLMEYER
TESTAMERICA LAB INC
25 KRAFT AVE
ALBANY NY 12205
US

TO **SAMPLE RECEIVING**

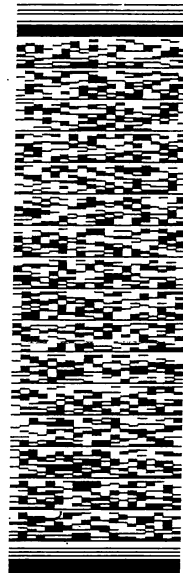
TESTAMERICA - BURLINGTON
30 COMMUNITY DRIVE, SUITE 11

BURLINGTON VT 05403

(802) 660-1990

REF: ENVIROSPEC PFAS

(US)



FedEx
Ground

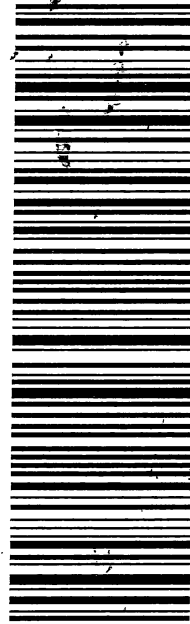


J2011201218010v

TRK# **5013 1604 9590**

05403

9622 0417 3 (000 000 0000) 0 00 5013 1604 9590



Part # 156148-434 RIT EXP 11/21

56DC37B387/05A2

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-237488-1

Login Number: 237488

List Source: Eurofins TestAmerica, Edison

List Number: 1

Creator: Meyers, Gary

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

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-237488-1

Login Number: 237488

List Number: 2

Creator: Lavigne, Scott M

List Source: Eurofins TestAmerica, Burlington

List Creation: 06/28/21 11:36 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1595417
Sample custody seals, if present, are 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	3.2°C
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.	N/A	
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	

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130

(770) 232-5082 (Fax)

www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY: AECOM Technical Services Northeast, Inc.
PROJECT NAME: Northeast Alloy & Metals # 633045
CONTRACTED LAB: Eurofins Test America, Edison
QA/QC LEVEL: DUSR
ANALYTICAL METHOD(S): SW 846 Method 8270E SIM, EPA Method 537 Modified
VALIDATION GUIDELINES: USEPA Region II data validation SOP (SVOC HW-22 Rev.5),
USEPA Contract Laboratory Program National Functional
Guidelines for Organic Data Review, **2008**; NYDEC Guidelines
for Sampling and Analysis of PFAS, January 2020, Professional
Judgment
SAMPLE MATRIX: Water
TYPES OF ANALYSES: 1,4-dioxane, Per and Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S): Amy L. Hogan, Thomas B Granat
SDG NUMBER: 460-237444-1
SAMPLING DATE(S): June 23, 2021

SAMPLES:

<u>Client Sample ID</u>	<u>Laboratory ID</u>	<u>1,4-dioxane</u>	<u>PFAS</u>
BR-1 062321	460-237444-1	X	X
BR-2 062321	460-237444-2	X	X
MW-4 062321	460-237444-3	X	X
MW-5 062321	460-237444-4	X	X
MW-6 062321	460-237444-5	X	X
MW-11 062321	460-237444-6	X	X
MW-12 062321	460-237444-7	X	X
MW-18 062321	460-237444-8	X	X
DUP 062321	460-237444-9	X	X
Field Bl. 062321	460-23744-11	X	X
BR-1 062321MS	460-237444-1MS	X	X
BR-1 062321MSD	460-237444-1MSD	X	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

Eurofins Test America, Edison – 460-237444-1

1,4-DIOXANE

SUMMARY

I.) General:

The analyses for 1,4-dioxane were performed per SW846 Method 8270D SIM.

II.) Overall Assessment of Data:

All laboratory data were acceptable without qualifications.

II.) Holding Times:

All Holding Time criteria were met. No data qualification was necessary.

IV.) GC/MS Tuning:

All GC/MS Tuning criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Initial Calibration Verification:

All Initial Calibration Verification criteria were met. No data qualification was necessary.

Continuing Calibration:

All Continuing Calibration criteria were met. No data qualification was necessary.

VI.) Blanks:

Method Blanks:

There were no detections in the associated method blank. No data qualification was necessary.

Equipment Blanks:

There was no associated field equipment blank submitted for this fraction of the SDG. No data qualification was necessary.

Field Blanks:

There was no detection in the associated field blank submitted for this SDG. No data qualification was necessary.

VII.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

One LCS / LCSD set was analyzed by the laboratory for this SDG. All criteria were met. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed using sample BR-1 062321. All criteria were met. No data qualification was necessary.

X.) Field Duplicates:

One set of field duplicate samples (BR-1 062321 / DUP 062321) was identified as part of this SDG. There was no calculable Relative Percent Difference, so no data qualification was necessary.

XI.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No data qualification was necessary.

XII.) Internal Standards Performance (ISTD):

All ISTD area count criteria were met. No data qualification was necessary.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No data qualification was necessary.

PERFLUROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 537 Modified.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

There were no major problems for this fraction of the SDG.

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete and accurate case narrative in the data package. The data package contains results for all samples and method types listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No data qualification was necessary.

V.) Blanks:

Method Blank (MB):

There were no detections in MB 200-168567/1-A . No data qualification was necessary.

Field Blank (FB):

There were no detections in Field Bl. 062321. No data qualification was necessary.

Equipment Blank (EB):

There were no detections in Equip Bl. 062321. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS/MSD):

MS/MSD analysis was performed on SDG sample BR-1 062321. All MS/MSD criteria were met. No data qualification was necessary.

VII.) Laboratory Control Sample (LCS):

All LCS criteria were met. No data qualification was necessary.

VIII.) Field Duplicates:

One set of field duplicate samples (BR-1 062321 / DUP 062321) was identified as part of this SDG. Below are the calculated RPDs (Relative Percent Differences) for the detected analyte results used to evaluate the field sampling and laboratory precision for the sample matrix. Only results > 2x RL were qualified if RPDs were not within the QC limit.

<u>Parent Sample</u>	<u>Duplicate Sample</u>	<u>Analyte</u>	<u>Results</u>	<u>RPD</u>
BR-1 062321	DUP 062321	PFBA	7.2 / ND	N/A
		PFPeA	0.76J / ND	N/A
		PFHxA	1.7J / ND	N/A
		PFHpA	0.86J / ND	N/A
		PFOA	3.2 / ND	N/A
		PFNA	0.37J / ND	N/A
		PFDA	0.88J / ND	N/A
		PFBS	2.8 / ND	N/A
		PFHxS	0.38J / ND	N/A
		PFOS	0.60J / ND	N/A
		6:2 FTS	12 / 2.6J	129

Based on Appendix H of the NYDEC *Guidelines for Sampling and Analysis of PFAS*, January 2020, the relative percent difference (RPD) should be less than 30% for analyte concentrations greater than two times the reporting limit. The only analyte result above 2x RL was the parent sample result for 6:2 FTS. It is noted that the parent sample had several analyte detections and the field duplicate only had one detection. This uncertainty should be evaluated in the context of project data quality objectives to determine data usability.

IX.) Internal Standards Performance (ISTD):

13C2 PFTeDA Isotope Dilution Analyte (IDA) recovery associated with the following sample was below the method recommended limit: BR-1 062321 (460-237444-1). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample. No data qualification was necessary.

M2-8:2 FTS Isotope Dilution Analyte (IDA) recovery was above the method recommended limit for the following sample: MW-18 062321 (460-237444-8). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries. No data qualification was necessary.

X.) Ion Transitions:

The following ratio of quantifier ion response to qualifier ion response were outside the laboratory criteria:

<u>Client Sample ID</u>	<u>Laboratory ID</u>	<u>Analyte</u>	<u>Qualifier</u>
MW-18 062321	460-237444-8	PFHxA	J
		PFNA	J

XI.) Reporting limits (RLs):

All SDG sample Reporting Limits were acceptable. No data qualification was necessary.

Sample results that were greater than the MDL but less than the RL and were qualified as estimated (J) by the laboratory. These qualifiers were confirmed by the validator.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237444-1
SDG No.: _____
Client Sample ID: BR-1 062321 Lab Sample ID: 460-237444-1
Matrix: Water Lab File ID: h266668.d
Analysis Method: 8270E SIM ID Date Collected: 06/23/2021 08:35
Extract. Method: 3510C Date Extracted: 06/29/2021 09:47
Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 15:50
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787336 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	44		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: BR-2 062321 Lab Sample ID: 460-237444-2
 Matrix: Water Lab File ID: h266669.d
 Analysis Method: 8270E SIM ID Date Collected: 06/23/2021 10:50
 Extract. Method: 3510C Date Extracted: 06/29/2021 09:47
 Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 16:06
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 5 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 787336 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237444-1
SDG No.: _____
Client Sample ID: MW-4 062321 Lab Sample ID: 460-237444-3
Matrix: Water Lab File ID: h266670.d
Analysis Method: 8270E SIM ID Date Collected: 06/23/2021 13:00
Extract. Method: 3510C Date Extracted: 06/29/2021 09:47
Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 16:22
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787336 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	45		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237444-1
SDG No.: _____
Client Sample ID: MW-5 062321 Lab Sample ID: 460-237444-4
Matrix: Water Lab File ID: h266671.d
Analysis Method: 8270E SIM ID Date Collected: 06/23/2021 15:15
Extract. Method: 3510C Date Extracted: 06/29/2021 09:47
Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 16:38
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787336 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.1		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237444-1
SDG No.: _____
Client Sample ID: MW-6 062321 Lab Sample ID: 460-237444-5
Matrix: Water Lab File ID: h266672.d
Analysis Method: 8270E SIM ID Date Collected: 06/23/2021 15:30
Extract. Method: 3510C Date Extracted: 06/29/2021 09:47
Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 16:55
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787336 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	6.6		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	39		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237444-1
SDG No.: _____
Client Sample ID: MW-11 062321 Lab Sample ID: 460-237444-6
Matrix: Water Lab File ID: h266673.d
Analysis Method: 8270E SIM ID Date Collected: 06/23/2021 12:30
Extract. Method: 3510C Date Extracted: 06/29/2021 09:47
Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 17:11
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787336 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: MW-12 062321 Lab Sample ID: 460-237444-7
 Matrix: Water Lab File ID: h266674.d
 Analysis Method: 8270E SIM ID Date Collected: 06/23/2021 09:10
 Extract. Method: 3510C Date Extracted: 06/29/2021 09:47
 Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 17:27
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 5 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 787336 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.019	J	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	46		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: MW-18 062321 Lab Sample ID: 460-237444-8
 Matrix: Water Lab File ID: h266675.d
 Analysis Method: 8270E SIM ID Date Collected: 06/23/2021 16:10
 Extract. Method: 3510C Date Extracted: 06/29/2021 09:47
 Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 17:44
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 5 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 787336 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.074	J	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237444-1
SDG No.: _____
Client Sample ID: DUP 062321 Lab Sample ID: 460-237444-9
Matrix: Water Lab File ID: h266676.d
Analysis Method: 8270E SIM ID Date Collected: 06/23/2021 08:35
Extract. Method: 3510C Date Extracted: 06/29/2021 09:47
Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 18:00
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787336 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	44		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: Field Bl. 062321 Lab Sample ID: 460-237444-11
 Matrix: Water Lab File ID: h266677.d
 Analysis Method: 8270E SIM ID Date Collected: 06/23/2021 10:00
 Extract. Method: 3510C Date Extracted: 06/29/2021 09:47
 Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 18:16
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 5 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 787336 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	39		10-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1

