PERIODIC REVIEW REPORT
DECEMBER 2021 – DECEMBER 2023

METAL ETCHING CO., INC. SITE
FREEPORT, NEW YORK 11520

NYSDEC Site No. 130110
Work Assignment No. D009812-04.1

Prepared for:

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

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MAY 2024

TRC Project No. 386554

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Engineering Control	• Cover System • Sub-Slab Depressurization Systems (SSDSs)
Institutional Control	• The property may be used for Commercial or Industrial use only, in accordance with current zoning • Site Management Plan (2019) • Environmental Notice - Lots 24 and 54 (2014) • Environmental Notice – Lots 155 and 157 (2014) • Environmental Easement - Lots 144, 145, and 158 (2019) • Groundwater-Use Restriction
Site Classification	Class 4
Site Management Plan	SMP – June 2019
Certification/Reporting Period	The Certification Period is defined as every three years in the SMP. The SMP requires a Periodic Review Report (PRR) to be completed every three years. The SMP requires annual reporting of groundwater and SSDS data. The Certification Period of this PRR was reduced to two years in anticipation of the upcoming transfer of site management responsibilities from the New York State Department of Environmental Conservation (NYSDEC) to the site owner.
Inspection	**Frequency**
1. Site Inspection 2. SSDS	Annually Annually
Monitoring	**Frequency**
1. Groundwater	Every other year
Prior PRR Recommendations	• Perform Site inspections in accordance with the SMP. • Collect and analyze groundwater samples from monitoring wells in accordance with the SMP. Eliminate the analysis of MNA parameters in groundwater from the SMP. Reduce the frequency of analysis of VOCs, metals, and PFAS in groundwater to once every other year. • Inspect the office building SSDS in accordance with the SMP. Eliminate the collection and analysis of ambient air samples and indoor air samples from the office and warehouse buildings from the SMP.

Site Management Activities	Two annual Site inspections, four post-storm Site inspections, one round of groundwater level measurements, one groundwater sampling event, one indoor air sampling event, one SSDS manometer repair event, one SSDS telemetry system installation event, and one Climate Change Vulnerability Assessment (CCVA) inspection were completed during this reporting period (December 2021 – December 2023). • 2/3/2022 – Post-storm Site inspection. • 3/1/2022 – Collection of one indoor air sample, one duplicate indoor air sample, and one ambient air sample. All samples were submitted to Con-Test/Pace Analytical New England (Pace) for laboratory analysis of VOCs by United States Environmental Protection Agency (USEPA) Method TO-15. • 10/26/2022 – Annual Site inspection. • 11/11/2022 –CCVA inspection. • 11/30/2022 – Office building SSDS manometer repair by Environmental Assessment & Remediations (EAR). • 5/10/2023 – Telemetry system installation for office building SSDS by EAR. • 7/13/2023 – Post-storm Site inspection. • 10/5/2023 – Post-storm Site inspection. • 10/26/2023 through 10/30/2023 – Collection of groundwater samples from 11 monitoring wells. All samples collected were submitted to Pace for analysis of Target Compound List (TCL) VOCs plus 10 tentatively identified compounds (TICs) via USEPA Method 8620C, Target Analyte List (TAL) metals and mercury vis USEPA Methods 6010C and 7470A, and PFAS via USEPA Method 1633. Annual Site inspection performed on 10/26/2023. • 12/20/2023 – Post-storm Site inspection.
Significant Findings or Concerns	1. Concentrations of Site contaminants in groundwater are generally stable. 2. VOCs were not detected in indoor air at concentrations greater than New York State Department of Health (NYSDOH) Air Guideline Values (AGVs).
Cost Evaluation	The total cost of the Site management activities during this reporting period was $71,761. This cost includes engineering and subcontractor costs (e.g., laboratory, equipment, rentals, etc.). It should be noted that this total does not include any costs incurred by the NYSDEC in support of the project.
Green Remediation Metrics	In accordance with the January 2023 Climate Change Vulnerability Assessment and Recommended Action Report prepared by TRC, a telemetry system was installed on May 10, 2023 to notify of power loss to the office building SSDS. Green Remediation Metrics are presented in **Appendix A**.

1.0 Introduction

This PRR has been prepared for the Metal Etching Co., Inc. Site, located at 435 South Main Street, Freeport, Nassau County, New York (the Site), and covers the period between December 2021 through December 2023. This PRR was prepared in accordance with the New York State Department of Environmental Conservation (NYSDEC) Department of Environmental Remediation (DER) Work Assignment (WA) No. D009812-04 Notice to Proceed dated February 27, 2020, the NYSDEC-approved amended Scope of Work dated July 20, 2020 (WA No. D009812-04.30), the NYSDEC DER WA Amendment (WAA) No. D009812-04.1 Notice to Proceed dated January 24, 2023, NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation (NYSDEC DER-10), and NYSDEC DER-31, Green Remediation. This PRR discusses the Site management activities performed by TRC and others during the referenced reporting period. A Site summary and applicable remedial program information are summarized below.

Site Information			
Site Name:	Metal Etching Co., Inc. Site	**NYSDEC Site No:**	130110
Site Location:	435 South Main Street, Freeport, Nassau County, NY	**Remedial Program:**	Inactive Hazardous Waste Disposal
Site Type:	Metal Plating	**Classification:**	04
Parcel Identification(s):	62.44.24, 62.45.54, 62.45.144, 62.45.145, 62.45.155, 62.45.157, and 62.45.158, Nassau County Tax Map	**Parcel Acreage / EE Acreage:**	2.25
Selected Remedy:	Excavation, sediment removal, underground storage tank (UST) closure, site cover system, SSDSs, groundwater monitoring	**Site COC(s):**	• VOCs (primarily chlorinated VOCs) • Metals • PFAS
Current Remedial Program Phase:	Post Remedial Action Site Monitoring; Site Management	**Institutional Controls:**	• EN – Lots 24 and 54 (2014) • EN – Lots 155 and 157 (2014) • EE – Lots 144, 145, and 158 (2019) • SMP (2019) • Land and groundwater use restrictions
Post-Remediation Monitoring and Sampling Frequency:	Site inspection (annually), SSDS inspection (annually), groundwater monitoring (annually)[1], SSDS/Indoor Air sampling (annually)[2]	**Engineering Controls:**	Site cover system, SSDSs, monitoring wells
Monitoring Locations:	11 Overburden monitoring wells[3]	**Required Reporting:**	PRR – Every three years

Notes:
[1] Frequency of groundwater monitoring was reduced to every other year in July 2022 in consultation with NYSDEC.

[2] Indoor air sampling was eliminated from site monitoring requirements in July 2022 in consultation with NYSDEC.
[3] Monitoring well MW-10M was removed from the monitoring well network in consultation with NYSDEC during the previous reporting period.

1.1 Recommendations

- Annual Site inspections shall continue to verify the Institutional Controls (ICs) and Engineering Controls (ECs) are in-place and effective and to observe any future development of the Site. One Site inspection report shall also be completed following the inspection event.
- The SSDS at the office building shall continue to be operated on a continuous full-time basis and inspected annually in conjunction with the annual Site inspections.
- Water level measurements shall continue to be collected at the 11 Site monitoring wells sampled during groundwater monitoring events.
- The frequency of collection and analysis of groundwater samples for VOCs, metals, and PFAS shall be reduced to once every three years.
- The Certification Period shall remain at every three years with a PRR frequency of one report every three years. The certification period shall begin January 2024 and end December 2026, with the next PRR covering the reporting period beginning January 1, 2024 and ending December 31, 2026.
- The SMP shall be revised to reflect the above changes/modifications if the changes are acceptable to NYSDEC. Additionally, the SMP shall be revised to reflect that indoor and ambient air sampling at the Site and analysis of groundwater samples for MNA parameters has been discontinued.

1.2 Site Location, Ownership, and Description

The Site is located at 435 South Main Street in Freeport, Nassau County, New York and is approximately 2.25 acres. The Site is identified as Section 62, Block 44, Lot 24 and Section 62, Block 45, Lots 54, 144, 145, 155, 157 and 158 on the Nassau County Tax Map. The Site is currently owned and occupied by Al Grovers High and Dry Marina. The Site is currently utilized as a boat dealership, marina, and boat storage yard, and houses two structures including a 2,400 square feet maintenance building and a 1,200 square feet office building. Additionally, a tension fabric structure is located along the western border of the maintenance building.

The Site is bounded by Ray Street followed by a commercial property to the north, Freeport Creek to the east, a commercial property to the south, and South Main Street followed by residential properties to the west. A Site Location Map and Site Plan are shown on **Figure 1** and **Figure 2**, respectively.

1.3 Investigation/Remedial History

While the exact date of the first use of the Site for commercial purposes is unknown, buildings were erected at the Site in 1954. Flores Manufacturing, a producer of handbags, operated at the Site until 1966. Flores Manufacturing's handbag production process included decorative plating using nickel, chrome, and cadmium. From 1966 to 1999, Metal Etching Corporation manufactured metal nameplates, instrument panels, rulers, and

miscellaneous plated products at the Site. The process included anodizing, chromate conversion, and chrome-nickel plating. Manufacturing operations at the Site were terminated by 1999 and all Site buildings, except for the maintenance building, were demolished by 2001. During the demolition, limited decontamination and/or investigation was performed under the oversight of NYSDEC Resource Conservation and Recovery Act (RCRA) personnel, and two 4,000-gallon ferric chloride aboveground storage tanks (ASTs) were removed from the Site. The Site was added to the Registry of Inactive Hazardous Waste Disposal Sites in New York (the Registry) as a Class 2 site in 2001 and was reclassified to a Class 4 site in April 2014.

A Remedial Investigation (RI) was conducted by Environmental Resources Management (ERM) from May 2004 to March 2005 to determine the nature and extent of contamination at the Site. The RI concluded that surface soil, subsurface soil, groundwater, and sediment contained VOCs and metals at concentrations above applicable standards, criteria, and guidance (SCGs) at the Site, and that remediation would be necessary. Additionally, soil vapor intrusion (VI) sampling conducted in 2004 indicated that chlorinated VOCs were present in the soil vapor beneath the floor slabs of the Site buildings. SSDS systems were installed at each building in March 2005 to mitigate potential VI impacts.

The RI and Final Feasibility Study (FS) Reports were issued in January 2007. In March 2007 NYSDEC issued a Record of Decision (ROD) selecting a remedy consisting of excavation of VOC and metals hot spots, limited excavation of sediments in Freeport Creek, continued operation of the on-Site SSDSs, monitoring of groundwater, imposition of an environmental easement (EE), development and implementation of an SMP, and the periodic certification of institutional controls (ICs) and engineering controls (ECs).

The Site was remediated in accordance with the NYSDEC-approved remedial design, which was part of the Contract Documents dated August 2010 and addendums dated September 28, 2010, September 30, 2010, and October 1, 2010. The Remedial Action (RA) activities at the Site were completed in January 2012 and included:

- Excavation of 2,684 cubic yards of soil/fill to the low-tide groundwater elevation, approximately five feet below ground surface (bgs);
- Construction and maintenance of a soil cover system consisting of a geotextile demarcation layer covered by asphalt or permeable pavement to prevent human exposure to contaminated soil/fill remaining at the Site;
- Execution and recording of two environmental notices (ENs) in 2014 and one environmental easement (EE) in 2019 to restrict land use to commercial or industrial uses and prevent future exposure to any contamination remaining at the Site;
- Removal of approximately two cubic yards of sediment from the on-Site storm water system and disposal at an approved off-Site facility;
- Closure and removal of four USTs in accordance with NYSDEC regulations;
- Removal of approximately 183 cubic yards of sediment from Freeport Creek and disposal at an approved off-Site facility;
- Development and implementation of a SMP for long-term management of remaining contamination as required by the ENs/EE, which include plans for ICs/ECs, monitoring, operation and maintenance, and reporting.

A detailed Site history, including the dates and descriptions of significant events, and a Custodial Record detailing known and available Site reports, are included in **Appendix B**. Additional details are presented in the SMP as well as historic Site documents.

1.4 Remaining Contamination

Remedial actions for the Site are complete but VOCs, metals, and per- and polyfluoroalkyl substances (PFAS) remain in on-Site soil and groundwater at concentrations greater than cleanup goals. Grossly contaminated unsaturated soils were excavated to the low-tide groundwater elevation, approximately 5 feet bgs; however, contaminated soil remains beneath the low-tide groundwater elevation in the excavation areas. Additionally, grossly contaminated sediment was excavated from Freeport Creek, however, contaminated sediment remains beyond the limits of excavation. As such, Site management activities consisting of Site inspections (including inspection of the SSDSs) and groundwater monitoring are ongoing. Currently, the Site cover system prevents contact with the contaminated Site soils and the SSDSs mitigate soil vapor intrusion to the Site structures. Residual contamination is managed under the SMP.

1.5 Regulatory Requirements/Remedial Controls

The remediation goals included in the ROD are as follows:

- To eliminate or reduce to the extent practicable:
    - Exposures of persons at or around the Site to VOCs and metals in soil, groundwater, sediment, and indoor air;
    - Environmental exposures of flora or fauna to VOCs and metals in soil, groundwater, and sediment;
    - The release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards; and
    - The release of contaminants from soil and groundwater into indoor air through soil vapor.

Further, the cleanup goals for the Site include attaining to the extent practicable the following SCGs:

- 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (SCOs);
- NYSDEC "Ambient Water Quality Standards and Guidance Values" (Class GA Values) and Part 5 of the New York State Sanitary Code;
- NYSDOH October 2006 "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" Air Guideline Values; and
- NYSDEC "Screening and Assessment of Contaminated Sediment" Sediment Guidance Values.

2.0 Institutional and Engineering Control Plan Compliance

Since remaining contamination exists at the Site, Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment. The IC/EC Plan documented in the SMP describes the procedures for the implementation and management of all IC/ECs at the Site.

2.1 Institutional Controls

A series of ICs is required by the ROD to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to commercial or industrial uses only. Adherence to these ICs on the Site is required by the ENs/EE summarized below and are implemented under the SMP.

Summary of Environmental Easements and Notices

Tax Map ID	Address	Owner	Environmental Easement or Notice
Section 62, Block 45, Lot 155	435 Main Street, Freeport, NY	Apache Realty Corporation	EN
Section 62, Block 45, Lot 157	24 Ray Street, Freeport, NY	Apache Realty Corporation	EN
Section 62, Block 44, Lot 24	South End Place, Freeport, NY	BWM High & Dry, Inc.	EN
Section 62, Block 45, Lot 54	16 South End Place, Freeport, NY	BWM High & Dry, Inc.	EN
Section 62, Block 45, Lot 144	435 Main Street, Freeport, NY	Freeport Creek Associates	EE
Section 62, Block 45, Lot 145	325 Main Street, Freeport, NY	Freeport Creek Associates	EE
Section 62, Block 45, Lot 158	Ray Street, Freeport, NY	Freeport Creek Associates	EE

ICs of this Site are:

- Compliance with the ENs/EE and the SMP by the Grantor and the Grantor's successors and assigns;
- All ECs must be operated and maintained as specified in the SMP;
- All ECs on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP;
- Groundwater and indoor air monitoring must be performed as defined in the SMP;

- Submission of a periodic certification of institutional and engineering controls to the NYSDEC by the property owner; and
- Data and information pertinent to Site management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP.

ICs identified in the ENs/EE may not be discontinued without an amendment to or extinguishment of the ENs/EE.

The Site has a series of ICs in the form of Site restrictions. Adherence to these ICs is required by the ENs/EE. Site restrictions that apply to the Controlled Property are:

- The property may only be used for commercial use provided that the long-term ECs and ICs included in this SMP are employed. The property may also be used for industrial use, in conformance of local zoning;
- The property may not be used for a higher level of use, such as unrestricted use without additional remediation and amendment of the ENs/EE, as approved by the NYSDEC;
- All future activities on the property that will disrupt remaining contaminated material must be conducted in accordance with the SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- The potential for vapor intrusion must be evaluated for any buildings developed within the Site boundaries, and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited; and
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.2 Engineering Controls

2.2.1 Cover System

Exposure to remaining contamination in soil/fill at the Site is prevented by a demarcation layer and asphalt and porous pavement cover system placed over the Site. This cover system is comprised of a geotextile demarcation layer, topped by a minimum of 12 inches of asphalt pavement, porous pavement, or rip-rap. Cover system maintenance includes but is not limited to asphalt pavement patching, porous pavement sweeping, and replacement of rip-rap. Site drainage features, including the two slotted drains at the Site entrances, are also to be inspected to maintain proper drainage at the Site. Maintenance may include cleaning out the drain of debris or

full replacement. The Excavation Work Plan that is included in the SMP outlines the procedures required to be implemented in the event the cover system is breached, penetrated, or temporarily removed; and any underlying remaining contamination is disturbed. A figure showing the location of the different cover types is provided as **Appendix C**.

2.2.2 Sub-Slab Depressurization Systems

Exposure to indoor air impacted with VOCs within the Site buildings was mitigated by two SSDSs, which were installed in the Site buildings in March 2005. The systems serve to reduce the pressure beneath the building slabs by venting potentially impacted soil vapor outside of the buildings. Both systems remained in operation until October 2012, but became inoperable due to flooding during Superstorm Sandy. The office building was renovated following the flooding and re-occupied beginning in 2013. The SSDS at this building was repaired in April 2014 and April 2021 and is currently operational. A telemetry system was installed in May 2023 to notify of power loss to the office building SSDS. The SSDS at the maintenance building has since been decommissioned in 2014.

2.3 Criteria for Completion of Remediation/Termination of Engineering Controls

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in NYSDEC Technical Guidance for Site Investigation and Remediation (DER-10).

2.3.1 Cover System

The composite cover system is a permanent control; the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

2.3.2 Sub-Slab Depressurization Systems

The office building SSDS will be inspected on an annual basis to determine whether the system remains operational. The SSDS will be operated until VOC concentrations in groundwater have decreased to below applicable SCGs for a minimum of two annual sampling events. Approximately 30 days after shutdown of the SSDS, indoor air and ambient air samples will be collected while the SSDS is shut down and analyzed for VOCs via USEPA Method TO-15 to determine if operation of the SSDS can be permanently terminated.

3.0 Monitoring and Sampling Plan Compliance

The SMP was prepared to manage remaining on-Site contamination and to ensure that the remedy remains effective by restricting Site use, Site development and soil movement on the property. The table below shows the SMP-specified monitoring and sampling activities for the Site and the dates those activities were completed:

Summary of SMP Site Monitoring and Sampling Plan				
Site Management Activity	**Frequency**	**Location**	**Analytical Method**	**Completion Date(s)**
Site Inspection	Annually (includes following inclement weather)	Section 62, Block 44, Lot 24 and Section 62, Block 45, Lots 54, 144, 145, 155, 157, and 158	Not Applicable	2/3/2022, 10/26/2022, 11/11/2022[1], 7/13/2023, 10/5/2023, 10/26/2023, and 12/20/2023
Groundwater Sampling	Annually[2]	• MW-04 • MW-05R • MW-06 • MW-08SR • MW-08DR • MW-09S • MW-09D • MW-10S • MW-10D • MW-10M[3] • MW-11S • MW-11D	USEPA Method 8260C for TCL VOCs +10 TICs, USEPA Methods 6010C and 7470A for TAL Metals and Mercury, USEPA Method 1633 for PFAS, and MNA paramters[4]	10/30/2023
SSDS Inspection and Indoor Air Sampling	Annually[5]	Collection of indoor air samples from each building (office and maintenance buildings) and ambient air samples	USEPA Method TO-15 for VOCs	3/1/2022, 11/30/2022 (manometer repair), and 5/10/2023 (telemetry installation)
PRR	Every 3 years	Not Applicable	Not Applicable	March 2024

Notes:
[1] Inspection to gather CCVA data.
[2] Frequency of groundwater monitoring was reduced to every other year in July 2022 in consultation with NYSDEC.
[3] Monitoring well MW-10M was removed from the monitoring well network in consultation with NYSDEC during the previous reporting period.

[4] Analysis of groundwater samples for MNA parameters was eliminated in consultation with NYSDEC.
[5] Indoor air sampling was eliminated from site monitoring requirements in July 2022 in consultation with NYSDEC.

3.1 Site Inspection

TRC conducted Site inspections for the period December 2021 to December 2023 in accordance with the SMP. The Site inspections were conducted to document the overall Site conditions, status of the cover and drainage system, status of the SSDS and associated components, and the condition of monitoring wells.

A summary of the Site inspections is presented below:

Summary of Site Activities and Site Monitoring and Sampling December 2021 to December 2023		
Site Management Activity	**Summary of Results**	**Maintenance/Corrective Measure**
Site and Monitoring Well Network Inspection	Annual Site inspections were performed on October 26, 2022 and October 26, 2023 and post-storm inspections were conducted on February 3, 2022, July 13, 2023, October 5, 2023 and December 20, 2023. The cover system appeared in generally good condition. Minor sheens resulting from *de minimis* releases of petroleum products were observed on ponded rainwater over the asphalt cover during the post-storm inspections, however, the sheens were contained and cleaned. Multiple areas indicative of Site cover system repair were observed throughout the non-porous asphalt and porous asphalt covers and a newly installed storm drain was observed within the porous pavement south of the office building during the October 2023 Site inspection. The cover system repairs and drain installation were performed by the Site owner without advanced notice or reporting to NYSDEC. The trench drains appeared in good condition with minimal sediment and debris accumulation. The monitoring wells appeared in good condition and the Site was secure. On November 11, 2022, TRC collected information from the office building SSDS to support the CCVA.	Cover system repairs were performed by the Site owner without advanced notice or reporting to NYSDEC.
SSDS Inspection and Indoor Air Quality (IAQ) Survey	An annual IAQ survey consisting of the collection of one indoor air sample, one duplicate indoor air sample, and one ambient air sample for VOCs analyses via USEPA Method TO-15 was performed on March 1, 2022. The samples were submitted to Pace for laboratory analysis. The manometer connected to the office building SSDS was not operational during the October 2022 Site inspection. The office building SSDS was in good condition and operational following the manometer repair on November 30, 2022. EAR installed a telemetry system to notify of power loss to the office building SSDS in accordance with recommendations from the 2023 CCVA for the Site on May 10, 2023.	The office building SSDS manometer was repaired on November 30, 2022.

Summary of Site Activities and Site Monitoring and Sampling December 2021 to December 2023		
Site Management Activity	**Summary of Results**	**Maintenance/Corrective Measure**
Groundwater Gauging and Sampling	Groundwater level measurements were collected, and 11 groundwater monitoring wells were sampled utilizing USEPA low-flow sampling methods between October 26, 2023 and October 30, 2023. Samples were submitted to Pace for analysis of TCL VOCs + 10 TICs via USEPA Method 8260C, TAL metals and mercury via USEPA Methods 6010C and 7470A, and PFAS via USEPA Method 1633.	None.

3.2 Groundwater Monitoring Summary

3.2.1 Groundwater Gauging

On October 26, 2023, prior to groundwater sample collection, all wells were gauged for depth to groundwater to evaluate potential groundwater flow directions. The Site monitoring wells are all screened in the overburden hydrogeologic unit. Potentiometric surface contours with an interpretation of groundwater flow direction for the overburden wells in October 2023 are shown on **Figure 3**. The groundwater gauging and elevation measurements are included in **Table 1**. A summary of the hydrogeologic information is presented below:

October 2023 Hydrogeologic Summary			
Number of Gauged Wells	**Hydrogeologic Units**	**Hydrogeologic Strata**	**Monitoring Wells**
11	1	Overburden	MW-04, MW-05R, MW-06, MW-08SR, MW-08DR, MW-09S, MW-09D, MW-10S, MW-10D, MW-11S and MW-11D
Overburden Groundwater Elevation Range			
Lowest groundwater elevation: -0.32 feet AMSL (MW-10D) Highest groundwater elevation: 1.80 feet AMSL (MW-10S)			
Inferred Overburden Groundwater Flow Direction			
Radially inward toward the center of Site			

Note:
AMSL – Above Mean Sea Level

3.2.2 Groundwater Sampling

TRC collected groundwater samples from 11 on and off-Site monitoring wells utilizing standard low-flow sampling techniques between October 26, 2023 and October 30, 2023. Low-flow groundwater sampling logs are included in **Appendix D**. Groundwater samples, in addition to QA/QC samples collected at the frequencies specified in TRC's July 2020 Generic QAPP, were submitted to Pace for analysis of TCL VOCs plus 10 TICs via USEPA Method 8260C, TAL metals and mercury via USEPA Methods 6010C and 7470A, and PFAS via USEPA Method 1633.

A summary of the groundwater sampling information and pertinent well details for each well is presented below:

Summary of Groundwater Monitoring and Sampling Activities
October 2023

Well ID	Monitoring Well Details[1]		Groundwater Sampling Event		
	Screen Zone (ft. bgs)	Unit Screened	DTW (ft. below TOC)	Analytes	Notes
MW-04	3.00 - 13.00	Overburden	5.21	VOCs, TAL Metals, and PFAS	
MW-05R	3.50 – 13.50	Overburden	2.62	VOCs, TAL Metals, and PFAS	
MW-06	3.00 - 13.00	Overburden	3.49	VOCs, TAL Metals, and PFAS	
MW-08SR	3.50 – 13.50	Overburden	4.40	VOCs, TAL Metals, and PFAS	
MW-08DR	21.50 – 31.50	Overburden	4.96	VOCs, TAL Metals, and PFAS	
MW-09S	4.00 – 14.00	Overburden	3.92	VOCs, TAL Metals, and PFAS	
MW-09D	22.00 – 32.00	Overburden	3.96	VOCs, TAL Metals, and PFAS	
MW-10S	4.00 – 14.00	Overburden	3.29	VOCs, TAL Metals, and PFAS	
MW-10D	22.00 – 32.00	Overburden	5.62	VOCs, TAL Metals, and PFAS	
MW-11S	5.20 – 15.20	Overburden	3.05	VOCs, TAL Metals, and PFAS	
MW-11D	20.20 – 30.20	Overburden	3.18	VOCs, TAL Metals, and PFAS	

Notes:
[1] The monitoring wells have not been surveyed; therefore, Northing and Easting coordinates are not presented. Monitoring well MW-10M was removed from the monitoring well network in consultation with NYSDEC.
DTW – Depth to water.
ft. bgs – Feet below ground surface.
TOC – Top of casing.

A complete table with well construction details is in included in **Appendix B**.

3.2.3 Groundwater Sample Results

3.2.3.1 Volatile Organic Compounds in Groundwater

Groundwater analytical data for VOCs are summarized in **Table 2**. The Data Usability Summary Report (DUSR) is included in **Appendix E**. PCE was detected at concentrations greater than the applicable SCG in groundwater samples collected from two monitoring wells (MW-08DR and MW-11D). Cis-1,2-dichloroethene and vinyl chloride were detected at concentrations greater than the applicable SCGs in the groundwater sample collected from monitoring well MW-08DR. Acetone was detected at concentrations greater than the applicable SCG in groundwater samples collected from two monitoring wells (MW-09D and MW-09S). Styrene was detected at a concentration greater than the applicable SCG in the groundwater sample collected from MW-09S. Detected concentrations of VOCs above SCGs are shown on **Figure 4**. PCE concentration graphs for MW-08DR, MW-09D, and MW-11D are shown on **Figure 5**. A summary of the October 2023 groundwater analytical results for VOCs is presented below:

Exceedance Summary of Laboratory Analytical Results of VOCs in Groundwater

Constituent	SCG	Concentration Range (µg/L)	Location with Highest Detection	Frequency Exceeding SCG
October 2023 - VOCs				
Acetone	50	ND – 71	MW-09D	2/11
Cis-1,2-dichloroethene	5	ND – 10	MW-08DR	1/11
Styrene	5	ND – 5.8	MW-09S	1/11
Tetrachloroethene	5	ND – 11	MW-11D	2/11
Vinyl Chloride	2	ND – 7.6	MW-08DR	1/11

Notes:
ND – Not detected.

3.2.3.2 Metals in Groundwater

Groundwater analytical data for metals are summarized in **Table 3**. The DUSR is presented in **Appendix E**. Discussion of results of metals in groundwater in this section is limited to those included in Table 1 of the ROD: chromium, copper, nickel, and zinc. Copper was detected at concentrations greater than the applicable SCG in groundwater samples collected from two monitoring wells (MW-09S and MW-09D). Zinc was detected at a concentration greater than the applicable SCG in the groundwater sample collected from one monitoring well (MW-09S). Chromium and nickel were not detected at concentrations greater than the applicable SCG in the groundwater samples collected from the monitoring wells in October 2023. Detected concentrations of chromium, copper, nickel, and zinc above SCGs are shown on **Figure 6**. A summary of the October 2023 groundwater analytical results for metals is presented below:

Exceedance Summary of Laboratory Analytical Results of Metals in Groundwater				
Constituent	**SCG**	**Concentration Range (µg/L)**	**Location with Highest Detection**	**Frequency Exceeding SCG**
October 2023 - Metals				
Chromium	50	ND – 25	MW-09S	0/11
Copper	200	ND – 3,600	MW-09S	2/11
Nickel	100	ND – 14	MW-09S	0/11
Zinc	2,000	ND – 2,200	MW-09S	1/11

Notes:
ND – Not detected.

3.2.3.3 Per- and Polyfluoroalkyl Substances in Groundwater

Groundwater analytical data for PFAS are summarized in **Table 4**. The DUSR is presented in **Appendix E**. Perfluorooctanoic acid (PFOA) was detected at concentrations greater than the applicable SCG in groundwater samples collected from nine monitoring wells (MW-04, MW-05R, MW-06, MW-08SR, MW-08DR, MW-09S, MW-10S, MW-11S, and MW-11D). Perfluorooctanesulfonic acid (PFOS) was detected at concentrations greater than the applicable SCG[1] in groundwater samples collected from ten monitoring wells (MW-04, MW-05R, MW-06, MW-08SR, MW-08DR, MW-09S, MW-09D, MW-10S, MW-11S, and MW-11D). Detected concentrations of PFAS above SCGs are shown on **Figure 7**. A summary of the October 2023 groundwater analytical results for PFAS is presented below:

Exceedance Summary of Laboratory Analytical Results of PFAS in Groundwater				
Constituent	**SCG**	**Concentration Range (ng/L)**	**Location with Highest Detection**	**Frequency Exceeding SCG**
October 2023 - PFAS				
PFOA	6.7	2.8 – 110	MW-05R	9/11
PFOS	2.7	1.3 – 57	MW-10S	10/11

3.3 Indoor Air Monitoring Summary

3.3.1 Indoor Air Sampling

TRC conducted one annual indoor air sampling event during the reporting period on March 1, 2022 in general accordance with the applicable procedures described in the NYSDOH "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated October 2006 (NYSDOH Guidance). TRC collected one indoor air sample and a duplicate sample from the office building, and one ambient air sample from the exterior portion of the Site using 6-liter SUMMA® canisters equipped with 8-hour flow regulators. The indoor and ambient air samples were collected at a height of approximately 3 to 5 feet to simulate a typical breathing zone. Initial and final vacuum readings (inches of mercury) were recorded immediately after opening each SUMMA® canister,

and after approximately eight (8) hours, respectively. The indoor and ambient air samples were submitted to Pace for analysis of TCL VOCs via USEPA Method TO-15. The sample locations can be found on **Figure 8**.

Prior to sampling, TRC completed a chemical inventory and building inspection. In accordance with the NYSDOH Guidance, sample locations and adjacent spaces were inspected and screened with a parts per billion (ppb) range photoionization detector (PID) to determine if interfering conditions such as open containers of cleaning supplies or petroleum products were present, and mitigated these interfering conditions to the extent feasible if noted. The NYSDOH Guidance "Indoor Air Quality Questionnaire and Building Inventory" form can be found in **Appendix F**.

3.3.2 Indoor Air Sample Results

Indoor air analytical data for VOCs can be found in **Table 5**. The DUSR can be found in **Appendix E**. Twenty-five (25) VOCs were detected in the indoor air sample and 21 VOCs were detected in the ambient air sample collected by TRC on March 1, 2022. A review of the indoor and ambient air sampling results indicates that no VOCs were detected at concentrations above the corresponding NYSDOH Air Guideline Values (AGVs). PCE was not detected in the indoor or ambient air samples collected during this sampling event.

4.0 Cost Summary

The total estimated cost of TRC's management activities for 2021 through 2023 (December 2021 through December 2023) is approximately $71,761. Site management activities during the reporting period including six Site inspections, sampling of 11 monitoring wells and analysis of 11 groundwater samples for TCL VOCs+10, TAL metals and PFAS in October 2023, sampling of one indoor air (plus an indoor air duplicate sample) and one ambient air location in March 2022, installation of a telemetry system for the office building SSDS (performed by EAR), one SSDS manometer maintenance event (performed by EAR), one CCVA inspection, and preparation of a PRR. The total includes engineering and expenses associated with the project. It should be noted that the total does not include costs for Site management activities performed by others, laboratory analysis performed by NYSDEC's call-out laboratory, electricity, maintenance of the office building SSDS, or project support. A summary of the 2021 through 2023 Site management costs is presented below:

Summary of Site Management Costs December 1, 2021 through December 31, 2023		
Cost Item	**Amount Expended (December 1, 2021 through December 31, 2023)**	**Percent of Total Cost**
Engineering Support		
TRC	$68,895	96%
Expenses		
TRC	$2,866	4%
Total Cost	**$71,761**	----

The following provides a review of each cost item:

- Engineering support includes labor costs associated with project management (e.g., WA Package preparation, monthly invoicing, project scheduling and coordination, etc.), Site inspections, groundwater sampling, indoor air and ambient air sampling, and reporting (i.e., Site inspection report and DUSR).
- Expense costs include travel, equipment, and supplies in support of the Site inspections, groundwater sampling event, indoor air sampling event, and routine Site maintenance activities.

5.0 Conclusions

- The integrity of the Site cover system is acceptable.
- The SSDS servicing the office building is being operated in accordance with the SMP. The SSDS has operated continuously through the reporting period. EAR installed a telemetry system to notify of power loss to the office building SSDS in accordance with recommendations from the 2023 CCVA for the Site on May 10, 2023.
- Based on groundwater elevations measured in October 2023 and the Site's proximity to Freeport Creek, groundwater flow in overburden hydrogeologic unit is tidally influenced. During the October 2023 groundwater sampling event, groundwater was observed to flow radially toward the center of the Site. Generally, groundwater has been observed to flow towards Freeport Creek.
- PCE, the primary Site COC, was detected at concentrations exceeding the applicable SCG in 2 of 11 groundwater samples collected in October 2023 from the Site. PCE degradation products cis-1,2-dichloroethene and vinyl chloride were detected at concentrations exceeding applicable SCGs in 1 of 11 groundwater samples collected (MW-08DR). Overall, detections of PCE were low with the highest concentration (11 µg/L) detected in the groundwater sample collected from monitoring well MW-11D. PCE concentrations continue to decrease, indicating that the groundwater plume is stable. Additionally, of the select metals defined in the ROD, copper was detected at concentrations above the applicable SCG in 2 of 11 groundwater samples collected and zinc was detected above the applicable SCG in 1 of 11 groundwater samples in October 2023. Concentrations of copper in groundwater increased this Reporting Period, however, do not currently warrant additional remedial measures. PFAS were detected at concentrations exceeding the applicable SCG in 10 of 11 groundwater samples collected in October 2023.
- VOCs were not detected at concentrations greater than AGVs in the indoor or ambient air samples collected in October 2023 from the Site. This data indicates that vapor intrusion is not occurring at the Site office building.
- Site and groundwater use are consistent with the restrictions set forth in the ROD and the SMP. One groundwater monitoring event was completed in October 2023. One indoor air monitoring event was completed in March 2022. Six Site inspections and Site inspection reports were also completed. The ICs operated as intended this reporting period.
- The remedy continued to be protective of human health and the environment this reporting period.

6.0 Green and Sustainable Remediation

Green remediation/sustainability metrics implemented during this reporting period included utilizing local staff for Site visits and sampling events and visiting multiple sites under a single mobilization to limit travel and gas consumption. Generally, staff located between approximately 5 and 30 miles from the Site were utilized. Con-Test/Pace Analytical New England (Pace), the laboratory utilized for the indoor air and groundwater sampling events, is located in East Longmeadow, Massachusetts, approximately 150 miles from the Site. Approximately 520 miles were travelled during this reporting period by Standby Engineers and Contractors and approximately 1,300 miles were travelled by the laboratory and equipment delivery services. Since full-time operation of the SSDS is necessary to protect the health of Site occupants, no energy reduction program has been implemented. Site emissions are limited to VOCs, primarily PCE, from the SSDS which is operated without vapor treatment. Emission rates are not calculated and no emission reduction program has been implemented. A summary of the green remediation metrics is included in **Appendix A**.

TRC's January 2023 Climate Change Vulnerability Assessment and Recommended Action Report (CCVA Report) assessed climate change vulnerabilities at the Site and included recommended actions to maintain protectiveness of remedies in response to climate change and implement green remediation measures, where appropriate. Sea level rise, coastal flooding, and storm surges were identified as the most significant climate change-related risks to the engineering controls at the Site. As such, it was concluded that increased frequency of Site inspections, as well as repairs to the cover and SSDS, if damage is found, will likely be required to maintain the protectiveness of the remedy. The CCVA Report recommended installation of a telemetry system, with backup power, to the SSDS to notify of power loss to the system. EAR installed the telemetry system to notify of power loss to the office building SSDS on May 10, 2023.

7.0 Certification of Engineering and Institutional Controls

For each institutional control identified for the Site, I certify that all the following statements are true:

- The institutional controls employed at this Site are unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the controls to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for these controls.
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the Site is compliant with the ENs/EE;
- The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Anthony Raposo, of TRC Engineers, Inc., am certifying as NYSDEC's Designated Site Representative for the Site.

I, Anthony Raposo, certify that I am currently a NYS registered professional engineer and that this Periodic Review Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and DER Green Remediation (DER-31) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Signature

105387

NYS Professional Engineer No.

5/24/2024

Date

8.0 Future Site Activities

Based on the recommendations in Section 5, the following site management activities will be completed during the next PRR reporting period (January 2024 to December 2026):

- Site Inspections – Annual (next scheduled: Q4 2024)
- Groundwater – Every three years (next scheduled: Q4 2026)
- PRR – Every three years (next scheduled: Q1 2027)

Figures

SCALE: 1:2400

1 0.5 0 KILOMETERS 1 2

1000 500 0 METERS 1000 2000

1 0.5 0 1

MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

FEET

QUADRANGLE LOCATION

MAP INCLUDES INFORMATION FROM THE FOLLOWING MAP SHEET(S): TP, FREEPORT, NY, 7.5 MINUTE DATED 2023.

MAP OBTAINED THROUGH USE OF TOPOVIEW WITH THE INTERFACE CREATED BY THE NATIONAL GEOLOGIC MAP DATABASE PROJECT (NGMDB), IN SUPPORT OF THE TOPOGRAPHIC MAPPING PROGRAM, MANAGED BY THE USGS NATIONAL GEOSPATIAL PROGRAM (NGP).

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PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SITE MANAGEMENT PORTFOLIO B
TASK NO. 9 - METAL ETCHING CO., INC. - SITE NO. 130110
435 SOUTH MAIN STREET, FREEPORT, NASSAU COUNTY, NEW YORK

TITLE:

SITE LOCATION MAP

DRAWN BY:	H. DELGADO
CHECKED BY:	M. WELLS
APPROVED BY:	A. RAPOSO
DATE:	MARCH 2024
PROJ. NO.:	386554.0000.0000
FILE:	Fig 1 - Site Loc. Map (MEC).dwg

FIGURE 1

8.5x11 -- ATTACHED XREFS: -- ATTACHED IMAGES: NY_Freeport_20230531_TM_Report.HW.130110.2019-01-22.MetalEtching_PRREFINAL_Page_2
DRAWING NAME: \\CLIFTONPARK-VFP\clifton\parkl\ECR\Projects\NYSDEC\D009812\Work Assignments\D009812-04 Site Management Portfolio B\09_Metal Etching Co., Inc. 130110\Reports\2024 PRR\Figures\TRC WD\ Fig 1 - Site Loc. Map (MEC).dwg -- PLOT DATE: March 07, 2024 - 10:11AM -- LAYOUT: 8.5x11P

LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- BUILDING FOOTPRINT
- MW-## — MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

N

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES, BOUNDARIES, AND SAMPLE LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.
2. BASEMAP IMAGERY SOURCED FROM NEARMAP DATED SEPTEMBER 16, 2023.
3. MONITORING WELL LOCATIONS HAVE NOT BEEN SURVEYED. WELL LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.

0 50' 100'

SCALE: 1" = 50'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SITE MANAGEMENT PORTFOLIO B
TASK NO. 9 - METAL ETCHING CO., INC. - SITE NO. 130110
435 SOUTH MAIN STREET, FREEPORT, NASSAU COUNTY, NEW YORK

TITLE:

SITE PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	386554.0000.0000
CHECKED BY:	M. WELLS		
APPROVED BY:	A. RAPOSO		**FIGURE 2**
DATE:	MARCH 2024		

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Phone: 212.221.7822
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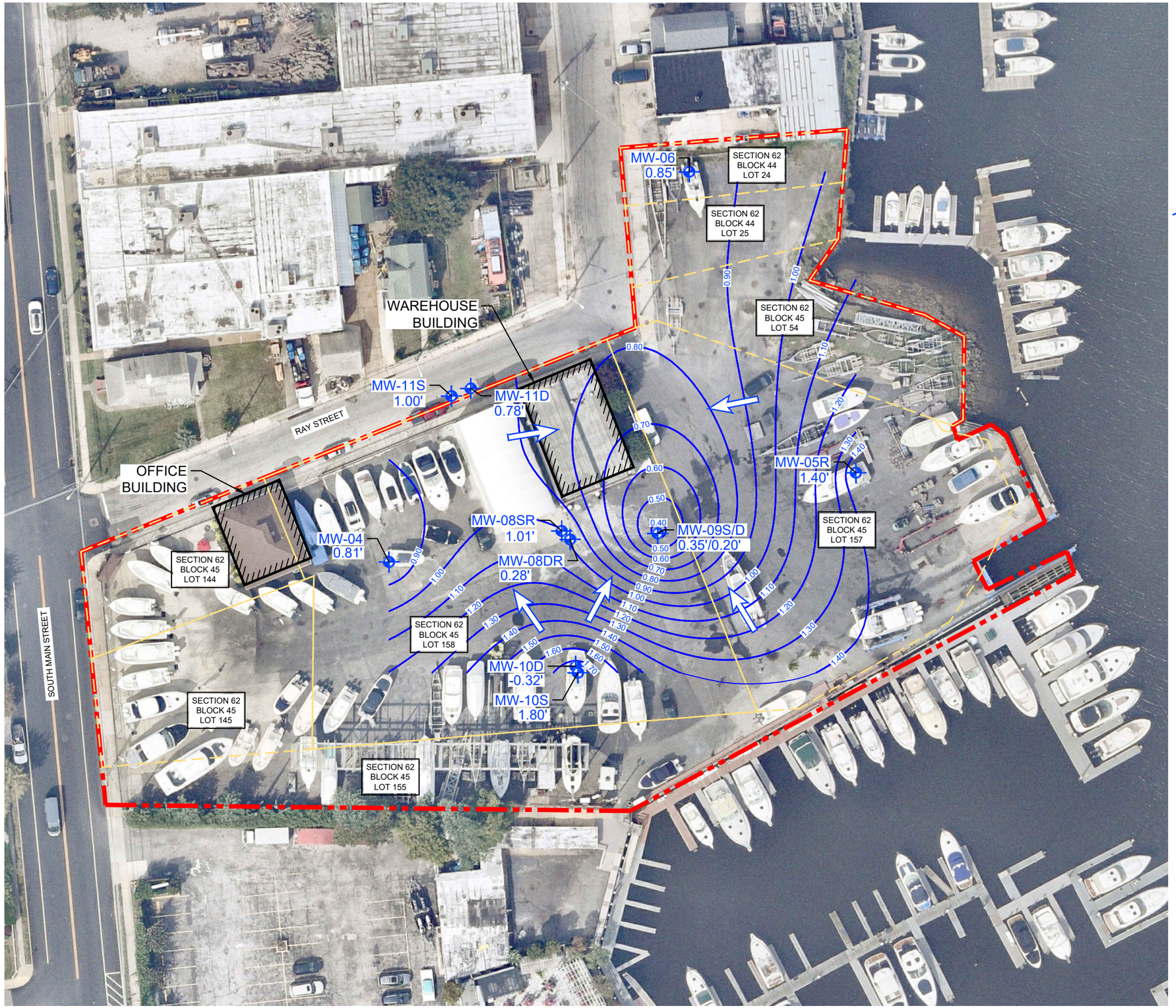
FILE NO.: Fig 2 - Site Plan (MEC).dwg

11x17 --- ATTACHED XREFS: --- ATTACHED IMAGES: EPSG:2263, 2001000, EPSG:2263, 2003916, EPSn Imp-09.14.2003 (MEC) Wet Pre-HW130110 2019-06-18 MeetElmo SMPB+ehd3_FA
DRAWING NAME: \\CLIFTONPARK-VFP\cliftonpark\ECR\Projects\NYSDEC\D009812\Work Assignments\D009812-04 Site Management Portfolio B\09_Metal Etching Co., Inc. 130110\Reports\2024 PRR\Figures\TRC WD\ Fig 2 - Site Plan (MEC).dwg --- PLOT DATE: March 07, 2024 - 12:41PM --- LAYOUT: 11X17L



LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- BUOLDING FOOTPRINT
- MW-## — MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- 0.81' — GROUND SURFACE CONTOUR ELEVATION (IN FEET)
- 1.50 — GROUNDWATER ELEVATION CONTOUR (0.10' INTERVALS)
- INFERRED GROUNDWATER FLOW DIRECTION

N

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES, BOUNDARIES, AND SAMPLE LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.
2. BASEMAP IMAGERY SOURCED FROM NEARMAP DATED SEPTEMBER 16, 2023.
3. MONITORING WELL LOCATIONS HAVE NOT BEEN SURVEYED. WELL LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE. MONITORING WELL ELEVATIONS FROM THE JANUARY 2019 PERIODIC REVIEW REPORT NO. 6 PREPARED BY EA ENGINEERING, P.C.
4. ELEVATIONS ARE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
5. GROUNDWATER SURFACE ELEVATION CONTOURS WERE GENERATED USING MEASUREMENTS COLLECTED FROM MW-04, MW-05R, MW-06, MW-08SR, MW-09S, MW-10S, AND MW-11S ON OCTOBER 26, 2023.