SDG No.: _____

Client Sample ID: BR-1 062321 Lab Sample ID: 460-237444-1

Matrix: Water Lab File ID: PA210630A20.d

Analysis Method: 537 (modified) Date Collected: 06/23/2021 08:35

Extraction Method: 3535 Date Extracted: 06/29/2021 15:14

Sample wt/vol: 253.7 (mL) Date Analyzed: 06/30/2021 18:18

Con. Extract Vol.: 10 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.2		4.9	0.88
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.76	J J	2.0	0.47
307-24-4	Perfluorohexanoic acid (PFHxA)	1.7	J J	2.0	0.45
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.86	J J	2.0	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	3.2		2.0	0.42
375-95-1	Perfluorononanoic acid (PFNA)	0.37	J J	2.0	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	0.88	J J	2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.8		2.0	0.25
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.38	J J	2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.60	J J	2.0	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.89
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73
27619-97-2	6:2 FTS	12		4.9	1.1
39108-34-4	8:2 FTS	ND		2.0	0.38

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: BR-2 062321 Lab Sample ID: 460-237444-2
 Matrix: Water Lab File ID: PA210630A24.d
 Analysis Method: 537 (modified) Date Collected: 06/23/2021 10:50
 Extraction Method: 3535 Date Extracted: 06/29/2021 15:14
 Sample wt/vol: 259.6(mL) Date Analyzed: 06/30/2021 18:51
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 20(uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.1	J J	4.8	0.86
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.9	0.46
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.9	0.44
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.24	J J	1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.9	0.41
375-95-1	Perfluorononanoic acid (PFNA)	0.28	J J	1.9	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.42
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.29	J J	1.9	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.34	J J	1.9	0.29
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.41	J J	1.9	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.56
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	0.87
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	0.72
27619-97-2	6:2 FTS	ND		4.8	1.1
39108-34-4	8:2 FTS	ND		1.9	0.38

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1

SDG No.: _____

Client Sample ID: MW-4 062321 Lab Sample ID: 460-237444-3

Matrix: Water Lab File ID: PA210630A25.d

Analysis Method: 537 (modified) Date Collected: 06/23/2021 13:00

Extraction Method: 3535 Date Extracted: 06/29/2021 15:14

Sample wt/vol: 253.1 (mL) Date Analyzed: 06/30/2021 18:59

Con. Extract Vol.: 10 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.6		4.9	0.88
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.4		2.0	0.47
307-24-4	Perfluorohexanoic acid (PFHxA)	1.9	J J	2.0	0.45
375-85-9	Perfluoroheptanoic acid (PFHpA)	2.0		2.0	0.24
335-67-1	Perfluorooctanoic acid (PFOA)	2.8		2.0	0.42
375-95-1	Perfluorononanoic acid (PFNA)	0.30	J J	2.0	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.2	J J	2.0	0.25
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.66	J J	2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.77	J J	2.0	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.89
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73
27619-97-2	6:2 FTS	ND		4.9	1.1
39108-34-4	8:2 FTS	ND		2.0	0.39

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1

SDG No.: _____

Client Sample ID: MW-5 062321 Lab Sample ID: 460-237444-4

Matrix: Water Lab File ID: PA210630A26.d

Analysis Method: 537 (modified) Date Collected: 06/23/2021 15:15

Extraction Method: 3535 Date Extracted: 06/29/2021 15:14

Sample wt/vol: 253.7 (mL) Date Analyzed: 06/30/2021 19:08

Con. Extract Vol.: 10 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.7	J J	4.9	0.88
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.1	J J	2.0	0.47
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.45
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.29	J J	2.0	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	2.1		2.0	0.42
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.38	J J	2.0	0.25
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.47	J J	2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.50	J J	2.0	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.89
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73
27619-97-2	6:2 FTS	ND		4.9	1.1
39108-34-4	8:2 FTS	ND		2.0	0.38

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: MW-6 062321 Lab Sample ID: 460-237444-5
 Matrix: Water Lab File ID: PA210630A27.d
 Analysis Method: 537 (modified) Date Collected: 06/23/2021 15:30
 Extraction Method: 3535 Date Extracted: 06/29/2021 15:14
 Sample wt/vol: 255.9(mL) Date Analyzed: 06/30/2021 19:16
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 20(uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.7	J J	4.9	0.87
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.2	J J	2.0	0.46
307-24-4	Perfluorohexanoic acid (PFHxA)	1.5	J J	2.0	0.44
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.91	J J	2.0	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	5.5		2.0	0.41
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.42
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.85	J J	2.0	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.52	J J	2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.3	J J	2.0	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.56
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.88
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73
27619-97-2	6:2 FTS	ND		4.9	1.1
39108-34-4	8:2 FTS	ND		2.0	0.38

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: MW-11 062321 Lab Sample ID: 460-237444-6
 Matrix: Water Lab File ID: PA210630A28.d
 Analysis Method: 537 (modified) Date Collected: 06/23/2021 12:30
 Extraction Method: 3535 Date Extracted: 06/29/2021 15:14
 Sample wt/vol: 254.6(mL) Date Analyzed: 06/30/2021 19:24
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 20(uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.2	J J	4.9	0.88
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.47
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.44
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.42
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.25
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.30	J J	2.0	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.89
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73
27619-97-2	6:2 FTS	ND		4.9	1.1
39108-34-4	8:2 FTS	ND		2.0	0.38

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: MW-12 062321 Lab Sample ID: 460-237444-7
 Matrix: Water Lab File ID: PA210630A29.d
 Analysis Method: 537 (modified) Date Collected: 06/23/2021 09:10
 Extraction Method: 3535 Date Extracted: 06/29/2021 15:14
 Sample wt/vol: 244.7 (mL) Date Analyzed: 06/30/2021 19:33
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	8.4		5.1	0.91
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.2	J J	2.0	0.48
307-24-4	Perfluorohexanoic acid (PFHxA)	1.7	J J	2.0	0.46
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.86	J J	2.0	0.24
335-67-1	Perfluorooctanoic acid (PFOA)	2.2		2.0	0.43
375-95-1	Perfluorononanoic acid (PFNA)	0.38	J J	2.0	0.29
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.35
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.39
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.44
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.65
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.80	J J	2.0	0.26
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.46	J J	2.0	0.31
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.24
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.1	J J	2.0	0.30
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.59
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.1	0.92
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.1	0.76
27619-97-2	6:2 FTS	ND		5.1	1.1
39108-34-4	8:2 FTS	ND		2.0	0.40

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: MW-18 062321 Lab Sample ID: 460-237444-8
 Matrix: Water Lab File ID: PA210630A30.d
 Analysis Method: 537 (modified) Date Collected: 06/23/2021 16:10
 Extraction Method: 3535 Date Extracted: 06/29/2021 15:14
 Sample wt/vol: 259(mL) Date Analyzed: 06/30/2021 19:41
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 20(uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	11		4.8	0.86
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.81	J J	1.9	0.46
307-24-4	Perfluorohexanoic acid (PFHxA)	2.5	I J	1.9	0.44
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.2	J J	1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	5.2		1.9	0.41
375-95-1	Perfluorononanoic acid (PFNA)	1.2	J I J	1.9	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	0.37	J J	1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.42
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.1	J J	1.9	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.2	J J	1.9	0.29
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	14		1.9	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.56
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	0.87
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	0.72
27619-97-2	6:2 FTS	ND		4.8	1.1
39108-34-4	8:2 FTS	ND		1.9	0.38

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: DUP 062321 Lab Sample ID: 460-237444-9
 Matrix: Water Lab File ID: PA210630A31.d
 Analysis Method: 537 (modified) Date Collected: 06/23/2021 08:35
 Extraction Method: 3535 Date Extracted: 06/29/2021 15:14
 Sample wt/vol: 263.3 (mL) Date Analyzed: 06/30/2021 19:49
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.7	0.85
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.9	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.9	0.43
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.9	0.40
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.9	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.41
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.60
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.29
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.55
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.7	0.86
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.7	0.71
27619-97-2	6:2 FTS	2.6	J J	4.7	1.0
39108-34-4	8:2 FTS	ND		1.9	0.37

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1
 SDG No.: _____
 Client Sample ID: Field Bl. 062321 Lab Sample ID: 460-237444-11
 Matrix: Water Lab File ID: PA210630A32.d
 Analysis Method: 537 (modified) Date Collected: 06/23/2021 10:00
 Extraction Method: 3535 Date Extracted: 06/29/2021 15:14
 Sample wt/vol: 263.1 (mL) Date Analyzed: 06/30/2021 19:57
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.8	0.85
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.9	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.9	0.43
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.9	0.40
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.9	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.41
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.60
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.29
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.55
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	0.86
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	0.71
27619-97-2	6:2 FTS	ND		4.8	1.0
39108-34-4	8:2 FTS	ND		1.9	0.37

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237444-1

SDG No.: _____

Client Sample ID: Equip Bl. 062321 Lab Sample ID: 460-237444-12

Matrix: Water Lab File ID: PA210630A33.d

Analysis Method: 537 (modified) Date Collected: 06/23/2021 11:05

Extraction Method: 3535 Date Extracted: 06/29/2021 15:14

Sample wt/vol: 261.2 (mL) Date Analyzed: 06/30/2021 20:06

Con. Extract Vol.: 10 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 168613 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.8	0.85
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.9	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.9	0.43
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.9	0.41
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.9	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.42
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.60
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.29
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.55
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	0.86
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	0.71
27619-97-2	6:2 FTS	ND		4.8	1.0
39108-34-4	8:2 FTS	ND		1.9	0.37

Attachment B

Support Documentation for Validation Qualifiers

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210630-46642.b\PA210630A30.d
 Lims ID: 460-237444-F-8-A
 Client ID: MW-18 062321
 Sample Type: Client
 Inject. Date: 30-Jun-2021 19:41:21 ALS Bottle#: 27 Worklist Smp#: 30
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 460-237444-F-8-A
 Misc. Info.: 200-0046642-030 Plate: 1 Rack: 1
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\chromfs\Burlington\ChromData\LC812\20210630-46642.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 01-Jul-2021 17:33:32 Calib Date: 20-May-2021 17:37:03
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\LC812\20210520-46072.b\PA210520ICAL07.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX1626

First Level Reviewer: nampitakw

Date: 01-Jul-2021 13:33:13

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.089	2.100	-0.011	0.597	698980	0.7285		58.3	2894	
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.115	2.100	0.015	1.013	146660	0.2805			7.2	M
D 3 13C5 PFPeA										M
267.90 > 223.00	2.411	2.413	-0.002	0.689	741834	1.06		85.1	272	M
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.398	2.426	-0.028	0.995	12625	0.0210			0.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.437	2.439	-0.002	0.696	840239	0.9642		82.9	30325	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.437	2.439	-0.002	1.000	22175	0.0298	Target=2.19		1.0	M
298.90 > 99.00	2.437	2.439	-0.002	1.000	8925		2.48(1.09-3.28)		1.1	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.768	2.770	-0.002	0.791	855240	1.13		90.4	1256	
6 Perfluorohexanoic acid										RM
313.00 > 269.00	2.768	2.770	-0.002	1.000	45238	0.0653	Target=12.12		0.2	RM
313.00 > 119.00	2.768	2.770	-0.002	1.000	2354		19.22(6.06-18.18)		0.9	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.132	3.132	0.0	0.895	674633	1.00		84.3	1781	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.143	3.132	0.011	1.003	19880	0.0314	Target=4.23		2.3	M
399.00 > 99.00	3.132	3.132	0.0	1.000	4558		4.36(2.12-6.35)		2.0	
D 9 13C4 PFHpA										
367.00 > 322.00	3.143	3.132	0.011	0.898	876577	1.16		92.7	1722	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.143	3.143	0.0	1.000	21279	0.0301	Target=3.49		0.4	M
363.00 > 169.00	3.132	3.143	-0.011	0.997	5566		3.82(1.75-5.24)		7.4	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
16 Perfluoroheptanesulfonic acid										RM
449.00 > 80.00	3.492	3.483	0.009	0.916	1491	0.002553	Target=6.21	0.3		RM
449.00 > 99.00	3.474	3.483	-0.009	0.911	707		2.11(3.10-9.31)	0.5		M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.492	3.483	0.009	0.997	149259	1.67		140	34.7	M
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.483	3.483	0.0	0.997	586	0.005197		5.6		M
D 14 13C4 PFOA										
417.00 > 372.00	3.501	3.492	0.009	1.000	977787	1.28		102	2258	
* 62 13C2 PFOA										M
415.00 > 370.00	3.501	3.492	0.009		956866	1.25		1750		M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.501	3.492	0.009	1.000	109095	0.1358	Target=2.53	2.9		M
413.00 > 169.00	3.501	3.492	0.009	1.000	51696		2.11(1.27-3.80)	67.6		M
D 18 13C4 PFOS										
503.00 > 80.00	3.814	3.804	0.010	1.089	561867	1.15		96.3	167	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.814	3.804	0.010	1.000	180136	0.3559	Target=6.09	32.3		M
499.00 > 99.00	3.814	3.804	0.010	1.000	24159		7.46(3.04-9.13)	23.4		M
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.824	0.012	1.096	960242	1.36		109	1459	
20 Perfluorononanoic acid										RM
463.00 > 419.00	3.836	3.824	0.012	1.000	22262	0.0301	Target=6.34	1.5		RM
463.00 > 169.00	3.836	3.824	0.012	1.000	2014		11.05(3.17-9.51)	6.1		M
D 23 13C2 PFDA										
515.00 > 470.00	4.126	4.126	0.0	1.179	892797	1.44		115	2827	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.126	4.126	0.0	1.000	7108	0.009510	Target=7.79	1.2		M
513.00 > 169.00	4.126	4.126	0.0	1.000	1033		6.88(3.90-11.69)	4.6		M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.126	4.137	-0.011	0.997	42	0.000597		1.6		M
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.137	4.137	0.0	1.182	167900	1.83		153	90.1	M
D 21 13C8 FOSA										
506.00 > 78.00	4.215	4.204	0.011	1.204	817708	0.9363		74.9	2290	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.215	4.204	0.011	1.000	1150	0.001797		5.1		M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.268	4.268	0.0	1.219	60530	1.45		116	354	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.235	4.268	-0.033	0.992	162	0.003806		1.7		M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.369	4.358	0.011	1.145	657	0.002214	Target=2.87	1.1		M
599.00 > 99.00	4.358	4.358	0.0	1.142	326		2.02(1.44-4.31)	2.3		M
D 30 13C2 PFUnA										
565.00 > 520.00	4.402	4.391	0.011	1.257	699003	1.41		113	2456	

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130

(770) 232-5082 (Fax)

www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY: AECOM Technical Services Northeast, Inc.
PROJECT NAME: Northeast Alloy & Metals # 633045
CONTRACTED LAB: Eurofins Test America, Edison, Burlington
QA/QC LEVEL: DUSR
ANALYTICAL METHOD(S): SW 846 Method 8270E SIM, EPA Method 537 Modified
VALIDATION GUIDELINES: USEPA Region II data validation SOP (SVOC HW-22 Rev.5),
USEPA Contract Laboratory Program National Functional
Guidelines for Organic Data Review, **2008**; NYDEC Guidelines
for Sampling and Analysis of PFAS, January 2020, Professional
Judgment
SAMPLE MATRIX: Water
TYPES OF ANALYSES: 1,4-dioxane, Per and Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S): Amy L. Hogan, Thomas B. Granat
SDG NUMBER: 460-237446-1
SAMPLING DATE(S): June 24, 2021

SAMPLES:

<u>Client Sample ID</u>	<u>Laboratory ID</u>	<u>1,4-dioxane</u>	<u>PFAS</u>
MW-14 062421	460-237446-1	X	X
MW-15 062421	460-237446-2	X	X
MW-16 062421	460-237446-3	X	X
MW-17 062421	460-237446-4	X	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

Eurofins Test America, Edison – 460-237446-1

1,4-DIOXANE

SUMMARY

I.) General:

The analyses for 1,4-dioxane were performed per SW846 Method 8270D SIM.

II.) Overall Assessment of Data:

All laboratory data were acceptable without qualifications.

II.) Holding Times:

All Holding Time criteria were met. No data qualification was necessary.

IV.) GC/MS Tuning:

All GC/MS Tuning criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Initial Calibration Verification:

All Initial Calibration Verification criteria were met. No data qualification was necessary.

Continuing Calibration:

All Continuing Calibration criteria were met. No data qualification was necessary.

VI.) Blanks:

Method Blanks:

There were no detections in the associated method blank. No data qualification was necessary.

Equipment Blanks:

There was no associated field equipment blank submitted for this fraction of the SDG. No data qualification was necessary.

Field Blanks:

There was no associated field blank submitted for this SDG. No data qualification was necessary.

VII.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

One LCS / LCSD set was analyzed by the laboratory for this SDG. All criteria were met. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses data were not submitted for this fraction of the SDG. Data qualification based on the absence of MS/MSD data was not required. No data qualification was necessary.

X.) Field Duplicates:

There were no field duplicate samples as part of this SDG. No data qualification was necessary.

XI.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No data qualification was necessary.

XII.) Internal Standards Performance (ISTD):

All ISTD area count criteria were met. No data qualification was necessary.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No data qualification was necessary.

PERFLUOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 537 Modified.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

There were no major problems for this fraction of the SDG.

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete and accurate case narrative in the data package. The data package contains results for all samples and method types listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No data qualification was necessary.

V.) Blanks:

Method Blank (MB):

There were no detections in MB 200-168585/1-A. No data qualification was necessary.

Field Blank (FB):

There was no associated field blank submitted for this SDG. No data qualification was necessary.

Equipment Blank (EB):

There was no associated field equipment blank submitted for this fraction of the SDG. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS/MSD):

MS / MSD analyses data were not submitted for this fraction of the SDG. Data qualification based on the absence of MS/MSD data was not required. No data qualification was necessary.

VII.) Laboratory Control Sample (LCS):

One LCS was analyzed by the laboratory for this SDG. All criteria were met. No data qualification was necessary.

VIII.) Field Duplicates:

There were no field duplicate samples as part of this SDG. No data qualification was necessary.

IX.) Internal Standards Performance (ISTD):

13C2 PFTeDA Isotope Dilution Analyte (IDA) recovery associated with the following sample was below the method recommended limit: MW-14 062421 (460-237446-1). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample. No data qualification was necessary.

M2-8:2 FTS and M2-6:2 FTS Isotope Dilution Analyte (IDA) recoveries were above the method recommended limit for the following sample: MW-14 062421 (460-237446-1). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries. No data qualification was necessary.

X.) Ion Transitions:

The following ratio of quantifier ion response to qualifier ion response were outside the laboratory criteria:

<u>Client Sample ID</u>	<u>Laboratory ID</u>	<u>Analyte</u>	<u>Qualifier</u>
MW-14 062421	460-237446-1	PFHpA	J
		PFOS	J
MW-16 062421	460-237446-3	PFNA	J

XI.) Reporting limits (RLs):

Sample MW-14 062421 (460-237446-1) exhibited elevated noise or matrix interferences for Perfluorohexanoic acid (PFHxA) causing elevation of the detection limit. The reporting limit (RL) for Perfluorohexanoic acid (PFHxA) was raised to be equal to the DL. All other SDG sample Reporting Limits were acceptable. No data qualification was necessary.