0 50' 100'

SCALE: 1" = 50'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SITE MANAGEMENT PORTFOLIO B
TASK NO. 9 - METAL ETCHING CO., INC. - SITE NO. 130110
435 SOUTH MAIN STREET, FREEPORT, NASSAU COUNTY, NEW YORK

TITLE:
GROUNDWATER SURFACE ELEVATIONS AND FLOW MAP - OCTOBER 2023

DRAWN BY:	H. DELGADO	PROJ NO.:	386554.0000.0000
CHECKED BY:	M. WELLS		
APPROVED BY:	A. RAPOSO		**FIGURE 3**
DATE:	MARCH 2024		

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Phone: 212.221.7822
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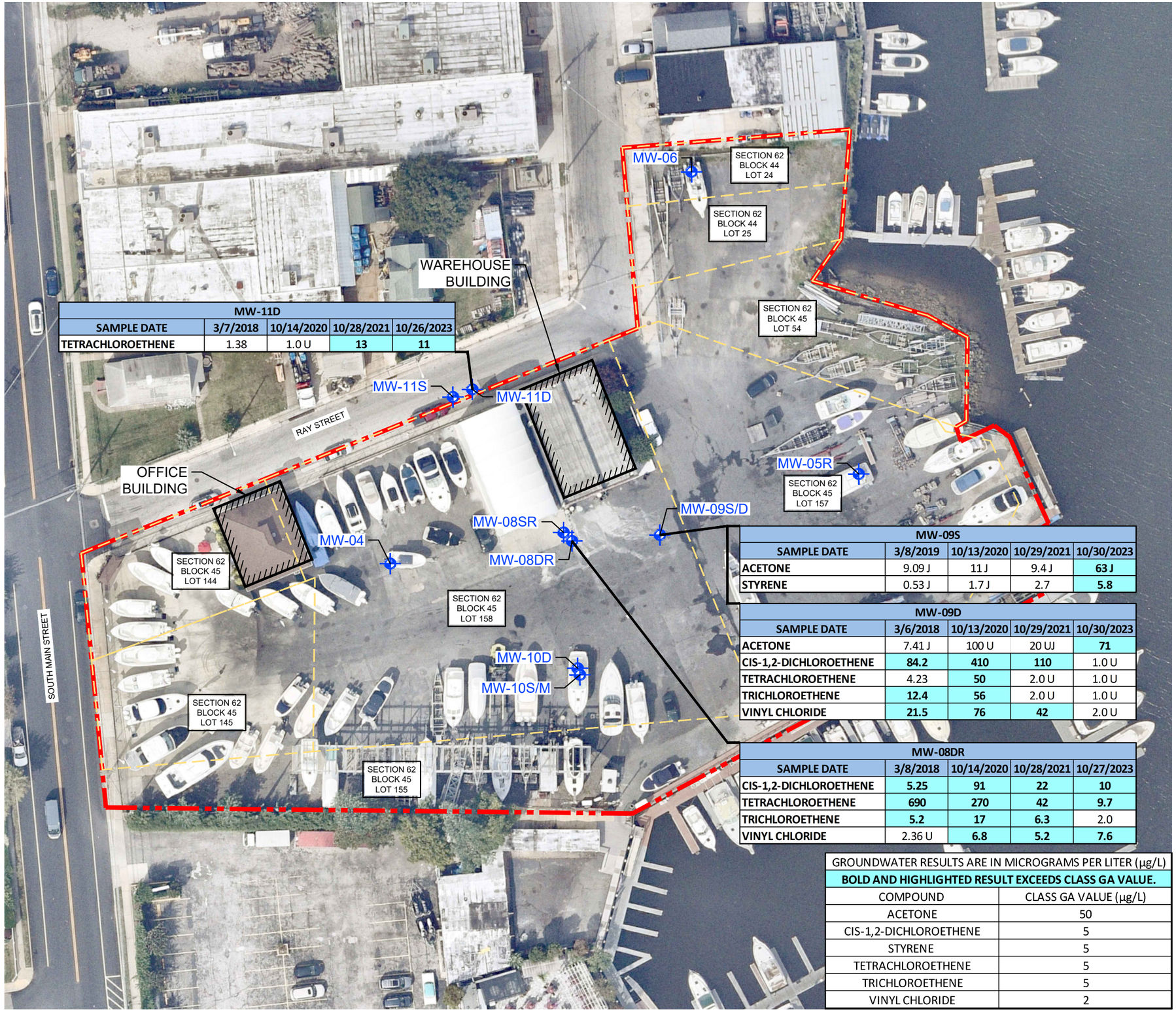
FILE NO.: Fig 3 - GWSE and Flow Map - 10.2023 (MEC).dwg

1417 --- ATTACHED XREFS: --- ATTACHED IMAGES: EPSG:2263, 2001000, EPSG:2263, 2002916, GEPro Img=09.14.2020 (MEC); Wet Pre-HW130110-2019-06-05 MetalEtching SMPBx=NO; FA:
DRAWING NAME: \\CLIFTONPARK-VFP\cliftonpark\EC\RProjects\NYSDEC\D009812\Work Assignments\D009812-04 Site Management Portfolio B\09_Metal Etching Co., Inc. 130110\Reports\2024 PRR\Figures\TRC WD\ Fig 3 - GWSE and Flow Map - 10.2023 (MEC).dwg --- PLOT DATE: March 07, 2024 - 10:31AM --- LAYOUT: 11X17L



MW-11D				
SAMPLE DATE	3/7/2018	10/14/2020	10/28/2021	10/26/2023
TETRACHLOROETHENE	1.38	1.0 U	13	11

MW-09S				
SAMPLE DATE	3/8/2019	10/13/2020	10/29/2021	10/30/2023
ACETONE	9.09 J	11 J	9.4 J	63 J
STYRENE	0.53 J	1.7 J	2.7	5.8

MW-09D				
SAMPLE DATE	3/6/2018	10/13/2020	10/29/2021	10/30/2023
ACETONE	7.41 J	100 U	20 UJ	71
CIS-1,2-DICHLOROETHENE	84.2	410	110	1.0 U
TETRACHLOROETHENE	4.23	50	2.0 U	1.0 U
TRICHLOROETHENE	12.4	56	2.0 U	1.0 U
VINYL CHLORIDE	21.5	76	42	2.0 U

MW-08DR				
SAMPLE DATE	3/8/2018	10/14/2020	10/28/2021	10/27/2023
CIS-1,2-DICHLOROETHENE	5.25	91	22	10
TETRACHLOROETHENE	690	270	42	9.7
TRICHLOROETHENE	5.2	17	6.3	2.0
VINYL CHLORIDE	2.36 U	6.8	5.2	7.6

GROUNDWATER RESULTS ARE IN MICROGRAMS PER LITER (µg/L)

BOLD AND HIGHLIGHTED RESULT EXCEEDS CLASS GA VALUE.

COMPOUND	CLASS GA VALUE (µg/L)
ACETONE	50
CIS-1,2-DICHLOROETHENE	5
STYRENE	5
TETRACHLOROETHENE	5
TRICHLOROETHENE	5
VINYL CHLORIDE	2

LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- BUILDING FOOTPRINT
- MW-## — MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

N

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES, BOUNDARIES, AND SAMPLE LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.
2. BASEMAP IMAGERY SOURCED FROM NEARMAP DATED SEPTEMBER 16, 2023.
3. MONITORING WELL LOCATIONS HAVE NOT BEEN SURVEYED. WELL LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.
4. ONLY VOLATILE ORGANIC COMPOUNDS WHICH EXCEED CLASS GA VALUES DURING THE REPORTING PERIOD ARE SHOWN IN DATA BOXES.
5. U - ANALYTE WAS NOT DETECTED AT SPECIFIED QUANTITATION LIMIT.
6. J - ESTIMATED VALUE.
7. µg/L - MICROGRAMS PER LITER.
8. GROUNDWATER MONITORING WELLS MW-04, MW-05R, MW-06, MW-08SR, MW-08DR, MW-09S, MW-09D, MW-10S, MW-10D, MW-11S, AND MW-11D ARE INCLUDED IN THE ANNUAL MONITORING NETWORK.

0 50' 100'

SCALE: 1" = 50'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SITE MANAGEMENT PORTFOLIO B
TASK NO. 9 - METAL ETCHING CO., INC. - SITE NO. 130110
435 SOUTH MAIN STREET, FREEPORT, NASSAU COUNTY, NEW YORK

TITLE:
VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER ABOVE CLASS GA VALUES

DRAWN BY:	H. DELGADO	PROJ NO.:	386554.0000.0000
CHECKED BY:	M. WELLS		
APPROVED BY:	A. RAPOSO		**FIGURE 4**
DATE:	MARCH 2024		

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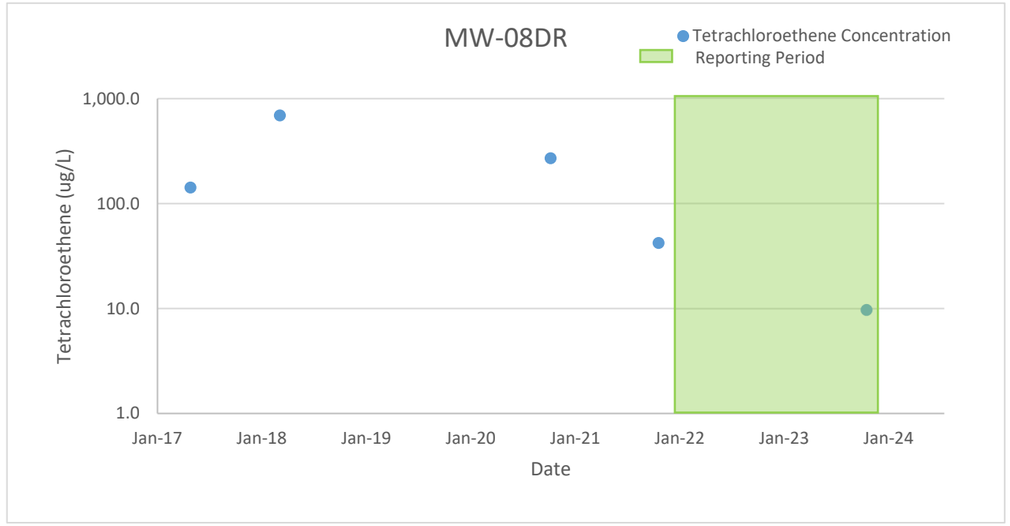
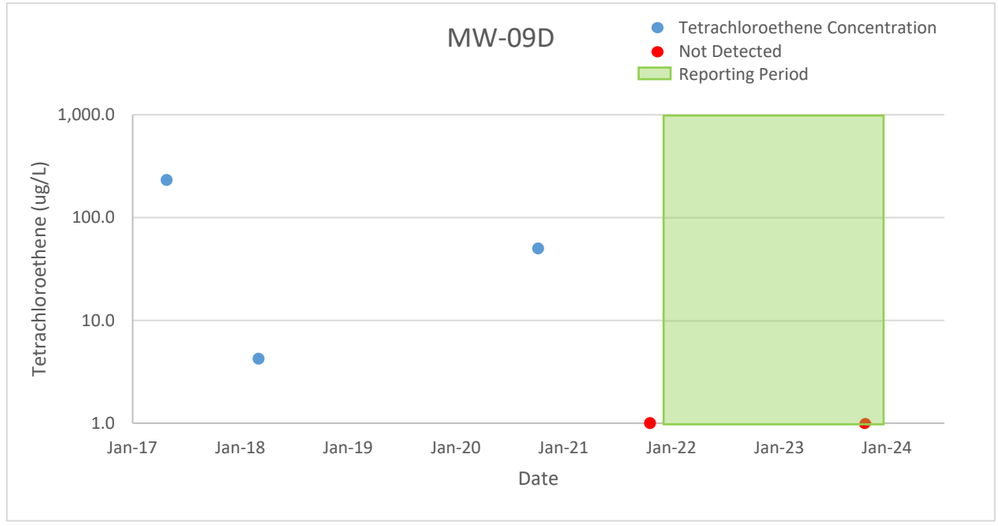
FILE NO.: Fig 4 - VOCs in GW ACGAV (MEC).dwg

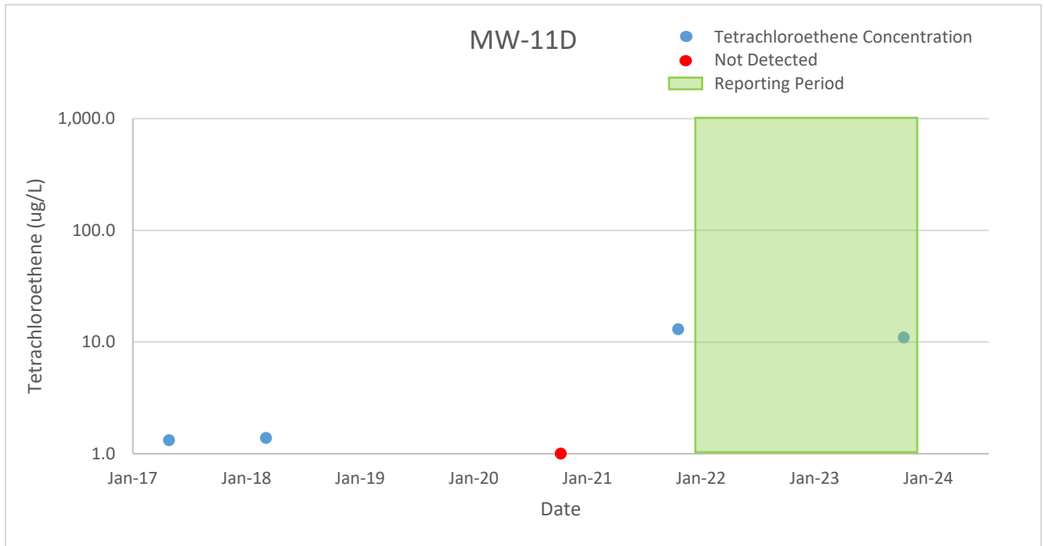
1x17 -- ATTACHED XREFS: -- ATTACHED IMAGES: EPSG:2263, 20211020, EPSG:2263, 20220916, GEPro Inspection 09.14.2020, MEC6, Web Plan VH 10/19/2016 06:48 MeadEtching_SMPortfolioB_54...
DRAWING NAME: \\CLIFTONPARK-VFP\cliftonpark\ECR Projects\NYSDEC\D009812\Work Assignments\D009812-04 Site Management Portfolio B\09_Metal Etching Co., Inc. 130110\Reports\2024 PRR\Figures\TRC WD\ Fig 4 - VOCs in GW ACGAV (MEC).dwg -- PLOT DATE: March 07, 2024 - 1:05PM -- LAYOUT: 11X17L

Figure 5

New York State Department of Environmental Conservation
Site Management Portfolio B
Task No. 9 – Metal Etching Co., Inc. - Site No. 130110
Freeport, Nassau County, New York
Tetrachloroethene in Groundwater Trend Charts







Notes:
µg/L – Micrograms per Liter
Tetrachloroethene concentrations are depicted using Base 10 Logarithmic Scale.

LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- BUILDING FOOTPRINT
- MW-## — MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

N

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES, BOUNDARIES, AND SAMPLE LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.
2. BASEMAP IMAGERY SOURCED FROM NEARMAP DATED SEPTEMBER 16, 2023.
3. MONITORING WELL LOCATIONS HAVE NOT BEEN SURVEYED. WELL LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.
4. ONLY COPPER AND ZINC RESULTS AT LOCATIONS WHERE CONCENTRATIONS EXCEED CLASS GA VALUES DURING THE REPORTING PERIOD ARE SHOWN IN DATA BOXES.
5. µg/L - MICROGRAMS PER LITER.
6. GROUNDWATER MONITORING WELLS MW-04, MW-05R, MW-06, MW-08SR, MW-08DR, MW-09S, MW-09D, MW-10S, MW-10D, MW-11S, AND MW-11D ARE INCLUDED IN THE ANNUAL MONITORING NETWORK.

MW-09S				
SAMPLE DATE	3/8/2018	10/13/2020	10/29/2021	10/30/2023
COPPER	**1,000**	**520**	**6,600**	**3,600**
ZINC	626	630	**3,400**	**2,200**

MW-09D				
SAMPLE DATE	3/6/2018	10/13/2020	10/29/2021	10/30/2023
COPPER	**1,350**	**240**	**380**	**800**

GROUNDWATER RESULTS ARE IN MICROGRAMS PER LITER (µg/L)

BOLD AND HIGHLIGHTED RESULT EXCEEDS CLASS GA VALUE.

COMPOUND	CLASS GA VALUE (µg/L)
COPPER	200
ZINC	2,000

0 50' 100'

SCALE: 1" = 50'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SITE MANAGEMENT PORTFOLIO B
TASK NO. 9 - METAL ETCHING CO., INC. - SITE NO. 130110
435 SOUTH MAIN STREET, FREEPORT, NASSAU COUNTY, NEW YORK

TITLE:
SELECT METALS IN GROUNDWATER ABOVE CLASS GA VALUES

DRAWN BY:	H. DELGADO	PROJ NO.:	386554.0000.0000
CHECKED BY:	M. WELLS		**FIGURE 6**
APPROVED BY:	A. RAPOSO		
DATE:	MARCH 2024		

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New York, NY 10018
Phone: 212.221.7822
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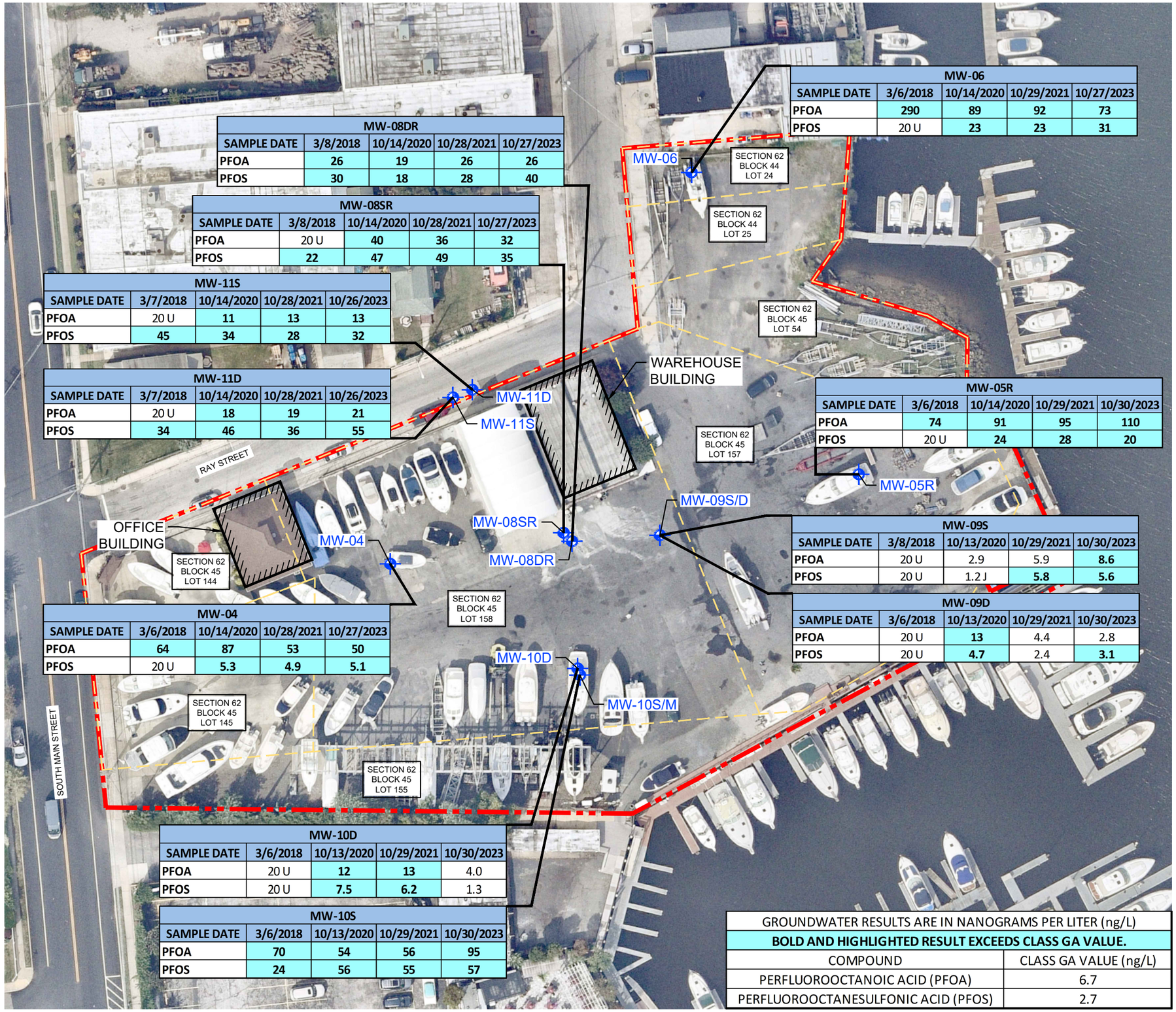
FILE NO.: Fig 6 - Select Metals in GW ACGAV (MEC).dwg

11x17 -- ATTACHED XREFS: -- ATTACHED IMAGES: EPSG:2263, 20211029, EPSG:2263, 20220916, GEPro Inov26 14 2020 MEG; Hve Rev HV130110 2019-06-18 MetEtching_SMPRevN3, SA
DRAWING NAME: \\CLIFTONPARK-VFP\cliftonpark\ECR\Projects\NYSDEC\D009812\Work Assignments\D009812-04 Site Management Portfolio B\09_Metal Etching Co., Inc. 130110\Reports\2024 PRR\Figures\TRC WD\ Fig 6 - Select Metals in GW ACGAV (MEC).dwg -- PLOT DATE: March 07, 2024 - 1:13PM -- LAYOUT: 11X17L



LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- BUILDING FOOTPRINT
- MW-## — MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

N

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES, BOUNDARIES, AND SAMPLE LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.
2. BASEMAP IMAGERY SOURCED FROM NEARMAP DATED SEPTEMBER 16, 2023.
3. MONITORING WELL LOCATIONS HAVE NOT BEEN SURVEYED. WELL LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.
4. ONLY PFAS WHICH EXCEED CLASS GA VALUES DURING THE REPORTING PERIOD ARE SHOWN IN THE DATA BOXES.
5. U - ANALYTE WAS NOT DETECTED AT SPECIFIED QUANTITATION LIMIT.
6. J - ESTIMATED VALUE.
7. ng/L - NANOGRAMS PER LITER.
8. GROUNDWATER MONITORING WELLS MW-04, MW-05R, MW-06, MW-08SR, MW-08DR, MW-09S, MW-09D, MW-10S, MW-10D, MW-11S, AND MW-11D ARE INCLUDED IN THE ANNUAL MONITORING NETWORK.

0 50' 100'

SCALE: 1" = 50'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SITE MANAGEMENT PORTFOLIO B
TASK NO. 9 - METAL ETCHING CO., INC. - SITE NO. 130110
435 SOUTH MAIN STREET, FREEPORT, NASSAU COUNTY, NEW YORK

TITLE: **PER- AND POLYFLUOROALKYL SUBSTANCES IN GROUNDWATER ABOVE CLASS GA VALUES**

DRAWN BY:	H. DELGADO	PROJ NO.:	386554.0000.0000
CHECKED BY:	M. WELLS		**FIGURE 7**
APPROVED BY:	A. RAPOSO		
DATE:	MARCH 2024		

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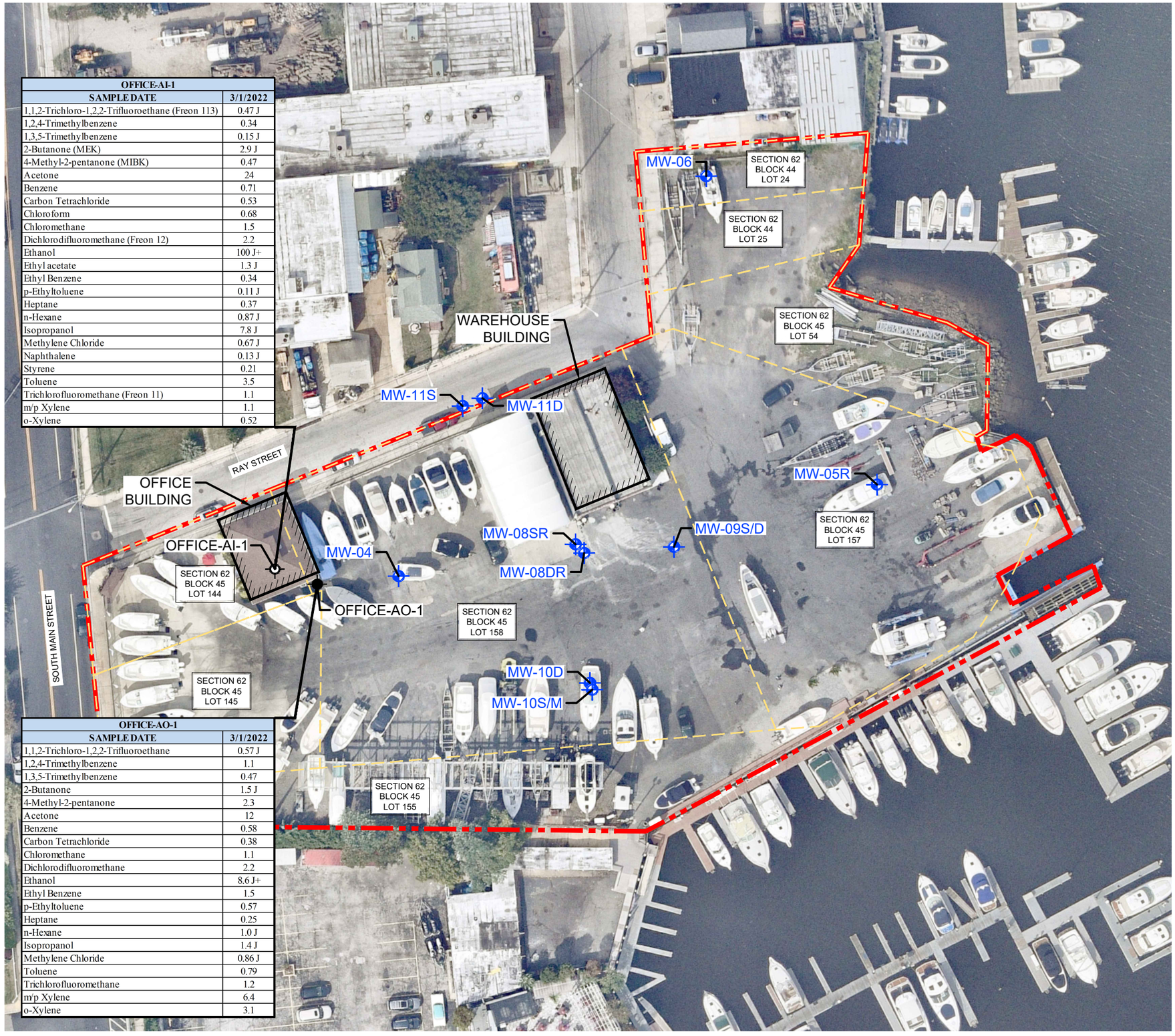
FILE NO.: Fig 7 - PER- AND POLYFLUOROALKYL SUB. in GW ACGAV (MEC).dwg

11x17 -- ATTACHED XREFS: -- ATTACHED IMAGES: EPSG:2263, 20210120, EPSG:2263, 20220916, GEN=true-09:14:2022.IMG\; Work Plan\HW130110.2016-06.18 MetalEtching, SMP\Rev03, EA: DRAWING NAME: \\CLIFTONPARK\VFP\cliftonpark\ECR\Projects\NYSDEC\D009812\Work Assignments\D009812-04 Site Management Portfolio B\09_Metal Etching Co., Inc. 130110\Reports\2024 PRR\Figures\TRC WDI Fig 7 - PER- AND POLYFLUOROALKYL SUB. in GW ACGAV (MEC).dwg -- PLOT DATE: March 08, 2024 - 4:08PM -- LAYOUT:



OFFICE-AI-1	
SAMPLE DATE	3/1/2022
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	0.47 J
1,2,4-Trimethylbenzene	0.34
1,3,5-Trimethylbenzene	0.15 J
2-Butanone (MEK)	2.9 J
4-Methyl-2-pentanone (MIBK)	0.47
Acetone	24
Benzene	0.71
Carbon Tetrachloride	0.53
Chloroform	0.68
Chloromethane	1.5
Dichlorodifluoromethane (Freon 12)	2.2
Ethanol	100 J+
Ethyl acetate	1.3 J
Ethyl Benzene	0.34
p-Ethyltoluene	0.11 J
Heptane	0.37
n-Hexane	0.87 J
Isopropanol	7.8 J
Methylene Chloride	0.67 J
Naphthalene	0.13 J
Styrene	0.21
Toluene	3.5
Trichlorofluoromethane (Freon 11)	1.1
m/p Xylene	1.1
o-Xylene	0.52

OFFICE-AO-1	
SAMPLE DATE	3/1/2022
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.57 J
1,2,4-Trimethylbenzene	1.1
1,3,5-Trimethylbenzene	0.47
2-Butanone	1.5 J
4-Methyl-2-pentanone	2.3
Acetone	12
Benzene	0.58
Carbon Tetrachloride	0.38
Chloromethane	1.1
Dichlorodifluoromethane	2.2
Ethanol	8.6 J+
Ethyl Benzene	1.5
p-Ethyltoluene	0.57
Heptane	0.25
n-Hexane	1.0 J
Isopropanol	1.4 J
Methylene Chloride	0.86 J
Toluene	0.79
Trichlorofluoromethane	1.2
m/p Xylene	6.4
o-Xylene	3.1

LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- BUILDING FOOTPRINT
- MW-## — MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- OFFICE-AI-## — INDOOR AIR SAMPLE LOCATION AND IDENTIFICATION NUMBER
- OFFICE-AO-## — AMBIENT AIR SAMPLE LOCATION AND IDENTIFICATION NUMBER

N

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES, BOUNDARIES, AND SAMPLE LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.
2. BASEMAP IMAGERY SOURCED FROM NEARMAP DATED SEPTEMBER 16, 2023.
3. MONITORING WELL LOCATIONS HAVE NOT BEEN SURVEYED. WELL LOCATIONS ARE APPROXIMATE, UNLESS STATED OTHERWISE.
4. INDOOR AIR SAMPLES WERE COLLECTED INSIDE THE OFFICE BUILDING ON THE FIRST FLOOR. THE AMBIENT AIR SAMPLE WAS COLLECTED OUTSIDE THE OFFICE BUILDING.
5. INDOOR AND AMBIENT AIR SAMPLES WERE ANALYZED FOR VOLATILE ORGANIC COMPOUNDS VIA USEPA METHOD TO-15. ONLY DETECTED COMPOUNDS ARE PRESENTED ON THIS FIGURE.
6. RESULTS ARE IN MICROGRAMS PER CUBIC METER ($\mu g/m^3$).
7. U - NOT DETECTED.
8. J - ESTIMATED VALUE.
9. J+ - ESTIMATED VALUE; BIASED HIGH.

0 50' 100'

SCALE: 1" = 50'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SITE MANAGEMENT PORTFOLIO B
TASK NO. 9 - METAL ETCHING CO., INC. - SITE NO. 130110
435 SOUTH MAIN STREET, FREEPORT, NASSAU COUNTY, NEW YORK

TITLE:
INDOOR AIR QUALITY SAMPLE LOCATION PLAN AND RESULTS

DRAWN BY:	H. DELGADO	PROJ NO.:	386554.0000.0000
CHECKED BY:	M. WELLS		**FIGURE 8**
APPROVED BY:	A. RAPOSO		
DATE:	MARCH 2024		

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FILE NO.: Fig 8 - IA & AA Samp. Loc. Plan & Res. (MEC).dwg

1:\47 -- ATTACHED XREFS: -- ATTACHED IMAGES: EPSG:2263, 2931600, EPSG:2263, 2933916, GEN= Imp=50.14 2000 (MEC); Plan=HW130110.2019-06-20 MetalEtching PRINTHAL_Page 1; Wed Plan=HW130110.2019-06-18 MetalEtching PRINTHAL_Page 1; Wed Jun 19, 2019 - 8:41am -- PLOT DATE: March 08, 2024 - 4:18PM -- LAYOUT: 11X17L
DRAWING NAME: \\CLIFTONPARK-VFP\cliftonpark\ECR\Projects\NYSDEC\D0098\12\Work Assignments\D0098\12-04 Site Management Portfolio B\09_Metal Etching Co., Inc.- 130110\Reports\2024 PRR\Figures\TRC WD\ Fig 8 - IA & AA Samp. Loc. Plan & Res. (MEC).dwg

Tables

Table 1
New York State Department of Environmental Conservation
Site Management Portfolio B
Task No. 9 - Metal Etching Co., Inc. - Site No. 130110
Freeport, Nassau County, New York
Summary of Depth to Water Measurements and Groundwater Elevations

Well ID	Screened Formation	Well Casing Elevation[1] (feet)	Depth to Bottom (feet below TOC)	Gauge Date	Depth to Water (feet below TOC)	Groundwater Elevation[1] (feet)
MW-04	Overburden	6.02	13	10/26/2023	5.21	0.81
MW-05R	Overburden	4.02	13	10/26/2023	2.62	1.40
MW-06	Overburden	4.34	13	10/26/2023	3.49	0.85
MW-08SR	Overburden	5.41	14	10/26/2023	4.40	1.01
MW-08DR	Overburden	5.24	31	10/26/2023	4.96	0.28
MW-09S	Overburden	4.27	14	10/26/2023	3.92	0.35
MW-09D	Overburden	4.16	32	10/26/2023	3.96	0.20
MW-10S	Overburden	5.09	14	10/26/2023	3.29	1.80
MW-10D	Overburden	5.30	32	10/26/2023	5.62	-0.32
MW-11S	Overburden	4.05	15	10/26/2023	3.05	1.00
MW-11D	Overburden	3.96	30	10/26/2023	3.18	0.78

Notes:
[1] Elevations are Above Mean Sea Level
ID - Identification
TOC - Top of Casing

Table 2
New York State Department of Environmental Conservation
Site Management Portfolio B
Task No. 9 - Metal Etching Co., Inc. - Site No. 130110
Freeport, Nassau County, New York
Summary of VOCs in Groundwater

Sample Location:			MW-04			MW-05R			MW-06					MW-08SR			MW-08DR		
Sample Name:			MEC-MW-04-WG-20201014	MEC-MW-04-WG-20211028	MEC-MW-04-WG-20231027	MEC-MW-05-WG-20201014	MEC-MW05-WG-20211029	MEC-MW-05R-WG-20231030	MEC-MW-06-WG-20201014	MEC-MW06-WG-20211029	MEC-DUP-WG-20211029	MEC-MW-06-WG-20231027	Duplicate1	MEC-MW-08S-WG-20201014	MEC-MW08S-WG-202111028	MEC-MW-08SR-WG-20231027	MEC-MW-08D-WG-20201014	MEC-MW-08D-WG-20211028	MEC-MW-08DR-WG-20231027
Sample Date:			10/14/2020	10/28/2021	10/27/2023	10/14/2020	10/29/2021	10/30/2023	10/14/2020	10/29/2021	10/29/2021	10/27/2023	10/27/2023	10/14/2020	10/28/2021	10/27/2023	10/14/2020	10/28/2021	10/27/2023
Analyte	Unit	Class GA Value*	Results	Results	Results	Results	Results	Results	Results	Results	Duplicate	Results	Duplicate	Results	Results	Results	Results	Results	Results
1,1,1-Trichloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.1 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	5	1.0 U	1.0 U	0.50 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	4.0 U	1.0 U	1.1 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	0.50 U
1,1,2-Trichloroethane	ug/L	1	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,1,2-Trichloro- 1,2,2-trifluoroethane	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,1-Dichloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,1-Dichloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 UJ	4.0 U	2.0 U	4.0 UJ	1.0 U
1,2,3-Trichlorobenzene	ug/L	5	NA	NA	5.0 U	NA	NA	10 U	NA	NA	NA	10 U	10 U	NA	NA	20 U	NA	NA	5.0 U
1,2,4-Trichlorobenzene	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,2-Dibromo-3-chloropropane	ug/L	0.04	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	10 U	4.0 U	4.0 U	4.0 U	10 U	10 U	4.0 U	4.0 U	20 U	2.0 U	4.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,2-Dichloroethane	ug/L	0.6	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,2-Dichloropropane	ug/L	1	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,4-Dioxane	ug/L	NC	NA	NA	50 UJ	NA	NA	100 UJ	NA	NA	NA	100 UJ	100 UJ	NA	NA	200 UJ	NA	NA	50 UJ
2-Butanone (MEK)	ug/L	50	10 U	10 U	20 U	40 U	40 UJ	40 U	40 U	40 UJ	40 UJ	40 U	40 U	40 U	40 U	80 U	20 U	40 U	20 U
2-Hexanone	ug/L	50	5.0 U	5.0 U	10 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	40 U	10 U	20 U	10 U
4-Methyl-2-pentanone	ug/L	NC	5.0 U	5.0 U	10 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	40 U	10 U	20 U	10 U
Acetone	ug/L	50	10 U	10 UJ	50 U	40 U	40 UJ	100 U	40 U	40 UJ	40 UJ	100 U	100 U	40 U	40 U	200 U	20 U	40 UJ	50 U
Benzene	ug/L	1	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
Bromochloromethane	ug/L	5	NA	NA	1.0 U	NA	NA	2.0 UJ	NA	NA	NA	2.0 U	2.0 U	NA	NA	4.0 U	NA	NA	1.0 U
Bromodichloromethane	ug/L	50	1.0 U	1.0 U	0.50 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	4.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	0.50 U
Bromoform	ug/L	50	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
Bromomethane	ug/L	5	1.0 U	1.0 U	2.0 U	4.0 U	4.0 U	4.0 UJ	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U	2.0 U	4.0 U	2.0 U
Carbon disulfide	ug/L	60	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	10 U	4.0 U	4.0 U	4.0 U	10 U	10 U	4.0 U	4.0 U	20 U	2.0 U	4.0 UJ	5.0 U
Carbon tetrachloride	ug/L	5	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	10 U	4.0 U	4.0 U	4.0 U	10 U	10 U	4.0 U	4.0 U	20 U	2.0 U	4.0 U	5.0 U
Chlorobenzene	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.1 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
Chlorodibromomethane	ug/L	50	NA	NA	0.50 U	NA	NA	1.0 U	NA	NA	NA	1.0 U	1.0 U	NA	NA	2.0 U	NA	NA	0.50 U
Chloroethane	ug/L	5	1.0 U	1.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U	2.0 U	4.0 U	2.0 U
Chloroform	ug/L	7	1.0 U	1.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U	2.0 U	4.0 U	2.0 U
Chloromethane	ug/L	5	1.0 U	1.0 U	2.0 U	4.0 U	4.0 U	4.0 UJ	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U	2.0 U	4.0 U	2.0 U
cis-1,2-Dichloroethene	ug/L	5	1.0 U	1.0 U	**0.45 J**	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	**91**	**22**	**10**
cis-1,3-Dichloropropene	ug/L	0.4(a)	1.0 U	1.0 U	0.50 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	4.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	0.50 U
Cyclohexane	ug/L	NC	1.0 U	1.0 U	5.0 UJ	**1.2 J**	**1.3 J**	10 U	**20**	**25 J**	**11 J**	**20 J**	**21 J**	**6.3**	**3.6 J**	20 UJ	2.0 U	4.0 U	5.0 UJ
Dibromochloromethane	ug/L	50	1.0 U	1.0 U	NA	4.0 U	4.0 U	NA	4.0 U	4.0 U	4.0 U	NA	NA	4.0 U	4.0 U	NA	2.0 U	4.0 U	NA
Dichlorodifluoromethane	ug/L	5	1.0 U	1.0 U	2.0 U	4.0 U	**3.1 J**	**0.88 J**	4.0 U	4.0 UJ	4.0 UJ	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U	2.0 U	4.0 U	2.0 U
Ethylbenzene	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	0.0006	1.0 U	1.0 U	0.50 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	4.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	0.50 U
Isopropylbenzene	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	**0.56 J**	**0.54 J**	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
Methyl acetate	ug/L	NC	2.5 UJ	2.5 U	1.0 U	10 UJ	10 U	2.0 U	10 UJ	10 U	10 U	2.0 UJ	2.0 U	10 UJ	10 U	4.0 U	5.0 UJ	10 U	1.0 U
Methyl tert-butyl ether	ug/L	10	1.0 U	1.0 U	1.0 U	**3.5 J**	**2.0 J**	**3.1**	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	**5.1**	**3.4 J**	**3.4 J**	**0.55 J**	4.0 U	**0.84 J**
Methylcyclohexane	ug/L	NC	1.0 U	**0.21 J**	1.0 U	4.0 U	4.0 U	2.0 U	**12**	**14 J**	**6.1 J**	**9.8**	**10**	**32**	**32**	**110**	**0.41 J**	4.0 U	**0.95 J**
Methylene chloride	ug/L	5	1.0 U	1.0 U	5.0 UJ	4.0 U	4.0 U	10 U	4.0 U	4.0 U	4.0 U	10 UJ	10 UJ	4.0 U	4.0 U	20 UJ	2.0 U	4.0 U	5.0 UJ
Styrene	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
Tetrachloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	**270**	**42**	**9.7**
Toluene	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	0.4(a)	1.0 U	1.0 U	0.50 U	4.0 U	4.0 U	1.0 U	4.0 U	4.0 U	4.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	0.50 U
Trichloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	4.0 U	4.0 U	**17**	**6.3**	**2.0**
Trichlorofluoromethane	ug/L	5	1.0 U	1.0 U	2.0 U	4.0 U	4.0 UJ	4.0 U	4.0 U	4.0 UJ	4.0 UJ	4.0 U	4.0 U	4.0 U	4.0 UJ	8.0 U	2.0 U	4.0 U	2.0 U
Vinyl chloride	ug/L	2	1.0 U	1.0 U	2.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U	**6.8**	**5.2**	**7.6**
Xylenes, total	ug/L	5	2.0 U	2.0 U	1.0 U	8.0 U	8.0 U	2.0 U	8.0 U	8.0 U	8.0 U	2.0 U	2.0 U	8.0 U	8.0 U	4.0 U	4.0 U	8.0 U	1.0 U

Notes:
ug/L - micrograms per liter.
J - Estimated value.
NA - Not analyzed.
NC - No NYSDEC standards exist for this analyte.
Sample MEC-DUP-WG-20211029 is a duplicate of sample MEC-MW06-WG-20211029.
Sample Duplicate1 is a duplicate of sample MEC-MW-06-WG-20231027.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standards.
VOCs - Volatile Organic Compounds.
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the February 2023 Addendum.
(a) - criteria applicable to the sum of the cis and trans isomers.