Sample results that were greater than the MDL but less than the RL and were qualified as estimated (J) by the laboratory. These qualifiers were confirmed by the validator.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237446-1
SDG No.: _____
Client Sample ID: MW-14 062421 Lab Sample ID: 460-237446-1
Matrix: Water Lab File ID: h266693.d
Analysis Method: 8270E SIM ID Date Collected: 06/24/2021 10:50
Extract. Method: 3510C Date Extracted: 06/29/2021 09:54
Sample wt/vol: 250 (mL) Date Analyzed: 06/30/2021 01:54
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787432 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	24		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237446-1
SDG No.: _____
Client Sample ID: MW-15 062421 Lab Sample ID: 460-237446-2
Matrix: Water Lab File ID: h266694.d
Analysis Method: 8270E SIM ID Date Collected: 06/24/2021 09:25
Extract. Method: 3510C Date Extracted: 06/29/2021 09:54
Sample wt/vol: 250 (mL) Date Analyzed: 06/30/2021 02:10
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787432 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.92		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	34		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237446-1
 SDG No.: _____
 Client Sample ID: MW-16 062421 Lab Sample ID: 460-237446-3
 Matrix: Water Lab File ID: h266695.d
 Analysis Method: 8270E SIM ID Date Collected: 06/24/2021 08:40
 Extract. Method: 3510C Date Extracted: 06/29/2021 09:54
 Sample wt/vol: 250 (mL) Date Analyzed: 06/30/2021 02:26
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 5 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 787432 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.0		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	31		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237446-1
SDG No.: _____
Client Sample ID: MW-17 062421 Lab Sample ID: 460-237446-4
Matrix: Water Lab File ID: h266696.d
Analysis Method: 8270E SIM ID Date Collected: 06/24/2021 12:25
Extract. Method: 3510C Date Extracted: 06/29/2021 09:54
Sample wt/vol: 250 (mL) Date Analyzed: 06/30/2021 02:42
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787432 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	40		10-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237446-1
 SDG No.: _____
 Client Sample ID: MW-14 062421 Lab Sample ID: 460-237446-1
 Matrix: Water Lab File ID: PA210630B09.d
 Analysis Method: 537 (modified) Date Collected: 06/24/2021 10:50
 Extraction Method: 3535 Date Extracted: 06/30/2021 08:44
 Sample wt/vol: 260.5 (mL) Date Analyzed: 06/30/2021 21:29
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168615 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.0		4.8	0.86
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.9	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	ND	G	4.8	4.8
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.74	J I J	1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	4.6		1.9	0.41
375-95-1	Perfluorononanoic acid (PFNA)	0.28	J J	1.9	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.33
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.42
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.46	J J	1.9	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.86	J J	1.9	0.29
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.67	J I J	1.9	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.55
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	0.87
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	0.71
39108-34-4	8:2 FTS	ND		1.9	0.37

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237446-1
 SDG No.: _____
 Client Sample ID: MW-15 062421 Lab Sample ID: 460-237446-2
 Matrix: Water Lab File ID: PA210630B10.d
 Analysis Method: 537 (modified) Date Collected: 06/24/2021 09:25
 Extraction Method: 3535 Date Extracted: 06/30/2021 08:44
 Sample wt/vol: 250.9(mL) Date Analyzed: 06/30/2021 21:37
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 20(uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168615 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.3	J J	5.0	0.89
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.48	J J	2.0	0.47
307-24-4	Perfluorohexanoic acid (PFHxA)	0.64	J J	2.0	0.45
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.48	J J	2.0	0.24
335-67-1	Perfluorooctanoic acid (PFOA)	1.1	J J	2.0	0.42
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.25
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.31	J J	2.0	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74
27619-97-2	6:2 FTS	1.1	J J	5.0	1.1
39108-34-4	8:2 FTS	ND		2.0	0.39

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237446-1

SDG No.: _____

Client Sample ID: MW-16 062421 Lab Sample ID: 460-237446-3

Matrix: Water Lab File ID: PA210630B11.d

Analysis Method: 537 (modified) Date Collected: 06/24/2021 08:40

Extraction Method: 3535 Date Extracted: 06/30/2021 08:44

Sample wt/vol: 252.2 (mL) Date Analyzed: 06/30/2021 21:45

Con. Extract Vol.: 10 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 168615 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.2	J J	5.0	0.89
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.75	J J	2.0	0.47
307-24-4	Perfluorohexanoic acid (PFHxA)	0.70	J J	2.0	0.45
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.45	J J	2.0	0.24
335-67-1	Perfluorooctanoic acid (PFOA)	1.3	J J	2.0	0.42
375-95-1	Perfluorononanoic acid (PFNA)	0.41	J I J	2.0	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.34
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.25
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.1	J J	2.0	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74
27619-97-2	6:2 FTS	ND		5.0	1.1
39108-34-4	8:2 FTS	ND		2.0	0.39

TBG 8/23/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237446-1
 SDG No.: _____
 Client Sample ID: MW-17 062421 Lab Sample ID: 460-237446-4
 Matrix: Water Lab File ID: PA210630B12.d
 Analysis Method: 537 (modified) Date Collected: 06/24/2021 12:25
 Extraction Method: 3535 Date Extracted: 06/30/2021 08:44
 Sample wt/vol: 271.5 (mL) Date Analyzed: 06/30/2021 21:54
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168615 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	14		4.6	0.82
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.5	J J	1.8	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	2.8		1.8	0.42
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.5	J J	1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	5.5		1.8	0.39
375-95-1	Perfluorononanoic acid (PFNA)	0.88	J J	1.8	0.26
335-76-2	Perfluorodecanoic acid (PFDA)	0.31	J J	1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.32
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.35
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.40
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.58
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.49	J J	1.8	0.23
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.72	J J	1.8	0.28
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.22
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	20		1.8	0.27
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.53
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.6	0.83
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.6	0.68
27619-97-2	6:2 FTS	ND		4.6	1.0
39108-34-4	8:2 FTS	ND		1.8	0.36

TBG 8/23/2021

Attachment B

Support Documentation for Validation Qualifiers

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210630-46644.b\PA210630B09.d
 Lims ID: 460-237446-F-1-A
 Client ID: MW-14 062421
 Sample Type: Client
 Inject. Date: 30-Jun-2021 21:29:10 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 460-237446-F-1-A
 Misc. Info.: 200-0046644-009 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\chromfs\Burlington\ChromData\LC812\20210630-46644.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 02-Jul-2021 10:57:07 Calib Date: 20-May-2021 17:37:03
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\LC812\20210520-46072.b\PA210520ICAL07.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX1631

First Level Reviewer: nampitakw

Date: 01-Jul-2021 15:47:16

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.098	2.100	-0.002	0.599	875070	0.8709		69.7	2438	
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.115	2.100	0.015	1.008	119618	0.1828		4.3		M
D 3 13C5 PFPeA										
267.90 > 223.00	2.424	2.413	0.011	0.692	796324	1.09		87.3	409	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.398	2.426	-0.028	0.989	4271	0.006632		0.1		M
D 47 13C3 PFBS										
301.90 > 80.00	2.437	2.439	-0.002	0.696	947588	1.04		89.3	46736	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.450	2.439	0.011	1.005	10164	0.0121	Target=2.19	0.3		M
298.90 > 99.00	2.437	2.439	-0.002	1.000	3162		3.21(1.09-3.28)	0.4		M
D 7 13C2 PFHxA										
315.00 > 270.00	2.780	2.770	0.010	0.794	900558	1.14		90.9	1361	
6 Perfluorohexanoic acid										RM
313.00 > 269.00	2.756	2.770	-0.014	0.991	89424	0.1226	Target=12.12	0.7		R
313.00 > 119.00	2.744	2.770	-0.026	0.987	638		140.16(6.06-18.18)	0.1		M
D 11 18O2 PFHxS										
403.00 > 84.00	3.143	3.132	0.011	0.898	716949	1.01		85.6	1710	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.143	3.132	0.011	1.000	15121	0.0225	Target=4.23	0.9		M
399.00 > 99.00	3.143	3.132	0.011	1.000	4162		3.63(2.12-6.35)	1.7		M
D 9 13C4 PFHpA										
367.00 > 322.00	3.143	3.132	0.011	0.898	972985	1.23		98.3	2691	
10 Perfluoroheptanoic acid										RM
363.00 > 319.00	3.143	3.143	0.0	1.000	15095	0.0192	Target=3.49	0.3		RM
363.00 > 169.00	3.143	3.143	0.0	1.000	24486		0.62(1.75-5.24)	3.7		M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.492	3.483	0.009	0.997	166935	1.78		150	38.6	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.492	3.483	0.009	1.000	17733	0.1406			143	M
D 14 13C4 PFOA										
417.00 > 372.00	3.501	3.492	0.009	1.000	1052062	1.31		105	2898	
* 62 13C2 PFOA										
415.00 > 370.00	3.501	3.492	0.009		1002008	1.25			2438	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.510	3.492	0.018	1.003	103508	0.1197	Target=2.53		3.7	M
413.00 > 169.00	3.510	3.492	0.018	1.003	41935		2.47(1.27-3.80)		10.9	M
D 18 13C4 PFOS										
503.00 > 80.00	3.814	3.804	0.010	1.089	573806	1.12		93.9	135	
17 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	3.699	3.804	-0.105	0.970	9074	0.0176	Target=6.09		1.1	RM
499.00 > 99.00	3.681	3.804	-0.123	0.965	5694		1.59(3.04-9.13)		3.8	M
D 19 13C5 PFNA										
468.00 > 423.00	3.836	3.824	0.012	1.096	1024258	1.39		111	2155	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.836	3.824	0.012	1.000	5749	0.007283	Target=6.34		0.8	M
463.00 > 169.00	3.836	3.824	0.012	1.000	943		6.10(3.17-9.51)		1.1	M
D 23 13C2 PFDA										
515.00 > 470.00	4.137	4.126	0.011	1.182	961939	1.48		119	3729	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.149	4.137	0.012	1.000	219	0.002467			6.2	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.149	4.137	0.012	1.185	211861	2.20		184	115	
D 21 13C8 FOSA										
506.00 > 78.00	4.215	4.204	0.011	1.204	778193	0.8509		68.1	1933	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.225	4.204	0.021	1.002	322	0.000529			1.9	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.280	4.268	0.012	1.223	73160	1.67		133	791	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.302	4.268	0.034	1.005	171	0.003323			2.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.402	4.391	0.011	1.257	716114	1.38		110	3237	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.391	4.391	0.0	0.997	1192	0.002104	Target=7.94		0.8	RM
563.00 > 169.00	4.347	4.391	-0.044	0.987	43		27.72(3.97-11.91)		0.3	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.413	4.402	0.011	1.260	79076	1.80		144	731	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.268	4.402	-0.134	0.967	545	-0.001084			1.6	M
D 36 13C2 PFDaA										
615.00 > 570.00	4.632	4.622	0.010	1.323	623377	1.15		91.7	4357	

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210630-46644.b\PA210630B11.d
 Lims ID: 460-237446-F-3-A
 Client ID: MW-16 062421
 Sample Type: Client
 Inject. Date: 30-Jun-2021 21:45:44 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 460-237446-F-3-A
 Misc. Info.: 200-0046644-011 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\chromfs\Burlington\ChromData\LC812\20210630-46644.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 02-Jul-2021 10:57:07 Calib Date: 20-May-2021 17:37:03
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\LC812\20210520-46072.b\PA210520ICAL07.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX1631