Table 2
New York State Department of Environmental Conservation
Site Management Portfolio B
Task No. 9 - Metal Etching Co., Inc. - Site No. 130110
Freeport, Nassau County, New York
Summary of VOCs in Groundwater

Sample Location:			MW-09S			MW-09D			MW-10S			MW-10D			MW-11S			MW-11D		
Sample Name:			MEC-MW-09S-WG-20201013	MEC-MW09S-WG-20211029	MEC-MW-09S-WG-20231030	MEC-MW-09D-WG-20201013	MEC-MW09D-WG-20211029	MEC-MW-09D-WG-20231030	MEC-MW-10S-WG-20201013	MEC-MW10S-WG-20211029	MEC-MW-10S-WG-20231030	MEC-MW-10D-WG-20201013	MEC-MW10D-WG-20211029	MEC-MW-10D-WG-20231030	MEC-MW-11S-WG-20201014	MEC-MW11S-WG-20211028	MEC-MW-11S-WG-20231026	MEC-MW-11D-WG-20201014	MEC-MW11D-WG-20211028	MEC-MW-11D-WG-20231026
Sample Date:			10/13/2020	10/29/2021	10/30/2023	10/13/2020	10/29/2021	10/30/2023	10/13/2020	10/29/2021	10/30/2023	10/13/2020	10/29/2021	10/30/2023	10/14/2020	10/28/2021	10/26/2023	10/14/2020	10/28/2021	10/26/2023
Analyte	Unit	Class GA Value*	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
1,1,1-Trichloroethane	ug/L	5	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	5	2.0 U	1.0 U	1.0 U	10 U	2.0 U	0.50 U	1.0 U	2.0 U	0.50 U	1.0 U	1.0 U	0.50 U	4.0 U	4.0 U	0.50 U	1.0 U	1.0 U	0.50 U
1,1,2-Trichloroethane	ug/L	1	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloro- 1,2,2-trifluoroethane	ug/L	5	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	5	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	5	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 UJ	1.0 U	1.0 U	1.0 UJ	1.0 U
1,2,3-Trichlorobenzene	ug/L	5	NA	NA	10 U	NA	NA	5.0 U	NA	NA	5.0 U	NA	NA	5.0 U	NA	NA	5.0 U	NA	NA	5.0 U
1,2,4-Trichlorobenzene	ug/L	5	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	ug/L	0.04	2.0 U	1.0 U	10 U	10 U	2.0 U	5.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	5.0 U	1.0 U	1.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	3	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	0.6	2.0 U	1.0 UJ	2.0 U	10 U	2.0 UJ	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	3	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	3	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane	ug/L	NC	NA	NA	100 UJ	NA	NA	50 UJ	NA	NA	50 UJ	NA	NA	50 UJ	NA	NA	50 UJ	NA	NA	50 UJ
2-Butanone (MEK)	ug/L	50	20 U	10 UJ	**5.5 J**	100 U	20 UJ	**4.4 J**	10 U	20 UJ	20 U	10 U	10 UJ	20 U	40 U	40 U	20 U	10 U	10 U	20 U
2-Hexanone	ug/L	50	10 U	5.0 U	20 U	50 U	10 U	10 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	20 U	20 U	10 U	5.0 U	5.0 U	10 U
4-Methyl-2-pentanone	ug/L	NC	10 U	5.0 U	20 U	50 U	10 U	10 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	20 U	20 U	10 U	5.0 U	5.0 U	10 U
Acetone	ug/L	50	**11 J**	**9.4 J**	**63 J**	100 U	20 UJ	71	10 U	20 UJ	**2.8 J**	10 U	10 UJ	50 U	40 U	40 U	50 U	10 U	10 U	50 U
Benzene	ug/L	1	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	ug/L	5	NA	NA	2.0 UJ	NA	NA	1.0 UJ	NA	NA	1.0 UJ	NA	NA	1.0 UJ	NA	NA	1.0 UJ	NA	NA	1.0 UJ
Bromodichloromethane	ug/L	50	2.0 U	1.0 U	1.0 U	10 U	2.0 U	0.50 U	1.0 U	2.0 U	0.50 U	1.0 U	1.0 U	0.50 U	4.0 U	4.0 U	0.50 U	1.0 U	1.0 U	0.50 U
Bromoform	ug/L	50	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	ug/L	5	2.0 U	1.0 U	4.0 UJ	10 U	2.0 U	2.0 UJ	1.0 U	2.0 U	2.0 UJ	1.0 U	1.0 U	2.0 UJ	4.0 U	4.0 U	2.0 U	1.0 U	1.0 U	2.0 U
Carbon disulfide	ug/L	60	2.0 U	1.0 U	10 U	10 U	2.0 U	5.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	5.0 U	1.0 U	1.0 U	5.0 U
Carbon tetrachloride	ug/L	5	2.0 U	1.0 U	10 U	10 U	2.0 UJ	5.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	5.0 U	1.0 U	1.0 U	5.0 U
Chlorobenzene	ug/L	5	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorodibromomethane	ug/L	50	NA	NA	1.0 U	NA	NA	0.50 U	NA	NA	0.50 UJ	NA	NA	0.50 U	NA	NA	0.50 U	NA	NA	0.50 U
Chloroethane	ug/L	5	2.0 U	1.0 U	4.0 U	10 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.0 U	4.0 U	4.0 U	2.0 U	1.0 U	1.0 U	2.0 U
Chloroform	ug/L	7	2.0 U	1.0 U	4.0 U	10 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.0 U	4.0 U	4.0 U	2.0 U	1.0 U	1.0 U	2.0 U
Chloromethane	ug/L	5	2.0 U	**1.4**	4.0 UJ	10 U	2.0 U	2.0 UJ	1.0 U	2.0 U	2.0 UJ	1.0 U	1.0 U	2.0 UJ	4.0 U	4.0 U	2.0 U	1.0 U	1.0 U	2.0 U
cis-1,2-Dichloroethene	ug/L	5	2.0 U	1.0 U	2.0 U	**410**	**110**	1.0 U	1.0 U	2.0 U	**0.14 J**	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L	0.4(a)	2.0 U	1.0 U	1.0 U	10 U	2.0 U	0.50 U	1.0 U	2.0 U	0.50 U	1.0 U	1.0 U	0.50 U	4.0 U	4.0 U	0.50 U	1.0 U	1.0 U	0.50 U
Cyclohexane	ug/L	NC	2.0 U	1.0 U	10 U	10 U	2.0 U	5.0 U	**5.7**	**5.1**	**2.2 J**	1.0 U	1.0 U	5.0 U	**3.4 J**	**4.0**	5.0 UJ	1.0 U	1.0 U	5.0 UJ
Dibromochloromethane	ug/L	50	2.0 U	1.0 U	NA	10 U	2.0 U	NA	1.0 U	2.0 U	NA	1.0 U	1.0 U	NA	4.0 U	4.0 U	NA	1.0 U	1.0 U	NA
Dichlorodifluoromethane	ug/L	5	2.0 U	1.0 UJ	4.0 U	10 U	2.0 UJ	2.0 U	1.0 U	2.0 UJ	2.0 U	1.0 U	1.0 UJ	2.0 U	4.0 U	4.0 U	2.0 U	1.0 U	1.0 U	2.0 U
Ethylbenzene	ug/L	5	2.0 U	1.0 U	**0.98 J**	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	0.0006	2.0 U	1.0 U	1.0 U	10 U	2.0 U	0.50 U	1.0 U	2.0 U	0.50 U	1.0 U	1.0 U	0.50 U	4.0 U	4.0 U	0.50 U	1.0 U	1.0 U	0.50 U
Isopropylbenzene	ug/L	5	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	**1.7**	**0.65 J**	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	ug/L	NC	5.0 U	2.5 UJ	2.0 U	25 U	5.0 UJ	1.0 U	2.5 U	5.0 U	1.0 U	2.5 U	2.5 U	1.0 U	10 UJ	10 U	1.0 U	2.5 UJ	2.5 U	1.0 U
Methyl tert-butyl ether	ug/L	10	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	**2.1**	**2.5**	**4.6**	**0.16 J**	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	ug/L	NC	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	**13**	**17**	**5.9**	1.0 U	1.0 U	1.0 U	**0.79 J**	**2.3 J**	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	5	2.0 U	1.0 U	10 U	10 U	2.0 U	5.0 U	1.0 U	2.0 U	5.0 U	1.0 U	1.0 U	5.0 U	4.0 U	4.0 U	5.0 UJ	1.0 U	1.0 U	5.0 UJ
Styrene	ug/L	5	**1.7 J**	**2.7**	**5.8**	10 U	2.0 U	**0.92 J**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	5	2.0 U	1.0 U	2.0 U	**50**	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	**0.96 J**	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	**13**	**11**
Toluene	ug/L	5	2.0 U	**1.6**	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	5	2.0 U	1.0 U	2.0 U	10 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	0.4(a)	2.0 U	1.0 U	1.0 U	10 U	2.0 U	0.50 U	1.0 U	2.0 U	0.50 U	1.0 U	1.0 U	0.50 U	4.0 U	4.0 U	0.50 U	1.0 U	1.0 U	0.50 U
Trichloroethene	ug/L	5	2.0 U	1.0 U	2.0 U	**56**	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	**0.71 J**	**0.98 J**	1.0 U	4.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	ug/L	5	2.0 U	1.0 UJ	4.0 U	10 U	2.0 UJ	2.0 U	1.0 U	2.0 UJ	2.0 U	1.0 U	1.0 UJ	2.0 U	4.0 U	4.0 UJ	2.0 U	1.0 U	1.0 UJ	2.0 U
Vinyl chloride	ug/L	2	2.0 U	1.0 U	4.0 U	**76**	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.0 U	4.0 U	4.0 U	2.0 U	1.0 U	1.0 U	2.0 U
Xylenes, total	ug/L	5	4.0 U	**0.90 J**	2.0 U	20 U	4.0 U	1.0 U	2.0 U	4.0 U	1.0 U	2.0 U	2.0 U	1.0 U	8.0 U	8.0 U	1.0 U	2.0 U	2.0 U	1.0 U

Notes:
ug/L - micrograms per liter.
J - Estimated value.
NA - Not analyzed.
NC - No NYSDEC standards exist for this analyte.
Sample MEC-DUP-WG-20211029 is a duplicate of sample MEC-MW06-WG-20211029.
Sample Duplicate1 is a duplicate of sample MEC-MW-06-WG-20231027.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standards.
VOCs - Volatile Organic Compounds.
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the February 2023 Addendum.
(a) - criteria applicable to the sum of the cis and trans isomers.

Table 3
New York State Department of Environmental Conservation
Site Management Portfolio B
Task No. 9 - Metal Etching Co., Inc. - Site No. 130110
Freeport, Nassau County, New York
Summary of Metals in Groundwater

Sample Location:			MW-04			MW-05R			MW-06					MW-08SR			MW-08DR		
Sample Name:			MEC-MW-04-WG-20201014	MEC-MW-04-WG-20211028	MEC-MW-04-WG-20231027	MEC-MW-05-WG-20201014	MEC-MW05-WG-20211029	MEC-MW-05R-WG-20231030	MEC-MW-06-WG-20201014	MEC-MW06-WG-20211029	MEC-DUP-WG-20211029	MEC-MW-06-WG-20231027	Duplicate1	MEC-MW-08S-WG-20201014	MEC-MW08S-WG-202111028	MEC-MW-08SR-WG-20231027	MEC-MW-08D-WG-20201014	MEC-MW-08D-WG-20211028	MEC-MW-08DR-WG-20231027
Sample Date:			10/14/2020	10/28/2021	10/27/2023	10/14/2020	10/29/2021	10/30/2023	10/14/2020	10/29/2021	10/29/2021	10/27/2023	10/27/2023	10/14/2020	10/28/2021	10/27/2023	10/14/2020	10/28/2021	10/27/2023
Analyte	Unit	Class GA Value*	Results	Results	Results	Results	Results	Results	Results	Results	Duplicate	Results	Duplicate	Results	Results	Results	Results	Results	Results
Aluminum	ug/L	NC	**390**	200 U	**100**	200 U	**120 J**	**93**	200 U	**130 J**	**220**	**75**	**69**	200 U	200 U	**39 J**	**180 J**	**510 J+**	**300**
Antimony	ug/L	3	20 U	20 U	50 U	20 U	20 U	50 U	20 U	20 U	20 U	50 U	50 U	20 U	20 U	50 U	20 U	20 U	50 U
Arsenic	ug/L	25	15 U	15 U	10 U	15 U	15 U	10 U	15 U	15 U	15 U	10 U	10 U	**57**	**16**	10 U	15 U	**8.7 J**	10 U
Barium	ug/L	1,000	**7.0**	**7.4**	**41 J**	**400**	**270**	**410**	**7.4**	**8.7**	**14**	**9.2 J**	**8.3 J**	**330**	**270**	**180**	**16**	**23**	**32 J**
Beryllium	ug/L	3	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	4.0 U
Cadmium	ug/L	5	2.0 U	2.0 U	4.0 U	**0.52 J**	**1.2 J**	4.0 U	2.0 U	**0.67 J**	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	4.0 U	2.0 U	**0.61 J**	4.0 U
Calcium	ug/L	NC	**30,000**	**29,200**	**72,000**	**159,000**	**98,700**	**150,000**	**107,000**	**99,100**	**99,100**	**82,000**	**81,000**	**118,000**	**97,300**	**83,000**	**43,900**	**48,100**	**61,000**
Chromium	ug/L	50	**6.4**	**1.2 J**	10 U	**1.1 J**	**1.8 J**	10 U	4.0 U	**1.1 J**	**3.3 J**	10 U	10 U	4.0 U	4.0 U	10 U	**4.9**	**9.5**	10 U
Cobalt	ug/L	NC	4.0 U	4.0 U	10 U	4.0 U	4.0 U	10 U	4.0 U	4.0 U	**2.2 J**	10 U	10 U	**18**	**8.6**	**7.9 J**	**1.3 J**	**1.6 J**	**2.5 J**
Copper	ug/L	200	**16**	**13**	**23**	**8.5 J**	**26**	**16**	**2.0 J**	**10**	**3.1 J**	**4.9 J**	10 U	**8.5 J**	**21**	10 U	**2.0 J**	**4.5 J**	10 U
Iron	ug/L	300	**1,400**	**730**	**3,500**	**14,100**	**9,500**	**20,000**	**7,300**	**13,500**	**10,000**	**5,300**	**5,000**	**27,400**	**9,000**	**9,800**	**10,700**	**29,100**	**15,000**
Lead	ug/L	25	**4.4 J**	10 U	10 U	**4.7 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**5.0 J**	10 U	10 U	10 U	10 U	10 U
Magnesium	ug/L	35,000	**3,400**	**3,100**	**9,400**	**31,800**	**25,000**	**36,000**	**43,500**	**39,900**	**39,700**	**36,000**	**36,000**	**16,200**	**13,300**	**14,000**	**10,700**	**10,900**	**14,000**
Manganese	ug/L	300	**260**	**180**	**390**	**810**	**510**	**780**	**320**	**310**	**330**	**190**	**190**	**1,100**	**710**	**520**	**370**	**370**	**340**
Mercury	ug/L	0.7	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	ug/L	100	**3.8 J**	**1.4 J**	**2.5 J**	10 U	**1.8 J**	10 U	10 U	**1.6 J**	**2.1 J**	10 U	10 U	**32**	**21**	**7.4 J**	**3.5 J**	**8.9 J**	**6.7 J**
Potassium	ug/L	NC	**4,800**	**4,800**	**7,200**	**35,800**	**26,600**	**36,000**	**17,800**	**16,500**	**16,800**	**16,000**	**16,000**	**10,900**	**11,400**	**11,000**	**6,900**	**8,000**	**8,500**
Selenium	ug/L	10	25 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	25 U	50 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U
Silver	ug/L	50	6.0 U	6.0 U	10 U	6.0 U	6.0 U	10 U	6.0 U	6.0 U	6.0 U	10 U	10 U	6.0 U	6.0 U	10 U	6.0 U	6.0 U	10 U
Sodium	ug/L	20,000	**30,900**	**24,400**	**69,000**	**403,000**	**292,000**	**420,000**	**270,000**	**244,000**	**247,000**	**250,000**	**250,000**	**74,400**	**75,100**	**97,000**	**109,000**	**82,200**	**78,000**
Thallium	ug/L	0.5	20 U	20 U	50 U	20 U	20 U	50 U	20 U	20 U	20 U	50 U	50 U	20 U	20 U	50 U	20 U	20 U	50 U
Vanadium	ug/L	NC	5.0 U	5.0 U	10 U	**2.9 J**	**4.1 J**	**7.7 J**	5.0 U	**2.7 J**	**1.8 J**	10 U	10 U	**5.9**	**2.8 J**	10 U	5.0 U	5.0 U	10 U
Zinc	ug/L	2,000	**22**	**11 J+**	**25 J+**	**8.0 J**	**15 J+**	10 U	**2.5 J**	**14 J+**	**36**	10 U	10 U	**16**	10 U	10 U	**48**	**12 J+**	10 U

Notes:
ug/L - micrograms per liter.
J - Estimated value.
J+ - Estimated value; biased high.
NA - Not analyzed.
NC - No NYSDEC standards exist for this analyte.
Sample MEC-DUP-WG-20211029 is a duplicate of sample MEC-MW06-WG-20211029.
Sample Duplicate1 is a duplicate of sample MEC-MW-06-WG-20231027.
U - Analyte was not detected at specified quantitation limit.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standards.
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the Feburary 2023 Addendum.

Table 3
New York State Department of Environmental Conservation
Site Management Portfolio B
Task No. 9 - Metal Etching Co., Inc. - Site No. 130110
Freeport, Nassau County, New York
Summary of Metals in Groundwater

			Sample Location:	MW-09S			MW-09D			MW-10S			MW-10D			MW-11S			MW-11D		
			Sample Name:	MEC-MW-09S-WG-20201013	MEC-MW09S-WG-20211029	MEC-MW-09S-WG-20231030	MEC-MW-09D-WG-20201013	MEC-MW09D-WG-20211029	MEC-MW-09D-WG-20231030	MEC-MW-10S-WG-20201013	MEC-MW10S-WG-20211029	MEC-MW-10S-WG-20231030	MEC-MW-10D-WG-20201013	MEC-MW10D-WG-20211029	MEC-MW-10D-WG-20231030	MEC-MW-11S-WG-20201014	MEC-MW11S-WG-20211028	MEC-MW-11S-WG-20231026	MEC-MW-11D-WG-20201014	MEC-MW11D-WG-20211028	MEC-MW-11D-WG-20231026
			Sample Date:	10/13/2020	10/29/2021	10/30/2023	10/13/2020	10/29/2021	10/30/2023	10/13/2020	10/29/2021	10/30/2023	10/13/2020	10/29/2021	10/30/2023	10/14/2020	10/28/2021	10/26/2023	10/14/2020	10/28/2021	10/26/2023
Analyte		Unit	Class GA Value*	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
Aluminum		ug/L	NC	**510**	**7,300**	**3,400**	**150 J**	**340**	**880**	**4,900**	200 U	**300**	**200**	**140 J**	**780**	**200**	**440 J+**	**130**	200 U	200 U	**27 J**
Antimony		ug/L	3	20 U	20 U	50 U	20 U	20 U	50 U	20 U	20 U	50 U	20 U	20 U	50 U	20 U	20 U	50 U	20 U	20 U	50 U
Arsenic		ug/L	25	15 U	**11 J**	10 U	15 U	15 U	10 U	15 U	15 U	10 U	15 U	15 U	10 U	15 U	15 U	10 U	15 U	15 U	10 U
Barium		ug/L	1,000	**360**	**4,400**	**3,100**	**260**	**550**	**850**	**2,100**	**1,600**	**1,900**	**32**	**31**	**6.6 J**	**33**	**33**	**87**	**16**	**17**	**15 J**
Beryllium		ug/L	3	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	4.0 U
Cadmium		ug/L	5	2.0 U	**2.5**	4.0 U	2.0 U	**0.65 J**	4.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	4.0 U
Calcium		ug/L	NC	**5,300**	**22,400**	**19,000**	**19,500**	**18,400**	**4,300**	**214,000**	**179,000**	**190,000**	**47,100**	**39,400**	**11,000**	**57,300**	**56,700**	**140,000**	**36,200**	**29,400**	**27,000**
Chromium		ug/L	50	**3.7 J**	**40**	**25**	**1.4 J**	**1.8 J**	10 U	**5.8**	4.0 U	10 U	**2.9 J**	**1.4 J**	**11**	4.0 U	**1.0 J**	10 U	4.0 U	4.0 U	10 U
Cobalt		ug/L	NC	**2.0 J**	**10**	**8.7 J**	**0.69 J**	**1.6 J**	**3.3 J**	**1.6 J**	4.0 U	**2.0 J**	4.0 U	4.0 U	10 U	**1.0 J**	**1.2 J**	10 U	4.0 U	4.0 U	10 U
Copper		ug/L	200	**520**	**6,600**	**3,600**	**240**	**380**	**800**	**12**	10 U	10 U	10 U	**2.7 J**	**5.4 J**	**2.6 J**	**2.7 J**	10 U	**5.3 J**	**4.9 J**	**8.3 J**
Iron		ug/L	300	**1,800**	**18,800**	**10,000**	**4,900**	**2,500**	**1,500**	**16,600**	**9,100**	**15,000**	**16,700**	**15,900**	**5,500**	**35,800**	**49,400**	**46,000**	**700**	**1,200**	**1,100**
Lead		ug/L	25	**4.1 J**	**56**	**46**	10 U	**4.8 J**	**16**	**12**	**3.6 J**	10 U	**3.1 J**	10 U	10 U	**4.0 J**	10 U	10 U	10 U	10 U	10 U
Magnesium		ug/L	35,000	**1,300**	**7,100**	**5,500**	**6,000**	**5,200**	**1,200**	**26,300**	**21,700**	**27,000**	**25,600**	**22,000**	**3,200**	**19,500**	**12,800**	**48,000**	**7,300**	**7,300**	**6,200**
Manganese		ug/L	300	**51**	**230**	**180**	**510**	**280**	**33**	**1,900**	**1,600**	**1,800**	**1,100**	**1,300**	**150**	**800**	**910**	**750**	**1,100**	**1,000**	**720**
Mercury		ug/L	0.7	0.20 U	**0.10 J**	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel		ug/L	100	**2.7 J**	**23**	**14**	10 U	**3.6 J**	**5.5 J**	**4.4 J**	10 U	10 U	**3.0 J**	**4.2 J**	**2.6 J**	10 U	**1.4 J**	10 U	10 U	10 U	10 U
Potassium		ug/L	NC	**1,000**	**2,800**	**2,900**	**2,400**	**2,100**	**880 J**	**15,300**	**13,700**	**16,000**	**8,700**	**7,900**	**2,300**	**9,400**	**8,400**	**17,000**	**4,800**	**5,400**	**5,200**
Selenium		ug/L	10	25 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U	25 U	25 U	50 U
Silver		ug/L	50	6.0 U	6.0 U	10 U	6.0 U	6.0 U	10 U	6.0 U	6.0 U	10 U	6.0 U	6.0 U	10 U	6.0 U	6.0 U	10 U	6.0 U	6.0 U	10 U
Sodium		ug/L	20,000	**5,200**	**15,900**	**27,000**	**68,600**	**47,000**	**4,600**	**67,200**	**76,500**	**68,000**	**281,000**	**240,000**	**18,000**	**212,000**	**155,000**	**430,000**	**180,000**	**138,000**	**130,000**
Thallium		ug/L	0.5	20 U	20 U	50 U	20 U	20 U	50 U	20 U	20 U	50 U	20 U	20 U	50 U	20 U	20 U	50 U	20 U	20 U	50 U
Vanadium		ug/L	NC	**4.9 J**	**33**	**15**	5.0 U	**2.2 J**	10 U	**12**	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U
Zinc		ug/L	2,000	**630**	**3,400**	**2,200**	**180**	**570**	**890**	**13**	10 U	10 U	**7.1 J**	**16 J+**	**4.3 J**	**3.8 J**	**16 J+**	10 U	**6.5 J**	**15**	10 U

Notes:
ug/L - micrograms per liter.
J - Estimated value.
J+ - Estimated value; biased high.
NA - Not analyzed.
NC - No NYSDEC standards exist for this analyte.
Sample MEC-DUP-WG-20211029 is a duplicate of sample MEC-MW06-WG-20211029.
Sample Duplicate1 is a duplicate of sample MEC-MW-06-WG-20231027.
U - Analyte was not detected at specified quantitation limit.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standards.
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the Feburary 2023 Addendum.

Table 4
New York State Department of Environmental Conservation
Site Management Portfolio B
Task No. 9 - Metal Etching Co., Inc. - Site No. 130110
Freeport, Nassau County, New York
Summary of PFAS in Groundwater

Sample Location:			MW-04			MW-05R			MW-06					MW-08SR			MW-08DR		
Sample Name:			MEC-MW-04-WG-20201014	MEC-MW-04-WG-20211028	MEC-MW-04-WG-20231027	MEC-MW-05-WG-20201014	MEC-MW05-WG-20211029	MEC-MW-05R-WG-20231030	MEC-MW-06-WG-20201014	MEC-MW06-WG-20211029	MEC-DUP-WG-20211029	MEC-MW-06-WG-20231027	Duplicate1	MEC-MW-08S-WG-20201014	MEC-MW08S-WG-20211028	MEC-MW-08SR-WG-20231027	MEC-MW-08D-WG-20201014	MEC-MW-08D-WG-20211028	MEC-MW-08DR-WG-20231027
Sample Date:			10/14/2020	10/28/2021	10/27/2023	10/14/2020	10/29/2021	10/30/2023	10/14/2020	10/29/2021	10/29/2021	10/27/2023	10/27/2023	10/14/2020	10/28/2021	10/27/2023	10/14/2020	10/28/2021	10/27/2023
Analyte	Unit	Class GA Value*	Results	Results	Results	Results	Results	Results	Results	Results	Duplicate	Results	Duplicate	Results	Results	Results	Results	Results	Results
Perfluorobutanoic Acid (PFBA)	ng/L	NC	**17**	**9.0**	**16**	**8.1**	**7.5**	**23**	**12**	**10**	**11**	**12**	**14**	**43**	**34**	**24 J**	**16**	**18**	**20 J**
Perfluoropentanoic Acid (PFPeA)	ng/L	NC	**19**	**11**	**17**	**9.9**	**10**	**14 J**	**12**	**8.0**	**8.3**	**24 J**	**25**	**12**	**16**	**12 J**	**6.6**	**10**	**10 J**
Perfluorohexanoic Acid (PFHxA)	ng/L	NC	**23**	**13**	**22**	**16**	**16**	**25**	**15**	**11**	**12**	**19**	**21**	**11**	**12**	**13 J**	**5.8**	**8.2**	**8.3 J**
Perfluoroheptanoic Acid (PFHpA)	ng/L	NC	**45**	**24**	**39**	**22**	**22**	**27**	**27**	**22**	**24**	**25**	**25**	**12**	**13**	**15 J**	**6.9**	**9.0**	**11 J**
Perfluorooctanoic acid (PFOA)	ng/L	6.7	**87**	**53**	**50**	**91**	**95**	**110**	**89**	**92**	**93**	**73**	**70**	**40**	**36**	**32 J**	**19**	**26**	**26 J**
Perfluorononanoic Acid (PFNA)	ng/L	NC	**37**	**33**	**20**	**24**	**26**	**23**	**37**	**33**	**31**	**29**	**29**	**9.5**	**11**	**10 J**	**6.7**	**7.3**	**8.7 J**
Perfluorodecanoic Acid (PFDA)	ng/L	NC	**42**	**45**	**51**	**19**	**25**	**22**	**9.2**	**12**	**11**	**13**	**12**	**7.7**	**22**	**6.6 J**	**5.8**	**6.0**	**6.8 J**
Perfluoroundecanoic Acid (PFUnA)	ng/L	NC	1.9 U	**2.1**	**2.5**	2.0 U	**2.4**	**2.7**	1.8 U	**0.31 J**	1.8 U	1.0 U	1.0 U	**10**	**14**	**3.8 J**	1.9 U	**0.72 J**	2.0 UJ
Perfluorododecanoic Acid (PFDoA)	ng/L	NC	1.9 U	**0.34 J**	0.96 U	2.0 U	1.7 U	0.93 U	1.8 U	1.8 U	1.8 U	1.0 U	1.0 U	**8**	**8.7**	**3.4 J**	1.9 U	**0.54 J**	2.0 UJ
Perfluorotridecanoic Acid (PFTriA)	ng/L	NC	1.9 U	1.8 U	0.96 U	2.0 U	1.7 U	0.93 U	1.8 U	1.8 U	1.8 U	1.0 U	1.0 U	1.8 U	**0.39 J**	2.1 UJ	1.9 U	1.8 U	2.0 UJ
Perfluorotetradecanoic Acid (PFTeA)	ng/L	NC	1.9 U	1.8 U	0.96 U	2.0 U	1.7 U	0.93 U	1.8 U	1.8 U	1.8 U	1.0 U	1.0 U	1.8 U	1.8 U	2.1 UJ	1.9 U	1.8 U	2.0 UJ
Perfluorobutanesulfonic Acid (PFBS)	ng/L	NC	**37**	**13**	**44**	**4.7**	**5.7**	**7.0**	**8.4**	**7.3**	**6.9**	**8.1**	**8.7**	**680**	**500**	**340 J**	**180**	**230**	**230 J**
Perfluoropentanesulfonic Acid (PFPeS)	ng/L	NC	NA	NA	0.96 U	NA	NA	0.93 U	NA	NA	NA	1.0 U	1.0 U	NA	NA	2.1 UJ	NA	NA	2.0 UJ
Perfluorohexane Sulfonic Acid (PFHxS)	ng/L	NC	1.9 U	**0.32 J**	0.96 U	**5.7**	**5.3**	**7.1**	**3.4**	**3.8**	**4.1**	**4.7**	**5.3**	**52**	**34**	**26 J**	**6.5**	**5.6**	**6.2 J**
Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	NC	1.9 U	1.8 U	0.96 U	2.0 U	**0.26 J**	0.93 U	1.8 U	**0.38 J**	**0.39 J**	1.0 U	1.0 U	1.8 U	**0.98 J**	2.1 UJ	1.9 U	**0.35 J**	2.0 UJ
Perfluorooctanesulfonic Acid (PFOS)	ng/L	2.7	**5.3**	**4.9**	**5.1**	**24**	**28**	**20**	**23**	**23**	**21**	**31**	**28**	**47**	**49**	**35 J**	**18**	**28**	**40 J**
Perfluorononanesulfonic Acid (PFNS)	ng/L	NC	NA	NA	0.96 U	NA	NA	0.93 U	NA	NA	NA	1.0 U	1.0 U	NA	NA	2.1 UJ	NA	NA	2.0 UJ
Perfluorodecanesulfonic Acid (PFDS)	ng/L	NC	1.9 U	1.8 U	0.96 U	2.0 U	1.7 U	0.93 U	1.8 U	1.8 U	1.8 U	1.0 U	1.0 U	1.8 U	1.8 U	2.1 UJ	1.9 U	1.8 U	2.0 UJ
Perfluorododecane sulfonic acid (PFDoS)	ng/L	NC	NA	NA	0.96 UJ	NA	NA	0.93 U	NA	NA	NA	1.0 UJ	1.0 UJ	NA	NA	2.1 UJ	NA	NA	2.0 UJ
4:2 Fluorotelomer Sulfonate (4:2 FTS)	ng/L	NC	NA	NA	3.9 U	NA	NA	3.7 U	NA	NA	NA	4.0 U	4.0 U	NA	NA	8.2 UJ	NA	NA	8.2 UJ
6:2 Fluorotelomer sulfonate (6:2 FTS)	ng/L	NC	4.8 U	**11**	3.9 U	4.9 U	**1.9 J**	**2.0 J**	4.6 U	**3.8 J**	**2.8 J**	4.0 U	4.0 U	4.5 U	**7.2**	8.2 UJ	4.9 U	4.4 U	8.2 UJ
8:2 Fluorotelomer sulfonate (8:2 FTS)	ng/L	NC	1.9 U	1.8 U	3.9 U	2.0 U	**0.43 J**	3.7 U	1.8 U	1.8 U	1.8 U	4.0 U	4.0 U	1.8 U	**2.2**	8.2 UJ	1.9 U	1.8 U	8.2 UJ
Perfluorooctane Sulfonamide (FOSA)	ng/L	NC	1.9 U	1.8 U	0.96 U	**2.1**	1.7 U	**0.52 J**	1.8 U	1.8 U	1.8 U	1.0 U	1.0 U	1.8 U	1.8 U	2.1 UJ	**1.3 J**	1.8 U	2.0 UJ
N-Methylperfluorooctane sulfonamide (NMeFOSA)	ng/L	NC	NA	NA	0.96 U	NA	NA	0.93 U	NA	NA	NA	1.0 U	1.0 U	NA	NA	2.1 UJ	NA	NA	2.0 UJ
N-Ethylperfluorooctane sulfonamide (NEtFOSA)	ng/L	NC	NA	NA	0.96 U	NA	NA	0.93 U	NA	NA	NA	1.0 U	1.0 U	NA	NA	2.1 UJ	NA	NA	2.0 UJ
2-(N-methyl perfluorooctanesulfonamido) acetic acid (N-MeFOSAA)	ng/L	NC	4.8 U	4.4 U	0.96 UJ	4.9 U	4.3 U	0.93 U	4.6 U	4.6 U	4.6 U	1.0 UJ	1.0 UJ	4.5 U	4.5 U	2.1 UJ	4.9 U	4.4 U	2.0 UJ
N-ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	ng/L	NC	4.8 U	4.4 U	0.96 UJ	**1.6 J**	**1.5 J**	0.93 U	4.6 U	4.6 U	4.6 U	1.0 UJ	1.0 UJ	4.5 U	4.5 U	2.1 UJ	4.9 U	4.4 U	2.0 UJ
N-Methyl perfluorooctane sulfonamido ethanol (NMeFOSE)	ng/L	NC	NA	NA	9.6 UJ	NA	NA	9.3 U	NA	NA	NA	10 UJ	10 UJ	NA	NA	21 UJ	NA	NA	20 UJ
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	ng/L	NC	NA	NA	9.6 UJ	NA	NA	9.3 U	NA	NA	NA	10 UJ	10 UJ	NA	NA	21 UJ	NA	NA	20 UJ
Perfluoro-2-methyl-3-oxahexanoic acid (HFPO-DA)	ng/L	NC	NA	NA	**1.0 J**	NA	NA	**2.3 J**	NA	NA	NA	**1.4 J**	**1.3 J**	NA	NA	8.2 UJ	NA	NA	8.2 UJ
4,8-dioxa-3H-perfluorononanoic Acid (ADONA)	ng/L	NC	NA	NA	3.9 U	NA	NA	3.7 U	NA	NA	NA	4.0 U	4.0 U	NA	NA	8.2 UJ	NA	NA	8.2 UJ
9Cl-PF3ONS (F53B Major)	ng/L	NC	NA	NA	3.9 U	NA	NA	3.7 U	NA	NA	NA	4.0 U	4.0 U	NA	NA	8.2 UJ	NA	NA	8.2 UJ
11Cl-PF3OUdS (F53B Minor)	ng/L	NC	NA	NA	3.9 U	NA	NA	3.7 U	NA	NA	NA	4.0 U	4.0 U	NA	NA	8.2 UJ	NA	NA	8.2 UJ
3:3 Fluorotelomer carboxylic acid (3:3 FTCA)	ng/L	NC	NA	NA	9.6 U	NA	NA	9.3 U	NA	NA	NA	10 U	10 U	NA	NA	21 UJ	NA	NA	20 UJ
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ng/L	NC	NA	NA	48 U	NA	NA	47 U	NA	NA	NA	50 U	50 U	NA	NA	100 UJ	NA	NA	100 UJ
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ng/L	NC	NA	NA	48 U	NA	NA	47 U	NA	NA	NA	50 U	50 U	NA	NA	100 UJ	NA	NA	100 UJ
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ng/L	NC	NA	NA	1.9 U	NA	NA	1.9 U	NA	NA	NA	2.0 U	2.0 U	NA	NA	4.1 UJ	NA	NA	4.1 UJ
Perfluoro-3-methoxypropanoic Acid (PFMPA)	ng/L	NC	NA	NA	1.9 U	NA	NA	1.9 U	NA	NA	NA	2.0 U	2.0 U	NA	NA	4.1 UJ	NA	NA	4.1 UJ
Perfluoro(4-methoxybutanoic) Acid (PFMBA)	ng/L	NC	NA	NA	1.9 U	NA	NA	1.9 U	NA	NA	NA	2.0 U	2.0 U	NA	NA	4.1 UJ	NA	NA	4.1 UJ
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ng/L	NC	NA	NA	1.9 UJ	NA	NA	1.9 UJ	NA	NA	NA	2.0 UJ	2.0 UJ	NA	NA	4.1 U	NA	NA	4.1 UJ

Notes:
ng/L - nanograms per liter.

J - Estimated value.
J+ - Estimated value; biased high.
NA- Not analyzed.
NC - No NYSDEC standards exist for this analyte.
Sample MEC-DUP-WG-20211029 is a duplicate of sample MEC-MW06-WG-20211029.
Sample Duplicate1 is a duplicate of sample MEC-MW-06-WG-20231027.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standards.
PFAS - Per- and Polyfluoroalkyl Substances.
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the Feburary 2023 Addendum.

Table 4
New York State Department of Environmental Conservation
Site Management Portfolio B
Task No. 9 - Metal Etching Co., Inc. - Site No. 130110
Freeport, Nassau County, New York
Summary of PFAS in Groundwater

			Sample Location:	MW-09S			MW-09D			MW-10S			MW-10D			MW-11S			MW-11D		
			Sample Name:	MEC-MW-09S-WG-20201013	MEC-MW09S-WG-20211029	MEC-MW-09S-WG-20231030	MEC-MW-09D-WG-20201013	MEC-MW09D-WG-20211029	MEC-MW-09D-WG-20231030	MEC-MW-10S-WG-20201013	MEC-MW10S-WG-20211029	MEC-MW-10S-WG-20231030	MEC-MW-10D-WG-20201013	MEC-MW10D-WG-20211029	MEC-MW-10D-WG-20231030	MEC-MW-11S-WG-20201014	MEC-MW11S-WG-20211028	MEC-MW-11S-WG-20231026	MEC-MW-11D-WG-20201014	MEC-MW11D-WG-20211028	MEC-MW-11D-WG-20231026
			Sample Date:	10/13/2020	10/29/2021	10/30/2023	10/13/2020	10/29/2021	10/30/2023	10/13/2020	10/29/2021	10/30/2023	10/13/2020	10/29/2021	10/30/2023	10/14/2020	10/28/2021	10/26/2023	10/14/2020	10/28/2021	10/26/2023
Analyte		Unit	Class GA Value*	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results	Results
Perfluorobutanoic Acid (PFBA)		ng/L	NC	4.8 U	**9.6**	**14 J**	**6.3**	**3.6 J**	**4.6**	**7.2**	**22**	**14**	**4.3 J**	**3.7 J**	**1.9 J**	**20**	**22**	**22 J**	**10**	**14**	**10**
Perfluoropentanoic Acid (PFPeA)		ng/L	NC	**2.3**	**2.8**	**37 J**	**3.6**	**2.1**	**1.1 J**	**11**	**14**	**120 J**	**4.0**	**4.0**	**1.2 J**	**41**	**25**	**67 J**	**5.6**	**13**	**5.1**
Perfluorohexanoic Acid (PFHxA)		ng/L	NC	**1.6 J**	**3.4**	**13 J**	**3.8**	**3.1**	**8.8**	**17**	**16**	**21**	**3.9**	**4.3**	**0.96**	**20**	**17**	**11 J**	**4.4**	**9.9**	**5.1**
Perfluoroheptanoic Acid (PFHpA)		ng/L	NC	**0.87 J**	**4.2**	**26 J**	**3.3**	**3.1**	**11**	**25**	**22**	**33**	**4.0**	**4.5**	**1.6**	**3.6**	**4.1**	**4.6 J**	**3.8**	**4.2**	**4.2**
Perfluorooctanoic acid (PFOA)		ng/L	6.7	**2.9**	**5.9**	**8.6 J**	**13**	**4.4**	**2.8**	**54**	**56**	**95**	**12**	**13**	**4.0**	**11**	**13**	**13 J**	**18**	**19**	**21**
Perfluorononanoic Acid (PFNA)		ng/L	NC	**4.1**	**3.7**	**5.9 J**	**6.0**	**1.2 J**	**2.5**	**28**	**22**	**23**	**1.4 J**	**1.6 J**	**1.3**	**1.3 J**	**1.6 J**	5.1 UJ	**1.9 J**	**1.6 J**	**2.3**
Perfluorodecanoic Acid (PFDA)		ng/L	NC	**15**	**7.9**	**9.5 J**	**6.3**	**1.5 J**	**4.0**	**24**	**27**	**20**	1.9 U	**0.39 J**	**1.1**	1.9 U	**0.68 J**	5.1 UJ	2.0 U	**0.41 J**	0.93 U
Perfluoroundecanoic Acid (PFUnA)		ng/L	NC	**12**	**3.6**	**4.5 J**	**2.4**	**1.2 J**	**4.5**	**4.6**	**3.8**	**4.3**	1.9 U	1.8 U	0.96 U	1.9 U	1.8 U	5.1 UJ	2.0 U	1.7 U	0.93 U
Perfluorododecanoic Acid (PFDoA)		ng/L	NC	**7.4**	**5.8**	**6.0 J**	**1.5 J**	**2.6**	**6.8**	**2.2**	**1.6 J**	**2.6**	1.9 U	1.8 U	0.96 U	1.9 U	1.8 U	5.1 UJ	2.0 U	1.7 U	0.93 U
Perfluorotridecanoic Acid (PFTriA)		ng/L	NC	**1.3 J**	**1.8**	**3.0 J**	2.0 U	**0.90 J**	**2.0**	1.9 U	1.8 U	0.94 U	1.9 U	1.8 U	0.96 U	1.9 U	1.8 U	5.1 UJ	2.0 U	1.7 U	0.93 U
Perfluorotetradecanoic Acid (PFTeA)		ng/L	NC	**1.5 J**	**3.2**	**4.8 J**	2.0 U	**1.2 J**	**2.6**	1.9 U	1.8 U	0.94 U	1.9 U	1.8 U	0.96 U	1.9 U	1.8 U	5.1 UJ	2.0 U	1.7 U	0.93 U
Perfluorobutanesulfonic Acid (PFBS)		ng/L	NC	**1.3 J**	**9.3**	**17 J**	**6.8**	**1.9 J+**	**7.3**	**10**	**7.9**	**11**	**1.4 J**	1.8 U	**0.91 J**	**2.6**	**3.6**	**5.0 J**	**3.4**	**4.4**	**5.0**
Perfluoropentanesulfonic Acid (PFPeS)		ng/L	NC	NA	NA	5.1 UJ	NA	NA	0.95 U	NA	NA	0.94 U	NA	NA	0.96 U	NA	NA	5.1 UJ	NA	NA	0.93 U
Perfluorohexane Sulfonic Acid (PFHxS)		ng/L	NC	1.9 U	**0.88 J**	5.1 UJ	**0.96 J**	**0.44 J**	0.95 U	**4.9**	**5.0**	**6.6**	**1.9**	**1.5 J**	0.96 U	**4.7**	**2.8**	**19 J**	**2.6**	**2.3**	**3.2**
Perfluoroheptanesulfonic Acid (PFHpS)		ng/L	NC	1.9 U	1.8 U	5.1 UJ	2.0 U	1.8 U	0.95 U	**0.83 J**	**1.0 J**	0.94 U	1.9 U	1.8 U	0.96 U	1.9 U	**0.29 J**	5.1 UJ	2 U	**0.55 J**	0.93 U
Perfluorooctanesulfonic Acid (PFOS)		ng/L	2.7	**1.2 J**	**5.8**	**5.6 J**	**4.7**	**2.4**	**3.1 J**	**56**	**55**	**57**	**7.5**	**6.2**	**1.3**	**34**	**28**	**32 J**	**46**	**36**	**55**
Perfluorononanesulfonic Acid (PFNS)		ng/L	NC	NA	NA	5.1 UJ	NA	NA	0.95 U	NA	NA	0.94 U	NA	NA	0.96 U	NA	NA	5.1 UJ	NA	NA	0.93 U
Perfluorodecanesulfonic Acid (PFDS)		ng/L	NC	1.9 U	1.8 U	5.1 UJ	2.0 U	1.8 U	0.95 U	1.9 U	1.8 U	0.94 U	1.9 U	1.8 U	0.96 U	1.9 U	1.8 U	5.1 UJ	2.0 U	1.7 U	0.93 U
Perfluorododecane sulfonic acid (PFDoS)		ng/L	NC	NA	NA	5.1 UJ	NA	NA	0.95 U	NA	NA	0.94 U	NA	NA	0.96 U	NA	NA	5.1 UJ	NA	NA	0.93 UJ
4:2 Fluorotelomer Sulfonate (4:2 FTS)		ng/L	NC	NA	NA	21 UJ	NA	NA	3.8 U	NA	NA	3.8 U	NA	NA	3.8 U	NA	NA	20 UJ	NA	NA	3.7 U
6:2 Fluorotelomer sulfonate (6:2 FTS)		ng/L	NC	**3.0 J**	**6.3**	21 UJ	**7.1 J**	**4.6**	3.8 UJ	4.8 U	**21**	3.8 UJ	4.8 U	4.5 U	3.8 UJ	4.8 U	**8.9**	20 UJ	4.9 U	**30**	3.7 U
8:2 Fluorotelomer sulfonate (8:2 FTS)		ng/L	NC	1.9 U	1.8 U	21 UJ	2.0 U	1.8 U	3.8 UJ	1.9 U	1.8 U	3.8 UJ	1.9 U	1.8 U	3.8 UJ	1.9 U	1.8 U	20 UJ	2.0 U	1.7 U	3.7 U
Perfluorooctane Sulfonamide (FOSA)		ng/L	NC	**2.2**	1.8 U	5.1 UJ	**1.8 J**	1.8 U	**0.32 J**	1.9 U	1.8 U	**0.82 J**	**1.8 J**	1.8 U	0.96 U	**2.4**	1.8 U	5.1 UJ	2.0 U	1.7 U	0.93 U
N-Methylperfluorooctane sulfonamide (NMeFOSA)		ng/L	NC	NA	NA	5.1 UJ	NA	NA	0.95 U	NA	NA	0.94 U	NA	NA	0.96 U	NA	NA	5.1 UJ	NA	NA	0.93 U
N-Ethylperfluorooctane sulfonamide (NEtFOSA)		ng/L	NC	NA	NA	5.1 UJ	NA	NA	0.95 U	NA	NA	0.94 U	NA	NA	0.96 U	NA	NA	5.1 UJ	NA	NA	0.93 U
2-(N-methyl perfluorooctanesulfonamido) acetic acid (N-MeFOSAA)		ng/L	NC	4.8 U	4.5 U	5.1 UJ	4.9 U	4.4 U	0.95 U	4.8 U	4.4 U	0.94 U	4.8 U	4.5 U	0.96 U	4.8 U	4.4 U	5.1 UJ	4.9 U	4.3 U	0.93 UJ
N-ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)		ng/L	NC	4.8 U	4.5 U	5.1 UJ	4.9 U	4.4 U	0.95 UJ	4.8 U	4.4 U	0.94 UJ	4.8 U	4.5 U	0.96 UJ	4.8 U	4.4 U	5.1 UJ	4.9 U	4.3 U	0.93 UJ
N-Methyl perfluorooctane sulfonamido ethanol (NMeFOSE)		ng/L	NC	NA	NA	51 UJ	NA	NA	9.5 U	NA	NA	9.4 U	NA	NA	9.6 U	NA	NA	51 UJ	NA	NA	9.3 UJ
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)		ng/L	NC	NA	NA	51 UJ	NA	NA	9.5 U	NA	NA	9.4 U	NA	NA	9.6 U	NA	NA	51 UJ	NA	NA	9.3 UJ
Perfluoro-2-methyl-3-oxahexanoic acid (HFPO-DA)		ng/L	NC	NA	NA	21 UJ	NA	NA	**2.1 J**	NA	NA	3.8 U	NA	NA	3.8 U	NA	NA	20 UJ	NA	NA	3.7 U
4,8-dioxa-3H-perfluorononanoic Acid (ADONA)		ng/L	NC	NA	NA	21 UJ	NA	NA	3.8 U	NA	NA	3.8 U	NA	NA	3.8 U	NA	NA	20 UJ	NA	NA	3.7 U
9Cl-PF3ONS (F53B Major)		ng/L	NC	NA	NA	21 UJ	NA	NA	3.8 U	NA	NA	3.8 U	NA	NA	3.8 U	NA	NA	20 UJ	NA	NA	3.7 U
11Cl-PF3OUdS (F53B Minor)		ng/L	NC	NA	NA	21 UJ	NA	NA	3.8 U	NA	NA	3.8 U	NA	NA	3.8 U	NA	NA	20 UJ	NA	NA	3.7 U
3:3 Fluorotelomer carboxylic acid (3:3 FTCA)		ng/L	NC	NA	NA	51 UJ	NA	NA	9.5 U	NA	NA	9.4 U	NA	NA	9.6 U	NA	NA	51 UJ	NA	NA	9.3 U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)		ng/L	NC	NA	NA	260 UJ	NA	NA	48 U	NA	NA	47 U	NA	NA	48 U	NA	NA	250 UJ	NA	NA	47 U
3-Perfluoroheptylpropanoic acid (7:3 FTCA)		ng/L	NC	NA	NA	260 UJ	NA	NA	48 U	NA	NA	47 U	NA	NA	48 U	NA	NA	250 UJ	NA	NA	47 U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)		ng/L	NC	NA	NA	10 UJ	NA	NA	1.9 U	NA	NA	1.9 U	NA	NA	1.9 U	NA	NA	10 UJ	NA	NA	1.9 U
Perfluoro-3-methoxypropanoic Acid (PFMPA)		ng/L	NC	NA	NA	10 UJ	NA	NA	1.9 U	NA	NA	1.9 U	NA	NA	1.9 U	NA	NA	10 UJ	NA	NA	1.9 U
Perfluoro(4-methoxybutanoic) Acid (PFMBA)		ng/L	NC	NA	NA	10 UJ	NA	NA	1.9 U	NA	NA	1.9 U	NA	NA	1.9 U	NA	NA	10 UJ	NA	NA	1.9 U
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)		ng/L	NC	NA	NA	10 UJ	NA	NA	1.9 UJ	NA	NA	1.9 UJ	NA	NA	1.9 UJ	NA	NA	10 UJ	NA	NA	1.9 UJ

Notes:
ng/L - nanograms per liter.