First Level Reviewer: nampitakw

Date: 01-Jul-2021 16:00:14

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.091	2.100	-0.009	0.599	1195314	0.9587		76.7	7580	
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.091	2.100	-0.009	1.000	71578	0.0801		8.4		M
D 3 13C5 PFPeA										
267.90 > 223.00	2.414	2.413	0.001	0.691	1028919	1.14		90.9	1247	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.414	2.426	-0.012	1.000	15797	0.0190		0.4		M
D 47 13C3 PFBS										M
301.90 > 80.00	2.440	2.439	0.001	0.699	1125401	0.99		85.5	58844	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.440	2.439	0.001	1.000	4214	0.004225	Target=2.19	1.0		
298.90 > 99.00	2.440	2.439	0.001	1.000	2693		1.56(1.09-3.28)	0.8		M
D 7 13C2 PFHxA										
315.00 > 270.00	2.771	2.770	0.001	0.793	1183930	1.20		96.3	3648	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.771	2.770	0.001	1.000	16939	0.0177	Target=12.12	1.1		M
313.00 > 119.00	2.771	2.770	0.001	1.000	1891		8.96(6.06-18.18)	2.7		M
D 11 18O2 PFHxS										
403.00 > 84.00	3.133	3.132	0.001	0.897	914498	1.04		88.0	2134	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.133	3.132	0.001	1.000	6123	0.007142	Target=4.23	3.1		M
399.00 > 99.00	3.123	3.132	-0.009	0.997	2131		2.87(2.12-6.35)	1.8		M
D 9 13C4 PFHpA										
367.00 > 322.00	3.144	3.132	0.012	0.900	1142720	1.16		93.0	2882	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.144	3.143	0.001	1.000	10353	0.0112	Target=3.49	1.3		
363.00 > 169.00	3.144	3.143	0.001	1.000	2977		3.48(1.75-5.24)	7.9		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.484	3.483	0.001	0.997	121805	1.05		88.1	136	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.493	3.483	0.010	1.003	1462	0.0159			20.6	M
D 14 13C4 PFOA										M
417.00 > 372.00	3.493	3.492	0.001	1.000	1218519	1.22		97.9	2884	M
* 62 13C2 PFOA										
415.00 > 370.00	3.493	3.492	0.001		1243348	1.25			2470	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.493	3.492	0.001	1.000	31956	0.0319	Target=2.53		6.6	M
413.00 > 169.00	3.493	3.492	0.001	1.000	15592		2.05(1.27-3.80)		37.0	M
D 18 13C4 PFOS										
503.00 > 80.00	3.806	3.804	0.002	1.089	593788	0.9361		78.3	852	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.701	3.804	-0.103	0.972	15180	0.0284	Target=6.09		7.9	M
499.00 > 99.00	3.816	3.804	0.012	1.003	3034		5.00(3.04-9.13)		6.8	M
D 19 13C5 PFNA										
468.00 > 423.00	3.826	3.824	0.002	1.095	1114987	1.22		97.2	3464	
20 Perfluorononanoic acid										RM
463.00 > 419.00	3.838	3.824	0.014	1.003	8890	0.0103	Target=6.34		2.8	RM
463.00 > 169.00	3.826	3.824	0.002	1.000	928		9.58(3.17-9.51)		7.2	M
D 23 13C2 PFDA										M
515.00 > 470.00	4.129	4.126	0.003	1.182	917639	1.14		91.3	2351	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.129	4.126	0.003	1.000	2254	0.002934	Target=7.79		1.5	M
513.00 > 169.00	4.129	4.126	0.003	1.000	246		9.16(3.90-11.69)		2.1	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.140	4.137	0.003	1.185	133145	1.12		93.1	337	
D 21 13C8 FOSA										M
506.00 > 78.00	4.207	4.204	0.003	1.204	1078216	0.9501		76.0	2915	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.196	4.204	-0.008	0.997	358	0.000424			1.6	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.272	4.268	0.004	1.223	54182	1.00		79.7	896	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.260	4.268	-0.008	0.997	41	0.001076			0.9	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.395	4.391	0.004	1.258	659489	1.02		81.8	3815	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.406	4.402	0.004	1.261	52065	0.9535		76.3	766	
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.428	4.402	0.026	1.005	76	-0.008899			2.7	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.627	4.622	0.005	1.324	670024	0.99		79.4	2578	
37 Perfluorododecanoic acid										RM
613.00 > 569.00	4.627	4.622	0.005	1.000	1196	0.002225	Target=5.94		0.9	RM
613.00 > 169.00	4.606	4.622	-0.016	0.996	58		20.62(2.97-8.92)		1.6	M

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130

(770) 232-5082 (Fax)

www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY: AECOM Technical Services Northeast, Inc.
PROJECT NAME: Northeast Alloy & Metals # 633045
CONTRACTED LAB: Eurofins Test America, Edison, South Burlington
QA/QC LEVEL: DUSR
ANALYTICAL METHOD(S): SW 846 Method 8270E SIM, EPA Method 537 Modified
VALIDATION GUIDELINES: USEPA Region II data validation SOP (SVOC HW-22 Rev.5),
USEPA Contract Laboratory Program National Functional
Guidelines for Organic Data Review, **2008**; NYDEC Guidelines
for Sampling and Analysis of PFAS, January 2020, Professional
Judgment
SAMPLE MATRIX: Water
TYPES OF ANALYSES: 1,4-dioxane, Per and Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S): Amy L. Hogan, Thomas B. Granat
SDG NUMBER: 460-237479-1
SAMPLING DATE(S): June 21-22, 2021

SAMPLES:

<u>Client Sample ID</u>	<u>Laboratory ID</u>	<u>1,4-dioxane</u>	<u>PFAS</u>
MW-7R 062221	460-237479-1	X	X
MW-1 062221	460-237479-2	X	X
MW-8 062221	460-237479-3	X	X
BR-3 062121	460-237479-5	X	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

Eurofins Test America, Edison – 460-237479-1

1,4-DIOXANE

SUMMARY

I.) General:

The analyses for 1,4-dioxane were performed per SW846 Method 8270D SIM.

II.) Overall Assessment of Data:

All laboratory data were acceptable without qualifications.

II.) Holding Times:

All Holding Time criteria were met. No data qualification was necessary.

IV.) GC/MS Tuning:

All GC/MS Tuning criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Initial Calibration Verification:

All Initial Calibration Verification criteria were met. No data qualification was necessary.

Continuing Calibration:

All Continuing Calibration criteria were met. No data qualification was necessary.

VI.) Blanks:

Method Blanks:

There were no detections in the associated method blank. No data qualification was necessary.

Equipment Blanks:

There was no associated field equipment blank submitted for this fraction of the SDG. No data qualification was necessary.

Field Blanks:

There was no associated field blank submitted for this SDG. No data qualification was necessary.

VII.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

One LCS / LCSD set was analyzed by the laboratory for this SDG. The Relative Percent Difference (RPD) at 22% exceeded the 20% QC limit. Data qualification based on LCS RPD criteria was not required. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses data were not submitted for this fraction of the SDG. Data qualification based on the absence of MS/MSD data was not required. No data qualification was necessary.

X.) Field Duplicates:

There were no field duplicate samples as part of this SDG. No data qualification was necessary.

XI.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No data qualification was necessary.

XII.) Internal Standards Performance (ISTD):

All ISTD area count criteria were met. No data qualification was necessary.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No data qualification was necessary.

PERFLUOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 537 Modified.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

There were no major problems for this fraction of the SDG.

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete and accurate case narrative in the data package. The data package contains results for all samples and method types listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No data qualification was necessary.

V.) Blanks:

Method Blank (MB):

There were no detections in MB 200-168535/1-A. No data qualification was necessary.

Field Blank (FB):

There was no associated field blank submitted for this SDG. No data qualification was necessary.

Equipment Blank (EB):

There was no associated field equipment blank submitted for this fraction of the SDG. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS/MSD):

MS / MSD analyses data were not submitted for this fraction of the SDG. Data qualification based on the absence of MS/MSD data was not required. No data qualification was necessary.

VII.) Laboratory Control Sample (LCS):

One LCS was analyzed by the laboratory for this SDG. The PFUnA recovery of 131% was above the QC upper limit of 130%. The associated PFUnA results were estimated (J/UJ).

VIII.) Field Duplicates:

There were no field duplicate samples as part of this SDG. No data qualification was necessary.

IX.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No data qualification was necessary.

X.) Ion Transitions:

The following ratio of quantifier ion response to qualifier ion response was outside the laboratory criteria:

<u>Client Sample ID</u>	<u>Laboratory ID</u>	<u>Analyte</u>	<u>Qualifier</u>
MW-7R 062221	460-237479-1	PFHpA	J

XI.) Reporting limits (RLs):

All SDG sample Reporting Limits were acceptable. No data qualification was necessary.

Sample results that were greater than the MDL but less than the RL and were qualified as estimated (J) by the laboratory. These qualifiers were confirmed by the validator.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237479-1
 SDG No.: _____
 Client Sample ID: MW-7R 062221 Lab Sample ID: 460-237479-1
 Matrix: Water Lab File ID: h266653.d
 Analysis Method: 8270E SIM ID Date Collected: 06/22/2021 08:20
 Extract. Method: 3510C Date Extracted: 06/28/2021 16:09
 Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 00:32
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 5 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 787166 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND	*1	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	44		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237479-1
 SDG No.: _____
 Client Sample ID: MW-1 062221 Lab Sample ID: 460-237479-2
 Matrix: Water Lab File ID: h266654.d
 Analysis Method: 8270E SIM ID Date Collected: 06/22/2021 10:15
 Extract. Method: 3510C Date Extracted: 06/28/2021 16:09
 Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 00:48
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 5 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 787166 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND	*1	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	50		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237479-1
 SDG No.: _____
 Client Sample ID: MW-8 062221 Lab Sample ID: 460-237479-3
 Matrix: Water Lab File ID: h266655.d
 Analysis Method: 8270E SIM ID Date Collected: 06/22/2021 10:25
 Extract. Method: 3510C Date Extracted: 06/28/2021 16:09
 Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 01:03
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 5 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 787166 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND	*1	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	38		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237479-1
 SDG No.: _____
 Client Sample ID: BR-3 062121 Lab Sample ID: 460-237479-5
 Matrix: Water Lab File ID: h266656.d
 Analysis Method: 8270E SIM ID Date Collected: 06/21/2021 15:20
 Extract. Method: 3510C Date Extracted: 06/28/2021 16:09
 Sample wt/vol: 250 (mL) Date Analyzed: 06/29/2021 01:19
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 5 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 787166 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND	*1	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	44		10-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237479-1
 SDG No.: _____
 Client Sample ID: MW-7R 062221 Lab Sample ID: 460-237479-1
 Matrix: Water Lab File ID: PA210629B07.d
 Analysis Method: 537 (modified) Date Collected: 06/22/2021 08:20
 Extraction Method: 3535 Date Extracted: 06/29/2021 10:16
 Sample wt/vol: 257.1 (mL) Date Analyzed: 06/29/2021 19:08
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168576 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.7	J J	4.9	0.87
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.9	0.46
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.9	0.44
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.26	J I J	1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	0.55	J J	1.9	0.41
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.9	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND	*+ UJ	1.9	0.33
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.37
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.42
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.37	J J	1.9	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.29
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.0	J J	1.9	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.56
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.88
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.72
27619-97-2	6:2 FTS	ND		4.9	1.1
39108-34-4	8:2 FTS	ND		1.9	0.38