J - Estimated value.
J+ - Estimated value; biased high.
NA- Not analyzed.
NC - No NYSDEC standards exist for this analyte.
Sample MEC-DUP-WG-20211029 is a duplicate of sample MEC-MW06-WG-20211029.
Sample Duplicate1 is a duplicate of sample MEC-MW-06-WG-20231027.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
Values in **bold** indicate the analyte was detected.
Values shown in bold and shaded type exceed the listed NYSDEC standards.
PFAS - Per- and Polyfluoroalkyl Substances.
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the Feburary 2023 Addendum.

Table 5
New York State Department of Environmental Conservation
Site Management Portfolio B
Task No. 9 - Metal Etching Co., Inc. - 130110
Freeport, Nassau County, New York
Summary of VOCs in Indoor Air

			OFFICE-AI-1						OFFICE-AO-1			
Sample Location:			MEC-OFFICE-AI-1 20210326		MEC-Office-AI-1-20220301		MEC-DUP-1-20220301		MEC-OFFICE-AO-1 20210326		MEC-Office-AO-1-20220301	
Sample Name:												
Lab Sample ID:			140-22504-1		22C0276-01		22C0276-03		140-22504-2		22C0276-02	
Sample Date:			3/26/2021		3/1/2022		3/1/2022		3/26/2021		3/1/2022	
Matrix:			Indoor Air		Indoor Air		Indoor Air		Ambient Air		Ambient Air	
Analyte	Unit	Guideline Value*	Results		Results		Field Duplicate		Results		Results	
1,1,1-Trichloroethane	ug/m^3	NC	2.7	U	0.19	U	0.19	U	0.44	U	0.19	U
1,1,2,2-Tetrachloroethane	ug/m^3	NC	3.4	U	0.24	U	0.24	U	0.55	U	0.24	U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/m^3	NC	3.8	U	**0.47**	**J**	**0.50**	**J**	0.61	U	**0.57**	**J**
1,1,2-Trichloroethane	ug/m^3	NC	2.7	U	0.19	U	0.19	U	0.44	U	0.19	U
1,1-Dichloroethane	ug/m^3	NC	2.0	U	0.14	U	0.14	U	0.32	U	0.14	U
1,1-Dichloroethylene	ug/m^3	NC	0.99	U	0.14	U	0.14	U	0.16	U	0.14	U
1,2,4-Trichlorobenzene	ug/m^3	NC	3.7	U	0.52	UJ	0.52	UJ	0.59	U	0.52	UJ
1,2,4-Trimethylbenzene	ug/m^3	NC	2.5	U	**0.34**		**0.29**		0.39	U	**1.1**	
1,2-Dibromoethane	ug/m^3	NC	3.8	U	0.27	U	0.27	U	0.61	U	0.27	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m^3	NC	3.5	U	0.24	U	0.24	U	0.56	U	0.24	U
1,2-Dichlorobenzene	ug/m^3	NC	3.0	U	0.21	U	0.21	U	0.48	U	0.21	U
1,2-Dichloroethane	ug/m^3	NC	2.0	U	0.14	U	0.14	U	0.32	U	0.14	U
1,2-Dichloropropane	ug/m^3	NC	2.3	U	0.16	U	0.16	U	0.37	U	0.16	U
1,3,5-Trimethylbenzene	ug/m^3	NC	2.5	U	**0.15**	**J**	**0.11**	**J**	0.39	U	**0.47**	
1,3-Butadiene	ug/m^3	NC	NA		0.077	U	0.077	U	NA		0.077	U
1,3-Dichlorobenzene	ug/m^3	NC	3.0	U	0.21	U	0.21	U	0.48	U	0.21	U
1,4-Dichlorobenzene	ug/m^3	NC	3.0	U	0.21	U	0.21	U	0.48	U	0.21	U
1,4-Dioxane	ug/m^3	NC	4.5	U	1.3	U	1.3	U	0.72	U	1.3	U
2,2,4-Trimethylpentane	ug/m^3	NC	5.8	U	NA		NA		0.93	U	NA	
2-Butanone (MEK)	ug/m^3	NC	5.9	U	**2.9**	**J**	**2.4**	**J**	**1.9**		**1.5**	**J**
2-Hexanone (MBK)	ug/m^3	NC	NA		0.29	U	0.29	U	NA		0.29	U
4-Methyl-2-pentanone (MIBK)	ug/m^3	NC	5.1	U	**0.47**		**0.36**		0.82	U	**2.3**	
Acetone	ug/m^3	NC	NA		**24**		**22**		NA		**12**	
Benzene	ug/m^3	NC	1.6	U	**0.71**		**0.66**		0.26	U	**0.58**	
Benzyl chloride	ug/m^3	NC	5.2	U	0.18	U	0.18	U	0.83	U	0.18	U
Bromodichloromethane	ug/m^3	NC	3.4	U	0.23	U	0.23	U	0.54	U	0.23	U
Bromoform	ug/m^3	NC	5.2	U	0.36	U	0.36	U	0.83	U	0.36	U
Bromomethane	ug/m^3	NC	1.9	U	0.14	U	0.14	U	0.31	U	0.14	U
Carbon Disulfide	ug/m^3	NC	NA		1.1	U	1.1	U	NA		1.1	U
Carbon Tetrachloride	ug/m^3	NC	1.3	U	**0.53**		**0.54**		**0.46**		**0.38**	
Chlorobenzene	ug/m^3	NC	2.3	U	0.16	U	0.16	U	0.37	U	0.16	U
Chlorodibromomethane	ug/m^3	NC	4.3	U	0.3	U	0.3	U	0.68	U	0.3	U
Chloroethane	ug/m^3	NC	1.3	U	0.092	U	0.092	U	0.21	U	0.092	U
Chloroform	ug/m^3	NC	2.4	U	**0.68**		**0.69**		0.39	U	0.17	U
Chloromethane	ug/m^3	NC	**2.6**		**1.5**		**1.5**		**1.4**		**1.1**	
cis-1,2-Dichloroethylene	ug/m^3	NC	0.99	U	0.14	U	0.14	U	0.16	U	0.14	U
cis-1,3-Dichloropropene	ug/m^3	NC	2.3	U	0.16	U	0.16	U	0.36	U	0.16	U
Cyclohexane	ug/m^3	NC	4.3	U	0.12	U	0.12	U	0.69	U	0.12	U
Dichlorodifluoromethane (Freon 12)	ug/m^3	NC	2.5	U	**2.2**		**2.2**		**1.7**		**2.2**	
Ethanol	ug/m^3	NC	**540**		**100**	**J+**	**94**	**J+**	**7.5**		**8.6**	**J+**
Ethyl acetate	ug/m^3	NC	NA		**1.3**	**J**	**0.73**	**J**	NA		1.3	UJ
Ethyl Benzene	ug/m^3	NC	2.2	U	**0.34**		**0.32**		0.35	U	**1.5**	
p-Ethyltoluene	ug/m^3	NC	NA		**0.11**	**J**	0.17	U	NA		**0.57**	
Heptane	ug/m^3	NC	NA		**0.37**		**0.32**		NA		**0.25**	
Hexachlorobutadiene	ug/m^3	NC	5.3	U	0.37	UJ	0.37	UJ	0.85	U	0.37	UJ
n-Hexane	ug/m^3	NC	4.4	U	**0.87**	**J**	**0.84**	**J**	0.70	U	**1.0**	**J**
Isopropanol	ug/m^3	NC	NA		**7.8**	**J**	**3.5**	**J**	NA		**1.4**	**J**
Methyl tert-Butyl Ether (MTBE)	ug/m^3	NC	3.6	U	0.13	U	0.13	U	0.58	U	0.13	U
Methylene Chloride	ug/m^3	60	8.7	U	**0.67**	**J**	**0.86**	**J**	1.4	U	**0.86**	**J**
Naphthalene	ug/m^3	NC	6.6	U	**0.13**	**J**	0.18	U	1.0	U	0.18	U
Propylene	ug/m^3	NC	NA		2.4	U	2.4	U	NA		2.4	U
Styrene	ug/m^3	NC	2.1	U	**0.21**		**0.22**		0.34	U	0.15	U
tert-Butyl alcohol	ug/m^3	NC	6.1	U	NA		NA		0.97	U	NA	
Tetrachloroethylene	ug/m^3	30	3.4	U	0.24	U	0.24	U	0.54	U	0.24	U
Tetrahydrofuran	ug/m^3	NC	NA		1	U	1	U	NA		1	U
Toluene	ug/m^3	NC	2.8	U	**3.5**		**3.3**		**0.51**		**0.79**	
trans-1,2-Dichloroethylene	ug/m^3	NC	2.0	U	0.14	U	0.14	U	0.32	U	0.14	U
trans-1,3-Dichloropropene	ug/m^3	NC	2.3	U	0.16	U	0.16	U	0.36	U	0.16	U
Trichloroethylene	ug/m^3	2	1.2	U	0.19	U	0.19	U	0.19	U	0.19	U
Trichlorofluoromethane (Freon 11)	ug/m^3	NC	2.8	U	**1.1**		**1.1**		**1.2**		**1.2**	
Vinyl acetate	ug/m^3	NC	NA		2.5	UJ	2.5	UJ	NA		2.5	UJ
Vinyl Chloride	ug/m^3	NC	0.64	U	0.089	U	0.089	U	0.10	U	0.089	U

Table 5
New York State Department of Environmental Conservation
Site Management Portfolio B
Task No. 9 - Metal Etching Co., Inc. - 130110
Freeport, Nassau County, New York
Summary of VOCs in Indoor Air

		Sample Location:	OFFICE-AI-1			OFFICE-AO-1	
		Sample Name:	MEC-OFFICE-AI-1_20210326	MEC-Office-AI-1-20220301	MEC-DUP-1-20220301	MEC-OFFICE-AO-1_20210326	MEC-Office-AO-1-20220301
		Lab Sample ID:	140-22504-1	22C0276-01	22C0276-03	140-22504-2	22C0276-02
		Sample Date:	3/26/2021	3/1/2022	3/1/2022	3/26/2021	3/1/2022
		Matrix:	Indoor Air	Indoor Air	Indoor Air	Ambient Air	Ambient Air
Analyte	Unit	Guideline Value*	Results	Results	Field Duplicate	Results	Results
m/p Xylene	ug/m^3	NC	**2.2**	**1.1**	**1.1**	**1.1**	**6.4**
o-Xylene	ug/m^3	NC	2.2 U	**0.52**	**0.49**	**0.40**	**3.1**

Notes:
ug/m^3 - micrograms per cubic meter.
J - Estimated value.
J+ - Estimated value; biased high.
NA - Not analyzed.
NC - No guideline exists for this analyte.
Sample MEC-DUP-1-20220301 is a duplicate of sample MEC-Office-AI-1-20220301.
U - Compound was not detected at specified quantitation limit.
UJ - Estimated non-detect.
VOCs - Volatile Organic Comopunds.
Values in **bold** indicate the compound was detected.
* - NYSDOH Air Guideline Values, August 2015.

Appendix A

Summary of Green Remediation Metrics for Site Management

Site Name: Metal Etching Co., Inc. Site Code: 130110
Address: 435 South Main Street City: Freeport
State: NY Zip Code: 11520 County: Nassau

Initial Report Period (Start Date of period covered by the Initial Report submittal)
Start Date: 11/13/2018

Current Reporting Period
Reporting Period From: 12/1/2021 To: 12/31/2023

Contact Information
Preparer's Name: Anthony Raposo Phone No.: 212-221-7822
Preparer's Affiliation: TRC Engineers, Inc.

I. Energy Usage: Quantify the amount of energy used directly on-site and the portion of that derived from renewable energy sources.

	Current Reporting Period	**Total to Date**
Fuel Type 1 (e.g. natural gas (cf))	0	0
Fuel Type 2 (e.g. fuel oil, propane (gals))	0	0
Electricity (kWh)	Not available	Not available
Of that Electric usage, provide quantity:		
Derived from renewable sources (e.g. solar, wind)	Not available	Not available
Other energy sources (e.g. geothermal, solar thermal (Btu))	Not available	Not available

Provide a description of all energy usage reduction programs for the site in the space provided on Page 3.

II. Solid Waste Generation: Quantify the management of solid waste generated on-site.

	Current Reporting Period (tons)	**Total to Date (tons)**
Total waste generated on-site		
OM&M generated waste	0	0
Of that total amount, provide quantity:		
Transported off-site to landfills	0	0
Transported off-site to other disposal facilities	0	0
Transported off-site for recycling/reuse	0	0
Reused on-site	0	0

Provide a description of any implemented waste reduction programs for the site in the space provided on Page 3.

III. Transportation/Shipping: Quantify the distances travelled for delivery of supplies, shipping of laboratory samples, and the removal of waste.

	Current Reporting Period (miles)	**Total to Date (miles)**
Standby Engineer/Contractor	Approximately 520	Approximately 1470
Laboratory Courier/Delivery Service	Approximately 1300	Approximately 1900
Waste Removal/Hauling	0	0

Provide a description of all mileage reduction programs for the site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the site.

IV. Water Usage: Quantify the volume of water used on-site from various sources.

	Current Reporting Period (gallons)	**Total to Date (gallons)**
Total quantity of water used on-site	0	0
Of that total amount, provide quantity:		
Public potable water supply usage	0	0
Surface water usage	0	0
On-site groundwater usage	0	0
Collected or diverted storm water usage	0	0

Provide a description of any implemented water consumption reduction programs for the site in the space provided on Page 3.

V. Land Use and Ecosystems: Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

	Current Reporting Period (acres)	**Total to Date (acres)**
Land disturbed	Not applicable	Not applicable
Land restored	Not applicable	Not applicable

Provide a description of any implemented land restoration/green infrastructure programs for the site in the space provided on Page 3.

Description of green remediation programs reported above
(Attach additional sheets if needed)

Energy Usage:

Site electricity usage is limited to full-time operation of a sub-slab depressurization system fan designed to provide vapor intrusion control. Since full-time operation of the system is necessary to protect the health of Site occupants, no energy reduction program has been implemented.

Waste Generation:

Not applicable.

Transportation/Shipping:

Generally, local staff are utilized to perform work at the site. Staff primarily utilized at the site are located between approximately 5 and 30 miles from the site. The laboratory, Con-Test/Pace Analytical New England, is located in East Longmeadow, Massachusetts, approximately 150 miles from the site.

Water usage:

Not applicable.

Land Use and Ecosystems:

Not applicable.

Other:

Site emissions are limited to volatile organic compounds, primarily tetrachloroethene, from the sub-slab depressurization system, which is operated without vapor treatment. Emission rates are not calculated and no emission reduction program has been implemented.

CERTIFICATION BY CONTRACTOR

I, Anthony Raposo (**Name**) do hereby certify that I am Project Manager (**Title**) of the Company/Corporation herein referenced and contractor for the work described in the foregoing application for payment. According to my knowledge and belief, all items and amounts shown on the face of this application for payment are correct, all work has been performed and/or materials supplied, the foregoing is a true and correct statement of the contract account up to and including that last day of the period covered by this application.

5/24/2024

Date **Contractor**

Appendix B

SITE HISTORY

METAL ETCHING CO., INC. (NYSDEC SITE NO. 130110)

Date	Description
Unknown – 1966	While the exact date of the first use of the Site for commercial purposes is unknown, buildings were erected at the Site in 1954. Flores Manufacturing, a producer of handbags, operated at the Site until 1966. Flores Manufacturing's handbag production process included decorative plating using nickel, chrome, and cadmium.
1966 - 1999	Metal Etching Corporation manufactured metal nameplates, instrument panels, rulers, and miscellaneous plated products at the Site. The process included anodizing, chromate conversion, and chrome-nickel plating. Manufacturing operations at the Site were terminated by 1999.
2001	All Site buildings, except for the maintenance building, were demolished by 2001. During the demolition, limited decontamination and/or investigation was performed under the oversight of NYSDEC Resource Conservation and Recovery Act (RCRA) personnel, and two 4,000-gallon ferric chloride aboveground storage tanks (ASTs) were removed from the Site. The Site was added to the Registry of Inactive Waste Disposal Sites in New York (the Registry) as a Class 2 site in 2001.
2004 – 2005	A Remedial Investigation (RI) was conducted by Environmental Resources Management (ERM) from May 2004 to March 2005 to determine the nature and extent of contamination at the Site. The RI concluded that surface soil, subsurface soil, groundwater, and sediment contained VOCs and metals at concentrations above applicable standards, criteria, and guidance (SCGs) at the Site, and that remediation of which would be necessary. Additionally, soil vapor intrusion (VI) sampling conducted in 2004 indicated that chlorinated VOCs were present in the soil vapor beneath the floor slabs of the Site buildings. SSDS systems were installed at each building in March 2005 to mitigate potential VI impacts.
2007	The RI and Final Feasibility Study (FS) Reports were issued in January 2007. In March 2007 NYSDEC issued a Record of Decision (ROD) selecting a remedy consisting of excavation of VOC and metals hot spots, limited excavation of sediments in Freeport Creek, continued operation of the on-Site SSDSs, monitoring of groundwater, imposition of an environmental easement (EE), development and implementation of an SMP, and the periodic certification of institutional controls (ICs) and engineering controls (ECs).
2012	Remedial Action (RA) activities were completed at the Site by January 2012 in accordance with the NYSDEC-approved remedial design, which was part of the Contract Documents dated August 2010 and addendums dated September 28, 2010, September 30, 2010, and October 1, 2010. The RA activities included excavation of soil/fill to the low-tide groundwater elevation, construction and maintenance of a soil cover system, removal of sediment from the on-Site storm water system and Freeport Creek; closure and removal of four USTs, and development and implementation of a SMP. The SMP

	was originally completed by EA in October 2012 and provided direction for maintenance and monitoring of the remedy selected by the ROD (NYSDEC 2007) for the Site.
October 2012	The Final Engineering Report was completed in October 2012 following the RA. The Final Engineering Report details the remedial activities conducted at the Site.
April 2014	The Final Engineering Report was updated to include the two Environmental Notices. The SMP was revised to include the Environmental Notices as an appendix and to update the groundwater monitoring well network based on field changes. The Site was reclassified to a Class 4 site.
November 2018	The SMP was revised to reduce the frequency of sampling, reduce the frequency of Periodic Review Report (PRR) submissions, and add per- and polyfluoroalkyl substances (PFAS) sampling.
June 2019	The SMP was revised to incorporate the Environmental Easement for Freeport Creek Associates.

CUSTODIAL RECORD

METAL ETCHING CO., INC. (NYSDEC SITE NO. 130110)

Environmental Resources Management, "*Remedial Investigation/Feasibility Study* (*RI/FS) Report – Metal Etching Co. Inc.",* December 2004

Environmental Resources Management, "*Remedial Investigation/Feasibility Study* (*RI/FS) Report – Metal Etching Co. Inc.",* January 2005

Environmental Resources Management, "*Remedial Investigation/Feasibility Study* (*RI/FS) Report – Metal Etching Co. Inc.",* November 2005

Environmental Resources Management, "*Remedial Investigation Report – Metal Etching Site.*", January 2007

Environmental Resources Management, "*Final Feasibility Study Report – Metal Etching Site",* January 2007

NYSDEC, "*Fact Sheet for the Metal Etching Site",* February 9, 2007

NYSDEC, "*Proposed Remedial Action Plan, Metal Etching Co., Inc.",* February 2007

NYSDEC, "*Record of Decision, Metal Etching Co., Inc. Site"*, March 2007

EA Engineering, P.C., and Its Affiliate EA Science and Technology, "*Final Basis of Design Report, Metal Etching Site (1-30-110)"*, December 2008

NYSDEC, "Contract Documents, Metal Etching Co. Inc.", August 16, 2010

EA Engineering, P.C., and Its Affiliate EA Science and Technology, "*Final Engineering Report, Metal Etching State Superfund Site"*, October 2012

EA Engineering, P.C., and Its Affiliate EA Science and Technology, "*Final Engineering Report, Metal Etching State Superfund Site"*, April 2014

EA Engineering, P.C., and Its Affiliate EA Science and Technology, *"Periodic Review Report No. 6",* January 2019

EA Engineering, P.C., and Its Affiliate EA Science and Technology, *"Site Management Plan",* October 2012, Revised April 11, 2014; November 14, 2018; and June 18, 2019.

TRC Engineers, Inc., "Periodic Review Report, November 2018 – November 2021", April 2022

New York State Department of Environmental Conservation
SMP B - Metal Etching Co., Inc. - Site No. 130110
Freeport, Nassau County, New York
Monitoring Well Construction Summary

Monitoring Well	Installation Date	Well Diameter (inches)	Well Material	Total Depth (feet bgs)	Screened Formation	Screen			Elevation (feet AMSL)			Location (STD UTM)	
						Top (feet bgs)	Bottom (feet bgs)	Length (feet)	PVC Casing	Screen		Northing	Easting
										Top	Bottom		
MW-04	9/13/2004	2	PVC	13.0	Overburden	3.00	13.00	10.00	6.02	4.07*	-5.93*	NA	NA
MW-05R	7/26/2013	2	PVC	13.5	Overburden	3.50	13.50	10.00	4.02	0.52	-9.48	NA	NA
MW-06	9/14/2004	2	PVC	13.0	Overburden	3.00	13.00	10.00	4.34	2.37*	-7.63*	NA	NA
MW-08SR	7/26/2013	2	PVC	13.5	Overburden	3.50	13.50	10.00	5.41	1.91	-8.09	NA	NA
MW-08DR	7/26/2013	2	PVC	31.5	Overburden	21.50	31.50	10.00	5.24	-16.26	-4.76	NA	NA
MW-09S	11/11/2011	2	PVC	14.0	Overburden	4.00	14.00	10.00	4.27	0.27	-5.73	NA	NA
MW-09D	11/11/2011	2	PVC	32.0	Overburden	22.00	32.00	10.00	4.16	-17.84	-5.84	NA	NA
MW-10S	11/10/2011	2	PVC	14.0	Overburden	4.00	14.00	10.00	5.09	1.09	-4.91	NA	NA
MW-10D	11/10/2021	2	PVC	32.0	Overburden	22.00	32.00	10.00	5.30	-16.70	-4.70	NA	NA
MW-10M	11/10/2011	2	PVC	26.0	Overburden	17.00	26.00	9.00	5.37	-11.63	-3.63	NA	NA
MW-11S	4/4/2014	2	PVC	15.2	Overburden	5.20	15.20	10.00	4.05	-1.15	-5.95	NA	NA
MW-11D	4/4/2014	2	PVC	30.2	Overburden	20.20	30.20	10.00	3.96	-16.24	-6.04	NA	NA

Notes
AMSL : Above Mean Sea Level
feet bgs : Feet Below Ground Surface
PVC : Polyvinyl Chloride
NA : Not Available
* : Measurement collected at time of well installation
Horizontal coordinate survey data is not available for the monitoring wells.

Appendix C

N

New Slotted Storm Drains

Ray Street

Main Street

MW-11S MW-11D

MW-11S

MW-8S/D

MW-9S/D

MW-10D

MW-10S/M

FREEPORT METAL ETCHING
SITE MONITORING PLAN
FREEPORT, NEW YORK

FIGURE 10
Location of Cover System Types

0 20 40 80 Feet

Source: NYS GIS Clearing House

Legend

- New Monitoring Wells
- Asphalt Cover
- Porous Pavement Cover
- Stone Cover

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	PROJECT NO:	DATE:	SCALE:	FILE NO:
RSC	RSC	MEM	RSC	14474.37	APRIL 2014	AS SHOWN	G:\Projects\Fig10

Appendix D

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.
PROJECT NUMBER	NYSDEC Site No. 130110
SAMPLE ID	MEC-MW-11D-WG-20231026
SAMPLE TIME	1225

LOCATION ID	MW-11D
DATE	10/26/2023
START TIME	1150
END TIME	1225
SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	3.18 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	30.25 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	27.07 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4.44 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	0.78 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1150	**BEGIN PURGING**									
1155	-	100	18.43	0.542	7.44	2.04	42.0	-86	~25	
1200	-	100	18.03	0.685	6.63	0.00	28.0	50	~25	
1205	-	100	17.82	0.772	6.65	0.00	4.3	78	~25	
1210	-	100	17.83	0.772	6.64	0.00	4.4	78	~25	
1215	-	100	17.86	0.774	6.64	0.00	4.4	70	~25	
1220	-	100	17.87	0.776	6.63	0.00	4.1	77	~25	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**18**	**0.774**	**6.6**	**0.0**	**4.3**	**75**		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [ ] WL METER _____
- [X] PID MiniRAE 3000
- [X] WQ METER Horiba
- [ ] TURB. METER _____
- [X] PUMP Pine Geopump
- [ ] OTHER _____
- [ ] FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1225	No	MEC-MW-11D-WG-20231026
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1225	No	MEC-MW-11D-WG-20231026
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1225	No	MEC-MW-11D-WG-20231026

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [X]

NO-PURGE METHOD UTILIZED: YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: 0.91

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Joe Menniti

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.	**LOCATION ID**	MW-11S
PROJECT NUMBER	NYSDEC Site No. 130110	**DATE**	10/26/2023
SAMPLE ID	MEC-MW-11S-WG-20231026	**START TIME**	1110
SAMPLE TIME	1140	**END TIME**	1140
		SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
		PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	3.05 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	15.10 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	12.05 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.98 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	0.65 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1110	**BEGIN PURGING**									
1115	-	100	17.85	4.07	6.73	0.00	39.1	-120	~10	
1120	-	100	18.44	3.63	6.95	0.00	33.0	-159	~10	
1125	-	100	18.07	3.53	7.03	0.00	25.0	-167	~10	
1130	-	100	18.68	3.50	7.04	0.00	22.0	-168	~10	
1135	-	100	18.70	3.49	7.05	0.00	18.0	-168	~10	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])										
			18	**3.51**	**7.0**	**0.0**	**21.7**	**-168**		

COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____ WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [ ] WL METER
- [X] PID MiniRAE 3000
- [X] WQ METER Horiba
- [ ] TURB. METER
- [X] PUMP Pine Geopump
- [ ] OTHER
- [ ] FILTERS NO. ____ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1140	No	MEC-MW-11S-WG-20231026
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1140	No	MEC-MW-11S-WG-20231026
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1140	No	MEC-MW-11S-WG-20231026

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: 0.65

NO-PURGE METHOD UTILIZED: YES [ ] NO [X]

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Joe Menniti

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.
PROJECT NUMBER	NYSDEC Site No. 130110
SAMPLE ID	MEC-MW-04-WG-20231027
SAMPLE TIME	1120

LOCATION ID	MW-04
DATE	10/27/2023
START TIME	1045
END TIME	1120
SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	5.21 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	13.08 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	7.87 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.29 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	0.78 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1045	**BEGIN PURGING**									
1050	-	100	20.33	0.825	6.85	0.00	7.3	-71	~10	
1055	-	100	20.40	0.807	6.79	0.00	7.0	-64	~10	
1100	-	100	20.41	0.747	6.82	0.00	4.7	-72	~10	
1105	-	100	20.42	0.733	6.84	0.00	4.1	-76	~10	
1110	-	100	20.42	0.732	6.84	0.00	4.1	-77	~10	
1115	-	100	20.42	0.731	6.85	0.00	4.2	-76	~10	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

20	**0.732**	**6.8**	**0.0**	**4.1**	**-76**	

COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [ ] WL METER _____
- [X] PID MiniRAE 3000
- [X] WQ METER Horiba
- [ ] TURB. METER _____
- [X] PUMP Pine Geopump
- [ ] OTHER _____
- [ ] FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1120	No	MEC-MW-04-WG-20231027
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1120	No	MEC-MW-04-WG-20231027
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1120	No	MEC-MW-04-WG-20231027

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED — YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: 0.78

NO-PURGE METHOD UTILIZED — YES [ ] NO [X]

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature:

Print Name: Joe Menniti

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.
PROJECT NUMBER	NYSDEC Site No. 130110
SAMPLE ID	MEC-MW-06-WG-20231027
SAMPLE TIME	1000

LOCATION ID	MW-06
DATE	10/27/2023
START TIME	0925
END TIME	1000
SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	3.49 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	13.55 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	10.06 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.65 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	0.78 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0925	**BEGIN PURGING**									
0930	-	100	18.75	2.19	7.13	3.54	41.9	-111	~10	
0935	-	100	19.91	1.98	7.00	0.00	32.3	-116	~10	
0940	-	100	19.97	1.95	7.01	0.00	25.1	-118	~10	
0945	-	100	19.96	1.95	7.02	0.00	21.7	-119	~10	
0950	-	100	19.98	1.94	7.01	0.00	20.0	-120	~10	
0955	-	100	19.98	1.95	7.01	0.00	18.6	-120	~10	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

20.0	**1.95**	**7.0**	**0.0**	**20.1**	**-120**	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [ ] WL METER _____
- [X] PID MiniRAE 3000
- [X] WQ METER Horiba
- [ ] TURB. METER _____
- [X] PUMP Pine Geopump
- [ ] OTHER _____
- [ ] FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1000	Yes	MEC-MW-06-WG-20231027
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1000	Yes	MEC-MW-06-WG-20231027
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1000	Yes	MEC-MW-06-WG-20231027

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 0.78

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Duplicate and MS/MSD samples collected from this groundwater monitoring well.

Sampler Signature: Print Name: Joe Menniti

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.
PROJECT NUMBER	NYSDEC Site No. 130110
SAMPLE ID	MEC-MW-08SR-WG-20231027
SAMPLE TIME	1010

LOCATION ID	MW-08SR
DATE	10/27/2023
START TIME	0930
END TIME	1010
SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER _____

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER _____

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	4.40 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	13.22 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	8.82 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.45 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	0.91 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0930	**BEGIN PURGING**									
0935	-	100	21.31	0.628	4.96	0.00	10.2	-36	~8	
0940	-	100	21.48	0.608	5.12	0.00	0.0	-66	~8	
0945	-	100	21.53	0.602	5.19	0.00	0.0	-73	~8	
0950	-	100	21.55	0.600	5.21	0.00	0.0	-76	~8	
0955	-	100	21.56	0.600	5.25	0.00	0.0	-80	~8	
1000	-	100	21.57	0.600	5.25	0.00	0.0	-81	-8	
1005	-	100	21.58	0.599	5.27	0.00	0.0	-83	~8	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])										
			21.6	**0.600**	**5.3**	**0.0**	**0.0**	**-81**		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[ ] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[ ] WL METER	
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[X] PID	MiniRAE 3000
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	Horiba
	[ ] NITRIC ACID	[X] HDPE TUBING	[ ] TEFLON BLADDER	[ ] TURB. METER	
[ ] WATTERA	[ ] HEXANE	[ ] LDPE TUBING	[ ] OTHER	[X] PUMP	Pine Geopump
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER	
[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS	NO. TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1010	No	MEC-MW-08SR-WG-20231027
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1010	No	MEC-MW-08SR-WG-20231027
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1010	No	MEC-MW-08SR-WG-20231027

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 0.91

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Maya Wells

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.
PROJECT NUMBER	NYSDEC Site No. 130110
SAMPLE ID	MEC-MW-08DR-WG-20231027
SAMPLE TIME	1100

LOCATION ID	MW-08DR
DATE	10/27/2023
START TIME	1020
END TIME	1100
SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER _____

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER _____

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	4.96 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	31.07 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	26.11 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	2.4 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4.28 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	0.91 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1020	**BEGIN PURGING**									
1025	-	100	20.90	0.430	6.00	0.30	21.2	-77	~25	
1030	-	100	20.43	0.456	5.55	0.00	0.0	-66	~25	
1035	-	100	20.36	0.468	5.41	0.00	0.0	-63	~25	
1040	-	100	20.34	0.473	5.32	0.00	0.0	-61	~25	
1045	-	100	20.34	0.475	5.28	0.00	0.0	-61	~25	
1050	-	100	20.35	0.475	5.25	0.00	0.0	-61	-25	
1055	-	100	20.34	0.474	5.23	0.00	0.0	-61	~25	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])										
			20.3	**0.475**	**5.3**	**0.0**	**0.0**	**-61**		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[ ] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[ ] WL METER	
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[X] PID	MiniRAE 3000
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	Horiba
	[ ] NITRIC ACID	[X] HDPE TUBING	[ ] TEFLON BLADDER	[ ] TURB. METER	
[ ] WATTERA	[ ] HEXANE	[ ] LDPE TUBING	[ ] OTHER	[X] PUMP	Pine Geopump
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER	
[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS	NO. TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1100	No	MEC-MW-08DR-WG-20231027
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1100	No	MEC-MW-08DR-WG-20231027
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1100	No	MEC-MW-08DR-WG-20231027

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 0.91

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Maya Wells

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.
PROJECT NUMBER	NYSDEC Site No. 130110
SAMPLE ID	MEC-MW-09D-WG-20231030
SAMPLE TIME	1135

LOCATION ID	MW-09D
DATE	10/30/2023
START TIME	1055
END TIME	1135
SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER _____

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER _____

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	3.92 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	28.08 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	24.16 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	2.7 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	3.96 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	0.91 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1055	**BEGIN PURGING**									
1100	-	100	19.30	0.040	6.84	3.12	59.0	85	~25	
1105	-	100	19.34	0.049	6.82	3.20	51.0	96	~25	
1110	-	100	18.99	0.039	6.83	3.60	33.5	126	~25	
1115	-	100	18.94	0.040	6.82	3.56	21.5	126	~25	
1120	-	100	18.59	0.043	6.83	1.41	20.1	120	~25	
1125	-	100	18.57	0.044	6.83	1.40	19.5	118	-25	
1130	-	100	18.57	0.044	6.82	1.39	19.1	117	~25	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])										
			18.6	**0.044**	**6.8**	**1.4**	**19.6**	**118**		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[ ] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[ ] WL METER	
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[X] PID	MiniRAE 3000
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	Horiba
	[ ] NITRIC ACID	[X] HDPE TUBING	[ ] TEFLON BLADDER	[ ] TURB. METER	
[ ] WATTERA	[ ] HEXANE	[ ] LDPE TUBING	[ ] OTHER	[X] PUMP	Pine Geopump
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER	
[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS	NO. TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1135	No	MEC-MW-09D-WG-20231030
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1135	No	MEC-MW-09D-WG-20231030
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1135	No	MEC-MW-09D-WG-20231030

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 0.91

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Joe Menniti

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.
PROJECT NUMBER	NYSDEC Site No. 130110
SAMPLE ID	MEC-MW-5R-WG-20231030
SAMPLE TIME	1015

LOCATION ID	MW-5R
DATE	10/30/2023
START TIME	0940
END TIME	1015
SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	2.62 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	13.22 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	10.60 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.74 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	0.78 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0940	**BEGIN PURGING**									
0945	-	100	19.85	3.24	6.58	0.47	40.8	-96	~10	
0950	-	100	20.09	3.22	6.57	0.00	33.3	-102	~10	
0955	-	100	20.19	3.24	6.58	0.00	5.4	-106	~10	
1000	-	100	20.31	3.27	6.57	0.00	5.1	-105	~10	
1005	-	100	20.36	3.28	6.57	0.00	4.5	-107	~10	
1010	-	100	20.39	3.27	6.57	0.00	4.1	-107	~10	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

20.4	**3.27**	**6.6**	**0.0**	**4.6**	**-106**	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [ ] WL METER _____
- [X] PID MiniRAE 3000
- [X] WQ METER Horiba
- [ ] TURB. METER _____
- [X] PUMP Pine Geopump
- [ ] OTHER _____
- [ ] FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1015	No	MEC-MW-5R-WG-20231030
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1015	No	MEC-MW-5R-WG-20231030
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1015	No	MEC-MW-5R-WG-20231030

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 0.78

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Joe Menniti

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.
PROJECT NUMBER	NYSDEC Site No. 130110
SAMPLE ID	MEC-MW-09S-WG-20231030
SAMPLE TIME	1055

LOCATION ID	MW-09S
DATE	10/30/2023
START TIME	1020
END TIME	1055
SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	3.96 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	10.80 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	6.84 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	2.3 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.12 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	0.78 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1020	**BEGIN PURGING**									
1025	-	100	18.35	0.001	7.11	6.45	34.1	-12	~8	
1030	-	100	18.24	0.001	7.13	0.34	30.6	-14	~8	
1035	-	100	18.23	0.000	7.13	0.00	29.4	-44	~8	
1040	-	100	18.23	0.001	7.14	0.00	26.1	-44	~8	
1045	-	100	18.24	0.000	7.13	0.00	22.1	-42	~8	
1050	-	100	18.23	0.001	7.14	0.00	18.6	-42	~8	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])										
			18	**0.001**	**7.1**	**0.0**	**22.3**	**-43**		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] _____
- [ ] WATTERA
- [ ] OTHER _____
- [ ] OTHER _____

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER _____

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER _____
- [ ] OTHER _____

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER _____
- [ ] OTHER _____
- [ ] OTHER _____

EQUIPMENT USED
- [ ] WL METER _____
- [X] PID MiniRAE 3000
- [X] WQ METER Horiba
- [ ] TURB. METER _____
- [X] PUMP Pine Geopump
- [ ] OTHER _____
- [ ] FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1055	No	MEC-MW-09S-WG-20231030
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1055	No	MEC-MW-09S-WG-20231030
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1055	No	MEC-MW-09S-WG-20231030

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED — YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: 0.78

NO-PURGE METHOD UTILIZED — YES [ ] NO [X]

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Purged and sampled groundwater from well has visible sheen.

Sampler Signature:

Print Name: Joe Menniti

Checked By:

Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.
PROJECT NUMBER	NYSDEC Site No. 130110
SAMPLE ID	MEC-MW-10S-WG-20231030
SAMPLE TIME	1145

LOCATION ID	MW-10S
DATE	10/30/2023
START TIME	1100
END TIME	1145
SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER _____

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER _____

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	4.42 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	13.92 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	9.50 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.56 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	1.04 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1100	**BEGIN PURGING**									
1105	-	100	19.85	0.823	5.38	0.00	54.4	-73	~10	
1110	-	100	20.13	0.827	5.43	0.00	66.6	-80	~10	
1115	-	100	20.34	0.838	5.82	0.00	26.0	-100	~10	
1120	-	100	20.41	0.848	5.29	0.00	14.0	-77	~10	
1125	-	100	20.44	0.855	5.40	0.00	7.4	-85	~10	
1130	-	100	20.41	0.856	5.52	0.00	4.9	-90	~10	
1135	-	100	20.44	0.855	5.53	0.00	4.4	-94	-10	
1140	-	100	20.48	0.855	5.57	0.00	4.0	-97	-10	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])										
			20	**0.855**	**5.5**	**0.0**	**4.4**	**-94**		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA
- [ ] OTHER
- [ ] OTHER

DECON FLUIDS USED
- [ ] LIQUINOX
- [ ] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE
- [ ] METHANOL
- [ ] OTHER

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [X] HDPE TUBING
- [ ] LDPE TUBING
- [ ] OTHER
- [ ] OTHER

- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [ ] OTHER
- [ ] OTHER
- [ ] OTHER

EQUIPMENT USED
- [ ] WL METER
- [X] PID MiniRAE 3000
- [X] WQ METER Horiba
- [ ] TURB. METER
- [X] PUMP Pine Geopump
- [ ] OTHER
- [ ] FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1145	No	MEC-MW-10S-WG-20231030
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1145	No	MEC-MW-10S-WG-20231030
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1145	No	MEC-MW-10S-WG-20231030

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 1.04

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Maya Wells

Checked By: Date:

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	NYSDEC Metal Etching Co., Inc.
PROJECT NUMBER	NYSDEC Site No. 130110
SAMPLE ID	MEC-MW-10D-WG-20231030
SAMPLE TIME	1050

LOCATION ID	MW-10D
DATE	10/30/2023
START TIME	0945
END TIME	1050
SITE NAME/NUMBER	NYSDEC Metal Etching Co., Inc.
PAGE	1 OF 1

WELL DIAMETER (INCHES) [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES) [ ] 1/8 [ ] 1/4 [X] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP) [ ] TOP OF RISER (TOR) [X] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	2.61 FT	**FINAL DTW (BMP)**	NA FT	**PROT. CASING STICKUP (AGS)**	NA FT	**TOC/TOR DIFFERENCE**	- FT
WELL DEPTH (BMP)	32.00 FT	**SCREEN LENGTH**	10.00 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	- SEC
WATER COLUMN	29.39 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	NA GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4.82 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	1.56 GAL	**DRAWDOWN/ TOTAL PURGED**	NA	**PRESSURE TO PUMP**	- PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0945	**BEGIN PURGING**									
0950	-	100	18.45	0.071	5.86	1.18	422	-70	~25	
0955	-	100	18.66	0.065	5.30	0.28	33.2	-34	~25	
1000	-	100	18.55	0.068	4.94	0.00	309	-8	~25	
1005	-	100	18.62	0.069	4.79	0.00	288	4	~25	
1010	-	100	18.57	0.070	4.72	0.00	232	16	~25	
1015	-	100	18.42	0.072	4.71	0.00	164	15	~25	
1020	-	100	18.38	0.074	4.69	0.00	101	17	~25	
1025	-	100	18.37	0.078	4.69	0.00	65.4	18	~25	
1030	-	100	18.38	0.083	4.71	0.00	48.8	19	~25	
1035	-	100	18.38	0.087	4.74	0.00	47.6	19	~25	
1040	-	100	18.36	0.088	4.76	0.00	48.8	20	~25	
1045	-	100	18.37	0.089	4.82	0.00	50.2	23	~25	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**18**	**0.088**	**4.8**	**0.0**	**48.9**	**21**		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[ ] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[ ] WL METER	
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[X] PID	MiniRAE 3000
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	Horiba
	[ ] NITRIC ACID	[X] HDPE TUBING	[ ] TEFLON BLADDER	[ ] TURB. METER	
[ ] WATTERA	[ ] HEXANE	[ ] LDPE TUBING	[ ] OTHER	[X] PUMP	Pine Geopump
[ ] OTHER	[ ] METHANOL	[ ] OTHER	[ ] OTHER	[ ] OTHER	
[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] OTHER	[ ] FILTERS NO.	TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	TCL VOCs+10	EPA Method 8260C	No	HCl	80 mL	1050	No	MEC-MW-10D-WG-20231030
X	TAL Metals and Mercury	EPA Methods 6010C, 7470A	No	HNO3	250 mL	1050	No	MEC-MW-10D-WG-20231030
X	PFAS/TSS	EPA Method 1633	No	None	1125 mL	1050	No	MEC-MW-10D-WG-20231030

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[ ]	[X]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: 1.56

If yes, purged approximately 1 standing volume prior to sampling or _____mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Maya Wells

Checked By: Date:

Appendix E

Data Usability Summary Report

Site: SMP B – Metal Etching Co.
Laboratory: Con-test/Pace New England - East Longmeadow, MA
SDGs: 23J3847 (Revised 1/9/24), 23J3978 (Revised 1/11/24)
Parameter: Volatile Organic Compounds (VOCs)
Data Reviewer: David DiGena-Segal/TRC
Peer Reviewer: Liz Denly/TRC
Date: January 11, 2024

Samples Reviewed and Evaluation Summary

SDG 23J3847 (Revised 1/9/24)

7 Groundwater Samples: DUPLICATE 1[1], MEC-MW-04-WG-20231027, MEC-MW-06-WG-20231027, MEC-MW-08DR-WG-20231027, MEC-MW-08SR-WG-20231027, MEC-MW-11D-WG-20231026, MEC-MW-11S-WG-20231026

[1]Field duplicate of MEC-06-WG-20231027

1 Trip Blank : Trip Blank (10/27/23)

SDG 23J3978 (Revised 1/11/24)

5 Groundwater Samples: MEC-MW-05R-WG-20231030, MEC-MW-09D-WG-20231030, MEC-MW-09S-WG-20231030, MEC-MW-10D-WG-202301030, MEC-MW-10S-WG-20231030

1 Trip Blank : Trip Blank (10/30/23)

The above-listed samples were collected on October 26-27 and 30, 2023, and were analyzed for VOCs by SW-846 Method 8260D. The data validation was performed in accordance with the following data validation guidelines modified for the SW-846 methodology utilized.

- EPA Region 2 Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry, SOP HW-24, Revision 4, September 2014
- EPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-20-005), November 2020

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
* • Holding Times and Sample Preservation
* • Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
* • Blanks
* • Surrogate Recoveries
* • Laboratory Control Sample (LCS)/LCS Duplicate (LCSD) Results
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results

* • Internal Standards
* • Field Duplicate Results
• Sample Results and Reported Quantitation Limits (QLs)
* • Target Compound Identification
* • Tentatively Identified Compounds (TICs)

* - All criteria were met.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualification of the data due to sampling error was not required. Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select VOC results that were detected between the method detection limit (MDL) and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The nondetect results for 1,4-dioxane in all samples were qualified as estimated (UJ) due to low relative response factors (RRFs) in initial and continuing calibrations. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The positive and nondetect results for select VOCs in all samples were qualified as estimated (J/UJ) due to continuing calibration nonconformances. These results can be used for project objectives as estimated values and as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect result for methyl acetate in sample MEC-MW-06-WG-20231027 was qualified as estimated (UJ) due to low recovery in the MS analysis. This result can be used for project objectives as a nondetect with an estimated QL, which may have a minor impact on the data usability.