TBG 8/24/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237479-1
 SDG No.: _____
 Client Sample ID: MW-1 062221 Lab Sample ID: 460-237479-2
 Matrix: Water Lab File ID: PA210629B08.d
 Analysis Method: 537 (modified) Date Collected: 06/22/2021 10:15
 Extraction Method: 3535 Date Extracted: 06/29/2021 10:16
 Sample wt/vol: 275.7 (mL) Date Analyzed: 06/29/2021 19:16
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168576 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.2	J J	4.5	0.81
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.8	0.43
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.41
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.8	0.38
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND	*+ UJ	1.8	0.31
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.35
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.39
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.57
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.31	J J	1.8	0.23
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.27
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.21
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.26
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.52
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.5	0.82
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.5	0.67
27619-97-2	6:2 FTS	ND		4.5	0.99
39108-34-4	8:2 FTS	ND		1.8	0.35

TBG 8/24/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237479-1
 SDG No.: _____
 Client Sample ID: MW-8 062221 Lab Sample ID: 460-237479-3
 Matrix: Water Lab File ID: PA210629B09.d
 Analysis Method: 537 (modified) Date Collected: 06/22/2021 10:25
 Extraction Method: 3535 Date Extracted: 06/29/2021 10:16
 Sample wt/vol: 249.8 (mL) Date Analyzed: 06/29/2021 19:24
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168576 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.7	J J	5.0	0.89
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.54	J J	2.0	0.47
307-24-4	Perfluorohexanoic acid (PFHxA)	0.75	J J	2.0	0.45
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.73	J J	2.0	0.24
335-67-1	Perfluorooctanoic acid (PFOA)	0.58	J J	2.0	0.42
375-95-1	Perfluorononanoic acid (PFNA)	0.69	J J	2.0	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	0.48	J J	2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	0.45	J *+ J	2.0	0.34
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.39
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.30	J J	2.0	0.25
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.32	J J	2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.97	J J	2.0	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.58
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74
27619-97-2	6:2 FTS	ND		5.0	1.1
39108-34-4	8:2 FTS	ND		2.0	0.39

TBG 8/24/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237479-1
 SDG No.: _____
 Client Sample ID: BR-3 062121 Lab Sample ID: 460-237479-5
 Matrix: Water Lab File ID: PA210629B10.d
 Analysis Method: 537 (modified) Date Collected: 06/21/2021 15:20
 Extraction Method: 3535 Date Extracted: 06/29/2021 10:16
 Sample wt/vol: 269.3 (mL) Date Analyzed: 06/29/2021 19:33
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168576 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		4.6	0.83
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.9	0.44
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.9	0.42
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.22
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.9	0.39
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.9	0.26
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.28
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND	*+ UJ	1.9	0.32
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.36
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.40
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.59
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.23
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.28
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.28
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.27
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.54
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.6	0.84
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.6	0.69
27619-97-2	6:2 FTS	1.2	J J	4.6	1.0
39108-34-4	8:2 FTS	ND		1.9	0.36

TBG 8/24/2021

Attachment B

Support Documentation for Validation Qualifiers

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237479-1

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

Lab Sample ID: MB 200-168535/1-A

Matrix: Water

Analysis Batch: 168576

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 168535

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C2 PFDA	97		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFUnA	90		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFDoA	69		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C2 PFTeDA	57		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C3 PFBS	92		50 - 150	06/29/21 10:15	06/29/21 18:26	1
18O2 PFHxS	91		50 - 150	06/29/21 10:15	06/29/21 18:26	1
13C4 PFOS	95		50 - 150	06/29/21 10:15	06/29/21 18:26	1
d3-NMeFOSAA	84		50 - 150	06/29/21 10:15	06/29/21 18:26	1
d5-NEtFOSAA	78		50 - 150	06/29/21 10:15	06/29/21 18:26	1
M2-6:2 FTS	92		25 - 150	06/29/21 10:15	06/29/21 18:26	1
M2-8:2 FTS	101		25 - 150	06/29/21 10:15	06/29/21 18:26	1

Lab Sample ID: LCS 200-168535/2-A

Matrix: Water

Analysis Batch: 168576

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 168535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	46.4		ng/L		116	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	47.2		ng/L		118	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	45.4		ng/L		114	70 - 130
Perfluoroheptanoic acid (PFHpA)	40.0	44.7		ng/L		112	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	45.6		ng/L		114	70 - 130
Perfluorononanoic acid (PFNA)	40.0	46.7		ng/L		117	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	42.9		ng/L		107	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	52.6	*+	ng/L		131	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	49.6		ng/L		124	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	45.5		ng/L		114	70 - 130
Perfluorotetradecanoic acid (PFTeA)	40.0	51.2		ng/L		128	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	41.1		ng/L		116	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	42.4		ng/L		117	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	44.3		ng/L		116	50 - 150
Perfluorodecanesulfonic acid (PFDS)	38.6	36.4		ng/L		94	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	41.3		ng/L		111	70 - 130
Perfluorooctanesulfonamide (FOSA)	40.0	43.2		ng/L		108	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	45.3		ng/L		113	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	44.2		ng/L		110	70 - 130
6:2 FTS	37.9	43.6		ng/L		115	50 - 150
8:2 FTS	38.3	43.5		ng/L		113	50 - 150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210629-46628.b\PA210629B07.d
 Lims ID: 460-237479-F-1-A
 Client ID: MW-7R 062221
 Sample Type: Client
 Inject. Date: 29-Jun-2021 19:08:12 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 460-237479-F-1-A
 Misc. Info.: 200-0046628-007 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\chromfs\Burlington\ChromData\LC812\20210629-46628.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 01-Jul-2021 15:21:15 Calib Date: 20-May-2021 17:37:03
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\LC812\20210520-46072.b\PA210520ICAL07.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX1626

First Level Reviewer: nampitakw

Date: 30-Jun-2021 14:52:34

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.100	2.100	0.0	0.600	1319355	1.14		91.6	8137	
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.100	2.100	0.0	1.000	42692	0.0433			8.1	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.426	2.413	0.013	0.693	1095067	1.31		105	2183	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.413	2.413	0.0	0.995	8067	0.009109			0.5	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.439	2.439	0.0	0.697	1117680	1.07		91.9	84296	M
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.439	2.439	0.0	1.000	9349	0.009438	Target=2.19		1.1	M
298.90 > 99.00	2.439	2.439	0.0	1.000	4249		2.20(1.09-3.28)		2.1	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.782	2.770	0.012	0.795	1190979	1.31		105	2733	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.770	2.770	0.0	0.996	9901	0.0103	Target=12.12		1.1	M
313.00 > 119.00	2.782	2.770	0.012	1.000	988		10.02(6.06-18.18)		2.8	M
D 11 18O2 PFHxS										M
403.00 > 84.00	3.143	3.132	0.011	0.898	851594	1.05		88.6	2416	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.143	3.132	0.011	1.000	5481	0.006865	Target=4.23		3.8	M
399.00 > 99.00	3.143	3.132	0.011	1.000	2326		2.36(2.12-6.35)		2.2	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.143	3.143	0.0	0.898	1151166	1.27		101	4298	
10 Perfluoroheptanoic acid										RM
363.00 > 319.00	3.143	3.143	0.0	1.000	6098	0.006565	Target=3.49		1.6	R
363.00 > 169.00	3.143	3.143	0.0	1.000	1003		6.08(1.75-5.24)		3.7	M

VALIDATA

Chemical Services, Inc.

2159 Wynnton Pointe, Duluth, GA 30097

(770) 232-0130

(770) 232-5082 (Fax)

www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY: AECOM Technical Services Northeast, Inc.
PROJECT NAME: Northeast Alloy & Metals # 633045
CONTRACTED LAB: Eurofins Test America, Edison, South Burlington
QA/QC LEVEL: DUSR
ANALYTICAL METHOD(S): SW 846 Method 8270E SIM, EPA Method 537 Modified
VALIDATION GUIDELINES: USEPA Region II data validation SOP (SVOC HW-22 Rev.5),
USEPA Contract Laboratory Program National Functional
Guidelines for Organic Data Review, **2008**; NYDEC Guidelines
for Sampling and Analysis of PFAS, January 2020, Professional
Judgment
SAMPLE MATRIX: Water
TYPES OF ANALYSES: 1,4-dioxane, Per and Polyfluoroalkyl Substances (PFAS)
DATA REVIEWER(S): Amy L. Hogan, Thomas B Granat
SDG NUMBER: 460-237488-1
SAMPLING DATE(S): June 22, 2021

SAMPLES:

<u>Client Sample ID</u>	<u>Laboratory ID</u>	<u>1,4-dioxane</u>	<u>PFAS</u>
MW-9 062221	460-237488-1	X	X
MW-10 062221	460-237488-2	X	X
MW-3 062221	460-237488-3	X	X
MW-13 062221	460-237488-4	X	X

Suffix Codes: DL= DILUTION, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE, RE = REANALYSIS

Qualifier	Definition
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.
J	The reported result was an estimated value with an unknown bias.
J+	The result was an estimated quantity, but the result may be biased high.
J-	The result was an estimated quantity, but the result may be biased low.
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value was the estimated concentration in the sample.
UJ	The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

DATA USABILITY SUMMARY REPORT

Eurofins Test America, Edison – 460-237488-1

1,4-DIOXANE

SUMMARY

I.) General:

The analyses for 1,4-dioxane were performed per SW846 Method 8270D SIM.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

II.) Holding Times:

The 8 days between sample collection and extraction for MW-9 092221 exceeded the 7-day QC limit. The non-detect result for the sample was qualified as estimated (UJ).

IV.) GC/MS Tuning:

All GC/MS Tuning criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Initial Calibration Verification:

All Initial Calibration Verification criteria were met. No data qualification was necessary.

Continuing Calibration:

All Continuing Calibration criteria were met. No data qualification was necessary.

VI.) Blanks:

Method Blanks:

There were no detections in the associated method blank. No data qualification was necessary.

Equipment Blanks:

There was no associated field equipment blank submitted for this fraction of the SDG. No data

qualification was necessary.

Field Blanks:

There was no associated field blank submitted for this SDG. No data qualification was necessary.

VII.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

Two LCS / LCSD sets were analyzed by the laboratory for this SDG. All criteria were met. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses data were not submitted for this fraction of the SDG. Data qualification based on the absence of MS/MSD data was not required. No data qualification was necessary.