Data Completeness

The data packages were complete Level IV data deliverables with the following exceptions.

- The laboratory-reported analyte list did not match the target compound list (TCL). Results for o-xylene and m,p-xylenes were not reported, although these are included on the TCL for 8260/VOC analysis; results for total xylenes were reported instead. Further, 1,4-dioxane was reported by the laboratory, although not included on the 8260/VOC TCL.

- The spectra for the TIC in sample MEC-MW-05R-WG-20231030 was not provided by the laboratory. The laboratory was contacted about this issue and provided a revised package on 1/11/2024.

- Tert-Butyl Alcohol (TBA) was identified in samples MEC-MW-08SR-WG-20231027 and MEC-MW-08DR-WG-20231027 on the quantitation report; since this compound was not a target analyte, it should have been reported as a TIC. The laboratory was contacted about this issue and provided a revised package on 1/9/2024.

Holding Times and Sample Preservation

All holding time and sample preservation criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

All percent relative standard deviations were within the method acceptance criteria in the initial calibrations (ICs) associated with the samples in this data set. The following table summarizes the RRFs that did not meet the acceptance criteria in the ICs, the associated samples, and the validation actions.

IC/ Instrument	Analyte	Average RRF	Validation Actions
8/22/2023/ GCMSVOA2	1,4-Dioxane	0.00383	The nondetect results for 1,4-dioxane were qualified as estimated (UJ) in the associated samples. These results were not rejected since the percent recovery (%R) of the lowest calibration standard (87.8%) was >70%.
Associated samples: All samples in SDG 23J3847			
8/14/2023/ GCMSVOA5	1,4-Dioxane	0.00187	The nondetect results for 1,4-dioxane were qualified as estimated (UJ) in the associated samples. These results were not rejected since the %R of the lowest calibration standard (85.2%) was >70%.
Associated samples: All samples in SDG 23J3978			

The following table summarizes percent difference (%D) values and RRFs for target compounds that did not meet the acceptance criteria in the continuing calibration (CC) standards, the associated samples, and the validation actions.

CC ID	Analyte	%D	RRF	Validation Action
S095814-CCV1 11/01/23	Cyclohexane	-23.3	-	The positive and nondetect results for these VOCs were qualified as estimated (J/UJ) in the associated samples.
	1,4-Dioxane	-24.8	0.00288*	
	Methylene Chloride	-21.5	-	
Associated samples: All samples in SDG 23J3847				
-: Met criteria * These results were not rejected since the %R of the lowest initial calibration standard (87.8%) was >70%.				

CC ID	Analyte	%D	RRF	Validation Action
S095804-CCV1 11/02/23	Bromochloromethane	23.1	-	The nondetect results for these VOCs were qualified as estimated (UJ) in the associated samples.
	Bromomethane	-20.6	-	
	Chloromethane	-53.7	-	
	1,4-Dioxane	-	0.00157*	
Associated samples: All samples in SDG 23J3978				
-: Met criteria * These results were not rejected since the %R of the lowest initial calibration standard (85.2%) was >70%.				

Blanks

Target compounds were not detected in the laboratory method blanks or trip blanks.

Surrogate Recoveries

The surrogate %Rs were within the laboratory's acceptance limits.

LCS/LCSD Results

An LCS/LCSD was analyzed each day prior to samples. All %Rs and relative percent differences (RPDs) were within the laboratory acceptance criteria.

MS/MSD Results

MS/MSD analyses were performed on sample MEC-MW-06-WG-20231027. The %R of methyl acetate (66.6%) was below the acceptance criteria (70-130%). The nondetect result for methyl acetate in this sample was qualified as estimated (UJ).

Internal Standards

All criteria were met.

Field Duplicate Results

Samples MEC-06-WG-20231027/DUPLICATE 1 were submitted as the field duplicate pair with this sample set. The following table summarizes the absolute differences (AbsDs) of the detected compounds in the field duplicate pair. The following criteria were used in the comparison of the field duplicate results:

- When both results are ≥ 5x the QL, RPDs must be ≤ 30%.
- When one or both results are < 5x the QL, AbsD must be ≤ the QL.
- When one result is nondetect, the nondetect result is represented by the QL value in calculating the AbsD.

Compound	QL (µg/L)	MEC-06-WG-20231027 (µg/L)	DUPLICATE 1 (µg/L)	RPD (%) or AbsD (µg/L)
Cyclohexane	10	20	21	AbsD = 1.0 (≤QL)
Isopropylbenzene (Cumene)	2.0	0.56 J	0.54 J	AbsD = 0.02 (≤QL)
Methyl Cyclohexane	2.0	9.8	10	AbsD = 0.2 (≤QL)

Sample Results and Reported Quantitation Limits

Select VOC results were reported between the MDL and QL. These results were qualified as estimated (J) in the associated samples by the laboratory.

Sample calculations were spot-checked; there were no errors noted.

The following table summarizes the dilutions performed in the VOC analyses associated with this sample set.

Sample ID	Dilution	Reason for Dilution
DUPLICATE 1, MEC-MW-05R-WG-20231030, MEC-MW-06-WG-20231027, MEC-MW-09S-WG-20231030	2-fold	Dilutions were performed due to foaming and/or matrix interference, as per the laboratory narrative.
MEC-MW-08SR-WG-20231027	4-fold	

Target Compound Identification

All criteria were met.

Tentatively Identified Compounds (TICs)

No TICs were reported in the method blanks or trip blank associated with this sample set. All criteria were met for TIC identifications.

QUALIFIED FORM 1s

con-test® A Pace Analytical® Laboratory
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-11S-WG-20231026 Sampled: 10/26/2023 11:40

Sample ID: 23J3847-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Cyclohexane	~~ND~~ UJ	5.0	1.8	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,4-Dioxane	~~ND~~ UJ	50	18	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Methylene Chloride	~~ND~~ UJ	5.0	0.18	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 16:53	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-11S-WG-20231026 Sampled: 10/26/2023 11:40

Sample ID: 23J3847-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:53	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	101	70-130		11/1/23 16:53
Toluene-d8	97.8	70-130		11/1/23 16:53
4-Bromofluorobenzene	96.6	70-130		11/1/23 16:53

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-11S-WG-20231026 Sampled: 10/26/2023 11:40

Sample ID: 23J3847-01

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Naphthalene, 1,2,3,4-tetrah...	5.1	µg/L	133513	12.948	1	001559-81-5	94	SW-846 8260D	10/31/23	11/1/23 16:53	MFF

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-11D-WG-20231026 Sampled: 10/26/2023 12:30

Sample ID: 23J3847-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Cyclohexane	~~ND~~ UJ	5.0	1.8	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,4-Dioxane	~~ND~~ UJ	50	18	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Methylene Chloride	~~ND~~ UJ	5.0	0.18	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 17:19	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Tetrachloroethylene	11	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-11D-WG-20231026 Sampled: 10/26/2023 12:30

Sample ID: 23J3847-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	10/31/23	11/1/23 17:19	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	102	70-130		11/1/23 17:19
Toluene-d8	97.8	70-130		11/1/23 17:19
4-Bromofluorobenzene	95.2	70-130		11/1/23 17:19

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-11D-WG-20231026 Sampled: 10/26/2023 12:30

Sample ID: 23J3847-02

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	10/31/23	11/1/23 17:19	MFF

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

Project Location: 435 Main St., Freeport, NY | Sample Description: | Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-06-WG-20231027 | Sampled: 10/27/2023 10:00

Sample ID: 23J3847-03

Sample Matrix: Ground Water

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	4.0	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Benzene	ND	2.0	0.37	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Bromochloromethane	ND	2.0	0.57	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Bromodichloromethane	ND	1.0	0.32	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Bromoform	ND	2.0	0.82	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Bromomethane	ND	4.0	2.6	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
2-Butanone (MEK)	ND	40	3.4	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Carbon Disulfide	ND	10	3.1	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Carbon Tetrachloride	ND	10	0.33	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Chlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Chlorodibromomethane	ND	1.0	0.40	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Chloroethane	ND	4.0	0.68	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Chloroform	ND	4.0	0.28	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Chloromethane	ND	4.0	1.0	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Cyclohexane	20 J	10	3.5	µg/L	2	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	1.7	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,2-Dibromoethane (EDB)	ND	1.0	0.32	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,2-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,3-Dichlorobenzene	ND	2.0	0.27	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,4-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.32	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,1-Dichloroethane	ND	2.0	0.27	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,2-Dichloroethane	ND	2.0	0.61	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,1-Dichloroethylene	ND	2.0	0.28	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
cis-1,2-Dichloroethylene	ND	2.0	0.28	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
trans-1,2-Dichloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,2-Dichloropropane	ND	2.0	0.39	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
cis-1,3-Dichloropropene	ND	1.0	0.33	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
trans-1,3-Dichloropropene	ND	1.0	0.28	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,4-Dioxane	~~ND~~ UJ	100	36	µg/L	2	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Ethylbenzene	ND	2.0	0.44	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
2-Hexanone (MBK)	ND	20	2.4	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Isopropylbenzene (Cumene)	0.56	2.0	0.30	µg/L	2	J	SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Methyl Acetate	~~ND~~ UJ	2.0	1.2	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.34	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Methyl Cyclohexane	9.8	2.0	0.31	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Methylene Chloride	~~ND~~ UJ	10	0.35	µg/L	2	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 17:45	MFF
4-Methyl-2-pentanone (MIBK)	ND	20	2.6	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Styrene	ND	2.0	0.30	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,1,2,2-Tetrachloroethane	ND	1.0	0.27	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Tetrachloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Toluene	ND	2.0	0.45	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,2,3-Trichlorobenzene	ND	10	0.68	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,2,4-Trichlorobenzene	ND	2.0	0.60	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-06-WG-20231027 Sampled: 10/27/2023 10:00

Sample ID: 23J3847-03

Sample Matrix: Ground Water

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	2.0	0.30	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,1,2-Trichloroethane	ND	2.0	0.38	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Trichloroethylene	ND	2.0	0.35	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Trichlorofluoromethane (Freon 11)	ND	4.0	0.31	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.42	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Vinyl Chloride	ND	4.0	0.47	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF
Xylenes (total)	ND	2.0	2.0	µg/L	2		SW-846 8260D	10/31/23	11/1/23 17:45	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	103	70-130		11/1/23 17:45
Toluene-d8	99.3	70-130		11/1/23 17:45
4-Bromofluorobenzene	95.5	70-130		11/1/23 17:45

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-06-WG-20231027 Sampled: 10/27/2023 10:00

Sample ID: 23J3847-03

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyclopentane, methyl-	12	µg/L	128945	3.266	2	000096-37-7	91	SW-846 8260D	10/31/23	11/1/23 17:45	MFF

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

Project Location: 435 Main St., Freeport, NY | Sample Description: | Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: DUPLICATE 1 | Sampled: 10/27/2023 10:30

Sample ID: 23J3847-04

Sample Matrix: Ground Water

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	4.0	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Benzene	ND	2.0	0.37	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Bromochloromethane	ND	2.0	0.57	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Bromodichloromethane	ND	1.0	0.32	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Bromoform	ND	2.0	0.82	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Bromomethane	ND	4.0	2.6	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
2-Butanone (MEK)	ND	40	3.4	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Carbon Disulfide	ND	10	3.1	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Carbon Tetrachloride	ND	10	0.33	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Chlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Chlorodibromomethane	ND	1.0	0.40	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Chloroethane	ND	4.0	0.68	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Chloroform	ND	4.0	0.28	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Chloromethane	ND	4.0	1.0	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Cyclohexane	21 J	10	3.5	µg/L	2	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	1.7	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,2-Dibromoethane (EDB)	ND	1.0	0.32	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,2-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,3-Dichlorobenzene	ND	2.0	0.27	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,4-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.32	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,1-Dichloroethane	ND	2.0	0.27	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,2-Dichloroethane	ND	2.0	0.61	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,1-Dichloroethylene	ND	2.0	0.28	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
cis-1,2-Dichloroethylene	ND	2.0	0.28	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
trans-1,2-Dichloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,2-Dichloropropane	ND	2.0	0.39	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
cis-1,3-Dichloropropene	ND	1.0	0.33	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
trans-1,3-Dichloropropene	ND	1.0	0.28	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,4-Dioxane	~~ND~~ UJ	100	36	µg/L	2	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Ethylbenzene	ND	2.0	0.44	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
2-Hexanone (MBK)	ND	20	2.4	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Isopropylbenzene (Cumene)	0.54	2.0	0.30	µg/L	2	J	SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Methyl Acetate	ND	2.0	1.2	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.34	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Methyl Cyclohexane	10	2.0	0.31	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Methylene Chloride	~~ND~~ UJ	10	0.35	µg/L	2	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 18:11	MFF
4-Methyl-2-pentanone (MIBK)	ND	20	2.6	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Styrene	ND	2.0	0.30	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,1,2,2-Tetrachloroethane	ND	1.0	0.27	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Tetrachloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Toluene	ND	2.0	0.45	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,2,3-Trichlorobenzene	ND	10	0.68	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,2,4-Trichlorobenzene	ND	2.0	0.60	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF

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

Project Location: 435 Main St., Freeport, NY | Sample Description: | Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: DUPLICATE 1 | Sampled: 10/27/2023 10:30

Sample ID: 23J3847-04

Sample Matrix: Ground Water

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	2.0	0.30	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,1,2-Trichloroethane	ND	2.0	0.38	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Trichloroethylene	ND	2.0	0.35	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Trichlorofluoromethane (Freon 11)	ND	4.0	0.31	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.42	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Vinyl Chloride	ND	4.0	0.47	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF
Xylenes (total)	ND	2.0	2.0	µg/L	2		SW-846 8260D	10/31/23	11/1/23 18:11	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	101	70-130		11/1/23 18:11
Toluene-d8	97.2	70-130		11/1/23 18:11
4-Bromofluorobenzene	94.2	70-130		11/1/23 18:11

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

Project Location: 435 Main St., Freeport, NY | Sample Description: | Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: DUPLICATE 1 | Sampled: 10/27/2023 10:30

Sample ID: 23J3847-04

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyclopentane, methyl-	13	µg/L	138250	3.269	2	000096-37-7	91	SW-846 8260D	10/31/23	11/1/23 18:11	MFF

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-08SR-WG-20231027 Sampled: 10/27/2023 10:10

Sample ID: 23J3847-05

Sample Matrix: Ground Water

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	200	8.0	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Benzene	ND	4.0	0.74	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Bromochloromethane	ND	4.0	1.1	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Bromodichloromethane	ND	2.0	0.63	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Bromoform	ND	4.0	1.6	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Bromomethane	ND	8.0	5.3	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
2-Butanone (MEK)	ND	80	6.7	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Carbon Disulfide	ND	20	6.2	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Carbon Tetrachloride	ND	20	0.65	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Chlorobenzene	ND	4.0	0.48	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Chlorodibromomethane	ND	2.0	0.80	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Chloroethane	ND	8.0	1.4	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Chloroform	ND	8.0	0.56	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Chloromethane	ND	8.0	2.0	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Cyclohexane	~~ND~~ UJ	20	7.1	µg/L	4	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	3.4	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,2-Dibromoethane (EDB)	ND	2.0	0.64	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,2-Dichlorobenzene	ND	4.0	0.52	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,3-Dichlorobenzene	ND	4.0	0.55	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,4-Dichlorobenzene	ND	4.0	0.51	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Dichlorodifluoromethane (Freon 12)	ND	8.0	0.64	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,1-Dichloroethane	ND	4.0	0.55	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,2-Dichloroethane	ND	4.0	1.2	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,1-Dichloroethylene	ND	4.0	0.56	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
cis-1,2-Dichloroethylene	ND	4.0	0.56	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
trans-1,2-Dichloroethylene	ND	4.0	0.69	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,2-Dichloropropane	ND	4.0	0.77	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
cis-1,3-Dichloropropene	ND	2.0	0.65	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
trans-1,3-Dichloropropene	ND	2.0	0.57	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,4-Dioxane	~~ND~~ UJ	200	72	µg/L	4	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Ethylbenzene	ND	4.0	0.88	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
2-Hexanone (MBK)	ND	40	4.8	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Isopropylbenzene (Cumene)	ND	4.0	0.60	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Methyl Acetate	ND	4.0	2.4	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Methyl tert-Butyl Ether (MTBE)	3.4	4.0	0.68	µg/L	4	J	SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Methyl Cyclohexane	110	4.0	0.62	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Methylene Chloride	~~ND~~ UJ	20	0.71	µg/L	4	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 18:37	MFF
4-Methyl-2-pentanone (MIBK)	ND	40	5.3	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Styrene	ND	4.0	0.60	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,1,2,2-Tetrachloroethane	ND	2.0	0.55	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Tetrachloroethylene	ND	4.0	0.67	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Toluene	ND	4.0	0.89	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,2,3-Trichlorobenzene	ND	20	1.4	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,2,4-Trichlorobenzene	ND	4.0	1.2	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-08SR-WG-20231027 Sampled: 10/27/2023 10:10

Sample ID: 23J3847-05

Sample Matrix: Ground Water

Sample Flags: DL-01

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	4.0	0.60	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,1,2-Trichloroethane	ND	4.0	0.76	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Trichloroethylene	ND	4.0	0.70	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Trichlorofluoromethane (Freon 11)	ND	8.0	0.62	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	4.0	0.83	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Vinyl Chloride	ND	8.0	0.95	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Xylenes (total)	ND	4.0	4.0	µg/L	4		SW-846 8260D	10/31/23	11/1/23 18:37	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	103	70-130		11/1/23 18:37
Toluene-d8	98.4	70-130		11/1/23 18:37
4-Bromofluorobenzene	95.4	70-130		11/1/23 18:37

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-08SR-WG-20231027 Sampled: 10/27/2023 10:10

Sample ID: 23J3847-05

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyclopentane, 1,2-dimethyl-...	24	µg/L	108890	4.404	4	001192-18-3	90	SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Cyclopentane, 1,3-dimethyl-	32	µg/L	120459	4.342	4	002453-00-1	95	SW-846 8260D	10/31/23	11/1/23 18:37	MFF
Isopropylcyclobutane	27	µg/L	122477	4.462	4	000872-56-0	97	SW-846 8260D	10/31/23	11/1/23 18:37	MFF
tert-Butyl Alcohol (TBA)	570	µg/L	43779	2.318	4	75-65-0	96	SW-846 8260D	10/31/23	11/1/23 18:37	MFF

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Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-08DR-WG-20231027 Sampled: 10/27/2023 11:00

Sample ID: 23J3847-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Cyclohexane	~~ND~~ UJ	5.0	1.8	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
cis-1,2-Dichloroethylene	10	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,4-Dioxane	~~ND~~ UJ	50	18	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Methyl tert-Butyl Ether (MTBE)	0.84	1.0	0.17	µg/L	1	J	SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Methyl Cyclohexane	0.95	1.0	0.16	µg/L	1	J	SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Methylene Chloride	~~ND~~ UJ	5.0	0.18	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 19:03	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Tetrachloroethylene	9.7	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-08DR-WG-20231027 Sampled: 10/27/2023 11:00

Sample ID: 23J3847-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Trichloroethylene	2.0	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Vinyl Chloride	7.6	2.0	0.24	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:03	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	103	70-130		11/1/23 19:03
Toluene-d8	97.8	70-130		11/1/23 19:03
4-Bromofluorobenzene	95.2	70-130		11/1/23 19:03

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-08DR-WG-20231027 Sampled: 10/27/2023 11:00

Sample ID: 23J3847-06

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Cyclopentane, 1,3-dimethyl-	3.2	µg/L	48912	4.339	1	002453-00-1	94	SW-846 8260D	10/31/23	11/1/23 19:03	MFF
tert-Butyl Alcohol (TBA)	140	µg/L	42822	2.318	1	75-65-0	94	SW-846 8260D	10/31/23	11/1/23 19:03	MFF

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Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-04-WG-20231027 Sampled: 10/27/2023 11:20

Sample ID: 23J3847-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Cyclohexane	~~ND~~ UJ	5.0	1.8	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
cis-1,2-Dichloroethylene	0.45	1.0	0.14	µg/L	1	J	SW-846 8260D	10/31/23	11/1/23 19:29	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,4-Dioxane	~~ND~~ UJ	50	18	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Methylene Chloride	~~ND~~ UJ	5.0	0.18	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 19:29	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-04-WG-20231027 Sampled: 10/27/2023 11:20

Sample ID: 23J3847-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	10/31/23	11/1/23 19:29	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	101	70-130		11/1/23 19:29
Toluene-d8	97.5	70-130		11/1/23 19:29
4-Bromofluorobenzene	96.2	70-130		11/1/23 19:29

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: MEC-MW-04-WG-20231027 Sampled: 10/27/2023 11:20

Sample ID: 23J3847-07

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	10/31/23	11/1/23 19:29	MFF

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Project Location: 435 Main St., Freeport, NY | Sample Description: | Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: TRIP BLANK | Sampled: 10/27/2023 00:00

Sample ID: 23J3847-08

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Cyclohexane	~~ND~~ UJ	5.0	1.8	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,4-Dioxane	~~ND~~ UJ	50	18	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Methylene Chloride	~~ND~~ UJ	5.0	0.18	µg/L	1	~~V-05~~	SW-846 8260D	10/31/23	11/1/23 16:01	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF

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

Project Location: 435 Main St., Freeport, NY | Sample Description: | Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: TRIP BLANK | Sampled: 10/27/2023 00:00

Sample ID: 23J3847-08

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	10/31/23	11/1/23 16:01	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	102	70-130		11/1/23 16:01
Toluene-d8	98.0	70-130		11/1/23 16:01
4-Bromofluorobenzene	96.1	70-130		11/1/23 16:01

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

Project Location: 435 Main St., Freeport, NY Sample Description: Work Order: 23J3847

Date Received: 10/28/2023

Field Sample #: TRIP BLANK Sampled: 10/27/2023 00:00

Sample ID: 23J3847-08

Sample Matrix: Trip Blank Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	10/31/23	11/1/23 16:01	MFF

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-10S-WG-20231030 Sampled: 10/30/2023 11:45

Sample ID: 23J3978-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	2.8	50	2.0	µg/L	1	J	SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Bromochloromethane	~~ND~~ UJ	1.0	0.28	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Bromomethane	~~ND~~ UJ	2.0	1.3	µg/L	1	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/3/23 2:22	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Chloromethane	~~ND~~ UJ	2.0	0.50	µg/L	1	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Cyclohexane	2.2	5.0	1.8	µg/L	1	J	SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
cis-1,2-Dichloroethylene	0.14	1.0	0.14	µg/L	1	J	SW-846 8260D	11/2/23	11/3/23 2:22	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,4-Dioxane	~~ND~~ UJ	50	18	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Isopropylbenzene (Cumene)	0.65	1.0	0.15	µg/L	1	J	SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Methyl tert-Butyl Ether (MTBE)	4.6	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Methyl Cyclohexane	5.9	1.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-10S-WG-20231030 Sampled: 10/30/2023 11:45

Sample ID: 23J3978-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:22	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	108	70-130		11/3/23 2:22
Toluene-d8	102	70-130		11/3/23 2:22
4-Bromofluorobenzene	99.2	70-130		11/3/23 2:22

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-10S-WG-20231030 Sampled: 10/30/2023 11:45

Sample ID: 23J3978-01

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/2/23	11/3/23 2:22	EEH

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-10D-WG-20231030 Sampled: 10/30/2023 10:50

Sample ID: 23J3978-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Bromochloromethane	~~ND~~ UJ	1.0	0.28	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Bromomethane	~~ND~~ UJ	2.0	1.3	µg/L	1	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/3/23 2:50	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Chloromethane	~~ND~~ UJ	2.0	0.50	µg/L	1	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,4-Dioxane	~~ND~~ UJ	50	18	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-10D-WG-20231030 Sampled: 10/30/2023 10:50

Sample ID: 23J3978-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/2/23	11/3/23 2:50	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,2-Dichloroethane-d4	105	70-130		11/3/23	2:50
Toluene-d8	103	70-130		11/3/23	2:50
4-Bromofluorobenzene	97.6	70-130		11/3/23	2:50

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-10D-WG-20231030 Sampled: 10/30/2023 10:50

Sample ID: 23J3978-02

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/2/23	11/3/23 2:50	EEH

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-05R-WG-20231030 Sampled: 10/30/2023 10:15

Sample ID: 23J3978-03

Sample Matrix: Ground Water

Sample Flags: RL-12

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	4.0	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Benzene	ND	2.0	0.37	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Bromochloromethane	~~ND~~ UJ	2.0	0.57	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Bromodichloromethane	ND	1.0	0.32	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Bromoform	ND	2.0	0.82	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Bromomethane	~~ND~~ UJ	4.0	2.6	µg/L	2	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/3/23 3:17	EEH
2-Butanone (MEK)	ND	40	3.4	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Carbon Disulfide	ND	10	3.1	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Carbon Tetrachloride	ND	10	0.33	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Chlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Chlorodibromomethane	ND	1.0	0.40	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Chloroethane	ND	4.0	0.68	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Chloroform	ND	4.0	0.28	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Chloromethane	~~ND~~ UJ	4.0	1.0	µg/L	2	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Cyclohexane	ND	10	3.5	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	1.7	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,2-Dibromoethane (EDB)	ND	1.0	0.32	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,2-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,3-Dichlorobenzene	ND	2.0	0.27	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,4-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Dichlorodifluoromethane (Freon 12)	0.88	4.0	0.32	µg/L	2	J	SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,1-Dichloroethane	ND	2.0	0.27	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,2-Dichloroethane	ND	2.0	0.61	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,1-Dichloroethylene	ND	2.0	0.28	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
cis-1,2-Dichloroethylene	ND	2.0	0.28	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
trans-1,2-Dichloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,2-Dichloropropane	ND	2.0	0.39	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
cis-1,3-Dichloropropene	ND	1.0	0.33	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
trans-1,3-Dichloropropene	ND	1.0	0.28	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,4-Dioxane	~~ND~~ UJ	100	36	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Ethylbenzene	ND	2.0	0.44	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
2-Hexanone (MBK)	ND	20	2.4	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Isopropylbenzene (Cumene)	ND	2.0	0.30	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Methyl Acetate	ND	2.0	1.2	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Methyl tert-Butyl Ether (MTBE)	3.1	2.0	0.34	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Methyl Cyclohexane	ND	2.0	0.31	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Methylene Chloride	ND	10	0.35	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	2.6	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Styrene	ND	2.0	0.30	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	0.27	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Tetrachloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Toluene	ND	2.0	0.45	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,2,3-Trichlorobenzene	ND	10	0.68	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,2,4-Trichlorobenzene	ND	2.0	0.60	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-05R-WG-20231030 Sampled: 10/30/2023 10:15

Sample ID: 23J3978-03

Sample Matrix: Ground Water

Sample Flags: RL-12

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	2.0	0.30	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,1,2-Trichloroethane	ND	2.0	0.38	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Trichloroethylene	ND	2.0	0.35	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	0.31	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.42	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Vinyl Chloride	ND	4.0	0.47	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH
Xylenes (total)	ND	2.0	2.0	µg/L	2		SW-846 8260D	11/2/23	11/3/23 3:17	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,2-Dichloroethane-d4	108	70-130		11/3/23	3:17
Toluene-d8	101	70-130		11/3/23	3:17
4-Bromofluorobenzene	99.6	70-130		11/3/23	3:17

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-05R-WG-20231030 Sampled: 10/30/2023 10:15

Sample ID: 23J3978-03

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Indan, 1-methyl-	5.1	µg/L	95277	10.937	2	000767-58-8	90	SW-846 8260D	11/2/23	11/3/23 3:17	EEH

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-09D-WG-20231030 Sampled: 10/30/2023 11:35

Sample ID: 23J3978-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	71	50	2.0	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Bromochloromethane	~~ND~~ UJ	1.0	0.28	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Bromomethane	~~ND~~ UJ	2.0	1.3	µg/L	1	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/3/23 3:44	EEH
2-Butanone (MEK)	4.4	20	1.7	µg/L	1	J	SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Chloromethane	~~ND~~ UJ	2.0	0.50	µg/L	1	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,4-Dioxane	~~ND~~ UJ	50	18	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Styrene	0.92	1.0	0.15	µg/L	1	J	SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-09D-WG-20231030 Sampled: 10/30/2023 11:35

Sample ID: 23J3978-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/2/23	11/3/23 3:44	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	105	70-130		11/3/23 3:44
Toluene-d8	103	70-130		11/3/23 3:44
4-Bromofluorobenzene	98.2	70-130		11/3/23 3:44

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-09D-WG-20231030 Sampled: 10/30/2023 11:35

Sample ID: 23J3978-04

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	11/2/23	11/3/23 3:44	EEH

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-09S-WG-20231030 Sampled: 10/30/2023 10:55

Sample ID: 23J3978-05

Sample Matrix: Ground Water

Sample Flags: RL-12

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	63	100	4.0	µg/L	2	J	SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Benzene	ND	2.0	0.37	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Bromochloromethane	~~ND~~ UJ	2.0	0.57	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Bromodichloromethane	ND	1.0	0.32	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Bromoform	ND	2.0	0.82	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Bromomethane	~~ND~~ UJ	4.0	2.6	µg/L	2	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/3/23 4:11	EEH
2-Butanone (MEK)	5.5	40	3.4	µg/L	2	J	SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Carbon Disulfide	ND	10	3.1	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Carbon Tetrachloride	ND	10	0.33	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Chlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Chlorodibromomethane	ND	1.0	0.40	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Chloroethane	ND	4.0	0.68	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Chloroform	ND	4.0	0.28	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Chloromethane	~~ND~~ UJ	4.0	1.0	µg/L	2	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Cyclohexane	ND	10	3.5	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	1.7	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,2-Dibromoethane (EDB)	ND	1.0	0.32	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,2-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,3-Dichlorobenzene	ND	2.0	0.27	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,4-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.32	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,1-Dichloroethane	ND	2.0	0.27	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,2-Dichloroethane	ND	2.0	0.61	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,1-Dichloroethylene	ND	2.0	0.28	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
cis-1,2-Dichloroethylene	ND	2.0	0.28	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
trans-1,2-Dichloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,2-Dichloropropane	ND	2.0	0.39	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
cis-1,3-Dichloropropene	ND	1.0	0.33	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
trans-1,3-Dichloropropene	ND	1.0	0.28	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,4-Dioxane	~~ND~~ UJ	100	36	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Ethylbenzene	0.98	2.0	0.44	µg/L	2	J	SW-846 8260D	11/2/23	11/3/23 4:11	EEH
2-Hexanone (MBK)	ND	20	2.4	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Isopropylbenzene (Cumene)	ND	2.0	0.30	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Methyl Acetate	ND	2.0	1.2	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Methyl Cyclohexane	ND	2.0	0.31	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Methylene Chloride	ND	10	0.35	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
4-Methyl-2-pentanone (MIBK)	ND	20	2.6	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Styrene	5.8	2.0	0.30	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,1,2,2-Tetrachloroethane	ND	1.0	0.27	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Tetrachloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Toluene	ND	2.0	0.45	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,2,3-Trichlorobenzene	ND	10	0.68	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,2,4-Trichlorobenzene	ND	2.0	0.60	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-09S-WG-20231030 Sampled: 10/30/2023 10:55

Sample ID: 23J3978-05

Sample Matrix: Ground Water

Sample Flags: RL-12

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	2.0	0.30	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,1,2-Trichloroethane	ND	2.0	0.38	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Trichloroethylene	ND	2.0	0.35	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Trichlorofluoromethane (Freon 11)	ND	4.0	0.31	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.42	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Vinyl Chloride	ND	4.0	0.47	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH
Xylenes (total)	ND	2.0	2.0	µg/L	2		SW-846 8260D	11/2/23	11/3/23 4:11	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	105	70-130		11/3/23 4:11
Toluene-d8	102	70-130		11/3/23 4:11
4-Bromofluorobenzene	96.0	70-130		11/3/23 4:11

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: MEC-MW-09S-WG-20231030 Sampled: 10/30/2023 10:55

Sample ID: 23J3978-05

Sample Matrix: Ground Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			2			SW-846 8260D	11/2/23	11/3/23 4:11	EEH

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: Trip Blank Sampled: 10/30/2023 00:00

Sample ID: 23J3978-06

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Bromochloromethane	~~ND~~ UJ	1.0	0.28	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Bromomethane	~~ND~~ UJ	2.0	1.3	µg/L	1	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/2/23 23:38	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Chloromethane	~~ND~~ UJ	2.0	0.50	µg/L	1	~~V-05, V-34~~	SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,4-Dioxane	~~ND~~ UJ	50	18	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3978

Date Received: 10/31/2023

Field Sample #: Trip Blank Sampled: 10/30/2023 00:00

Sample ID: 23J3978-06

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	11/2/23	11/2/23 23:38	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	106	70-130		11/2/23 23:38
Toluene-d8	105	70-130		11/2/23 23:38
4-Bromofluorobenzene	97.8	70-130		11/2/23 23:38

QC NONCONFORMANCE DOCUMENTATION

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8260D

Laboratory:	Pace New England	Work Order:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0(
Calibration:	2301046	Instrument:	GCMSVOA2
		Calibration Date:	8/22/2023 11:59:17AM

COMPOUND	Mean RF	RF RSD	Linear r^2	Quad COD	LIMIT	Q
1,3-Dichlorobenzene	1.234696	8.0			20	
1,4-Dichlorobenzene	1.295066	5.4			20	
trans-1,4-Dichloro-2-butene	0.2712216	5.9			20	
Dichlorodifluoromethane (Freon 12)	0.5076679	9.9			20	
1,1-Dichloroethane	0.9157079	11.3			20	
1,2-Dichloroethane	0.3692397	13.6			20	
1,1-Dichloroethylene	0.7183183	10.0			20	
cis-1,2-Dichloroethylene	0.8250032	10.9			20	
trans-1,2-Dichloroethylene	0.7266709	10.8			20	
Dichlorofluoromethane (Freon 21)	0.8150758	7.5			20	
1,2-Dichloropropane	0.3092735	12.6			20	
1,3-Dichloropropane	0.4445131	12.2			20	
2,2-Dichloropropane	0.6911486	8.9			20	
1,1-Dichloropropene	0.6743689	7.9			20	
cis-1,3-Dichloropropene	0.4675584	12.5			20	
trans-1,3-Dichloropropene	0.4021062	14.6			20	
Diethyl Ether	0.3592915	9.3			20	
Difluorochloromethane (Freon 22)	0.7758997	10.8			20	
Diisopropyl Ether (DIPE)	2.043934	8.3			20	
1,4-Dioxane	3.834256E-03	7.0			20	
Ethanol	9.413334E-03	10.7			20	
Ethyl Acetate	0.7826219	4.9			20	
Ethylbenzene	2.751109	7.9			20	
Hexachlorobutadiene	0.3038286	13.2			20	
2-Hexanone (MBK)	0.2910779	8.5			20	
Iodomethane	0.6158952	14.4			20	
Isopropylbenzene (Cumene)	2.912551	7.3			20	
p-Isopropyltoluene (p-Cymene)	2.477135	8.3			20	
Methyl Acetate	0.5480667	6.1			20	
Methyl tert-Butyl Ether (MTBE)	1.240174	10.9			20	
Methyl Cyclohexane	0.4844583	7.8			20	

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

SW-846 8260D

Laboratory:	Pace New England	Work Order:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0(
Calibration:	2300982	Instrument:	GCMSVOA5
		Calibration Date:	8/14/2023 10:49:51AM

COMPOUND	Mean RF	RF RSD	Linear r^2	Quad COD	LIMIT	Q
1,3-Dichlorobenzene	0.9814969	8.2			20	
1,4-Dichlorobenzene	1.01772	5.8			20	
trans-1,4-Dichloro-2-butene	0.1116967	10.6			20	
Dichlorodifluoromethane (Freon 12)	0.508352	6.5			20	
1,1-Dichloroethane	0.6381386	5.7			20	
1,2-Dichloroethane	0.3171885	7.5			20	
1,1-Dichloroethylene	0.6660022	4.5			20	
cis-1,2-Dichloroethylene	0.4923488	6.2			20	
trans-1,2-Dichloroethylene	0.522564	4.2			20	
Dichlorofluoromethane (Freon 21)	0.8055034	5.9			20	
1,2-Dichloropropane	0.2398591	6.8			20	
1,3-Dichloropropane	0.3256315	7.2			20	
2,2-Dichloropropane	0.4025728	7.9			20	
1,1-Dichloropropene	0.487346	10.4			20	
cis-1,3-Dichloropropene	0.335889	14.0			20	
trans-1,3-Dichloropropene	0.2610193	17.5			20	
Diethyl Ether	0.2688968	7.3			20	
Difluorochloromethane (Freon 22)	0.5162075	6.9			20	
Diisopropyl Ether (DIPE)	0.9569245	8.3			20	
1,4-Dioxane	1.869616E-03	9.2			20	
Ethanol	7.660742E-03	46.8	0.999		0.99	
Ethyl Acetate	0.2984163	13.4			20	
Ethylbenzene	2.147715	7.2			20	
Hexachlorobutadiene	0.2214059	12.6			20	
2-Hexanone (MBK)	0.1365899	6.7			20	
Iodomethane	0.4745002	25.7	0.999		0.99	
Isopropylbenzene (Cumene)	2.020546	7.2			20	
p-Isopropyltoluene (p-Cymene)	1.699103	12.1			20	
Methyl Acetate	0.352252	8.7			20	
Methyl tert-Butyl Ether (MTBE)	0.7133643	11.7			20	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB000
Instrument ID:	GCMSVOA2	Calibration:	2301046
Lab File ID:	B23V30502.D	Calibration Date:	08/22/23 11:59
Sequence:	S095814	Injection Date:	11/01/23
Lab Sample ID:	S095814-CCV1	Injection Time:	13:13

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Acetone	A	100	93.4	0.1886873	0.1762058		-6.6	20	
Benzene	A	10.0	8.92	1.87242	1.66938		-10.8	20	
Bromochloromethane	A	10.0	9.52	0.2374894	0.2260948		-4.8	20	
Bromodichloromethane	A	10.0	10.3	0.3633148	0.37536		3.3	20	
Bromoform	A	10.0	10.9	0.3942354	0.4306884		9.2	20	
Bromomethane	A	10.0	10.1	0.2918845	0.2951313		1.1	20	
2-Butanone (MEK)	A	100	84.9	0.2953406	0.2506368		-15.1	20	
Carbon Disulfide	A	100	111	1.128181	1.25441		11.2	20	
Carbon Tetrachloride	A	10.0	8.88	0.7037482	0.6251221		-11.2	20	
Chlorobenzene	A	10.0	9.97	1.618839	1.613229		-0.3	20	
Chlorodibromomethane	A	10.0	10.6	0.3138034	0.3315852		5.7	20	
Chloroethane	A	10.0	10.6	0.3570477	0.3799821		6.4	20	
Chloroform	A	10.0	9.61	0.7941618	0.7630146		-3.9	20	
Chloromethane	A	10.0	8.04	0.921604	0.7407583		-19.6	20	
Cyclohexane	A	10.0	7.67	1.151711	0.8832265		-23.3	20	*
1,2-Dibromo-3-chloropropane (DBCP)	A	10.0	11.7	0.1131143	0.1319187		16.6	20	
1,2-Dibromoethane (EDB)	A	10.0	10.9	0.2715205	0.2957659		8.9	20	
1,2-Dichlorobenzene	A	10.0	10.3	1.145222	1.175286		2.6	20	
1,3-Dichlorobenzene	A	10.0	9.85	1.234696	1.216374		-1.5	20	
1,4-Dichlorobenzene	A	10.0	9.88	1.295066	1.279326		-1.2	20	
Dichlorodifluoromethane (Freon 12)	A	10.0	11.0	0.5076679	0.5581526		9.9	20	
1,1-Dichloroethane	A	10.0	8.92	0.9157079	0.8166584		-10.8	20	
1,2-Dichloroethane	A	10.0	10.5	0.3692397	0.3874267		4.9	20	
1,1-Dichloroethylene	A	10.0	9.82	0.7183183	0.7050761		-1.8	20	
cis-1,2-Dichloroethylene	A	10.0	9.08	0.8250032	0.7490267		-9.2	20	
trans-1,2-Dichloroethylene	A	10.0	9.24	0.7266709	0.6717017		-7.6	20	
1,2-Dichloropropane	A	10.0	9.38	0.3092735	0.2901576		-6.2	20	
cis-1,3-Dichloropropene	A	10.0	9.75	0.4675584	0.4560581		-2.5	20	
trans-1,3-Dichloropropene	A	10.0	10.1	0.4021062	0.4077788		1.4	20	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB000
Instrument ID:	GCMSVOA2	Calibration:	2301046
Lab File ID:	B23V30502.D	Calibration Date:	08/22/23 11:59
Sequence:	S095814	Injection Date:	11/01/23
Lab Sample ID:	S095814-CCV1	Injection Time:	13:13

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
1,4-Dioxane	A	100	75.2	3.834256E-03	2.881529E-03		-24.8	20	*
Ethylbenzene	A	10.0	9.79	2.751109	2.694475		-2.1	20	
2-Hexanone (MBK)	A	100	93.5	0.2910779	0.2722797		-6.5	20	
Isopropylbenzene (Cumene)	A	10.0	9.44	2.912551	2.749001		-5.6	20	
Methyl Acetate	A	10.0	8.52	0.5480667	0.4667193		-14.8	20	
Methyl tert-Butyl Ether (MTBE)	A	10.0	9.31	1.240174	1.154556		-6.9	20	
Methyl Cyclohexane	A	10.0	8.76	0.4844583	0.4245655		-12.4	20	
Methylene Chloride	A	10.0	7.85	0.8289869	0.6508703		-21.5	20	*
4-Methyl-2-pentanone (MIBK)	A	100	93.4	0.3874748	0.3620525		-6.6	20	
Styrene	A	10.0	9.82	1.798821	1.765917		-1.8	20	
1,1,2,2-Tetrachloroethane	A	10.0	11.5	0.6543669	0.7535679		15.2	20	
Tetrachloroethylene	A	10.0	9.91	0.259656	0.2572567		-0.9	20	
Toluene	A	10.0	9.41	1.280736	1.205319		-5.9	20	
1,2,3-Trichlorobenzene	A	10.0	10.3	0.5277462	0.5446569		3.2	20	
1,2,4-Trichlorobenzene	A	10.0	10.0	0.6572101	0.6586263		0.2	20	
1,1,1-Trichloroethane	A	10.0	10.0	0.7320261	0.7319682		-0.008	20	
1,1,2-Trichloroethane	A	10.0	10.4	0.2440284	0.2538689		4.0	20	
Trichloroethylene	A	10.0	10.2	0.2887468	0.2950427		2.2	20	
Trichlorofluoromethane (Freon 11)	A	10.0	11.0	0.6425119	0.7038318		9.5	20	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	10.2	0.3878568	0.3961776		2.1	20	
Vinyl Chloride	A	10.0	10.3	0.6444279	0.6656409		3.3	20	
m+p Xylene	A	20.0	19.3	2.16433	2.086459		-3.6	20	
o-Xylene	A	10.0	9.71	2.206763	2.14377		-2.9	20	
1,2-Dichloroethane-d4	A	25.0	25.3	0.624035	0.6307213		1.1		
Toluene-d8	A	25.0	24.7	1.261711	1.246566		-1.2		
4-Bromofluorobenzene	A	25.0	24.2	0.9530317	0.9227403		-3.2		

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB000
Instrument ID:	GCMSVOA5	Calibration:	2300982
Lab File ID:	E23V30628.D	Calibration Date:	08/14/23 10:49
Sequence:	S095804	Injection Date:	11/02/23
Lab Sample ID:	S095804-CCV1	Injection Time:	20:27

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Acetone	A	100	91.2	0.1151024	0.1049205		-8.8	20	
Benzene	A	10.0	11.0	1.357795	1.491681		9.9	20	
Bromochloromethane	A	10.0	12.3	0.2663149	0.3277904		23.1	20	*
Bromodichloromethane	A	10.0	9.67	0.2999803	0.2901063		-3.3	20	
Bromoform	A	10.0	8.02	0.2861101	0.2295607		-19.8	20	
Bromomethane	A	10.0	7.94	0.3378874	0.2683327		-20.6	20	*
2-Butanone (MEK)	A	100	108	0.1435519	0.1549759		8.0	20	
Carbon Disulfide	A	100	91.0	1.202863	1.094139		-9.0	20	
Carbon Tetrachloride	A	10.0	11.5	0.4167862	0.4809517		15.4	20	
Chlorobenzene	A	10.0	9.49	1.241607	1.178655		-5.1	20	
Chlorodibromomethane	A	10.0	9.33	0.2238279	0.2089317		-6.7	20	
Chloroethane	A	10.0	11.5	0.2360157	0.2721406		15.3	20	
Chloroform	A	10.0	10.5	0.6614191	0.6948997		5.1	20	
Chloromethane	A	10.0	4.63	0.7148475	0.3308188		-53.7	20	*
Cyclohexane	A	10.0	10.4	0.5811759	0.6036495		3.9	20	
1,2-Dibromo-3-chloropropane (DBCP)	A	10.0	9.60	7.390315E-02	7.092395E-02		-4.0	20	
1,2-Dibromoethane (EDB)	A	10.0	9.73	0.1997932	0.1943623		-2.7	20	
1,2-Dichlorobenzene	A	10.0	9.51	0.8855419	0.84217		-4.9	20	
1,3-Dichlorobenzene	A	10.0	9.97	0.9814969	0.9789786		-0.3	20	
1,4-Dichlorobenzene	A	10.0	9.92	1.01772	1.009298		-0.8	20	
Dichlorodifluoromethane (Freon 12)	A	10.0	10.9	0.508352	0.5552706		9.2	20	
1,1-Dichloroethane	A	10.0	10.5	0.6381386	0.6712598		5.2	20	
1,2-Dichloroethane	A	10.0	9.46	0.3171885	0.3002094		-5.4	20	
1,1-Dichloroethylene	A	10.0	8.63	0.6660022	0.5749621		-13.7	20	
cis-1,2-Dichloroethylene	A	10.0	10.6	0.4923488	0.5245131		6.5	20	
trans-1,2-Dichloroethylene	A	10.0	10.2	0.522564	0.5331258		2.0	20	
1,2-Dichloropropane	A	10.0	9.84	0.2398591	0.236104		-1.6	20	
cis-1,3-Dichloropropene	A	10.0	9.76	0.335889	0.3278196		-2.4	20	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

SW-846 8260D

Laboratory:	Pace New England	Work Order:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB000
Instrument ID:	GCMSVOA5	Calibration:	2300982
Lab File ID:	E23V30628.D	Calibration Date:	08/14/23 10:49
Sequence:	S095804	Injection Date:	11/02/23
Lab Sample ID:	S095804-CCV1	Injection Time:	20:27

		CONC. (µg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
trans-1,3-Dichloropropene	A	10.0	9.29	0.2610193	0.242505		-7.1	20
1,4-Dioxane	A	100	83.8	1.869616E-03	1.566808E-03		-16.2	20
Ethylbenzene	A	10.0	9.48	2.147715	2.036304		-5.2	20
2-Hexanone (MBK)	A	100	101	0.1365899	0.1377287		0.8	20
Isopropylbenzene (Cumene)	A	10.0	9.37	2.020546	1.89426		-6.3	20
Methyl Acetate	A	10.0	9.69	0.352252	0.3411693		-3.1	20
Methyl tert-Butyl Ether (MTBE)	A	10.0	11.2	0.7133643	0.7961299		11.6	20
Methyl Cyclohexane	A	10.0	9.10	0.3639102	0.3312749		-9.0	20
Methylene Chloride	A	10.0	8.69	0.5562033	0.4831496		-13.1	20
4-Methyl-2-pentanone (MIBK)	A	100	106	0.1916801	0.2026533		5.7	20
Styrene	A	10.0	9.23	1.19458	1.102747		-7.7	20
1,1,2,2-Tetrachloroethane	A	10.0	9.50	0.5066891	0.4815945		-5.0	20
Tetrachloroethylene	A	10.0	8.36	0.2700648	0.2256666		-16.4	20
Toluene	A	10.0	9.78	0.9923748	0.9706568		-2.2	20
1,2,3-Trichlorobenzene	A	10.0	8.35	0.3364552	0.2810621		-16.5	20
1,2,4-Trichlorobenzene	A	10.0	8.45	0.4270244	0.3607374		-15.5	20
1,1,1-Trichloroethane	A	10.0	10.3	0.5358446	0.5509899		2.8	20
1,1,2-Trichloroethane	A	10.0	9.99	0.1909456	0.190692		-0.1	20
Trichloroethylene	A	10.0	9.26	0.2524513	0.2337793		-7.4	20
Trichlorofluoromethane (Freon 11)	A	10.0	9.75	0.6709731	0.6539195		-2.5	20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	8.83	0.4268836	0.3769743		-11.7	20
Vinyl Chloride	A	10.0	11.1	0.6629986	0.7329665		10.6	20
m+p Xylene	A	20.0	19.5	1.66659	1.623443		-2.6	20
o-Xylene	A	10.0	9.99	1.596251	1.59538		-0.05	20
1,2-Dichloroethane-d4	A	25.0	30.1	0.5208337	0.626303		20.3	
Toluene-d8	A	25.0	25.4	1.145285	1.162295		1.5	
4-Bromofluorobenzene	A	25.0	23.9	0.8268374	0.7912093		-4.3	

3 - FORM III

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MEC-MW-06-WG-20231027

Laboratory:	Pace New England	Work Order:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB000
Matrix:	Water	Analysis:	SW-846 8260D
Batch:	B356796	Preparation:	SW-846 5030B
% Solids:		Laboratory ID:	B356796-MSD1
Initial/Final:	5 mL / 5 mL	Sample Lab ID:	23J3847-03
Column:			

ANALYTE	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #		% RPD	QC LIMITS RPD	QC LIMITS REC.
1,4-Dioxane	200	179	89.5		7.21	30	70 - 130
Ethylbenzene	20.0	19.4	97.0		0.620	30	70 - 130
2-Hexanone (MBK)	200	183	91.7		3.53	30	70 - 130
Isopropylbenzene (Cumene)	20.0	19.2	93.1		0.104	30	70 - 130
Methyl Acetate	20.0	13.3	66.6	*	26.3	30	70 - 130
Methyl tert-Butyl Ether (MTBE)	20.0	18.1	90.6		0.221	30	70 - 130
Methyl Cyclohexane	20.0	31.8	110		1.01	30	70 - 130
Methylene Chloride	20.0	15.9	79.3		0.879	30	70 - 130
4-Methyl-2-pentanone (MIBK)	200	184	91.8		3.87	30	70 - 130
Styrene	20.0	18.1	90.4		5.70	30	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.8	109		3.45	30	70 - 130
Tetrachloroethylene	20.0	19.4	97.2		4.23	30	70 - 130
Toluene	20.0	19.0	95.1		0.524	30	70 - 130
1,2,3-Trichlorobenzene	20.0	20.4	102		7.54	30	70 - 130
1,2,4-Trichlorobenzene	20.0	19.2	96.0		3.17	30	70 - 130
1,1,1-Trichloroethane	20.0	20.2	101		3.50	30	70 - 130
1,1,2-Trichloroethane	20.0	19.6	98.0		2.22	30	70 - 130
Trichloroethylene	20.0	20.3	102		3.01	30	70 - 130
Trichlorofluoromethane (Freon 11)	20.0	22.9	114		1.73	30	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	20.0	20.9	104		4.40	30	70 - 130
Vinyl Chloride	20.0	21.4	107		0.187	30	70 - 130
Xylenes (total)	60.0	58.0	96.7		0.762	200	0 - 200

Data Usability Summary Report

Site: SMP B – Metal Etching Co.
Laboratory: Con-test/Pace New England – East Longmeadow, MA
SDG Numbers: 23J3847, 23J3978
Parameter: Metals
Data Reviewer: Amy Bass/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: January 8, 2024

Sample Reviewed and Evaluation Summary

SDG 23J3847

7 Groundwater Samples: (collected October 26, 2023 and October 27, 2023)	MEC-MW-11S-WG-20231026, MEC-MW-11D-WG-20231026, MEC-MW-06-WG-20231027, DUPLICATE 1[1], MEC-MW-08SR-WG-20231027, MEC-MW-08DR-WG-20231027, MEC-MW-04-WG-20231027

SDG 23J3978

5 Groundwater Samples: (collected October 30,2023)	MEC-MW-10S-WG-20231030, MEC-MW-10D-WG-20231030, MEC-MW-05R-WG-20231030, MEC-MW-09D-WG-20231030, MEC-MW-09S-WG-20231030

[1]Field duplicate of MEC-MW-06-WG-20231027

The above-listed samples were collected on October 26, 27, and 30, 2023 and were analyzed for metals by SW-846 Methods 6010D/7470A. The data validation was performed in accordance with *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA-542-R-20-006),* November 2020, modified for the SW-846 methodologies utilized.

The data were evaluated based on the following parameters:

	•	Overall Evaluation of Data and Potential Usability Issues
	•	Data Completeness
*	•	Holding Times and Sample Preservation
*	•	Initial and Continuing Calibrations
	•	Interference Check Sample (ICS) Results
	•	Blanks
	•	Matrix Spike (MS)/MS Duplicate (MSD) Results
NA	•	Laboratory Duplicate Results
NA	•	Serial Dilution Results
*	•	Laboratory Control Sample (LCS)/LCS Duplicate (LCSD) Results
*	•	Field Duplicate Results
	•	Sample Results and Reported Quantitation Limits (QLs)

*	-	All criteria were met.
NA	-	Not applicable; laboratory duplicate and serial dilution analyses were not performed on a sample from this data set.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error were not required. Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select metals results that were detected between the method detection limit (MDL) and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive result for zinc in sample MEC-MW-04-WG-20231027 was qualified as estimated (J+) with a potential high bias due to method blank contamination. This result can be used for project objectives as an estimated value, which may have a minor impact on the data usability.

Data Completeness

The data package was a complete Level IV data deliverable package with the following exception.

- The laboratory performed the metals analyses using SW-846 Method 6010D rather than SW-846 Method 6010C, as requested on the chain-of-custody (COC) for SDG 23J3847; the COC for SDG 23J3978 did not indicate the specific method version requested. No validation action was required on this basis.

Holding Times and Sample Preservation

All holding time (HT) and sample preservation method criteria were met for the metals analyses. Note that the laboratory qualified select mercury results to indicate these samples were “extracted past the recommended holding time” (as stated in the laboratory qualifier definition). The extractions for mercury analysis in all samples were performed within the recommended 28-day HT. Although samples were analyzed 2 to 4 days outside the 28-days, professional judgment was used, and results were not qualified, as mercury is essentially fixed in the digestate, and there is no potential for loss due to this exceedance. No validation action was taken on this basis.

Initial and Continuing Calibrations

The associated initial calibration verification and continuing calibration verification percent recoveries (%Rs) met the method acceptance limits for the metals analyses. All initial calibration coefficients were >0.995. Low-level standards were not reported for mercury; no validation actions were required on this basis since the sample QLs were at or above the lowest calibration standard for mercury. The low-level standards for the remaining target metals were within the acceptance limits of 80-120%.

ICS Results

All spiked analytes recovered within the 80-120% acceptance limits in the ICSAB/ICSA analyses (referred to as IFB/IFA by the laboratory).

Initial review of the ICSA (IFA) results indicated that multiple non-spiked metals were detected at concentrations above the MDL but below the QL; however, interferents (aluminum, calcium, iron,

and magnesium) were not detected in the samples in this data set at concentrations ≥90% of the concentrations found in the ICSA analyses. Therefore, potential interference effects from those metals do not pose a significant concern, and no further evaluation of ICS interferences was required.

It was noted that the raw data relevant to S095740-IFA1 in SDG 23J3847 were not provided in the data package. This IFA was not relevant to any project sample results; therefore, no validation action was taken on this basis, and these IFA results were not included in this evaluation.

Blanks

Mercury was not detected in the method blanks or continuing calibration blanks (CCBs), and target metals were not detected in the initial calibration blanks. The following table summarizes the metals detected in the method blank and/or CCBs, the concentrations detected, the associated samples, and the resulting validation actions.

Blank ID	Analyte	Blank Concentration (mg/L)	Validation Actions
B356771-BLK1	Zinc	0.0047 J	The positive result for zinc in sample MEC-MW-04-WG-20231027 was qualified as estimated with a potential high bias (J+) since this result was ≥ the QL and <10× the blank concentration. Qualification was not required for the remaining associated samples since zinc was not detected in these samples.
Associated samples: All samples in SDG 23J3847			
S095798-CCB2	Cadmium	0.0013 J	Qualification was not required on this basis since cadmium was not detected in the associated samples.
Associated samples: MEC-MW-10S-WG-20231030, MEC-MW-10D-WG-20231030			

MS/MSD Results

MS/MSD analyses were performed on sample MEC-MW-06-WG-20231027 for metals and mercury. Post-digestion spike analysis was not required and was not performed. The table below summarizes the %Rs did not meet the acceptance criteria (75-125% for MS/MSD, 20% relative percent difference [RPD]), the associated samples, and the validation actions.

MS/MSD Sample ID	Analyte	MS %R	MSD %R	RPD (%)	Validation Actions
MEC-MW-06-WG-20231027	Sodium	201	175	-	The sample concentration of sodium is >4× the spike concentration; therefore, no validation action was required on this basis.
-: Met criteria					

Laboratory Duplicate Results

Laboratory duplicate analyses were not performed on any samples in this data set.

Serial Dilution Results

Serial dilution analysis was not performed on a sample from this data set.

LCS/LCSD Results

The LCS and LCSD %Rs and LCS/LCSD RPDs for all metals met the laboratory acceptance criteria.

Field Duplicate Results

One field duplicate pair was submitted with this data set: MEC-MW-06-WG-20231027 and DUPLICATE 1. The duplicate RPD is not applicable for comparison of results if either concentration is <5x the QL; in this case, comparison is based on the absolute difference (AbsD) between the results. The acceptance limits for field duplicates in aqueous media is ≤30% for the RPD and ≤QL for the AbsD. For analytes that are detected in one sample and nondetect in the other, the QL is used to represent the nondetect result in the AbsD calculation. The following tables summarize the RPDs and/or AbsDs of the detected results. All criteria were met; therefore, no validation was required on this basis.

Analyte	QLs (mg/L)	MEC-MW-06-WG-20231027 (mg/L)	DUPLICATE 1 (mg/L)	RPD (%) or AbsD (mg/L)	Validation Action
Aluminum	0.050	0.075	0.069	AbsD: 0.006	None; all criteria were met.
Barium	0.050	0.0092 J	0.0083 J	AbsD: 0.009	
Calcium	0.50	82	81	RPD: 1.2	
Copper	0.010	0.0049 J	ND (0.010 U)	AbsD: 0.0051	
Iron	0.050	5.3	5.0	RPD: 5.8	
Magnesium	0.050	36	36	RPD: 0	
Manganese	0.010	0.19	0.19	RPD: 0	
Potassium	2.0	16	16	RPD: 0	
Sodium	2.0	250	250	RPD: 0	

Sample Results and Reported Quantitation Limits

Select metal results were reported between the MDL and QL. These results were qualified as estimated (J) by the laboratory.

Sample calculations were spot-checked; there were no errors noted.

There were no dilutions performed in the metals analyses in this data set.

QUALIFIED FORM 1s

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-11S-WG-20231026

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-01
Sampled:	10/26/23 11:40		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.13	0.020	0.050	1		B356771	11/01/23 15:23	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356771	11/01/23 15:23	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356771	11/02/23 16:44	SW-846 6010D
7440-39-3	Barium	0.087	0.0057	0.050	1		B356771	11/01/23 15:23	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356771	11/01/23 15:23	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356771	11/01/23 15:23	SW-846 6010D
7440-70-2	Calcium	140	0.091	0.50	1		B356771	11/01/23 15:23	SW-846 6010D
7440-47-3	Chromium		0.0093	0.010	1		B356771	11/01/23 15:23	SW-846 6010D
7440-48-4	Cobalt		0.0017	0.010	1		B356771	11/01/23 15:23	SW-846 6010D
7440-50-8	Copper		0.0047	0.010	1		B356771	11/01/23 15:23	SW-846 6010D
7439-89-6	Iron	46	0.023	0.050	1		B356771	11/01/23 15:23	SW-846 6010D
7439-92-1	Lead		0.0065	0.010	1		B356771	11/01/23 15:23	SW-846 6010D
7439-95-4	Magnesium	48	0.016	0.050	1		B356771	11/01/23 15:23	SW-846 6010D
7439-96-5	Manganese	0.75	0.0028	0.010	1		B356771	11/01/23 15:23	SW-846 6010D
7440-02-0	Nickel		0.0024	0.010	1		B356771	11/01/23 15:23	SW-846 6010D
7440-09-7	Potassium	17	0.33	2.0	1		B356771	11/01/23 15:23	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356771	11/01/23 15:23	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356771	11/01/23 15:23	SW-846 6010D
7440-23-5	Sodium	430	0.74	2.0	1		B356771	11/01/23 15:23	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356771	11/01/23 15:23	SW-846 6010D
7440-62-2	Vanadium		0.0071	0.010	1		B356771	11/01/23 15:23	SW-846 6010D
7440-66-6	Zinc		0.0040	0.010	1		B356771	11/01/23 15:23	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-11D-WG-20231026

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-02
Sampled:	10/26/23 12:30		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.027	0.020	0.050	1	J	B356771	11/01/23 15:29	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356771	11/01/23 15:29	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356771	11/02/23 16:49	SW-846 6010D
7440-39-3	Barium	0.015	0.0057	0.050	1	J	B356771	11/01/23 15:29	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356771	11/01/23 15:29	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356771	11/01/23 15:29	SW-846 6010D
7440-70-2	Calcium	27	0.091	0.50	1		B356771	11/01/23 15:29	SW-846 6010D
7440-47-3	Chromium		0.0093	0.010	1		B356771	11/01/23 15:29	SW-846 6010D
7440-48-4	Cobalt		0.0017	0.010	1		B356771	11/01/23 15:29	SW-846 6010D
7440-50-8	Copper	0.0083	0.0047	0.010	1	J	B356771	11/01/23 15:29	SW-846 6010D
7439-89-6	Iron	1.1	0.023	0.050	1		B356771	11/01/23 15:29	SW-846 6010D
7439-92-1	Lead		0.0065	0.010	1		B356771	11/01/23 15:29	SW-846 6010D
7439-95-4	Magnesium	6.2	0.016	0.050	1		B356771	11/01/23 15:29	SW-846 6010D
7439-96-5	Manganese	0.72	0.0028	0.010	1		B356771	11/01/23 15:29	SW-846 6010D
7440-02-0	Nickel		0.0024	0.010	1		B356771	11/01/23 15:29	SW-846 6010D
7440-09-7	Potassium	5.2	0.33	2.0	1		B356771	11/01/23 15:29	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356771	11/01/23 15:29	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356771	11/01/23 15:29	SW-846 6010D
7440-23-5	Sodium	130	0.74	2.0	1		B356771	11/01/23 15:29	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356771	11/01/23 15:29	SW-846 6010D
7440-62-2	Vanadium		0.0071	0.010	1		B356771	11/01/23 15:29	SW-846 6010D
7440-66-6	Zinc		0.0040	0.010	1		B356771	11/01/23 15:29	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-06-WG-20231027

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-03
Sampled:	10/27/23 10:00		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.075	0.020	0.050	1		B356771	11/01/23 14:12	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356771	11/01/23 14:12	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356771	11/02/23 16:15	SW-846 6010D
7440-39-3	Barium	0.0092	0.0057	0.050	1	J	B356771	11/01/23 14:12	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356771	11/01/23 14:12	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356771	11/01/23 14:12	SW-846 6010D
7440-70-2	Calcium	82	0.091	0.50	1		B356771	11/01/23 14:12	SW-846 6010D
7440-47-3	Chromium		0.0093	0.010	1		B356771	11/01/23 14:12	SW-846 6010D
7440-48-4	Cobalt		0.0017	0.010	1		B356771	11/01/23 14:12	SW-846 6010D
7440-50-8	Copper	0.0049	0.0047	0.010	1	J	B356771	11/01/23 14:12	SW-846 6010D
7439-89-6	Iron	5.3	0.023	0.050	1		B356771	11/01/23 14:12	SW-846 6010D
7439-92-1	Lead		0.0065	0.010	1		B356771	11/01/23 14:12	SW-846 6010D
7439-95-4	Magnesium	36	0.016	0.050	1		B356771	11/01/23 14:12	SW-846 6010D
7439-96-5	Manganese	0.19	0.0028	0.010	1		B356771	11/01/23 14:12	SW-846 6010D
7440-02-0	Nickel		0.0024	0.010	1		B356771	11/01/23 14:12	SW-846 6010D
7440-09-7	Potassium	16	0.33	2.0	1		B356771	11/01/23 14:12	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356771	11/01/23 14:12	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356771	11/01/23 14:12	SW-846 6010D
7440-23-5	Sodium	250	0.74	2.0	1	~~MS-19~~	B356771	11/01/23 14:12	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356771	11/01/23 14:12	SW-846 6010D
7440-62-2	Vanadium		0.0071	0.010	1		B356771	11/01/23 14:12	SW-846 6010D
7440-66-6	Zinc		0.0040	0.010	1		B356771	11/01/23 14:12	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
DUPLICATE 1

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-04
Sampled:	10/27/23 10:30		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.069	0.020	0.050	1		B356771	11/01/23 15:36	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356771	11/01/23 15:36	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356771	11/02/23 16:55	SW-846 6010D
7440-39-3	Barium	0.0083	0.0057	0.050	1	J	B356771	11/01/23 15:36	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356771	11/01/23 15:36	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356771	11/01/23 15:36	SW-846 6010D
7440-70-2	Calcium	81	0.091	0.50	1		B356771	11/01/23 15:36	SW-846 6010D
7440-47-3	Chromium		0.0093	0.010	1		B356771	11/01/23 15:36	SW-846 6010D
7440-48-4	Cobalt		0.0017	0.010	1		B356771	11/01/23 15:36	SW-846 6010D
7440-50-8	Copper		0.0047	0.010	1		B356771	11/01/23 15:36	SW-846 6010D
7439-89-6	Iron	5.0	0.023	0.050	1		B356771	11/01/23 15:36	SW-846 6010D
7439-92-1	Lead		0.0065	0.010	1		B356771	11/01/23 15:36	SW-846 6010D
7439-95-4	Magnesium	36	0.016	0.050	1		B356771	11/01/23 15:36	SW-846 6010D
7439-96-5	Manganese	0.19	0.0028	0.010	1		B356771	11/01/23 15:36	SW-846 6010D
7440-02-0	Nickel		0.0024	0.010	1		B356771	11/01/23 15:36	SW-846 6010D
7440-09-7	Potassium	16	0.33	2.0	1		B356771	11/01/23 15:36	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356771	11/01/23 15:36	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356771	11/01/23 15:36	SW-846 6010D
7440-23-5	Sodium	250	0.74	2.0	1		B356771	11/01/23 15:36	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356771	11/01/23 15:36	SW-846 6010D
7440-62-2	Vanadium		0.0071	0.010	1		B356771	11/01/23 15:36	SW-846 6010D
7440-66-6	Zinc		0.0040	0.010	1		B356771	11/01/23 15:36	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-08SR-WG-20231027

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-05
Sampled:	10/27/23 10:10		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.039	0.020	0.050	1	J	B356771	11/01/23 15:41	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356771	11/01/23 15:41	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356771	11/02/23 17:13	SW-846 6010D
7440-39-3	Barium	0.18	0.0057	0.050	1		B356771	11/01/23 15:41	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356771	11/01/23 15:41	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356771	11/01/23 15:41	SW-846 6010D
7440-70-2	Calcium	83	0.091	0.50	1		B356771	11/01/23 15:41	SW-846 6010D
7440-47-3	Chromium		0.0093	0.010	1		B356771	11/01/23 15:41	SW-846 6010D
7440-48-4	Cobalt	0.0079	0.0017	0.010	1	J	B356771	11/01/23 15:41	SW-846 6010D
7440-50-8	Copper		0.0047	0.010	1		B356771	11/01/23 15:41	SW-846 6010D
7439-89-6	Iron	9.8	0.023	0.050	1		B356771	11/01/23 15:41	SW-846 6010D
7439-92-1	Lead		0.0065	0.010	1		B356771	11/01/23 15:41	SW-846 6010D
7439-95-4	Magnesium	14	0.016	0.050	1		B356771	11/01/23 15:41	SW-846 6010D
7439-96-5	Manganese	0.52	0.0028	0.010	1		B356771	11/01/23 15:41	SW-846 6010D
7440-02-0	Nickel	0.0074	0.0024	0.010	1	J	B356771	11/01/23 15:41	SW-846 6010D
7440-09-7	Potassium	11	0.33	2.0	1		B356771	11/01/23 15:41	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356771	11/01/23 15:41	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356771	11/01/23 15:41	SW-846 6010D
7440-23-5	Sodium	97	0.74	2.0	1		B356771	11/01/23 15:41	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356771	11/01/23 15:41	SW-846 6010D
7440-62-2	Vanadium		0.0071	0.010	1		B356771	11/01/23 15:41	SW-846 6010D
7440-66-6	Zinc		0.0040	0.010	1		B356771	11/01/23 15:41	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-08DR-WG-20231027

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-06
Sampled:	10/27/23 11:00		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.30	0.020	0.050	1		B356771	11/01/23 15:46	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356771	11/01/23 15:46	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356771	11/02/23 17:18	SW-846 6010D
7440-39-3	Barium	0.032	0.0057	0.050	1	J	B356771	11/01/23 15:46	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356771	11/01/23 15:46	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356771	11/01/23 15:46	SW-846 6010D
7440-70-2	Calcium	61	0.091	0.50	1		B356771	11/01/23 15:46	SW-846 6010D
7440-47-3	Chromium		0.0093	0.010	1		B356771	11/01/23 15:46	SW-846 6010D
7440-48-4	Cobalt	0.0025	0.0017	0.010	1	J	B356771	11/01/23 15:46	SW-846 6010D
7440-50-8	Copper		0.0047	0.010	1		B356771	11/01/23 15:46	SW-846 6010D
7439-89-6	Iron	15	0.023	0.050	1		B356771	11/01/23 15:46	SW-846 6010D
7439-92-1	Lead		0.0065	0.010	1		B356771	11/01/23 15:46	SW-846 6010D
7439-95-4	Magnesium	14	0.016	0.050	1		B356771	11/01/23 15:46	SW-846 6010D
7439-96-5	Manganese	0.34	0.0028	0.010	1		B356771	11/01/23 15:46	SW-846 6010D
7440-02-0	Nickel	0.0067	0.0024	0.010	1	J	B356771	11/01/23 15:46	SW-846 6010D
7440-09-7	Potassium	8.5	0.33	2.0	1		B356771	11/01/23 15:46	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356771	11/01/23 15:46	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356771	11/01/23 15:46	SW-846 6010D
7440-23-5	Sodium	78	0.74	2.0	1		B356771	11/01/23 15:46	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356771	11/01/23 15:46	SW-846 6010D
7440-62-2	Vanadium		0.0071	0.010	1		B356771	11/01/23 15:46	SW-846 6010D
7440-66-6	Zinc		0.0040	0.010	1		B356771	11/01/23 15:46	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-04-WG-20231027

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-07
Sampled:	10/27/23 11:20		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.10	0.020	0.050	1		B356771	11/01/23 15:53	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356771	11/01/23 15:53	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356771	11/02/23 17:24	SW-846 6010D
7440-39-3	Barium	0.041	0.0057	0.050	1	J	B356771	11/01/23 15:53	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356771	11/01/23 15:53	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356771	11/01/23 15:53	SW-846 6010D
7440-70-2	Calcium	72	0.091	0.50	1		B356771	11/01/23 15:53	SW-846 6010D
7440-47-3	Chromium		0.0093	0.010	1		B356771	11/01/23 15:53	SW-846 6010D
7440-48-4	Cobalt		0.0017	0.010	1		B356771	11/01/23 15:53	SW-846 6010D
7440-50-8	Copper	0.023	0.0047	0.010	1		B356771	11/01/23 15:53	SW-846 6010D
7439-89-6	Iron	3.5	0.023	0.050	1		B356771	11/01/23 15:53	SW-846 6010D
7439-92-1	Lead		0.0065	0.010	1		B356771	11/01/23 15:53	SW-846 6010D
7439-95-4	Magnesium	9.4	0.016	0.050	1		B356771	11/01/23 15:53	SW-846 6010D
7439-96-5	Manganese	0.39	0.0028	0.010	1		B356771	11/01/23 15:53	SW-846 6010D
7440-02-0	Nickel	0.0025	0.0024	0.010	1	J	B356771	11/01/23 15:53	SW-846 6010D
7440-09-7	Potassium	7.2	0.33	2.0	1		B356771	11/01/23 15:53	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356771	11/01/23 15:53	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356771	11/01/23 15:53	SW-846 6010D
7440-23-5	Sodium	69	0.74	2.0	1		B356771	11/01/23 15:53	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356771	11/01/23 15:53	SW-846 6010D
7440-62-2	Vanadium		0.0071	0.010	1		B356771	11/01/23 15:53	SW-846 6010D
7440-66-6	Zinc	0.025 J+	0.0040	0.010	1		B356771	11/01/23 15:53	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-10S-WG-20231030

Laboratory:	Pace New England	SDG:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3978-01
Sampled:	10/30/23 11:45		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.30	0.020	0.050	1		B356862	11/02/23 17:47	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356862	11/02/23 17:47	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356862	11/03/23 16:07	SW-846 6010D
7440-39-3	Barium	1.9	0.0057	0.050	1		B356862	11/02/23 17:47	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356862	11/02/23 17:47	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356862	11/02/23 17:47	SW-846 6010D
7440-70-2	Calcium	190	0.091	0.50	1		B356862	11/02/23 17:47	SW-846 6010D
7440-47-3	Chromium		0.0093	0.010	1		B356862	11/02/23 17:47	SW-846 6010D
7440-48-4	Cobalt	0.0020	0.0017	0.010	1	J	B356862	11/02/23 17:47	SW-846 6010D
7440-50-8	Copper		0.0047	0.010	1		B356862	11/02/23 17:47	SW-846 6010D
7439-89-6	Iron	15	0.023	0.050	1		B356862	11/02/23 17:47	SW-846 6010D
7439-92-1	Lead		0.0065	0.010	1		B356862	11/02/23 17:47	SW-846 6010D
7439-95-4	Magnesium	27	0.016	0.050	1		B356862	11/02/23 17:47	SW-846 6010D
7439-96-5	Manganese	1.8	0.0028	0.010	1		B356862	11/02/23 17:47	SW-846 6010D
7440-02-0	Nickel		0.0024	0.010	1		B356862	11/02/23 17:47	SW-846 6010D
7440-09-7	Potassium	16	0.33	2.0	1		B356862	11/02/23 17:47	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356862	11/02/23 17:47	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356862	11/02/23 17:47	SW-846 6010D
7440-23-5	Sodium	68	0.74	2.0	1		B356862	11/02/23 17:47	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356862	11/02/23 17:47	SW-846 6010D
7440-62-2	Vanadium		0.0071	0.010	1		B356862	11/02/23 17:47	SW-846 6010D
7440-66-6	Zinc		0.0040	0.010	1		B356862	11/02/23 17:47	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-10D-WG-20231030

Laboratory:	Pace New England	SDG:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3978-02
Sampled:	10/30/23 10:50		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.78	0.020	0.050	1		B356862	11/02/23 17:53	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356862	11/02/23 17:53	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356862	11/03/23 16:24	SW-846 6010D
7440-39-3	Barium	0.0066	0.0057	0.050	1	J	B356862	11/02/23 17:53	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356862	11/02/23 17:53	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356862	11/02/23 17:53	SW-846 6010D
7440-70-2	Calcium	11	0.091	0.50	1		B356862	11/02/23 17:53	SW-846 6010D
7440-47-3	Chromium	0.011	0.0093	0.010	1		B356862	11/02/23 17:53	SW-846 6010D
7440-48-4	Cobalt		0.0017	0.010	1		B356862	11/02/23 17:53	SW-846 6010D
7440-50-8	Copper	0.0054	0.0047	0.010	1	J	B356862	11/02/23 17:53	SW-846 6010D
7439-89-6	Iron	5.5	0.023	0.050	1		B356862	11/02/23 17:53	SW-846 6010D
7439-92-1	Lead		0.0065	0.010	1		B356862	11/02/23 17:53	SW-846 6010D
7439-95-4	Magnesium	3.2	0.016	0.050	1		B356862	11/02/23 17:53	SW-846 6010D
7439-96-5	Manganese	0.15	0.0028	0.010	1		B356862	11/02/23 17:53	SW-846 6010D
7440-02-0	Nickel	0.0026	0.0024	0.010	1	J	B356862	11/02/23 17:53	SW-846 6010D
7440-09-7	Potassium	2.3	0.33	2.0	1		B356862	11/02/23 17:53	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356862	11/02/23 17:53	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356862	11/02/23 17:53	SW-846 6010D
7440-23-5	Sodium	18	0.74	2.0	1		B356862	11/02/23 17:53	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356862	11/02/23 17:53	SW-846 6010D
7440-62-2	Vanadium		0.0071	0.010	1		B356862	11/02/23 17:53	SW-846 6010D
7440-66-6	Zinc	0.0043	0.0040	0.010	1	J	B356862	11/02/23 17:53	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-05R-WG-20231030

Laboratory:	Pace New England	SDG:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3978-03
Sampled:	10/30/23 10:15		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.093	0.020	0.050	1		B356862	11/02/23 18:13	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356862	11/02/23 18:13	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356862	11/03/23 16:30	SW-846 6010D
7440-39-3	Barium	0.41	0.0057	0.050	1		B356862	11/02/23 18:13	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356862	11/02/23 18:13	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356862	11/02/23 18:13	SW-846 6010D
7440-70-2	Calcium	150	0.091	0.50	1		B356862	11/02/23 18:13	SW-846 6010D
7440-47-3	Chromium		0.0093	0.010	1		B356862	11/02/23 18:13	SW-846 6010D
7440-48-4	Cobalt		0.0017	0.010	1		B356862	11/02/23 18:13	SW-846 6010D
7440-50-8	Copper	0.016	0.0047	0.010	1		B356862	11/02/23 18:13	SW-846 6010D
7439-89-6	Iron	20	0.023	0.050	1		B356862	11/02/23 18:13	SW-846 6010D
7439-92-1	Lead		0.0065	0.010	1		B356862	11/02/23 18:13	SW-846 6010D
7439-95-4	Magnesium	36	0.016	0.050	1		B356862	11/02/23 18:13	SW-846 6010D
7439-96-5	Manganese	0.78	0.0028	0.010	1		B356862	11/02/23 18:13	SW-846 6010D
7440-02-0	Nickel		0.0024	0.010	1		B356862	11/02/23 18:13	SW-846 6010D
7440-09-7	Potassium	36	0.33	2.0	1		B356862	11/02/23 18:13	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356862	11/02/23 18:13	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356862	11/02/23 18:13	SW-846 6010D
7440-23-5	Sodium	420	0.74	2.0	1		B356862	11/02/23 18:13	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356862	11/02/23 18:13	SW-846 6010D
7440-62-2	Vanadium	0.0077	0.0071	0.010	1	J	B356862	11/02/23 18:13	SW-846 6010D
7440-66-6	Zinc		0.0040	0.010	1		B356862	11/02/23 18:13	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-09D-WG-20231030

Laboratory:	Pace New England	SDG:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3978-04
Sampled:	10/30/23 11:35		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	0.88	0.020	0.050	1		B356862	11/02/23 18:20	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356862	11/02/23 18:20	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356862	11/03/23 16:36	SW-846 6010D
7440-39-3	Barium	0.85	0.0057	0.050	1		B356862	11/02/23 18:20	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356862	11/02/23 18:20	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356862	11/02/23 18:20	SW-846 6010D
7440-70-2	Calcium	4.3	0.091	0.50	1		B356862	11/02/23 18:20	SW-846 6010D
7440-47-3	Chromium		0.0093	0.010	1		B356862	11/02/23 18:20	SW-846 6010D
7440-48-4	Cobalt	0.0033	0.0017	0.010	1	J	B356862	11/02/23 18:20	SW-846 6010D
7440-50-8	Copper	0.80	0.0047	0.010	1		B356862	11/02/23 18:20	SW-846 6010D
7439-89-6	Iron	1.5	0.023	0.050	1		B356862	11/02/23 18:20	SW-846 6010D
7439-92-1	Lead	0.016	0.0065	0.010	1		B356862	11/02/23 18:20	SW-846 6010D
7439-95-4	Magnesium	1.2	0.016	0.050	1		B356862	11/02/23 18:20	SW-846 6010D
7439-96-5	Manganese	0.033	0.0028	0.010	1		B356862	11/02/23 18:20	SW-846 6010D
7440-02-0	Nickel	0.0055	0.0024	0.010	1	J	B356862	11/02/23 18:20	SW-846 6010D
7440-09-7	Potassium	0.88	0.33	2.0	1	J	B356862	11/02/23 18:20	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356862	11/02/23 18:20	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356862	11/02/23 18:20	SW-846 6010D
7440-23-5	Sodium	4.6	0.74	2.0	1		B356862	11/02/23 18:20	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356862	11/02/23 18:20	SW-846 6010D
7440-62-2	Vanadium		0.0071	0.010	1		B356862	11/02/23 18:20	SW-846 6010D
7440-66-6	Zinc	0.89	0.0040	0.010	1		B356862	11/02/23 18:20	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-09S-WG-20231030

Laboratory:	Pace New England	SDG:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3978-05
Sampled:	10/30/23 10:55		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7429-90-5	Aluminum	3.4	0.020	0.050	1		B356862	11/02/23 18:27	SW-846 6010D
7440-36-0	Antimony		0.011	0.050	1		B356862	11/02/23 18:27	SW-846 6010D
7440-38-2	Arsenic		0.0073	0.010	1		B356862	11/03/23 16:41	SW-846 6010D
7440-39-3	Barium	3.1	0.0057	0.050	1		B356862	11/02/23 18:27	SW-846 6010D
7440-41-7	Beryllium		0.0012	0.0040	1		B356862	11/02/23 18:27	SW-846 6010D
7440-43-9	Cadmium		0.0013	0.0040	1		B356862	11/02/23 18:27	SW-846 6010D
7440-70-2	Calcium	19	0.091	0.50	1		B356862	11/02/23 18:27	SW-846 6010D
7440-47-3	Chromium	0.025	0.0093	0.010	1		B356862	11/02/23 18:27	SW-846 6010D
7440-48-4	Cobalt	0.0087	0.0017	0.010	1	J	B356862	11/02/23 18:27	SW-846 6010D
7440-50-8	Copper	3.6	0.0047	0.010	1		B356862	11/02/23 18:27	SW-846 6010D
7439-89-6	Iron	10	0.023	0.050	1		B356862	11/02/23 18:27	SW-846 6010D
7439-92-1	Lead	0.046	0.0065	0.010	1		B356862	11/02/23 18:27	SW-846 6010D
7439-95-4	Magnesium	5.5	0.016	0.050	1		B356862	11/02/23 18:27	SW-846 6010D
7439-96-5	Manganese	0.18	0.0028	0.010	1		B356862	11/02/23 18:27	SW-846 6010D
7440-02-0	Nickel	0.014	0.0024	0.010	1		B356862	11/02/23 18:27	SW-846 6010D
7440-09-7	Potassium	2.9	0.33	2.0	1		B356862	11/02/23 18:27	SW-846 6010D
7782-49-2	Selenium		0.018	0.050	1		B356862	11/02/23 18:27	SW-846 6010D
7440-22-4	Silver		0.0027	0.010	1		B356862	11/02/23 18:27	SW-846 6010D
7440-23-5	Sodium	27	0.74	2.0	1		B356862	11/02/23 18:27	SW-846 6010D
7440-28-0	Thallium		0.019	0.050	1		B356862	11/02/23 18:27	SW-846 6010D
7440-62-2	Vanadium	0.015	0.0071	0.010	1		B356862	11/02/23 18:27	SW-846 6010D
7440-66-6	Zinc	2.2	0.0040	0.010	1		B356862	11/02/23 18:27	SW-846 6010D

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-11S-WG-20231026

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-01
Sampled:	10/26/23 11:40		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1		B358720	11/22/23 12:22	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET

MEC-MW-11D-WG-20231026

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-02
Sampled:	10/26/23 12:30		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1		B358720	11/22/23 12:29	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-06-WG-20231027

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-03
Sampled:	10/27/23 10:00		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1	~~H-06~~	B358879	11/27/23 15:23	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET
DUPLICATE 1

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-04
Sampled:	10/27/23 10:30		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1	~~H-06~~	B358879	11/27/23 15:25	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-08SR-WG-20231027

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-05
Sampled:	10/27/23 10:10		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1	~~H-06~~	B358879	11/27/23 15:27	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-08DR-WG-20231027

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-06
Sampled:	10/27/23 11:00		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1	~~H-06~~	B358879	11/27/23 15:29	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-04-WG-20231027

Laboratory:	Pace New England	SDG:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3847-07
Sampled:	10/27/23 11:20		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1	~~H-06~~	B358879	11/27/23 15:31	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-10S-WG-20231030

Laboratory:	Pace New England	SDG:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3978-01
Sampled:	10/30/23 11:45		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1	~~H-06~~	B359067	11/29/23 13:10	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET

MEC-MW-10D-WG-20231030

Laboratory:	Pace New England	SDG:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3978-02
Sampled:	10/30/23 10:50		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1	~~H-06~~	B359067	11/29/23 13:12	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-05R-WG-20231030

Laboratory:	Pace New England	SDG:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3978-03
Sampled:	10/30/23 10:15		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1	~~H-06~~	B359067	11/29/23 13:14	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-09D-WG-20231030

Laboratory:	Pace New England	SDG:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3978-04
Sampled:	10/30/23 11:35		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1	~~H-06~~	B359067	11/29/23 13:16	SW-846 7470A

1 - FORM I
ANALYSIS DATA SHEET
MEC-MW-09S-WG-20231030

Laboratory:	Pace New England	SDG:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Matrix:	Ground Water	Laboratory ID:	23J3978-05
Sampled:	10/30/23 10:55		
% Solids:	0.00		

CAS NO.	Analyte	Concentration (mg/L)	MDL	RL	DF	Q	Batch	Analyzed	Method
7439-97-6	Mercury		0.00014	0.00020	1	~~H-06~~	B359067	11/29/23 13:17	SW-846 7470A

QC NONCONFORMANCE DOCUMENTATION

FORM 3 - Blank Summary

SW-846 6010D

Laboratory:	Pace New England	Work Order:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Instrument ID:	ICP4	Calibration:	2301313
Sequence:	S095740		

Lab Sample ID	Analyte	Found	Units	RL	C
B356771-BLK1	Manganese		mg/L	0.010	U
	Nickel		mg/L	0.010	U
	Potassium		mg/L	2.0	U
	Selenium		mg/L	0.050	U
	Silver		mg/L	0.010	U
	Sodium		mg/L	2.0	U
	Thallium		mg/L	0.050	U
	Vanadium		mg/L	0.010	U
	Zinc	0.0047	mg/L	0.010	J
S095740-CCB2	Aluminum		mg/L	0.050	U
	Antimony		mg/L	0.050	U
	Barium		mg/L	0.050	U
	Beryllium		mg/L	0.0040	U
	Cadmium		mg/L	0.0040	U
	Calcium		mg/L	0.50	U
	Chromium		mg/L	0.010	U
	Cobalt		mg/L	0.010	U
	Copper		mg/L	0.010	U
	Iron		mg/L	0.050	U
	Lead		mg/L	0.010	U
	Magnesium		mg/L	0.050	U
	Manganese		mg/L	0.010	U
	Nickel		mg/L	0.010	U
	Potassium		mg/L	2.0	U
	Selenium		mg/L	0.050	U
	Silver		mg/L	0.010	U
	Sodium		mg/L	2.0	U
	Thallium		mg/L	0.050	U
	Vanadium		mg/L	0.010	U
	Zinc		mg/L	0.010	U
S095740-CCB3	Aluminum		mg/L	0.050	U
	Antimony		mg/L	0.050	U
	Barium		mg/L	0.050	U

FORM 3 - Blank Summary

SW-846 6010D

Laboratory:	Pace New England	Work Order:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Instrument ID:	ICP4	Calibration:	2301319
Sequence:	S095798		

Lab Sample ID	Analyte	Found	Units	RL	C
~~S095798-CCB1~~	Aluminum		mg/L	0.050	U
	Antimony		mg/L	0.050	U
	Barium		mg/L	0.050	U
	Beryllium		mg/L	0.0040	U
	Cadmium	0.0029	mg/L	0.0040	
	Calcium		mg/L	0.50	U
	Chromium		mg/L	0.010	U
	Cobalt		mg/L	0.010	U
	Copper		mg/L	0.010	U
	Iron		mg/L	0.050	U
	Lead		mg/L	0.010	U
	Magnesium		mg/L	0.050	U
	Manganese		mg/L	0.010	U
	Nickel		mg/L	0.010	U
	Potassium		mg/L	2.0	U
	Selenium		mg/L	0.050	U
	Silver		mg/L	0.010	U
	Sodium		mg/L	2.0	U
	Thallium		mg/L	0.050	U
	Vanadium		mg/L	0.010	U
	Zinc		mg/L	0.010	U
B356862-BLK1	Aluminum		mg/L	0.050	U
	Antimony		mg/L	0.050	U
	Barium		mg/L	0.050	U
	Beryllium		mg/L	0.0040	U
	Calcium		mg/L	0.50	U
	Chromium		mg/L	0.010	U
	Cobalt		mg/L	0.010	U
	Copper		mg/L	0.010	U
	Iron		mg/L	0.050	U
	Lead		mg/L	0.010	U
	Magnesium		mg/L	0.050	U
	Manganese		mg/L	0.010	U

Not associated with project samples

FORM 3 - Blank Summary

SW-846 6010D

Laboratory:	Pace New England	Work Order:	23J3978
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB0001
Instrument ID:	ICP4	Calibration:	2301319
Sequence:	S095798		

Lab Sample ID	Analyte	Found	Units	RL	C
B356862-BLK1	Nickel		mg/L	0.010	U
	Potassium		mg/L	2.0	U
	Selenium		mg/L	0.050	U
	Silver		mg/L	0.010	U
	Sodium		mg/L	2.0	U
	Thallium		mg/L	0.050	U
	Vanadium		mg/L	0.010	U
S095798-CCB2	Aluminum		mg/L	0.050	U
	Antimony		mg/L	0.050	U
	Barium		mg/L	0.050	U
	Beryllium		mg/L	0.0040	U
	Cadmium	0.0013	mg/L	0.0040	
	Calcium		mg/L	0.50	U
	Chromium		mg/L	0.010	U
	Cobalt		mg/L	0.010	U
	Copper		mg/L	0.010	U
	Iron		mg/L	0.050	U
	Lead		mg/L	0.010	U
	Magnesium		mg/L	0.050	U
	Manganese		mg/L	0.010	U
	Nickel		mg/L	0.010	U
	Potassium		mg/L	2.0	U
	Selenium		mg/L	0.050	U
	Silver		mg/L	0.010	U
	Sodium		mg/L	2.0	U
	Thallium		mg/L	0.050	U
	Vanadium		mg/L	0.010	U
	Zinc		mg/L	0.010	U
S095798-CCB3	Aluminum		mg/L	0.050	U
	Antimony		mg/L	0.050	U
	Barium		mg/L	0.050	U
	Beryllium		mg/L	0.0040	U
	Cadmium		mg/L	0.0040	U

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MEC-MW-06-WG-20231027

Laboratory:	Pace New England	Work Order:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB000
Matrix:	Water	Analysis:	SW-846 6010D
Batch:	B356771	Preparation:	SW-846 3005A
% Solids:		Laboratory ID:	B356771-MS3
Column:		Sample Lab ID:	23J3847-03

ANALYTE	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC.	QC LIMITS REC.
Aluminum	0.500	0.0750	0.587	102	75 - 125
Antimony	0.500	ND	0.538	108	75 - 125
Barium	0.500	0.00922	0.501	98.3	75 - 125
Beryllium	0.500	ND	0.515	103	75 - 125
Cadmium	0.500	ND	0.514	103	75 - 125
Calcium	4.00	81.8	86.7	124	75 - 125
Chromium	0.500	ND	0.501	100	75 - 125
Cobalt	0.500	ND	0.489	97.8	75 - 125
Copper	1.00	0.00493	1.04	103	75 - 125
Iron	4.00	5.34	9.45	103	75 - 125
Lead	0.500	ND	0.508	102	75 - 125
Magnesium	4.00	36.1	40.3	106	75 - 125
Manganese	0.500	0.189	0.677	97.7	75 - 125
Nickel	0.500	ND	0.487	97.4	75 - 125
Potassium	4.00	16.3	20.6	107	75 - 125
Selenium	0.500	ND	0.550	110	75 - 125
Silver	0.500	ND	0.541	108	75 - 125
Sodium	4.00	252 [>4x spike]	260 MS-19	201	75 - 125
Thallium	0.500	ND	0.520	104	75 - 125
Vanadium	0.500	ND	0.519	104	75 - 125
Zinc	1.00	ND	1.01	101	75 - 125

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

MEC-MW-06-WG-20231027

Laboratory:	Pace New England	Work Order:	23J3847
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB000
Matrix:	Water	Analysis:	SW-846 6010D
Batch:	B356771	Preparation:	SW-846 3005A
% Solids:		Laboratory ID:	B356771-MSD3
Column:		Sample Lab ID:	23J3847-03

ANALYTE	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC. #	% RPD	QC LIMITS RPD	QC LIMITS REC.
Aluminum	0.500	0.588	103	0.132	20	75 - 125
Antimony	0.500	0.529	106	1.63	20	75 - 125
Barium	0.500	0.496	97.4	0.937	20	75 - 125
Beryllium	0.500	0.514	103	0.166	20	75 - 125
Cadmium	0.500	0.506	101	1.54	20	75 - 125
Calcium	4.00	86.4	115	0.381	20	75 - 125
Chromium	0.500	0.497	99.3	0.862	20	75 - 125
Cobalt	0.500	0.482	96.4	1.37	20	75 - 125
Copper	1.00	1.02	102	1.59	20	75 - 125
Iron	4.00	9.40	101	0.534	20	75 - 125
Lead	0.500	0.502	100	1.08	20	75 - 125
Magnesium	4.00	40.1	100	0.645	20	75 - 125
Manganese	0.500	0.679	98.0	0.213	20	75 - 125
Nickel	0.500	0.481	96.3	1.15	20	75 - 125
Potassium	4.00	20.7	109	0.334	20	75 - 125
Selenium	0.500	0.540	108	1.93	20	75 - 125
Silver	0.500	0.537	107	0.708	20	75 - 125
Sodium	4.00	259 MS-19	175	0.395	20	75 - 125
Thallium	0.500	0.506	101	2.64	20	75 - 125
Vanadium	0.500	0.513	103	1.05	20	75 - 125
Zinc	1.00	0.996	99.6	1.02	20	75 - 125

Data Usability Summary Report

Site: Metal Etching Co.
Laboratory: Con-test/Pace New England - East Longmeadow, MA
SDGs: 23J3846 (Revised 1/23/24), 23J3979 (Revised 1/23/24)
Parameter: Per- and Polyfluoroalkyl substances (PFAS)
Data Reviewer: Kristen Morin/TRC
Peer Reviewer: Elizabeth Denly/TRC
Date: February 4, 2024

Samples Reviewed and Evaluation Summary

SDG 23J3846 (Revised 1/23/24)

7 Groundwater Samples: MEC-MW-04-WG-20231027, MEC-MW-06-WG-20231027, MEC-MW-08DR-WG-20231027, MEC-MW-08SR-WG-20231027, MEC-MW-11D-WG-20231026, MEC-MW-11S-WG-20231026, Duplicate1*

*Field duplicate of MEC-MW-06-WG-20231027

SDG 23J3979 (Revised 1/23/24)

5 Groundwater Samples: MEC-MW-05R-WG-20231030, MEC-MW-09D-WG-20231030, MEC-MW-09S-WG-20231030, MEC-MW-10D-WG-20231030, MEC-MW-10S-WG-20231030

The above-listed samples were collected on October 26, 27, and 30, 2023 and were analyzed for PFAS (40 target analytes) based on Draft EPA Method 1633 and using Con-test/Pace New England - East Longmeadow, MA standard operating procedure (SOP) ENV-SOP-ELON-0084.