X.) Field Duplicates:

There were no field duplicate samples as part of this SDG. No data qualification was necessary.

XI.) TCL Compound Identification:

All TCL Compound Identification criteria were met. No data qualification was necessary.

XII.) Internal Standards Performance (ISTD):

All ISTD area count criteria were met. No data qualification was necessary.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No data qualification was necessary.

PERFLUOROALKYL SUBSTANCES (PFAS)

SUMMARY

I.) General:

The analyses for Perfluoroalkyl Substances were performed by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS) per EPA Method 537 Modified.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualifications.

MAJOR ISSUES

There were no major problems for this fraction of the SDG.

MINOR ISSUES

I.) Laboratory Data Package:

The required documentation was present and complete. The laboratory presented a complete and accurate case narrative in the data package. The data package contains results for all samples and method types listed on the COC.

II.) Sample Receipt, Preservation, and Holding Times:

The samples were received intact with proper COC documentation and signatures. The samples were received within the method temperature requirements. The samples were extracted and analyzed within the method hold times.

III.) Initial Calibration (ICAL) and Initial Calibration Verification (ICV):

All Initial Calibration criteria were met. No data qualification was necessary.

IV.) Continuing Calibration (CCV):

All Continuing Calibration Verification criteria were met. No data qualification was necessary.

V.) Blanks:

Method Blank (MB):

There were no detections in MB 200-168535/1-A. No data qualification was necessary.

Field Blank (FB):

There was no associated field blank submitted for this SDG. No data qualification was necessary.

Equipment Blank (EB):

There was no associated field equipment blank submitted for this fraction of the SDG. No data qualification was necessary.

VI.) Matrix Spike / Matrix Spike Duplicate (MS/MSD):

MS / MSD analyses data were not submitted for this fraction of the SDG. Data qualification based on the absence of MS/MSD data was not required. No data qualification was necessary.

VII.) Laboratory Control Sample (LCS):

One LCS was analyzed by the laboratory for this SDG. The PFUnA recovery of 131% was above the QC upper limit of 130%. The associated PFUnA results were estimated (UJ).

VIII.) Field Duplicates:

There were no field duplicate samples as part of this SDG. No data qualification was necessary.

IX.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No data qualification was necessary.

X.) Ion Transitions:

The following ratio of quantifier ion response to qualifier ion response were outside the laboratory criteria:

<u>Client Sample ID</u>	<u>Laboratory ID</u>	<u>Analyte</u>	<u>Qualifier</u>
MW-10 062221	460-237488-2	PFBS	J
MW-3 062221	460-237488-3	PFHpA	J
		PFBS	J
MW-13 062221	460-237488-4	PFHpA	J
		PFBS	J
		PFOS	J

XI.) Reporting limits (RLs):

All SDG sample Reporting Limits were acceptable. No data qualification was necessary.

Sample results that were greater than the MDL but less than the RL and were qualified as estimated (J) by the laboratory. These qualifiers were confirmed by the validator.

XII.) Instrument Performance criteria:

All Instrument Performance criteria were met. No data qualification was necessary.

XIII.) Sample and QC Calculation Verification:

All Sample and QC Calculation Verification criteria were met. No discrepancies were noted.

Attachment A

Sample Result Forms (FORM Is) Corrected for Validation Qualifiers

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237488-1
 SDG No.: _____
 Client Sample ID: MW-9 062221 Lab Sample ID: 460-237488-1
 Matrix: Water Lab File ID: h266706a.d
 Analysis Method: 8270E SIM ID Date Collected: 06/22/2021 14:25
 Extract. Method: 3510C Date Extracted: 06/30/2021 07:18
 Sample wt/vol: 250 (mL) Date Analyzed: 06/30/2021 10:18
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 5 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 787432 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND	H UJ	0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	52		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237488-1
SDG No.: _____
Client Sample ID: MW-10 062221 Lab Sample ID: 460-237488-2
Matrix: Water Lab File ID: h266698.d
Analysis Method: 8270E SIM ID Date Collected: 06/22/2021 14:37
Extract. Method: 3510C Date Extracted: 06/29/2021 09:54
Sample wt/vol: 250 (mL) Date Analyzed: 06/30/2021 03:14
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787432 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.36		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	42		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237488-1
SDG No.: _____
Client Sample ID: MW-3 062221 Lab Sample ID: 460-237488-3
Matrix: Water Lab File ID: h266699.d
Analysis Method: 8270E SIM ID Date Collected: 06/22/2021 15:35
Extract. Method: 3510C Date Extracted: 06/29/2021 09:54
Sample wt/vol: 250 (mL) Date Analyzed: 06/30/2021 03:30
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787432 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	45		10-150

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Edison Job No.: 460-237488-1
SDG No.: _____
Client Sample ID: MW-13 062221 Lab Sample ID: 460-237488-4
Matrix: Water Lab File ID: h266700.d
Analysis Method: 8270E SIM ID Date Collected: 06/22/2021 16:25
Extract. Method: 3510C Date Extracted: 06/29/2021 09:54
Sample wt/vol: 250 (mL) Date Analyzed: 06/30/2021 03:46
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 787432 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.016

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	40		10-150

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237488-1
 SDG No.: _____
 Client Sample ID: MW-9 062221 Lab Sample ID: 460-237488-1
 Matrix: Water Lab File ID: PA210629B25.d
 Analysis Method: 537 (modified) Date Collected: 06/22/2021 14:25
 Extraction Method: 3535 Date Extracted: 06/29/2021 10:16
 Sample wt/vol: 255.7 (mL) Date Analyzed: 06/29/2021 21:37
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168576 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	2.5	J J	4.9	0.87
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.46
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.44
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.37	J J	2.0	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	1.0	J J	2.0	0.41
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND	*+ UJ	2.0	0.34
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.42
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.62
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.41	J J	2.0	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.40	J J	2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.58	J J	2.0	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.56
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.9	0.88
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.9	0.73
27619-97-2	6:2 FTS	ND		4.9	1.1
39108-34-4	8:2 FTS	ND		2.0	0.38

TBG 8/24/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237488-1
 SDG No.: _____
 Client Sample ID: MW-10 062221 Lab Sample ID: 460-237488-2
 Matrix: Water Lab File ID: PA210629B26.d
 Analysis Method: 537 (modified) Date Collected: 06/22/2021 14:37
 Extraction Method: 3535 Date Extracted: 06/29/2021 10:16
 Sample wt/vol: 264.1 (mL) Date Analyzed: 06/29/2021 21:45
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168576 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.3	J J	4.7	0.85
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.99	J J	1.9	0.45
307-24-4	Perfluorohexanoic acid (PFHxA)	0.83	J J	1.9	0.43
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.65	J J	1.9	0.23
335-67-1	Perfluorooctanoic acid (PFOA)	1.3	J J	1.9	0.40
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.9	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.9	0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND	*+ UJ	1.9	0.33
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.9	0.36
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.41
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.60
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.62	J I J	1.9	0.24
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.60	J J	1.9	0.29
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.9	0.22
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.29
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.87	J J	1.9	0.28
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.55
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.7	0.85
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.7	0.70
27619-97-2	6:2 FTS	13		4.7	1.0
39108-34-4	8:2 FTS	ND		1.9	0.37

TBG 8/24/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237488-1

SDG No.: _____

Client Sample ID: MW-3 062221 Lab Sample ID: 460-237488-3

Matrix: Water Lab File ID: PA210629B27.d

Analysis Method: 537 (modified) Date Collected: 06/22/2021 15:35

Extraction Method: 3535 Date Extracted: 06/29/2021 10:16

Sample wt/vol: 248.2 (mL) Date Analyzed: 06/29/2021 21:54

Con. Extract Vol.: 10 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 168576 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.2	J J	5.0	0.90
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.48
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.46
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.26	J I J	2.0	0.24
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.43
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.31
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND	*+ UJ	2.0	0.35
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.39
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.44
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.64
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.32	J I J	2.0	0.25
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.30	J J	2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.24
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.31
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.40	J J	2.0	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.58
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.91
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.75
27619-97-2	6:2 FTS	ND		5.0	1.1
39108-34-4	8:2 FTS	ND		2.0	0.39

TBG 8/24/2021

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 460-237488-1
 SDG No.: _____
 Client Sample ID: MW-13 062221 Lab Sample ID: 460-237488-4
 Matrix: Water Lab File ID: PA210629B28.d
 Analysis Method: 537 (modified) Date Collected: 06/22/2021 16:25
 Extraction Method: 3535 Date Extracted: 06/29/2021 10:16
 Sample wt/vol: 251.8 (mL) Date Analyzed: 06/29/2021 22:02
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 168576 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		5.0	0.89
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.47
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.45
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.51	J I J	2.0	0.24
335-67-1	Perfluorooctanoic acid (PFOA)	1.9	J J	2.0	0.42
375-95-1	Perfluorononanoic acid (PFNA)	0.42	J J	2.0	0.28
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.30
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND	*+ UJ	2.0	0.34
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.38
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.43
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.63
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.77	J I J	2.0	0.25
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.65	J J	2.0	0.30
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.23
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.30
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.7	J I J	2.0	0.29
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.57
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	0.90
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	0.74
27619-97-2	6:2 FTS	ND		5.0	1.1
39108-34-4	8:2 FTS	ND		2.0	0.39