Note that samples were also analyzed for total suspended solids (TSS) as per the Draft EPA Method 1633; however, raw data were not included in the Category B deliverable for TSS.

The data validation was performed in accordance with the following guidance, modified for the methodology utilized:

- USEPA National Functional Guidelines for Organic Superfund Methods Data Review (EPA-540-R-20-005), November 2020
- USEPA National Functional Guidelines for High Resolution Superfund Methods Data Review (EPA-542-R-20-007), November 2020
- New York State Department of Environmental Conservation Data Review Guidelines for Analysis of PFAS in Non-Potable Water and Solids, April 2023

The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Initial and Continuing Calibrations
- Blanks

* • Isotopically Labeled Extraction Internal Standard (EIS) Results
• Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
* • On Going Precision and Recovery (OPR) Standard Results
* • Non-Extracted Internal Standard Results
* • Field Duplicate Results
• Sample Results and Reported Quantitation Limits (QLs)
• Target Compound Identification

* - All criteria were met.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. There were no qualifications applied to the data because of sampling error. Qualifications applied to the data because of analytical error are discussed below.

- Potential uncertainty exists for select PFAS results that were below the lowest calibration standard and QL. These results were qualified as estimated (J) by the laboratory in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The nondetect results for NFDHA in all samples in this data set, and the nondetect results for NMeFOSE, NEtFOSE, NMeFOSAA, and NEtFOSAA in all samples in SDG 23J3979 were qualified as estimated (UJ) with a potential low bias due to holding time exceedances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The positive and nondetect results for all PFAS in samples MEC-MW-11S-WG-20231026, MEC-MW-09S-WG-20231030, MEC-MW-08DR-WG-20231027, and MEC-MW-08SR-WG-20231027 were qualified as estimated (J/UJ) due to subsampling performed by the laboratory. These results can be used for project objectives as estimated values and as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for PFDoS in all samples in SDG 23J3846, and the nondetect results for 6:2FTS, 8:2FTS, and NEtFOSAA in all samples except MEC-MW-05R-WG-20231030 in SDG 23J3979 were qualified as estimated (UJ) due to continuing calibration nonconformances. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The positive results for HFPO-DA, PFOSA, PFPeA, and/or PFOS in select samples were qualified as estimated (J) due to ion transition ratios being outside of the acceptance limits. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data packages were complete Category B data deliverables, with minor deviations as noted throughout this report, and with the following exceptions.

- In SDG 23J3846, the Sample Receiving Checklist incorrectly stated that no MS/MSD

samples were received. However, MS/MSD samples were submitted and listed on the chain-of-custody (COC). Therefore, it was assumed that this item was inadvertently marked “False” by the laboratory; the laboratory was not contacted about this issue.

- The initial volumes for select samples and final volumes for all samples were not provided on preparation bench sheets within the raw data. However, this information was provided on the Form Is and IIIs within the Category B deliverables.
- The raw data were missing for the low-level OPR (referred to as method reporting limit [MRL] Check by the laboratory) in both SDGs. The laboratory was contacted about this issue during validation and provided revised Category B deliverables with the missing raw data. However, the precise initial volumes for the MRL checks were not provided by the laboratory in the revised Category B deliverables; therefore, the adjusted MRL results summarized on forms could not be reproduced during validation. The laboratory was not further contacted about this issue since all other sample and QC results could be reproduced.
- A discrepancy was noted with the detected values reported on the Form 1 for the instrument blanks in the Category B deliverables; the results reported on the Form 1s for the instrument blanks were 1,000x higher than the raw data. The laboratory was contacted about this issue during a previous validation inquiry and confirmed this was incorrect. The instrument blanks were not used to qualify sample results since they did not immediately precede any sample analyses; thus, the laboratory was not further contacted about this issue.
- In SDG 23J3979, a discrepancy was noted with the lack of integration of (i.e., false negative) PFBA in sample MEC-MW-09S-WG-20231030. The laboratory was contacted about this issue and provided a revised report to correctly report PFBA in this sample.

Holding Times and Sample Preservation

The cooler temperature upon arrival at the laboratory was <6°C.

Samples in SDG 23J3846 were stored by the laboratory at 0-6°C and were extracted 12-13 days after collection; sample analyses in this SDG were performed one day after extraction. Based on professional judgment and specific cautions in the EPA method, sample results were qualified as follows on this basis:

- Nondetect results for NFDHA in all samples in SDG 23J3846 were qualified as estimated (UJ) with a potential low bias since extraction was performed >48 hours after collection.

- Nondetect results for NMeFOSE, NEtFOSE, NMeFOSAA, and NEtFOSAA in all samples in SDG 23J3846 were qualified as estimated (UJ) with a potential low bias since extraction was performed >7 days after collection.

Samples in SDG 23J3979 were frozen (i.e., stored by the laboratory at <20°C) and were extracted 31 days after collection; sample analyses in this SDG were performed two to four days after extraction. Based on professional judgment and specific cautions in the EPA method, sample results were qualified as follows on this basis:

- Nondetect results for NFDHA in all samples in SDG 23J3979 were qualified as estimated (UJ) with a potential low bias since extraction was performed >48 hours after collection.

Initial and Continuing Calibrations

All percent relative standard deviations in the initial calibrations (ICs) were within the method acceptance criteria. Target analytes were within 70-130% of their true value for each IC standard per the laboratory's SOP and EPA method 1633. Select EISs were not within 70-130% of their true value in several IC standards; however, no validation actions were taken on this basis and the EIS values outside of the acceptance limits are not summarized in this report since the target analytes were within the method acceptance criteria in the ICs.

All percent differences (%Ds) for target analytes were within the acceptance criteria (30%) in the continuing calibration (CC) standards associated with the samples in this data set with the following exceptions.

- Select EISs were not within the acceptance criteria; however, no validation actions were taken on this basis and the EIS values outside of the acceptance limits are not summarized in this report since the target analytes were within the method acceptance criteria in the CC standards.

- The %D for PFDoS (31.3%) was above the acceptance limit (30%) in one of the CC standards (S096133-CCV2) associated with all samples in SDG 23J3846. Therefore, the nondetect results for PFDoS in all samples in SDG 23J3846 were qualified as estimated (UJ).

- The %Ds for 8:2FTS (31.1%) and NEtFOSAA (31.8%) in S097239-CCV2, and the %Ds for 6:2FTS (34.3%), 8:2FTS (33.3%), and NEtFOSAA (31.5%) in S097239-CCV3 were above the acceptance limit (30%) the CC standards associated with samples MEC-MW-09D-WG-20231030, MEC-MW-09S-WG-20231030, MEC-MW-10D-WG-20231030, and MEC-MW-10S-WG-20231030 in SDG 23J3979. Therefore, the nondetect results for 6:2FTS, 8:2FTS, and NEtFOSAA in samples MEC-MW-09D-WG-20231030, MEC-MW-09S-WG-20231030, MEC-MW-10D-WG-20231030, and MEC-MW-10S-WG-20231030 were qualified as estimated (UJ).

It should be noted that the initial and continuing calibration standards contained linear and branched isomers for PFOS, PFHxS, NMeFOSAA, and NEtFOSAA. According to the method, linear and branched isomers should have also been utilized in the initial and continuing calibration standards for PFOSA, NMeFOSE, NMeFOSA, NEtFOSE, and NEtFOSA. Instead, the laboratory analyzed one standard with the linear and branched isomers for these PFAS compounds (as well as PFOA) in order to determine the retention times of each isomer for identification of the linear and branched isomers in samples; the laboratory did not analyze any qualitative standards with the linear and branched isomers for PFNA. Although the branched isomers of these PFAS were not included in the calibration, the branched isomers of these PFAS were included in the quantitation of these PFAS in samples. The linear and branched isomers of these PFAS were quantitated in samples using the response factors from the linear only isomers in the calibration standards. There was no significant impact to the quality of sample data as NMeFOSE, NMeFOSA, NEtFOSE, and NEtFOSA were not detected in the samples in this data set, since the predominant peak for PFOSA, where detected in the samples in this data set, was the linear peak, and since the linear and branched isomers of PFNA were integrated in samples, when present. Although a qualitative standard was not analyzed for linear and branched PFNA, the integrations in the samples appeared to be reasonable and linear PFNA was the predominant peak. Therefore, no validation actions were required on this basis.

The laboratory calculated the response factor for PFTrDA using the isotopically labeled standard 13C2-PFDoA. According to the method, the average of the area counts for the isotopically labeled standards 13C2-PFDoA and 13C2-PFTeDA should be used. There was no significant impact to the quality of sample data as the area counts of each of these isotopically labeled standards were similar, indicating the quantitation of this PFAS would not change significantly based on the method used by the laboratory; it should be noted that PFTrDA was detected in samples MEC-MW-09D-WG-20231030 and MEC-MW-09S-WG-20231030 from this data set. No validation actions were required on this basis.

Blanks

Target PFAS compounds were not detected in the laboratory method blanks.

There were select detections reported on one of the continuing calibration blank (CCB) summary forms; however, the detections were < the method detection limit (MDL) and therefore were not used to qualify any sample results or summarized in this report.

The instrument blanks were not used to qualify sample results since they did not immediately precede any sample analyses; therefore, the instrument blank results are not summarized in this report.

Isotopically Labeled EIS Results

Twenty-four (24) isotopically labeled extracted internal standards were spiked into the samples prior to extraction. The percent recoveries (%Rs) were within the laboratory acceptance limits for all PFAS analyses.

It should be noted that the laboratory used different acceptance limits than those provided in EPA method 1633. Only the laboratory acceptance limits were used in evaluation of the EIS %Rs.

MS/MSD Results

MS/MSD analyses were performed on sample MEC-MW-06-WG-20231027. The %Rs and relative percent differences were within the laboratory acceptance limits with the following exception. The %Rs for 5:3FTCA in the MS (152%) and MSD (150%) analyses performed on this sample were above the laboratory acceptance limits (63-134%). No validation actions were required on this basis since 5:3FTCA was not detected in sample MEC-MW-06-WG-20231027.

OPR Standard Results

The laboratory analyzed a low-level and mid-level OPR with each extraction batch. The %Rs were within the laboratory acceptance limits.

It should be noted that the laboratory used different acceptance limits than those provided in EPA method 1633. Only the laboratory acceptance limits were used in the evaluation of the OPR %Rs.

Non-Extracted Internal Standard Results

Seven isotopically labeled non-extracted internal standards were spiked into the samples prior to analysis. The %Rs were within the laboratory acceptance limits (>30% of the average response from the calibration standards) for all PFAS analyses.

Field Duplicate Results

Samples MEC-MW-06-WG-20231027 and Duplicate1 were submitted as the field duplicate pair with this sample set. The RPD acceptance limit for field duplicates in aqueous media is ≤30%. The RPD is not applicable for comparison of results <5x the QL; instead, comparison is based on the absolute difference (AbsD) between the results, which must be <QL. The following table summarizes the detected results, the RPDs and/or AbsDs for the detected analytes, as applicable, and the resulting validation actions.

Analyte	QLs (units)	Concentration (units)		RPD (%) or AbsD (units)	Validation Actions
		MEC-MW-06-WG-20231027	Duplicate1		
TSS	10 mg/L	20 mg/L	12 mg/L	AbsD: 8 mg/L	None; all criteria were met.
PFBA	4.0 ng/L	12 ng/L	14 ng/L	AbsD: 2 ng/L	
PFPeA	2.0 ng/L	24 ng/L	25 ng/L	RPD: 4.1	
PFHxA	1.0 ng/L	19 ng/L	21 ng/L	RPD: 10	
PFHpA	1.0 ng/L	25 ng/L	25 ng/L	RPD: 0	
PFOA	1.0 ng/L	73 ng/L	70 ng/L	RPD: 4.2	
PFNA	1.0 ng/L	29 ng/L	29 ng/L	RPD: 0	
PFDA	1.0 ng/L	13 ng/L	12 ng/L	RPD: 8	
PFBS	1.0 ng/L	8.1 ng/L	8.7 ng/L	RPD: 7.1	
PFHxS	1.0 ng/L	4.7 ng/L	5.3 ng/L	AbsD: 0.6 ng/L	
PFOS	1.0 ng/L	31 ng/L	28 ng/L	RPD: 10.2	
HFPO-DA	4.0 ng/L	1.4 J ng/L	1.3 J ng/L	AbsD: 0.1 ng/L	

Sample Results and Reported Quantitation Limits

Sample calculations were spot-checked; there were no errors noted.

Select PFAS results were reported below the lowest calibration standard level and QL. These results were qualified as estimated (J) in the associated samples by the laboratory.

No analytical dilutions were performed on the samples in this data set. However, select samples were extracted at reduced volumes as noted below likely due to their respective TSS results and/or observations noted during preparation; QLs were elevated accordingly by the laboratory.

- Sample MEC-MW-11S-WG-20231026 was extracted at a reduced volume (approximately 100 mL) likely due to the observation noted on the preparation bench sheet as indicated below; the TSS result for sample MEC-MW-11S-WG-20231026 was <100 mg/L. Sample and MEC-MW-09S-WG-20231030 was extracted at a reduced volume (approximately 100 ml) since the TSS result was >100 mg/L. Therefore, the positive and nondetect results for all PFAS in these samples were qualified as estimated (J/UJ) due to subsampling.
- Samples MEC-MW-08DR-WG-20231027 and MEC-MW-08SR-WG-20231027 were extracted at a reduced volume (approximately 250 mL) likely due to the observations noted on the preparation bench sheets as indicated below; the TSS results for these samples were <100 mg/L. Therefore, the positive and nondetect results for all PFAS in these samples were qualified as estimated (J/UJ) due to subsampling.

The remaining samples in this data set were extracted using approximately 500 mL (i.e., the entire volume submitted) since the TSS results for these samples were <100 mg/L.

The laboratory noted the following observations on the preparation bench sheets; no validation actions were taken on the basis of these observations.

- Sample MEC-MW-11S-WG-20231026 was dark orange.
- Sample MEC-MW-08DR-WG-20231027 was yellow/brown.
- Sample MEC-MW-08SR-WG-20231027 was yellow/brown and contained sediment.

Target Compound Identification

Extracted ion chromatograms were reviewed to verify the target compound identifications. The laboratory manually integrated several peaks to ensure the inclusion of linear and branched isomers for PFOA, PFNA, PFOS, PFOSA, N-EtFOSAA, N-MeFOSAA, NMeFOSA, NEtFOSA, NMeFOSE, NEtFOSE, and/or PFHxS and/or to ensure proper integration.

The laboratory did not analyze a separate bile salt interference check standard on each day of analysis. Thus, the laboratory was not able to demonstrate that taurodeoxycholic acid (TDCA) did not co-elute with any of the target PFAS and that there was a minimum one-minute separation between PFOS and TDCA. The laboratory clarified during validation that the analyst did not integrate peaks that appeared to be matrix interference related to PFOS. No validation actions were taken on this basis.

No issues were noted with signal to noise ratios. The laboratory indicated in the SOP that they use and evaluate second precursor/product ion transitions for identification confirmation for all reported PFAS except PFBA, NMeFOSE, NEtFOSE, PFMPA, and PFMBA, as per the method; however, due to limitations of the laboratory's software, the laboratory cannot currently report the ion ratio limits in data packages. The laboratory stated during validation that when ion ratios were not met (i.e., the ion ratio in the sample was outside of 50-150% of the ion ratio in the initial calibration midpoint standard), the affected compound would be flagged and noted in the narrative. The laboratory flags and narrative indicated that the following ion ratios were outside of the acceptance criteria; the results for the affected compounds were qualified as estimated (J) in the listed samples.

- HFPO-DA in sample MEC-MW-09D-WG-20231030*
- PFOSA in sample MEC-MW-09D-WG-20231030* and MEC-MW-10S-WG-20231030**
- PFPeA in samples MEC-MW-06-WG-20231027*, MEC-MW-11S-WG-20231026**, MEC-MW-10D-WG-20231030*, MEC-MW-05R-WG-20231030*, MEC-MW-09D-WG-20231030*, MEC-MW-10S-WG-20231030**, and MEC-MW-09S-WG-20231030**
- PFOS in samples MEC-MW-08SR-WG-20231027** and MEC-MW-09D-WG-20231030**

*Qualifier ion ratio >150% of associated calibration
**Qualifier ion ratio <50% of associated calibration

It should be noted that due to limitations of the laboratory's software, the analyst was unable to integrate the peak for the linear isomer of PFOS associated with the qualifier ion in sample MEC-MW-08SR-WG-20231027. The qualifier ion for PFOS in this sample shows a larger peak for the linear isomer while the quantifier ion for PFOS in this sample shows a larger peak for the branched isomer. This discrepancy caused a software error when an attempt was made to integrate the area underneath both the linear and branched isomers for the qualifier ion only; therefore, the ion ratio was determined using only the branched isomer peak for the qualifier ion. In order to remain

conservative, the result for PFOS in this sample was qualified as estimated as stated above due to the ion ratio. No further validation action was required due to this issue.

QUALIFIED FORM 1s

con-test® A Pace Analytical® Laboratory
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-11S-WG-20231026 Sampled: 10/26/2023 11:40

Sample ID: 23J3846-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	22	20	7.3	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluoropentanoic acid (PFPeA)	67	10	1.8	ng/L	1	~~PF-23A~~ J	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorohexanoic acid (PFHxA)	11	5.1	1.1	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluoroheptanoic acid (PFHpA)	4.6	5.1	1.3	ng/L	1	~~J~~ J	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorooctanoic acid (PFOA)	13	5.1	1.1	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorononanoic acid (PFNA)	ND	5.1	0.97	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorodecanoic acid (PFDA)	ND	5.1	0.94	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluoroundecanoic acid (PFUnA)	ND	5.1	1.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorododecanoic acid (PFDoA)	ND	5.1	1.3	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	5.1	1.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	5.1	1.3	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorobutanesulfonic acid (PFBS)	5.0	5.1	1.3	ng/L	1	~~J~~ J	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	5.1	1.2	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorohexanesulfonic acid (PFHxS)	19	5.1	1.0	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	5.1	1.5	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorooctanesulfonic acid (PFOS)	32	5.1	1.6	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorononanesulfonic acid (PFNS)	ND	5.1	1.5	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	5.1	1.6	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	5.1	1.3	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	20	3.5	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	20	5.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	20	5.5	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	5.1	1.6	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	5.1	2.1	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	5.1	1.6	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
N-MeFOSAA (NMeFOSAA)	ND	5.1	2.2	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
N-EtFOSAA (NEtFOSAA)	ND	5.1	1.1	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	51	13	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	51	12	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	20	5.3	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	20	3.5	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
9Cl-PF3ONS (F53B Minor)	ND	20	4.3	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
11Cl-PF3OUdS (F53B Major)	ND	20	4.9	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	51	9.1	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	250	52	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	250	45	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	10	2.5	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	10	2.5	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:19	AMS

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-11S-WG-20231026 Sampled: 10/26/2023 11:40

Sample ID: 23J3846-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	10	2.0	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:19	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	10	4.4	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:19	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	76.2	10-130		11/9/23 12:19
13C5-PFPeA	63.9	35-150		11/9/23 12:19
13C5-PFHxA	75.2	55-150		11/9/23 12:19
13C4-PFHpA	83.5	55-150		11/9/23 12:19
13C8-PFOA	83.3	60-140		11/9/23 12:19
13C9-PFNA	70.2	55-140		11/9/23 12:19
13C6-PFDA	72.3	50-140		11/9/23 12:19
13C7-PFUnA	73.6	30-140		11/9/23 12:19
13C2-PFDoA	70.4	10-150		11/9/23 12:19
13C2-PFTeDA	66.4	10-130		11/9/23 12:19
13C3-PFBS	81.0	55-150		11/9/23 12:19
13C3-PFHxS	76.3	55-150		11/9/23 12:19
13C8-PFOS	73.8	45-140		11/9/23 12:19
13C2-4:2FTS	68.8	60-200		11/9/23 12:19
13C2-6:2FTS	66.1	60-200		11/9/23 12:19
13C2-8:2FTS	64.4	50-200		11/9/23 12:19
13C8-PFOSA	79.2	30-130		11/9/23 12:19
D3-NMeFOSA	64.3	15-130		11/9/23 12:19
D5-NEtFOSA	68.7	10-130		11/9/23 12:19
D3-NMeFOSAA	79.4	45-200		11/9/23 12:19
D5-NEtFOSAA	80.6	10-200		11/9/23 12:19
D7-NMeFOSE	87.1	10-150		11/9/23 12:19
D9-NEtFOSE	88.9	10-150		11/9/23 12:19
13C3-HFPO-DA	74.2	25-160		11/9/23 12:19

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-11S-WG-20231026 Sampled: 10/26/2023 11:40

Sample ID: 23J3846-01

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	68	10	mg/L	1		Draft Method 1633	10/31/23	10/31/23 12:49	LL

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-11D-WG-20231026 Sampled: 10/26/2023 12:30

Sample ID: 23J3846-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	10	3.7	1.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluoropentanoic acid (PFPeA)	5.1	1.9	0.32	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorohexanoic acid (PFHxA)	5.1	0.93	0.20	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluoroheptanoic acid (PFHpA)	4.2	0.93	0.24	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorooctanoic acid (PFOA)	21	0.93	0.21	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorononanoic acid (PFNA)	2.3	0.93	0.18	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorodecanoic acid (PFDA)	ND	0.93	0.17	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.93	0.26	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.93	0.24	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.93	0.25	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.93	0.23	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorobutanesulfonic acid (PFBS)	5.0	0.93	0.24	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.93	0.22	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorohexanesulfonic acid (PFHxS)	3.2	0.93	0.19	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.93	0.29	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorooctanesulfonic acid (PFOS)	55	0.93	0.30	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.93	0.28	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.93	0.29	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.93	0.25	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:35	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	0.65	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	0.92	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	1.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.93	0.29	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.93	0.39	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.93	0.29	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.93	0.41	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:35	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.93	0.21	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:35	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.3	2.5	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:35	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.3	2.3	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	0.98	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.7	0.64	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	0.80	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.7	0.90	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.3	1.7	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	9.5	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	8.2	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.46	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.47	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-11D-WG-20231026 Sampled: 10/26/2023 12:30

Sample ID: 23J3846-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.38	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:35	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.81	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:35	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	76.0	10-130		11/9/23 12:35
13C5-PFPeA	61.8	35-150		11/9/23 12:35
13C5-PFHxA	77.5	55-150		11/9/23 12:35
13C4-PFHpA	84.0	55-150		11/9/23 12:35
13C8-PFOA	86.1	60-140		11/9/23 12:35
13C9-PFNA	69.9	55-140		11/9/23 12:35
13C6-PFDA	76.4	50-140		11/9/23 12:35
13C7-PFUnA	75.6	30-140		11/9/23 12:35
13C2-PFDoA	71.1	10-150		11/9/23 12:35
13C2-PFTeDA	66.0	10-130		11/9/23 12:35
13C3-PFBS	80.8	55-150		11/9/23 12:35
13C3-PFHxS	77.7	55-150		11/9/23 12:35
13C8-PFOS	73.6	45-140		11/9/23 12:35
13C2-4:2FTS	95.7	60-200		11/9/23 12:35
13C2-6:2FTS	81.4	60-200		11/9/23 12:35
13C2-8:2FTS	71.7	50-200		11/9/23 12:35
13C8-PFOSA	78.7	30-130		11/9/23 12:35
D3-NMeFOSA	59.4	15-130		11/9/23 12:35
D5-NEtFOSA	61.4	10-130		11/9/23 12:35
D3-NMeFOSAA	75.4	45-200		11/9/23 12:35
D5-NEtFOSAA	77.7	10-200		11/9/23 12:35
D7-NMeFOSE	82.6	10-150		11/9/23 12:35
D9-NEtFOSE	81.0	10-150		11/9/23 12:35
13C3-HFPO-DA	71.8	25-160		11/9/23 12:35

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-11D-WG-20231026 Sampled: 10/26/2023 12:30

Sample ID: 23J3846-02

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	12	10	mg/L	1		Draft Method 1633	10/31/23	10/31/23 12:49	LL

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-06-WG-20231027 Sampled: 10/27/2023 10:00

Sample ID: 23J3846-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	12	4.0	1.5	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluoropentanoic acid (PFPeA)	24	2.0	0.35	ng/L	1	~~--PF-22A---~~ J	Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorohexanoic acid (PFHxA)	19	1.0	0.22	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluoroheptanoic acid (PFHpA)	25	1.0	0.25	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorooctanoic acid (PFOA)	73	1.0	0.23	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorononanoic acid (PFNA)	29	1.0	0.19	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorodecanoic acid (PFDA)	13	1.0	0.18	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.25	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorobutanesulfonic acid (PFBS)	8.1	1.0	0.26	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.24	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorohexanesulfonic acid (PFHxS)	4.7	1.0	0.21	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorooctanesulfonic acid (PFOS)	31	1.0	0.32	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.27	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:51	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.70	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	0.99	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.41	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.44	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:51	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.22	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:51	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.6	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:51	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.5	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.4	4.0	1.0	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 12:51	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.69	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.85	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.0	0.97	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.8	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	10	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	8.8	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.49	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.50	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-06-WG-20231027 Sampled: 10/27/2023 10:00

Sample ID: 23J3846-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.40	ng/L	1		Draft Method 1633	11/8/23	11/9/23 12:51	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.87	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 12:51	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	29.7	10-130		11/9/23 12:51
13C5-PFPeA	55.8	35-150		11/9/23 12:51
13C5-PFHxA	77.9	55-150		11/9/23 12:51
13C4-PFHpA	89.3	55-150		11/9/23 12:51
13C8-PFOA	85.9	60-140		11/9/23 12:51
13C9-PFNA	69.5	55-140		11/9/23 12:51
13C6-PFDA	72.3	50-140		11/9/23 12:51
13C7-PFUnA	72.4	30-140		11/9/23 12:51
13C2-PFDoA	67.2	10-150		11/9/23 12:51
13C2-PFTeDA	49.5	10-130		11/9/23 12:51
13C3-PFBS	78.6	55-150		11/9/23 12:51
13C3-PFHxS	79.4	55-150		11/9/23 12:51
13C8-PFOS	70.3	45-140		11/9/23 12:51
13C2-4:2FTS	131	60-200		11/9/23 12:51
13C2-6:2FTS	119	60-200		11/9/23 12:51
13C2-8:2FTS	91.9	50-200		11/9/23 12:51
13C8-PFOSA	77.1	30-130		11/9/23 12:51
D3-NMeFOSA	52.5	15-130		11/9/23 12:51
D5-NEtFOSA	53.7	10-130		11/9/23 12:51
D3-NMeFOSAA	78.4	45-200		11/9/23 12:51
D5-NEtFOSAA	77.4	10-200		11/9/23 12:51
D7-NMeFOSE	70.7	10-150		11/9/23 12:51
D9-NEtFOSE	69.2	10-150		11/9/23 12:51
13C3-HFPO-DA	66.5	25-160		11/9/23 12:51

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-06-WG-20231027 Sampled: 10/27/2023 10:00

Sample ID: 23J3846-03

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	20	10	mg/L	1		Draft Method 1633	10/31/23	10/31/23 12:49	LL

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: Duplicate1 Sampled: 10/27/2023 10:30

Sample ID: 23J3846-04

Sample Matrix: Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	14	4.0	1.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluoropentanoic acid (PFPeA)	25	2.0	0.35	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorohexanoic acid (PFHxA)	21	1.0	0.22	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluoroheptanoic acid (PFHpA)	25	1.0	0.25	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorooctanoic acid (PFOA)	70	1.0	0.22	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorononanoic acid (PFNA)	29	1.0	0.19	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorodecanoic acid (PFDA)	12	1.0	0.18	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.25	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorobutanesulfonic acid (PFBS)	8.7	1.0	0.26	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.24	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorohexanesulfonic acid (PFHxS)	5.3	1.0	0.21	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorooctanesulfonic acid (PFOS)	28	1.0	0.32	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.27	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:06	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.70	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	0.98	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	1.0	0.41	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.44	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:06	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.22	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:06	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	10	2.6	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:06	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.4	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.3	4.0	1.0	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 13:06	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.69	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.85	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.0	0.97	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.8	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	10	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	8.8	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.49	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.50	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: Duplicate1 Sampled: 10/27/2023 10:30

Sample ID: 23J3846-04

Sample Matrix: Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.40	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:06	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.86	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:06	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	33.3	10-130		11/9/23 13:06
13C5-PFPeA	65.8	35-150		11/9/23 13:06
13C5-PFHxA	90.4	55-150		11/9/23 13:06
13C4-PFHpA	106	55-150		11/9/23 13:06
13C8-PFOA	103	60-140		11/9/23 13:06
13C9-PFNA	82.9	55-140		11/9/23 13:06
13C6-PFDA	87.0	50-140		11/9/23 13:06
13C7-PFUnA	88.4	30-140		11/9/23 13:06
13C2-PFDoA	85.4	10-150		11/9/23 13:06
13C2-PFTeDA	71.2	10-130		11/9/23 13:06
13C3-PFBS	92.3	55-150		11/9/23 13:06
13C3-PFHxS	93.8	55-150		11/9/23 13:06
13C8-PFOS	85.4	45-140		11/9/23 13:06
13C2-4:2FTS	157	60-200		11/9/23 13:06
13C2-6:2FTS	142	60-200		11/9/23 13:06
13C2-8:2FTS	119	50-200		11/9/23 13:06
13C8-PFOSA	92.2	30-130		11/9/23 13:06
D3-NMeFOSA	65.6	15-130		11/9/23 13:06
D5-NEtFOSA	66.7	10-130		11/9/23 13:06
D3-NMeFOSAA	99.5	45-200		11/9/23 13:06
D5-NEtFOSAA	104	10-200		11/9/23 13:06
D7-NMeFOSE	95.2	10-150		11/9/23 13:06
D9-NEtFOSE	91.2	10-150		11/9/23 13:06
13C3-HFPO-DA	77.7	25-160		11/9/23 13:06

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: Duplicate1 Sampled: 10/27/2023 10:30

Sample ID: 23J3846-04

Sample Matrix: Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	12	10	mg/L	1		Draft Method 1633	10/31/23	10/31/23 12:49	LL

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-08SR-WG-20231027 Sampled: 10/27/2023 10:10

Sample ID: 23J3846-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	24	8.2	3.0	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluoropentanoic acid (PFPeA)	12	4.1	0.71	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorohexanoic acid (PFHxA)	13	2.1	0.44	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluoroheptanoic acid (PFHpA)	15	2.1	0.52	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorooctanoic acid (PFOA)	32	2.1	0.46	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorononanoic acid (PFNA)	10	2.1	0.39	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorodecanoic acid (PFDA)	6.6	2.1	0.38	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluoroundecanoic acid (PFUnA)	3.8	2.1	0.56	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorododecanoic acid (PFDoA)	3.4	2.1	0.53	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	2.1	0.56	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	2.1	0.51	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorobutanesulfonic acid (PFBS)	340	2.1	0.53	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	2.1	0.49	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorohexanesulfonic acid (PFHxS)	26	2.1	0.42	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.1	0.63	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorooctanesulfonic acid (PFOS)	35	2.1	0.65	ng/L	1	~~PF-23A~~ J	Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorononanesulfonic acid (PFNS)	ND	2.1	0.61	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	2.1	0.64	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	2.1	0.55	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	8.2	1.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	8.2	2.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	8.2	2.2	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	2.1	0.63	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	2.1	0.85	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	2.1	0.63	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
N-MeFOSAA (NMeFOSAA)	ND	2.1	0.91	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
N-EtFOSAA (NEtFOSAA)	ND	2.1	0.45	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	21	5.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	21	5.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	8.2	2.1	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	8.2	1.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
9Cl-PF3ONS (F53B Minor)	ND	8.2	1.8	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
11Cl-PF3OUdS (F53B Major)	ND	8.2	2.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	21	3.7	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	100	21	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	100	18	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	4.1	1.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	4.1	1.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:38	AMS

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-08SR-WG-20231027 Sampled: 10/27/2023 10:10

Sample ID: 23J3846-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	4.1	0.83	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:38	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	4.1	1.8	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:38	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	63.1	10-130		11/9/23 13:38
13C5-PFPeA	59.7	35-150		11/9/23 13:38
13C5-PFHxA	80.2	55-150		11/9/23 13:38
13C4-PFHpA	92.1	55-150		11/9/23 13:38
13C8-PFOA	87.5	60-140		11/9/23 13:38
13C9-PFNA	70.9	55-140		11/9/23 13:38
13C6-PFDA	76.6	50-140		11/9/23 13:38
13C7-PFUnA	74.5	30-140		11/9/23 13:38
13C2-PFDoA	67.8	10-150		11/9/23 13:38
13C2-PFTeDA	58.9	10-130		11/9/23 13:38
13C3-PFBS	87.6	55-150		11/9/23 13:38
13C3-PFHxS	82.4	55-150		11/9/23 13:38
13C8-PFOS	72.7	45-140		11/9/23 13:38
13C2-4:2FTS	137	60-200		11/9/23 13:38
13C2-6:2FTS	123	60-200		11/9/23 13:38
13C2-8:2FTS	90.7	50-200		11/9/23 13:38
13C8-PFOSA	76.1	30-130		11/9/23 13:38
D3-NMeFOSA	51.4	15-130		11/9/23 13:38
D5-NEtFOSA	53.7	10-130		11/9/23 13:38
D3-NMeFOSAA	80.4	45-200		11/9/23 13:38
D5-NEtFOSAA	81.8	10-200		11/9/23 13:38
D7-NMeFOSE	71.4	10-150		11/9/23 13:38
D9-NEtFOSE	69.9	10-150		11/9/23 13:38
13C3-HFPO-DA	69.1	25-160		11/9/23 13:38

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-08SR-WG-20231027 Sampled: 10/27/2023 10:10

Sample ID: 23J3846-05

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	20	10	mg/L	1		Draft Method 1633	10/31/23	10/31/23 12:49	LL

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-08DR-WG-20231027 Sampled: 10/27/2023 11:00

Sample ID: 23J3846-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	20	8.2	3.0	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluoropentanoic acid (PFPeA)	10	4.1	0.71	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorohexanoic acid (PFHxA)	8.3	2.0	0.44	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluoroheptanoic acid (PFHpA)	11	2.0	0.52	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorooctanoic acid (PFOA)	26	2.0	0.46	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorononanoic acid (PFNA)	8.7	2.0	0.39	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorodecanoic acid (PFDA)	6.8	2.0	0.38	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluoroundecanoic acid (PFUnA)	ND	2.0	0.56	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorododecanoic acid (PFDoA)	ND	2.0	0.53	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	2.0	0.56	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	2.0	0.51	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorobutanesulfonic acid (PFBS)	230	2.0	0.53	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	2.0	0.49	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorohexanesulfonic acid (PFHxS)	6.2	2.0	0.42	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0	0.63	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorooctanesulfonic acid (PFOS)	40	2.0	0.65	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorononanesulfonic acid (PFNS)	ND	2.0	0.60	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	2.0	0.64	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	2.0	0.55	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	8.2	1.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	8.2	2.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	8.2	2.2	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	2.0	0.63	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	2.0	0.85	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	2.0	0.63	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
N-MeFOSAA (NMeFOSAA)	ND	2.0	0.90	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
N-EtFOSAA (NEtFOSAA)	ND	2.0	0.45	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	20	5.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	20	5.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	8.2	2.1	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	8.2	1.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
9Cl-PF3ONS (F53B Minor)	ND	8.2	1.7	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
11Cl-PF3OUdS (F53B Major)	ND	8.2	2.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	20	3.7	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	100	21	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	100	18	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	4.1	1.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	4.1	1.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 13:54	AMS

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-08DR-WG-20231027 Sampled: 10/27/2023 11:00

Sample ID: 23J3846-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	4.1	0.82	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:54	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	4.1	1.8	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 13:54	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	75.7	10-130		11/9/23 13:54
13C5-PFPeA	61.5	35-150		11/9/23 13:54
13C5-PFHxA	75.5	55-150		11/9/23 13:54
13C4-PFHpA	82.7	55-150		11/9/23 13:54
13C8-PFOA	84.4	60-140		11/9/23 13:54
13C9-PFNA	71.2	55-140		11/9/23 13:54
13C6-PFDA	71.8	50-140		11/9/23 13:54
13C7-PFUnA	73.6	30-140		11/9/23 13:54
13C2-PFDoA	68.8	10-150		11/9/23 13:54
13C2-PFTeDA	62.5	10-130		11/9/23 13:54
13C3-PFBS	79.8	55-150		11/9/23 13:54
13C3-PFHxS	78.1	55-150		11/9/23 13:54
13C8-PFOS	72.4	45-140		11/9/23 13:54
13C2-4:2FTS	97.6	60-200		11/9/23 13:54
13C2-6:2FTS	86.2	60-200		11/9/23 13:54
13C2-8:2FTS	65.3	50-200		11/9/23 13:54
13C8-PFOSA	77.9	30-130		11/9/23 13:54
D3-NMeFOSA	52.6	15-130		11/9/23 13:54
D5-NEtFOSA	55.4	10-130		11/9/23 13:54
D3-NMeFOSAA	76.3	45-200		11/9/23 13:54
D5-NEtFOSAA	77.7	10-200		11/9/23 13:54
D7-NMeFOSE	75.9	10-150		11/9/23 13:54
D9-NEtFOSE	76.0	10-150		11/9/23 13:54
13C3-HFPO-DA	70.0	25-160		11/9/23 13:54

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-08DR-WG-20231027 Sampled: 10/27/2023 11:00

Sample ID: 23J3846-06

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	34	10	mg/L	1		Draft Method 1633	10/31/23	10/31/23 12:49	LL

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-04-WG-20231027 Sampled: 10/27/2023 11:20

Sample ID: 23J3846-07

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	16	3.9	1.4	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluoropentanoic acid (PFPeA)	17	1.9	0.33	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorohexanoic acid (PFHxA)	22	0.96	0.21	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluoroheptanoic acid (PFHpA)	39	0.96	0.25	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorooctanoic acid (PFOA)	50	0.96	0.22	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorononanoic acid (PFNA)	20	0.96	0.18	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorodecanoic acid (PFDA)	51	0.96	0.18	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluoroundecanoic acid (PFUnA)	2.5	0.96	0.26	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.96	0.25	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.96	0.26	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.96	0.24	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorobutanesulfonic acid (PFBS)	44	0.96	0.25	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.96	0.23	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.96	0.20	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.96	0.29	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorooctanesulfonic acid (PFOS)	5.1	0.96	0.31	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.96	0.28	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.96	0.30	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.96	0.26	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 14:09	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.67	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	0.95	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.0	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.96	0.30	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.96	0.40	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.96	0.30	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.96	0.42	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 14:09	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.96	0.21	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 14:09	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.6	2.5	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 14:09	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.6	2.4	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	1.0	3.9	1.0	ng/L	1	J	Draft Method 1633	11/8/23	11/9/23 14:09	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.66	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.82	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.9	0.93	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.6	1.7	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	48	9.8	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	48	8.5	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.47	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.48	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-04-WG-20231027 Sampled: 10/27/2023 11:20

Sample ID: 23J3846-07

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.39	ng/L	1		Draft Method 1633	11/8/23	11/9/23 14:09	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.84	ng/L	1	UJ	Draft Method 1633	11/8/23	11/9/23 14:09	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	73.7	10-130		11/9/23 14:09
13C5-PFPeA	61.0	35-150		11/9/23 14:09
13C5-PFHxA	73.2	55-150		11/9/23 14:09
13C4-PFHpA	81.5	55-150		11/9/23 14:09
13C8-PFOA	81.5	60-140		11/9/23 14:09
13C9-PFNA	64.9	55-140		11/9/23 14:09
13C6-PFDA	66.5	50-140		11/9/23 14:09
13C7-PFUnA	62.3	30-140		11/9/23 14:09
13C2-PFDoA	56.5	10-150		11/9/23 14:09
13C2-PFTeDA	48.9	10-130		11/9/23 14:09
13C3-PFBS	75.7	55-150		11/9/23 14:09
13C3-PFHxS	73.0	55-150		11/9/23 14:09
13C8-PFOS	64.0	45-140		11/9/23 14:09
13C2-4:2FTS	89.7	60-200		11/9/23 14:09
13C2-6:2FTS	77.7	60-200		11/9/23 14:09
13C2-8:2FTS	61.5	50-200		11/9/23 14:09
13C8-PFOSA	70.6	30-130		11/9/23 14:09
D3-NMeFOSA	44.5	15-130		11/9/23 14:09
D5-NEtFOSA	46.3	10-130		11/9/23 14:09
D3-NMeFOSAA	68.4	45-200		11/9/23 14:09
D5-NEtFOSAA	65.7	10-200		11/9/23 14:09
D7-NMeFOSE	62.4	10-150		11/9/23 14:09
D9-NEtFOSE	59.6	10-150		11/9/23 14:09
13C3-HFPO-DA	68.9	25-160		11/9/23 14:09

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3846

Date Received: 10/28/2023

Field Sample #: MEC-MW-04-WG-20231027 Sampled: 10/27/2023 11:20

Sample ID: 23J3846-07

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	20	10	mg/L	1		Draft Method 1633	10/31/23	10/31/23 12:49	LL

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-10S-WG-20231030 Sampled: 10/30/2023 11:45