TBG 8/24/2021

Attachment B

Support Documentation for Validation Qualifiers

QC Sample Results

Client: New York State D.E.C.
Project/Site: Northeast Alloys & Metals #633045

Job ID: 460-237488-1

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

Lab Sample ID: **LCS 200-168535/2-A**

Matrix: Water

Analysis Batch: 168576

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 168535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanoic acid (PFHpA)	40.0	44.7		ng/L		112	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	45.6		ng/L		114	70 - 130
Perfluorononanoic acid (PFNA)	40.0	46.7		ng/L		117	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	42.9		ng/L		107	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	52.6	*+	ng/L		131	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	49.6		ng/L		124	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	45.5		ng/L		114	70 - 130
Perfluorotetradecanoic acid (PFTeA)	40.0	51.2		ng/L		128	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	41.1		ng/L		116	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	42.4		ng/L		117	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	44.3		ng/L		116	50 - 150
Perfluorodecanesulfonic acid (PFDS)	38.6	36.4		ng/L		94	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	41.3		ng/L		111	70 - 130
Perfluorooctanesulfonamide (FOSA)	40.0	43.2		ng/L		108	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	45.3		ng/L		113	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	44.2		ng/L		110	70 - 130
6:2 FTS	37.9	43.6		ng/L		115	50 - 150
8:2 FTS	38.3	43.5		ng/L		113	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C8 FOSA	67		25 - 150
13C4 PFBA	108		25 - 150
13C5 PFPeA	107		25 - 150
13C2 PFHxA	110		50 - 150
13C4 PFHpA	102		50 - 150
13C4 PFOA	103		50 - 150
13C5 PFNA	101		50 - 150
13C2 PFDA	104		50 - 150
13C2 PFUnA	86		50 - 150
13C2 PFDoA	71		50 - 150
13C2 PFTeDA	63		50 - 150
13C3 PFBS	98		50 - 150
18O2 PFHxS	94		50 - 150
13C4 PFOS	97		50 - 150
d3-NMeFOSAA	84		50 - 150
d5-NEtFOSAA	80		50 - 150
M2-6:2 FTS	100		25 - 150
M2-8:2 FTS	108		25 - 150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210629-46628.b\PA210629B26.d
 Lims ID: 460-237488-F-2-A
 Client ID: MW-10 062221
 Sample Type: Client
 Inject. Date: 29-Jun-2021 21:45:44 ALS Bottle#: 26 Worklist Smp#: 26
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 460-237488-F-2-A
 Misc. Info.: 200-0046628-026 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\chromfs\Burlington\ChromData\LC812\20210629-46628.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 01-Jul-2021 15:22:01 Calib Date: 20-May-2021 17:37:03
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\LC812\20210520-46072.b\PA210520ICAL07.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX1626

First Level Reviewer: nampitakw

Date: 30-Jun-2021 16:16:36

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.091	2.100	-0.009	0.597	1079693	0.9311		74.5	5009	
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.100	2.100	0.0	1.004	27025	0.0335			2.5	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.413	2.413	0.0	0.689	958182	1.14		91.0	936	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.426	2.413	0.013	1.005	20259	0.0261			0.3	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.439	2.439	0.0	0.697	1053432	1.00		86.0	59234	M
5 Perfluorobutanesulfonic acid										RM
298.90 > 80.00	2.439	2.439	0.0	1.000	15323	0.0164	Target=2.19		1.0	RM
298.90 > 99.00	2.439	2.439	0.0	1.000	4058		3.78(1.09-3.28)		0.7	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.770	2.770	0.0	0.791	1130204	1.24		98.9	2492	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.770	2.770	0.0	1.000	20171	0.0220	Target=12.12		0.6	M
313.00 > 119.00	2.770	2.770	0.0	1.000	1489		13.55(6.06-18.18)		1.3	M
D 11 18O2 PFHxS										
403.00 > 84.00	3.143	3.132	0.011	0.898	820157	1.00		84.8	2670	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.143	3.132	0.011	1.000	12171	0.0158	Target=4.23		3.1	M
399.00 > 99.00	3.143	3.132	0.011	1.000	3520		3.46(2.12-6.35)		2.3	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.143	3.143	0.0	0.898	1118879	1.22		97.9	3139	
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.143	3.143	0.0	1.000	15490	0.0172	Target=3.49		0.5	M
363.00 > 169.00	3.132	3.143	-0.011	0.997	4740		3.27(1.75-5.24)		4.1	M

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210629-46628.b\PA210629B27.d
 Lims ID: 460-237488-F-3-A
 Client ID: MW-3 062221
 Sample Type: Client
 Inject. Date: 29-Jun-2021 21:54:01 ALS Bottle#: 27 Worklist Smp#: 27
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 460-237488-F-3-A
 Misc. Info.: 200-0046628-027 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\chromfs\Burlington\ChromData\LC812\20210629-46628.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 01-Jul-2021 15:22:01 Calib Date: 20-May-2021 17:37:03
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\LC812\20210520-46072.b\PA210520ICAL07.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX1626

First Level Reviewer: nampitakw

Date: 30-Jun-2021 16:23:27

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.091	2.100	-0.009	0.597	1007593	0.8998		72.0	7403	
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.091	2.100	-0.009	1.000	22468	0.0298			2.4	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.413	2.413	0.0	0.689	896228	1.10		88.1	983	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.387	2.413	-0.026	0.989	6082	0.008391			0.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.426	2.439	-0.013	0.693	1038569	1.02		87.8	40575	M
5 Perfluorobutanesulfonic acid										RM
298.90 > 80.00	2.439	2.439	0.0	1.005	7275	0.007904	Target=2.19		0.5	RM
298.90 > 99.00	2.426	2.439	-0.013	1.000	946		7.69(1.09-3.28)		0.2	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.770	2.770	0.0	0.791	1041719	1.18		94.3	2792	
6 Perfluorohexanoic acid										RM
313.00 > 269.00	2.770	2.770	0.0	1.000	3036	0.003599	Target=12.12		0.1	RM
313.00 > 119.00	2.770	2.770	0.0	1.000	580		5.23(6.06-18.18)		0.8	M
D 11 18O2 PFHxS										M
403.00 > 84.00	3.132	3.132	0.0	0.895	838075	1.06		89.8	2631	M
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.143	3.132	0.011	1.003	5844	0.007438	Target=4.23		1.5	M
399.00 > 99.00	3.121	3.132	-0.011	0.997	1950		3.00(2.12-6.35)		1.0	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.143	3.143	0.0	0.898	1079772	1.22		97.8	2989	
10 Perfluoroheptanoic acid										RM
363.00 > 319.00	3.132	3.143	-0.011	0.997	5683	0.006522	Target=3.49		0.4	RM
363.00 > 169.00	3.143	3.143	0.0	1.000	1046		5.43(1.75-5.24)		2.4	M

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20210629-46628.b\PA210629B28.d
 Lims ID: 460-237488-F-4-A
 Client ID: MW-13 062221
 Sample Type: Client
 Inject. Date: 29-Jun-2021 22:02:18 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 20.0 ul Dil. Factor: 1.0000
 Sample Info: 460-237488-F-4-A
 Misc. Info.: 200-0046628-028 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\chromfs\Burlington\ChromData\LC812\20210629-46628.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 01-Jul-2021 15:22:01 Calib Date: 20-May-2021 17:37:03
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\LC812\20210520-46072.b\PA210520ICAL07.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX1626

First Level Reviewer: nampitakw

Date: 30-Jun-2021 16:31:38

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.082	2.100	-0.018	0.598	637356	0.6774		54.2	1466	
D 3 13C5 PFPeA										
267.90 > 223.00	2.401	2.413	-0.012	0.689	668934	0.9785		78.3	206	
D 47 13C3 PFBS										M
301.90 > 80.00	2.427	2.439	-0.012	0.697	847677	0.99		85.3	18178	M
5 Perfluorobutanesulfonic acid										RM
298.90 > 80.00	2.427	2.439	-0.012	1.000	14506	0.0193	Target=2.19	0.1		RM
298.90 > 99.00	2.414	2.439	-0.025	0.995	4079		3.56(1.09-3.28)	0.3		M
D 7 13C2 PFHxA										
315.00 > 270.00	2.759	2.770	-0.011	0.792	786040	1.06		84.7	1047	
D 11 18O2 PFHxS										
403.00 > 84.00	3.122	3.132	-0.010	0.896	653961	0.9858		83.4	1754	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.133	3.132	0.001	1.003	10099	0.0165	Target=4.23	0.4		M
399.00 > 99.00	3.144	3.132	0.012	1.007	2923		3.46(2.12-6.35)	0.7		M
D 9 13C4 PFHpA										
367.00 > 322.00	3.133	3.143	-0.010	0.899	804756	1.08		86.8	1988	
10 Perfluoroheptanoic acid										RM
363.00 > 319.00	3.122	3.143	-0.021	0.997	8303	0.0128	Target=3.49	0.1		RM
363.00 > 169.00	3.133	3.143	-0.010	1.000	14383		0.58(1.75-5.24)	2.0		M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.475	3.483	-0.008	0.997	142252	1.62		136	17.6	M
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.466	3.483	-0.017	0.997	447	0.004160		2.9		M
D 14 13C4 PFOA										M
417.00 > 372.00	3.484	3.492	-0.008	1.000	817991	1.09		87.1	2000	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
* 62 13C2 PFOA										
415.00 > 370.00	3.484	3.492	-0.008		938242	1.25			1925	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.493	3.501	-0.008	1.003	31515	0.0469	Target=2.53	1.0		M
413.00 > 169.00	3.493	3.501	-0.008	1.003	18246		1.73(1.27-3.80)	5.0		M
D 18 13C4 PFOS										
503.00 > 80.00	3.805	3.804	0.001	1.092	342414	0.7153		59.9	45.3	M
17 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	3.701	3.804	-0.103	0.972	12896	0.0418	Target=6.09	0.9		RM
499.00 > 99.00	3.805	3.804	0.001	1.000	4887		2.64(3.04-9.13)	1.5		M
D 19 13C5 PFNA										
468.00 > 423.00	3.826	3.824	0.002	1.098	672000	0.9708		77.7	1164	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.826	3.824	0.002	1.000	5446	0.0105	Target=6.34	0.5		M
463.00 > 169.00	3.826	3.824	0.002	1.000	788		6.91(3.17-9.51)	1.4		M
D 23 13C2 PFDA										
515.00 > 470.00	4.118	4.126	-0.008	1.182	454197	0.7482		59.9	2161	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.162	4.137	0.025	1.008	89	0.002377		2.7		M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.129	4.137	-0.008	1.185	89351	0.99		82.8	25.8	M
D 21 13C8 FOSA										
506.00 > 78.00	4.207	4.215	-0.008	1.208	448586	0.5238		41.9	1996	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.196	4.215	-0.019	0.997	251	0.000715		1.5		M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.272	4.268	0.004	1.226	36385	0.8861		70.9	530	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.237	4.268	-0.031	0.992	127	0.004963		1.8		M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.339	4.358	-0.019	1.140	814	0.004501	Target=2.87	0.5		M
599.00 > 99.00	4.350	4.358	-0.008	1.143	204		3.99(1.44-4.31)	0.9		M
D 30 13C2 PFUnA										
565.00 > 520.00	4.395	4.391	0.004	1.261	337957	0.6941		55.5	1870	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.395	4.402	-0.007	1.261	37456	0.9090		72.7	307	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.306	4.402	-0.096	0.980	234	-0.002012		1.8		M
D 36 13C2 PFDaA										
615.00 > 570.00	4.626	4.622	0.004	1.328	418186	0.8208		65.7	2330	
37 Perfluorododecanoic acid										RM
613.00 > 569.00	4.616	4.622	-0.006	0.998	103	0.000307	Target=5.94	0.1		RM
613.00 > 169.00	4.616	4.622	-0.006	0.998	215		0.48(2.97-8.92)	2.1		M
D 43 13C2 PFTeDA										
715.00 > 670.00	5.027	5.024	0.003	1.443	423441	1.14		90.9	3410	