Sample ID: 23J3979-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	14	3.8	1.4	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluoropentanoic acid (PFPeA)	120	1.9	0.33	ng/L	1	~~PF-23A~~ J	Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorohexanoic acid (PFHxA)	21	0.94	0.20	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluoroheptanoic acid (PFHpA)	33	0.94	0.24	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorooctanoic acid (PFOA)	95	0.94	0.21	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorononanoic acid (PFNA)	23	0.94	0.18	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorodecanoic acid (PFDA)	20	0.94	0.17	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluoroundecanoic acid (PFUnA)	4.3	0.94	0.26	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorododecanoic acid (PFDoA)	2.6	0.94	0.24	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.94	0.26	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.94	0.24	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorobutanesulfonic acid (PFBS)	11	0.94	0.25	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.94	0.22	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorohexanesulfonic acid (PFHxS)	6.6	0.94	0.19	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.94	0.29	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorooctanesulfonic acid (PFOS)	57	0.94	0.30	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.94	0.28	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.94	0.30	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.94	0.25	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	0.66	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	0.93	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 1:54	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	1.0	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluorooctanesulfonamide (PFOSA)	0.82	0.94	0.29	ng/L	1	~~PF-23A, J~~ J	Draft Method 1633	11/30/23	12/2/23 1:54	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.94	0.39	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.94	0.29	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.94	0.42	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.94	0.21	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 1:54	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.4	2.5	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.4	2.3	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	0.99	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.8	0.65	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	0.80	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.8	0.91	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.4	1.7	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	9.6	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	8.3	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.46	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.47	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-10S-WG-20231030 Sampled: 10/30/2023 11:45

Sample ID: 23J3979-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.38	ng/L	1		Draft Method 1633	11/30/23	12/2/23 1:54	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.82	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 1:54	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	18.6	10-130		12/2/23 1:54
13C5-PFPeA	56.4	35-150		12/2/23 1:54
13C5-PFHxA	70.9	55-150		12/2/23 1:54
13C4-PFHpA	72.4	55-150		12/2/23 1:54
13C8-PFOA	62.8	60-140		12/2/23 1:54
13C9-PFNA	60.0	55-140		12/2/23 1:54
13C6-PFDA	59.5	50-140		12/2/23 1:54
13C7-PFUnA	51.3	30-140		12/2/23 1:54
13C2-PFDoA	45.1	10-150		12/2/23 1:54
13C2-PFTeDA	33.5	10-130		12/2/23 1:54
13C3-PFBS	65.8	55-150		12/2/23 1:54
13C3-PFHxS	61.1	55-150		12/2/23 1:54
13C8-PFOS	51.5	45-140		12/2/23 1:54
13C2-4:2FTS	119	60-200		12/2/23 1:54
13C2-6:2FTS	109	60-200		12/2/23 1:54
13C2-8:2FTS	75.4	50-200		12/2/23 1:54
13C8-PFOSA	50.1	30-130		12/2/23 1:54
D3-NMeFOSA	36.3	15-130		12/2/23 1:54
D5-NEtFOSA	31.0	10-130		12/2/23 1:54
D3-NMeFOSAA	55.2	45-200		12/2/23 1:54
D5-NEtFOSAA	49.6	10-200		12/2/23 1:54
D7-NMeFOSE	34.0	10-150		12/2/23 1:54
D9-NEtFOSE	28.3	10-150		12/2/23 1:54
13C3-HFPO-DA	62.7	25-160		12/2/23 1:54

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-10S-WG-20231030 Sampled: 10/30/2023 11:45

Sample ID: 23J3979-01

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	32	10	mg/L	1		Draft Method 1633	11/1/23	11/1/23 12:59	LL

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-10D-WG-20231030 Sampled: 10/30/2023 10:50

Sample ID: 23J3979-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	1.9	3.8	1.4	ng/L	1	J	Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluoropentanoic acid (PFPeA)	1.2	1.9	0.33	ng/L	1	~~PF-22A; J~~ J	Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorohexanoic acid (PFHxA)	0.96	0.96	0.21	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluoroheptanoic acid (PFHpA)	1.6	0.96	0.24	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorooctanoic acid (PFOA)	4.0	0.96	0.22	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorononanoic acid (PFNA)	1.3	0.96	0.18	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorodecanoic acid (PFDA)	1.1	0.96	0.18	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.96	0.26	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.96	0.25	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.96	0.26	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.96	0.24	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorobutanesulfonic acid (PFBS)	0.91	0.96	0.25	ng/L	1	J	Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.96	0.23	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.96	0.20	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.96	0.29	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorooctanesulfonic acid (PFOS)	1.3	0.96	0.30	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.96	0.28	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.96	0.30	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.96	0.25	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	0.67	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	0.94	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:09	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	1.0	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.96	0.29	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.96	0.40	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.96	0.29	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.96	0.42	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.96	0.21	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:09	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.6	2.5	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.6	2.3	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	1.0	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.8	0.66	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	0.81	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.8	0.93	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.6	1.7	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	48	9.8	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	48	8.4	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.47	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.48	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-10D-WG-20231030 Sampled: 10/30/2023 10:50

Sample ID: 23J3979-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.38	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:09	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.83	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:09	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	80.1	10-130		12/2/23 2:09
13C5-PFPeA	79.5	35-150		12/2/23 2:09
13C5-PFHxA	80.3	55-150		12/2/23 2:09
13C4-PFHpA	79.4	55-150		12/2/23 2:09
13C8-PFOA	76.3	60-140		12/2/23 2:09
13C9-PFNA	74.6	55-140		12/2/23 2:09
13C6-PFDA	74.3	50-140		12/2/23 2:09
13C7-PFUnA	71.1	30-140		12/2/23 2:09
13C2-PFDoA	66.6	10-150		12/2/23 2:09
13C2-PFTeDA	61.7	10-130		12/2/23 2:09
13C3-PFBS	76.1	55-150		12/2/23 2:09
13C3-PFHxS	75.1	55-150		12/2/23 2:09
13C8-PFOS	76.8	45-140		12/2/23 2:09
13C2-4:2FTS	72.1	60-200		12/2/23 2:09
13C2-6:2FTS	80.3	60-200		12/2/23 2:09
13C2-8:2FTS	81.6	50-200		12/2/23 2:09
13C8-PFOSA	70.3	30-130		12/2/23 2:09
D3-NMeFOSA	57.5	15-130		12/2/23 2:09
D5-NEtFOSA	56.8	10-130		12/2/23 2:09
D3-NMeFOSAA	71.3	45-200		12/2/23 2:09
D5-NEtFOSAA	65.8	10-200		12/2/23 2:09
D7-NMeFOSE	57.1	10-150		12/2/23 2:09
D9-NEtFOSE	53.2	10-150		12/2/23 2:09
13C3-HFPO-DA	81.2	25-160		12/2/23 2:09

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-10D-WG-20231030 Sampled: 10/30/2023 10:50

Sample ID: 23J3979-02

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	20	10	mg/L	1		Draft Method 1633	11/1/23	11/1/23 12:59	LL

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-05R-WG-20231030 Sampled: 10/30/2023 10:15

Sample ID: 23J3979-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	23	3.7	1.4	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluoropentanoic acid (PFPeA)	14	1.9	0.32	ng/L	1	~~PF-22A~~ J	Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorohexanoic acid (PFHxA)	25	0.93	0.20	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluoroheptanoic acid (PFHpA)	27	0.93	0.24	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorooctanoic acid (PFOA)	110	0.93	0.21	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorononanoic acid (PFNA)	23	0.93	0.18	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorodecanoic acid (PFDA)	22	0.93	0.17	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluoroundecanoic acid (PFUnA)	2.7	0.93	0.25	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.93	0.24	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.93	0.25	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.93	0.23	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorobutanesulfonic acid (PFBS)	7.0	0.93	0.24	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.93	0.22	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorohexanesulfonic acid (PFHxS)	7.1	0.93	0.19	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.93	0.28	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorooctanesulfonic acid (PFOS)	20	0.93	0.30	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.93	0.27	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.93	0.29	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.93	0.25	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	0.65	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	2.0	3.7	0.92	ng/L	1	J	Draft Method 1633	11/30/23	12/4/23 12:03	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	1.0	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluorooctanesulfonamide (PFOSA)	0.52	0.93	0.29	ng/L	1	J	Draft Method 1633	11/30/23	12/4/23 12:03	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.93	0.39	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.93	0.29	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.93	0.41	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.93	0.21	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.3	2.4	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.3	2.3	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	2.3	3.7	0.97	ng/L	1	J	Draft Method 1633	11/30/23	12/4/23 12:03	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.7	0.64	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	0.79	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.7	0.90	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.3	1.7	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	9.5	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	8.2	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.46	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.46	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-05R-WG-20231030 Sampled: 10/30/2023 10:15

Sample ID: 23J3979-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.37	ng/L	1		Draft Method 1633	11/30/23	12/4/23 12:03	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.81	ng/L	1	UJ	Draft Method 1633	11/30/23	12/4/23 12:03	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	19.9	10-130		12/4/23 12:03
13C5-PFPeA	58.9	35-150		12/4/23 12:03
13C5-PFHxA	89.2	55-150		12/4/23 12:03
13C4-PFHpA	100	55-150		12/4/23 12:03
13C8-PFOA	85.0	60-140		12/4/23 12:03
13C9-PFNA	89.7	55-140		12/4/23 12:03
13C6-PFDA	88.2	50-140		12/4/23 12:03
13C7-PFUnA	86.8	30-140		12/4/23 12:03
13C2-PFDoA	82.9	10-150		12/4/23 12:03
13C2-PFTeDA	64.5	10-130		12/4/23 12:03
13C3-PFBS	84.2	55-150		12/4/23 12:03
13C3-PFHxS	86.7	55-150		12/4/23 12:03
13C8-PFOS	86.2	45-140		12/4/23 12:03
13C2-4:2FTS	141	60-200		12/4/23 12:03
13C2-6:2FTS	164	60-200		12/4/23 12:03
13C2-8:2FTS	162	50-200		12/4/23 12:03
13C8-PFOSA	71.5	30-130		12/4/23 12:03
D3-NMeFOSA	64.8	15-130		12/4/23 12:03
D5-NEtFOSA	56.6	10-130		12/4/23 12:03
D3-NMeFOSAA	92.2	45-200		12/4/23 12:03
D5-NEtFOSAA	93.7	10-200		12/4/23 12:03
D7-NMeFOSE	62.8	10-150		12/4/23 12:03
D9-NEtFOSE	58.2	10-150		12/4/23 12:03
13C3-HFPO-DA	75.1	25-160		12/4/23 12:03

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-05R-WG-20231030 Sampled: 10/30/2023 10:15

Sample ID: 23J3979-03

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	40	10	mg/L	1		Draft Method 1633	11/1/23	11/1/23 12:59	LL

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-09D-WG-20231030 Sampled: 10/30/2023 11:35

Sample ID: 23J3979-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	4.6	3.8	1.4	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluoropentanoic acid (PFPeA)	1.1	1.9	0.33	ng/L	1	----PF-22A, J--- J	Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorohexanoic acid (PFHxA)	8.8	0.95	0.21	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluoroheptanoic acid (PFHpA)	11	0.95	0.24	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorooctanoic acid (PFOA)	2.8	0.95	0.22	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorononanoic acid (PFNA)	2.5	0.95	0.18	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorodecanoic acid (PFDA)	4.0	0.95	0.18	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluoroundecanoic acid (PFUnA)	4.5	0.95	0.26	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorododecanoic acid (PFDoA)	6.8	0.95	0.25	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorotridecanoic acid (PFTrDA)	2.0	0.95	0.26	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorotetradecanoic acid (PFTeDA)	2.6	0.95	0.24	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorobutanesulfonic acid (PFBS)	7.3	0.95	0.25	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.95	0.23	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.95	0.20	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.95	0.29	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorooctanesulfonic acid (PFOS)	3.1	0.95	0.30	ng/L	1	----PF-23A---- J	Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.95	0.28	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.95	0.30	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.95	0.25	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	0.67	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	0.94	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:41	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	1.0	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluorooctanesulfonamide (PFOSA)	0.32	0.95	0.29	ng/L	1	-----PF-22A, J----- J	Draft Method 1633	11/30/23	12/2/23 2:41	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.95	0.40	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.95	0.29	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.95	0.42	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.95	0.21	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:41	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.5	2.5	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.5	2.3	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	2.1	3.8	1.0	ng/L	1	--PF-22A, J-- J	Draft Method 1633	11/30/23	12/2/23 2:41	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.8	0.66	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	0.81	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.8	0.92	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.5	1.7	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	48	9.7	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	48	8.4	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.47	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.47	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-09D-WG-20231030 Sampled: 10/30/2023 11:35

Sample ID: 23J3979-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.38	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:41	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.83	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:41	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	66.2	10-130		12/2/23 2:41
13C5-PFPeA	75.1	35-150		12/2/23 2:41
13C5-PFHxA	77.1	55-150		12/2/23 2:41
13C4-PFHpA	69.9	55-150		12/2/23 2:41
13C8-PFOA	75.9	60-140		12/2/23 2:41
13C9-PFNA	75.8	55-140		12/2/23 2:41
13C6-PFDA	79.4	50-140		12/2/23 2:41
13C7-PFUnA	61.7	30-140		12/2/23 2:41
13C2-PFDoA	75.4	10-150		12/2/23 2:41
13C2-PFTeDA	24.3	10-130		12/2/23 2:41
13C3-PFBS	74.3	55-150		12/2/23 2:41
13C3-PFHxS	77.5	55-150		12/2/23 2:41
13C8-PFOS	81.7	45-140		12/2/23 2:41
13C2-4:2FTS	146	60-200		12/2/23 2:41
13C2-6:2FTS	142	60-200		12/2/23 2:41
13C2-8:2FTS	119	50-200		12/2/23 2:41
13C8-PFOSA	83.3	30-130		12/2/23 2:41
D3-NMeFOSA	57.3	15-130		12/2/23 2:41
D5-NEtFOSA	46.1	10-130		12/2/23 2:41
D3-NMeFOSAA	47.3	45-200		12/2/23 2:41
D5-NEtFOSAA	15.9	10-200		12/2/23 2:41
D7-NMeFOSE	59.9	10-150		12/2/23 2:41
D9-NEtFOSE	54.7	10-150		12/2/23 2:41
13C3-HFPO-DA	65.0	25-160		12/2/23 2:41

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-09D-WG-20231030 Sampled: 10/30/2023 11:35

Sample ID: 23J3979-04

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	40	10	mg/L	1		Draft Method 1633	11/1/23	11/1/23 12:59	LL

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Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-09S-WG-20231030 Sampled: 10/30/2023 10:55

Sample ID: 23J3979-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	14	21	7.5	ng/L	1	~~--J--~~ J	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluoropentanoic acid (PFPeA)	37	10	1.8	ng/L	1	~~--PF-23A-~~ J	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorohexanoic acid (PFHxA)	13	5.1	1.1	ng/L	1	J	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluoroheptanoic acid (PFHpA)	26	5.1	1.3	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorooctanoic acid (PFOA)	8.6	5.1	1.2	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorononanoic acid (PFNA)	5.9	5.1	0.98	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorodecanoic acid (PFDA)	9.5	5.1	0.95	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluoroundecanoic acid (PFUnA)	4.5	5.1	1.4	ng/L	1	J	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorododecanoic acid (PFDoA)	6.0	5.1	1.3	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorotridecanoic acid (PFTrDA)	3.0	5.1	1.4	ng/L	1	J	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorotetradecanoic acid (PFTeDA)	4.8	5.1	1.3	ng/L	1	J	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorobutanesulfonic acid (PFBS)	17	5.1	1.3	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	5.1	1.2	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	5.1	1.1	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	5.1	1.6	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorooctanesulfonic acid (PFOS)	5.6	5.1	1.6	ng/L	1	J	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorononanesulfonic acid (PFNS)	ND	5.1	1.5	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	5.1	1.6	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	5.1	1.4	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	21	3.6	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	21	5.1	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	21	5.6	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	5.1	1.6	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	5.1	2.1	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	5.1	1.6	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
N-MeFOSAA (NMeFOSAA)	ND	5.1	2.3	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
N-EtFOSAA (NEtFOSAA)	ND	5.1	1.1	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	51	14	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	51	13	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	21	5.4	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	21	3.5	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
9Cl-PF3ONS (F53B Minor)	ND	21	4.4	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
11Cl-PF3OUdS (F53B Major)	ND	21	5.0	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	51	9.3	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	260	53	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	260	45	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	10	2.5	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	10	2.6	ng/L	1		Draft Method 1633	11/30/23	12/2/23 2:56	AMS

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-09S-WG-20231030 Sampled: 10/30/2023 10:55

Sample ID: 23J3979-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	10	2.1	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:56	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	10	4.5	ng/L	1	UJ	Draft Method 1633	11/30/23	12/2/23 2:56	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	83.3	10-130		12/2/23 2:56
13C5-PFPeA	77.4	35-150		12/2/23 2:56
13C5-PFHxA	80.5	55-150		12/2/23 2:56
13C4-PFHpA	76.4	55-150		12/2/23 2:56
13C8-PFOA	76.8	60-140		12/2/23 2:56
13C9-PFNA	78.6	55-140		12/2/23 2:56
13C6-PFDA	81.2	50-140		12/2/23 2:56
13C7-PFUnA	77.7	30-140		12/2/23 2:56
13C2-PFDoA	75.5	10-150		12/2/23 2:56
13C2-PFTeDA	51.4	10-130		12/2/23 2:56
13C3-PFBS	77.4	55-150		12/2/23 2:56
13C3-PFHxS	78.7	55-150		12/2/23 2:56
13C8-PFOS	79.8	45-140		12/2/23 2:56
13C2-4:2FTS	122	60-200		12/2/23 2:56
13C2-6:2FTS	132	60-200		12/2/23 2:56
13C2-8:2FTS	131	50-200		12/2/23 2:56
13C8-PFOSA	65.7	30-130		12/2/23 2:56
D3-NMeFOSA	53.8	15-130		12/2/23 2:56
D5-NEtFOSA	50.4	10-130		12/2/23 2:56
D3-NMeFOSAA	75.3	45-200		12/2/23 2:56
D5-NEtFOSAA	62.1	10-200		12/2/23 2:56
D7-NMeFOSE	57.8	10-150		12/2/23 2:56
D9-NEtFOSE	55.4	10-150		12/2/23 2:56
13C3-HFPO-DA	74.6	25-160		12/2/23 2:56

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

Project Location: 435 South Main Street, Freeport, N Sample Description: Work Order: 23J3979

Date Received: 10/31/2023

Field Sample #: MEC-MW-09S-WG-20231030 Sampled: 10/30/2023 10:55

Sample ID: 23J3979-05

Sample Matrix: Ground Water

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

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	400	10	mg/L	1		Draft Method 1633	11/1/23	11/1/23 12:59	LL

QC NONCONFORMANCE DOCUMENTATION

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

Draft Method 1633

Laboratory:	Pace New England	Work Order:	23J3846
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB000
Instrument ID:	QQQ5	Calibration:	2301277
Lab File ID:	CCV2_1633_110923.d	Calibration Date:	10/23/23 00:00
Sequence:	S096133	Injection Date:	11/09/23
Lab Sample ID:	S096133-CCV2	Injection Time:	14:41

		CONC. (ng/mL)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Perfluorobutanoic acid (PFBA)	A	10.0	12.1	0.8196638	0.9947364		21.4	30	
Perfluoropentanoic acid (PFPeA)	A	5.00	5.92	0.8928105	1.057709		18.5	30	
Perfluorohexanoic acid (PFHxA)	A	2.50	2.83	0.9330469	1.057841		13.4	30	
Perfluoroheptanoic acid (PFHpA)	A	2.50	2.91	0.9697097	1.130486		16.6	30	
Perfluorooctanoic acid (PFOA)	A	2.50	2.61	1.206551	1.257727		4.2	30	
Perfluorononanoic acid (PFNA)	A	2.50	2.98	0.9225279	1.100735		19.3	30	
Perfluorodecanoic acid (PFDA)	A	2.50	3.02	0.916751	1.107387		20.8	30	
Perfluoroundecanoic acid (PFUnA)	A	2.50	2.81	0.8893434	1.000291		12.5	30	
Perfluorododecanoic acid (PFDoA)	A	2.50	3.00	0.9255046	1.109693		19.9	30	
Perfluorotridecanoic acid (PFTrDA)	A	2.50	2.87	0.9137515	1.048908		14.8	30	
Perfluorotetradecanoic acid (PFTeDA)	A	2.50	2.99	0.8999241	1.074914		19.4	30	
Perfluorobutanesulfonic acid (PFBS)	A	2.22	2.51	1.073533	1.214119		13.1	30	
Perfluoropentanesulfonic acid (PFPeS)	A	2.35	2.77	1.236278	1.458492		18.0	30	
Perfluorohexanesulfonic acid (PFHxS)	A	2.29	2.71	0.9974138	1.180881		18.4	30	
Perfluoroheptanesulfonic acid (PFHpS)	A	2.38	2.89	0.9863397	1.196823		21.3	30	
Perfluorooctanesulfonic acid (PFOS)	A	2.32	2.69	1.017225	1.179613		16.0	30	
Perfluorononanesulfonic acid (PFNS)	A	2.41	3.03	0.8829191	1.109545		25.7	30	
Perfluorodecanesulfonic acid (PFDS)	A	2.41	2.92	0.7122843	0.8621956		21.0	30	
Perfluorododecanesulfonic acid (PFDoS)	A	2.42	3.18	0.4497543	0.590572		31.3	30	*
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	A	9.38	10.6	3.155818	3.553116		12.6	30	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

Draft Method 1633

Laboratory:	Pace New England	Work Order:	23J3979
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB000
Instrument ID:	QQQ5	Calibration:	2301412
Lab File ID:	CCV6_1633_120123.d	Calibration Date:	11/22/23 00:00
Sequence:	S097239	Injection Date:	12/02/23
Lab Sample ID:	S097239-CCV2	Injection Time:	00:35

		CONC. (ng/mL)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	A	9.50	11.8	2.730737	3.399958		24.5	30	
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	A	9.62	12.6	1.640282	2.150339		31.1	30	*
Perfluorooctanesulfonamide (PFOSA)	A	2.50	3.16	0.961849	1.21398		26.2	30	
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	A	2.50	2.77	1.183008	1.311063		10.8	30	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	A	2.50	2.64	1.336106	1.409263		5.5	30	
N-MeFOSAA (NMeFOSAA)	A	2.50	2.90	0.3234786	0.3753223		16.0	30	
N-EtFOSAA (NEtFOSAA)	A	2.50	3.30	0.8803468	1.160381		31.8	30	*
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	A	25.0	28.6	1.114721	1.273135		14.2	30	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	A	25.0	29.1	1.073078	1.248318		16.3	30	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	A	10.0	10.7	0.8576565	0.9182452		7.1	30	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	A	9.44	9.62	5.759299	5.867795		1.9	30	
9Cl-PF3ONS (F53B Minor)	A	9.38	9.74	4.179793	4.35498		4.2	30	
11Cl-PF3OUdS (F53B Major)	A	9.44	10.2	2.447649	2.633587		7.6	30	
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	A	25.0	26.9	0.0411359	4.419297E-02		7.4	30	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	A	125	135	0.1048425	0.113176		7.9	30	
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	A	125	131	0.1119362	0.1174516		4.9	30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	A	4.45	5.30	1.101496	1.311567		19.1	30	
Perfluoro-3-methoxypropanoic acid (PFMPA)	A	5.00	5.48	0.1103077	0.1209411		9.6	30	
Perfluoro-4-methoxybutanoic acid (PFMBA)	A	5.00	5.58	0.706389	0.7886072		11.6	30	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	A	5.00	6.05	6.995482E-02	8.458504E-02		20.9	30	

7 - FORM VII

CONTINUING CALIBRATION VERIFICATION

Draft Method 1633

Laboratory:	Pace New England	Work Order:	23J3979
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching 435 South Main St - CO SMPB000
Instrument ID:	QQQ5	Calibration:	2301412
Lab File ID:	CCV7_1633_120123.d	Calibration Date:	11/22/23 00:00
Sequence:	S097239	Injection Date:	12/02/23
Lab Sample ID:	S097239-CCV3	Injection Time:	04:30

		CONC. (ng/mL)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	A	9.50	12.8	2.730737	3.666424		34.3	30	*
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	A	9.62	12.8	1.640282	2.186854		33.3	30	*
Perfluorooctanesulfonamide (PFOSA)	A	2.50	3.14	0.961849	1.209862		25.8	30	
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	A	2.50	2.80	1.183008	1.325973		12.1	30	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	A	2.50	2.64	1.336106	1.413571		5.8	30	
N-MeFOSAA (NMeFOSAA)	A	2.50	2.88	0.3234786	0.3727094		15.2	30	
N-EtFOSAA (NEtFOSAA)	A	2.50	3.29	0.8803468	1.158035		31.5	30	*
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	A	25.0	29.2	1.114721	1.300953		16.7	30	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	A	25.0	29.1	1.073078	1.250399		16.5	30	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	A	10.0	11.2	0.8576565	0.9619194		12.2	30	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	A	9.44	9.74	5.759299	5.936965		3.1	30	
9Cl-PF3ONS (F53B Minor)	A	9.38	9.91	4.179793	4.433527		6.1	30	
11Cl-PF3OUdS (F53B Major)	A	9.44	10.2	2.447649	2.634335		7.6	30	
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	A	25.0	26.7	0.0411359	4.385142E-02		6.6	30	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	A	125	136	0.1048425	0.1137419		8.5	30	
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	A	125	130	0.1119362	0.1165141		4.1	30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	A	4.45	5.40	1.101496	1.33575		21.3	30	
Perfluoro-3-methoxypropanoic acid (PFMPA)	A	5.00	5.46	0.1103077	0.1204627		9.2	30	
Perfluoro-4-methoxybutanoic acid (PFMBA)	A	5.00	5.68	0.706389	0.802807		13.6	30	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	A	5.00	6.43	6.995482E-02	8.999831E-02		28.7	30	

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QUALITY CONTROL

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B356811 - Draft Method 1633											
Matrix Spike (B356811-MS1) MEC-MW-06-WG-20231027 **Source: 23J3846-03** Prepared: 11/08/23 Analyzed: 11/09/23											
N-EtFOSAA (NEtFOSAA)	25.5	1.0	ng/L	24.1	ND	106		59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	283	10	ng/L	241	ND	118		71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	294	10	ng/L	241	ND	122		69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	116	4.0	ng/L	96.3	1.44	119		63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	116	4.0	ng/L	90.8	ND	128		68-146			
9Cl-PF3ONS (F53B Minor)	111	4.0	ng/L	90.2	ND	123		56-156			
11Cl-PF3OUdS (F53B Major)	106	4.0	ng/L	90.8	ND	116		46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	201	10	ng/L	241	ND	83.3		62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1830	50	ng/L	1200	ND	**152**	*	63-134			MS-12
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1440	50	ng/L	1200	ND	120		50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	47.4	2.0	ng/L	42.8	ND	111		56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	41.6	2.0	ng/L	48.1	ND	86.5		51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	62.2	2.0	ng/L	48.1	ND	129		55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	34.2	2.0	ng/L	48.1	ND	71.1		48-161			
Surrogate: 13C4-PFBA	*26.0*		ng/L	100		26.0		10-130			
Surrogate: 13C5-PFPeA	*26.3*		ng/L	50.1		52.4		35-150			
Surrogate: 13C5-PFHxA	*17.2*		ng/L	25.1		68.6		55-150			
Surrogate: 13C4-PFHpA	*18.6*		ng/L	25.1		74.0		55-150			
Surrogate: 13C8-PFOA	*18.6*		ng/L	25.1		74.2		60-140			
Surrogate: 13C9-PFNA	*7.76*		ng/L	12.5		61.9		55-140			
Surrogate: 13C6-PFDA	*8.31*		ng/L	12.5		66.3		50-140			
Surrogate: 13C7-PFUnA	*7.96*		ng/L	12.5		63.5		30-140			
Surrogate: 13C2-PFDoA	*7.63*		ng/L	12.5		60.9		10-150			
Surrogate: 13C2-PFTeDA	*6.04*		ng/L	12.5		48.2		10-130			
Surrogate: 13C3-PFBS	*17.9*		ng/L	25.1		71.6		55-150			
Surrogate: 13C3-PFHxS	*16.8*		ng/L	25.1		67.0		55-150			
Surrogate: 13C8-PFOS	*16.0*		ng/L	25.1		63.7		45-140			
Surrogate: 13C2-4:2FTS	*61.6*		ng/L	50.1		123		60-200			
Surrogate: 13C2-6:2FTS	*55.4*		ng/L	50.1		110		60-200			
Surrogate: 13C2-8:2FTS	*43.6*		ng/L	50.1		87.0		50-200			
Surrogate: 13C8-PFOSA	*16.6*		ng/L	25.1		66.1		30-130			
Surrogate: D3-NMeFOSA	*12.9*		ng/L	25.1		51.3		15-130			
Surrogate: D5-NEtFOSA	*12.9*		ng/L	25.1		51.3		10-130			
Surrogate: D3-NMeFOSAA	*38.2*		ng/L	50.1		76.1		45-200			
Surrogate: D5-NEtFOSAA	*38.0*		ng/L	50.1		75.7		10-200			
Surrogate: D7-NMeFOSE	*159*		ng/L	251		63.3		10-150			
Surrogate: D9-NEtFOSE	*152*		ng/L	251		60.5		10-150			
Surrogate: 13C3-HFPO-DA	*61.2*		ng/L	100		61.1		25-160			
Matrix Spike Dup (B356811-MSD1) **Source: 23J3846-03** Prepared: 11/08/23 Analyzed: 11/09/23											
Perfluorobutanoic acid (PFBA)	132	3.8	ng/L	91.8	12.2	130		58-148	3.84	20	
Perfluoropentanoic acid (PFPeA)	78.2	1.9	ng/L	45.9	24.5	117		54-152	10.0	20	
Perfluorohexanoic acid (PFHxA)	47.0	0.96	ng/L	23.0	19.5	120		55-152	7.29	25	
Perfluoroheptanoic acid (PFHpA)	53.5	0.96	ng/L	23.0	25.0	124		54-154	6.98	25	
Perfluorooctanoic acid (PFOA)	104	0.96	ng/L	23.0	73.3	132		52-161	0.798	25	

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QUALITY CONTROL

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B356811 - Draft Method 1633											
Matrix Spike Dup (B356811-MSD1) MEC-MW-06-WG-20231027 **Source: 23J3846-03** Prepared: 11/08/23 Analyzed: 11/09/23											
Perfluorononanoic acid (PFNA)	59.8	0.96	ng/L	23.0	29.0	134		59-149	2.18	25	
Perfluorodecanoic acid (PFDA)	43.8	0.96	ng/L	23.0	12.7	136		52-147	0.588	25	
Perfluoroundecanoic acid (PFUnA)	26.6	0.96	ng/L	23.0	ND	116		48-159	11.7	30	
Perfluorododecanoic acid (PFDoA)	28.9	0.96	ng/L	23.0	ND	126		64-142	8.37	25	
Perfluorotridecanoic acid (PFTrDA)	25.2	0.96	ng/L	23.0	ND	110		49-148	9.75	25	
Perfluorotetradecanoic acid (PFTeDA)	29.0	0.96	ng/L	23.0	ND	126		47-161	7.35	25	
Perfluorobutanesulfonic acid (PFBS)	32.4	0.96	ng/L	20.4	8.12	119		62-144	0.822	20	
Perfluoropentanesulfonic acid (PFPeS)	28.5	0.96	ng/L	21.6	ND	132		59-151	4.51	25	
Perfluorohexanesulfonic acid (PFHxS)	32.9	0.96	ng/L	21.0	4.73	134		57-146	2.95	25	
Perfluoroheptanesulfonic acid (PFHpS)	27.8	0.96	ng/L	21.9	ND	127		55-152	9.67	25	
Perfluorooctanesulfonic acid (PFOS)	56.0	0.96	ng/L	21.3	30.9	118		58-149	7.96	20	
Perfluorononanesulfonic acid (PFNS)	27.1	0.96	ng/L	22.1	ND	123		52-148	12.8	25	
Perfluorodecanesulfonic acid (PFDS)	25.6	0.96	ng/L	22.1	ND	115		51-147	14.2	25	
Perfluorododecanesulfonic acid (PFDoS)	21.8	0.96	ng/L	22.3	ND	97.9		36-145	20.3	30	
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	102	3.8	ng/L	86.1	ND	118		67-146	3.77	25	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	116	3.8	ng/L	87.2	ND	134		61-151	2.45	30	
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	106	3.8	ng/L	88.4	ND	120		63-152	11.7	30	
Perfluorooctanesulfonamide (PFOSA)	29.5	0.96	ng/L	23.0	ND	128		61-148	6.46	20	
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	25.5	0.96	ng/L	23.0	ND	111		63-145	13.5	25	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	27.8	0.96	ng/L	23.0	ND	121		65-139	7.90	25	
N-MeFOSAA (NMeFOSAA)	27.9	0.96	ng/L	23.0	ND	122		58-144	10.1	25	
N-EtFOSAA (NEtFOSAA)	23.7	0.96	ng/L	23.0	ND	103		59-146	7.35	25	
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	263	9.6	ng/L	230	ND	115		71-136	7.44	20	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	271	9.6	ng/L	230	ND	118		69-137	8.20	25	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	112	3.8	ng/L	91.8	1.44	120		63-144	3.65	25	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	115	3.8	ng/L	86.6	ND	133		68-146	0.555	20	
9Cl-PF3ONS (F53B Minor)	103	3.8	ng/L	86.1	ND	119		56-156	7.62	30	
11Cl-PF3OUdS (F53B Major)	93.8	3.8	ng/L	86.6	ND	108		46-156	11.9	35	
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	193	9.6	ng/L	230	ND	84.2		62-129	3.67	20	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1720	48	ng/L	1150	ND	**150**	*	63-134	6.07	20	MS-12
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1320	48	ng/L	1150	ND	115		50-138	8.38	25	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	43.1	1.9	ng/L	40.9	ND	105		56-151	9.55	20	
Perfluoro-3-methoxypropanoic acid (PFMPA)	37.0	1.9	ng/L	45.9	ND	80.7		51-145	11.7	25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	57.8	1.9	ng/L	45.9	ND	126		55-148	7.40	20	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	30.5	1.9	ng/L	45.9	ND	66.5		48-161	11.4	35	
Surrogate: 13C4-PFBA	*25.0*		ng/L	95.6		26.2		10-130			
Surrogate: 13C5-PFPeA	*26.7*		ng/L	47.8		55.9		35-150			
Surrogate: 13C5-PFHxA	*17.7*		ng/L	23.9		74.0		55-150			
Surrogate: 13C4-PFHpA	*19.3*		ng/L	23.9		80.7		55-150			
Surrogate: 13C8-PFOA	*18.8*		ng/L	23.9		78.8		60-140			
Surrogate: 13C9-PFNA	*7.73*		ng/L	12.0		64.6		55-140			

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Sample Extraction Data

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
23J3846-01 [MEC-MW-11S-WG-20231026]	B356733	50.0	10/31/23
23J3846-02 [MEC-MW-11D-WG-20231026]	B356733	50.0	10/31/23
23J3846-03 [MEC-MW-06-WG-20231027]	B356733	50.0	10/31/23
23J3846-04 [Duplicate1]	B356733	50.0	10/31/23
23J3846-05 [MEC-MW-08SR-WG-20231027]	B356733	50.0	10/31/23
23J3846-06 [MEC-MW-08DR-WG-20231027]	B356733	50.0	10/31/23
23J3846-07 [MEC-MW-04-WG-20231027]	B356733	50.0	10/31/23

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633** **Leachates were extracted on 10/31/2023 per NO PREP in Batch B356733**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23J3846-01 [MEC-MW-11S-WG-20231026]	B356811	98.9	5.00	11/08/23
23J3846-02 [MEC-MW-11D-WG-20231026]	B356811	535	5.00	11/08/23
23J3846-03 [MEC-MW-06-WG-20231027]	B356811	500	5.00	11/08/23
23J3846-04 [Duplicate1]	B356811	501	5.00	11/08/23
23J3846-05 [MEC-MW-08SR-WG-20231027]	B356811	243	5.00	11/08/23
23J3846-06 [MEC-MW-08DR-WG-20231027]	B356811	244	5.00	11/08/23
23J3846-07 [MEC-MW-04-WG-20231027]	B356811	518	5.00	11/08/23

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Sample Extraction Data

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
23J3979-01 [MEC-MW-10S-WG-20231030]	B356860	50.0	11/01/23
23J3979-02 [MEC-MW-10D-WG-20231030]	B356860	50.0	11/01/23
23J3979-03 [MEC-MW-05R-WG-20231030]	B356860	50.0	11/01/23
23J3979-04 [MEC-MW-09D-WG-20231030]	B356860	50.0	11/01/23
23J3979-05 [MEC-MW-09S-WG-20231030]	B356860	50.0	11/01/23

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633** **Leachates were extracted on 11/1/2023 per NO PREP in Batch B356860**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23J3979-01 [MEC-MW-10S-WG-20231030]	B357285	530	5.00	11/30/23
23J3979-02 [MEC-MW-10D-WG-20231030]	B357285	523	5.00	11/30/23
23J3979-03 [MEC-MW-05R-WG-20231030]	B357285	537	5.00	11/30/23
23J3979-04 [MEC-MW-09D-WG-20231030]	B357285	524	5.00	11/30/23
23J3979-05 [MEC-MW-09S-WG-20231030]	B357285	97.1	5.00	11/30/23

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CASE NARRATIVE SUMMARY

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

REVISED REPORT 01/18/24: For PFAS 1633, report revised to include missing data qualifiers.

Draft Method 1633

Qualifications:

MS-12

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FT
B356811-MS1, B356811-MSD1

PF-22A

Qualifier ion ratio >150% of associated calibration.

Analyte & Samples(s) Qualified:

Perfluoropentanoic acid (PFPeA)
23J3846-03[MEC-MW-06-WG-20231027]

PF-23A

Qualifier ion ratio <50% of associated calibration.

Analyte & Samples(s) Qualified:

Perfluorooctanesulfonic acid (PFOS)
23J3846-05[MEC-MW-08SR-WG-20231027]

Perfluoropentanoic acid (PFPeA)
23J3846-01[MEC-MW-11S-WG-20231026]

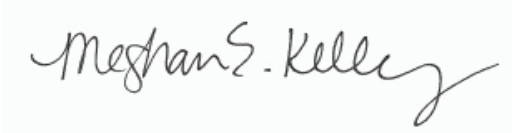
V-20

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

Analyte & Samples(s) Qualified:

Perfluorododecanesulfonic acid (PFDoS)
S096133-CCV2, S096133-CCV3

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



Meghan E. Kelley
Reporting Specialist

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CASE NARRATIVE SUMMARY

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

PFAS 1633 water samples were frozen extending the holding time to 90 days.

REVISED REPORT 01/18/24: For PFAS 1633, report revised to include missing data qualifiers and to correct PFBA calculation for sample -05.

Draft Method 1633

Qualifications:

PF-22A

Qualifier ion ratio >150% of associated calibration.

Analyte & Samples(s) Qualified:

Hexafluoropropylene oxide dimer acid (HFPO-DA)
23J3979-04[MEC-MW-09D-WG-20231030]

Perfluorooctanesulfonamide (PFOSA)
23J3979-04[MEC-MW-09D-WG-20231030]

Perfluoropentanoic acid (PFPeA)
23J3979-02[MEC-MW-10D-WG-20231030], 23J3979-03[MEC-MW-05R-WG-20231030], 23J3979-04[MEC-MW-09D-WG-20231030]

PF-23A

Qualifier ion ratio <50% of associated calibration.

Analyte & Samples(s) Qualified:

Perfluorooctanesulfonamide (PFOSA)
23J3979-01[MEC-MW-10S-WG-20231030]

Perfluorooctanesulfonic acid (PFOS)
23J3979-04[MEC-MW-09D-WG-20231030]

Perfluoropentanoic acid (PFPeA)
23J3979-01[MEC-MW-10S-WG-20231030], 23J3979-05[MEC-MW-09S-WG-20231030]

V-20

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

Analyte & Samples(s) Qualified:

1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS
S097239-CCV2, S097239-CCV3

1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS
S097239-CCV3

N-EtFOSAA (NEtFOSAA)
S097239-CCV2, S097239-CCV3

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

Meghan E. Kelley
Reporting Specialist

Data Usability Summary Report

Site: Metal Etching Company
Laboratory: Contest/Pace Analytical New England – East Longmeadow, MA
SDG No.: 22C0276 (Revised 7/21/22)
Parameter: Volatile Organic Compounds (VOCs)
Data Reviewer: Kristen Morin/TRC
Peer reviewer: Elizabeth Denly/TRC
Date: July 25, 2022

Samples Reviewed and Evaluation Summary

3 Air Samples: MEC-Office-AI-1-20220301, MEC-Office-AO-1-20220301, MEC-DUP-1-20220301*

*Field duplicate of MEC-Office-AI-1-20220301

The above-listed air samples were collected on March 1, 2022 and were analyzed for VOCs by EPA method TO-15. The data validation was performed in accordance with the USEPA Region 2 Standard Operating Procedure (SOP) HW-31 (Revision 6) *Data Validation for the Analysis of VOCs in Air Contained in Canisters by Method TO-15* (September 2016).

The data were evaluated based on the following parameters:

	•	Overall Evaluation of Data and Potential Usability Issues
	•	Data Completeness
	•	Holding Times and Sample Integrity
*	•	Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
	•	Initial and Continuing Calibrations
*	•	Blanks
*	•	Internal Standards
	•	Laboratory Control Sample (LCS) Results
NA	•	Laboratory Duplicate Results
	•	Field Duplicate Results
	•	Sample Results and Reported Quantitation Limits (QLs)
*	•	Target Compound Identification

*	-	All criteria were met.
NA	-	A laboratory duplicate was not performed with this sample set.

Overall Evaluation of Data and Potential Usability Issues

All results are usable for project objectives. Qualifications applied to the data as a result of sampling error are discussed below.

- The positive results for isopropanol in samples MEC-Office-AI-1-20220301 and MEC-DUP-1-20220301 were qualified as estimated (J) due to field duplicate variability. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Qualifications applied to the data as a result of analytical error are discussed below.

- Potential uncertainty exists for select results that were below the lowest calibration standard and QL. These results were qualified as estimated (J) in the associated samples. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

- The positive and nondetect results for select VOCs in all samples were qualified as estimated (J/UJ) due to continuing calibration nonconformances. These results can be used for project objectives as estimated values and as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The nondetect results for hexachlorobutadiene in all samples were qualified as estimated (UJ) with a potential low bias due to low LCS recovery. These results can be used for project objectives as nondetects with estimated QLs, which may have a minor impact on the data usability.

- The positive results for ethanol in all samples were qualified as estimated (J+) with a potential high bias due to high LCS recovery. These results can be used for project objectives as estimated values, which may have a minor impact on the data usability.

Data Completeness

The data package was complete as received by the laboratory with the following exceptions/notes. No validation actions were required on the basis of these issues.

- The laboratory reported a different compound list that what was specified in the call-out contract. Results for t-butyl alcohol and 2,2,4-trimethylpentane were not reported, although these two compounds were listed in the call-out contract. In addition, several additional compounds were reported that were not listed in the call-out contract.

- The flow controller calibration relative percent difference (RPD) pre and post-sampling information was not provided by the laboratory. The laboratory was contacted during validation and provided a revised report to correct this issue.

Holding Times and Sample Integrity

All holding time, canister vacuum, and flow controller calibration criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

All correlation coefficients and relative response factors (RRFs) were within the acceptance criteria in the initial calibration (IC) associated with the samples in this data set. The following table summarizes the percent relative standard deviation (%RSD) that did not meet the acceptance criteria in the IC associated with the samples in this data set and the validation actions.

IC	Compound	%RSD	Validation Actions
8/20/21 SYSJ	1,2,4-Trichlorobenzene	39.6	Qualification was not required on this basis since 1,2,4-trichlorobenzene was not detected in the associated samples.
Associated samples: All samples in this data set			

Initial calibration verification (ICV) nonconformances were not summarized in this report since the ICV analyses did not immediately precede any sample analyses.

All RRFs were within the acceptance criteria in the continuing calibration (CC) standards associated with the samples in this data set. The following table summarizes the percent differences (%Ds) that did not meet the acceptance criteria in the CC standards, the associated samples, and the validation actions.

CC	Compound	%D	Validation Actions
S069208-CCV1	Ethyl Acetate	-33.2	The positive and nondetect results for the listed VOCs were qualified as estimated (J/UJ) in the associated samples.
	Hexachlorobutadiene	-39.7	
	1,2,4-Trichlorobenzene	-40.8	
	Vinyl Acetate	47.5	
Associated samples: MEC-Office-AI-1-20220301 (undiluted), MEC-Office-AO-1-20220301, MEC-DUP-1-20220301 (undiluted)			
S069241-CCV1	Ethyl Acetate	-39.8	No qualification was required on this basis for the associated samples since the results for the listed VOCs were reported from a different analytical run.
	Hexachlorobutadiene	-41.5	
	Naphthalene	-30.8	
	1,2,4-Trichlorobenzene	-43.9	
	Vinyl Acetate	34.0	
Associated samples: MEC-Office-AI-1-20220301 (2-fold), MEC-DUP-1-20220301 (2-fold)			

Blanks

No target compounds were detected in the canister certification checks or the associated method blanks.

Internal Standards

All criteria were met.

LCS Results

The following table summarizes the LCS percent recoveries (%Rs) that did not meet the laboratory acceptance criteria, the associated samples, and the validation action.

LCS ID	Compound	LCS %R	LCS %R QC Limits	Validation Action
B303248-BS1	2-Hexanone	134	70-130	No qualification was required on this basis since 2-hexanone and vinyl acetate were not detected in the associated samples.
	Vinyl Acetate	143		
	Hexachlorobutadiene	69.7		The nondetect results for hexachlorobutadiene were qualified as estimated (UJ) with a potential low bias in the associated samples.

LCS ID	Compound	LCS %R	LCS %R QC Limits	Validation Action
B303248-BS1	Ethanol	145	70-130	The positive result for ethanol in sample MEC-Office-AO-1-20220301 was qualified as estimated (J+) with a potential high bias. No qualification was required for the remaining associated samples on this basis since the results for ethanol were reported from a different analytical run and were associated with a different LCS.
Associated samples: MEC-Office-AI-1-20220301 (undiluted), MEC-Office-AO-1-20220301, MEC-DUP-1-20220301 (undiluted)				
B303345-BS1	Ethanol	133	70-130	The positive results for ethanol in the associated samples were qualified as estimated (J+) with a potential high bias.
	Ethyl Acetate	66.3		No qualification was required for the associated samples on this basis since the results for ethyl acetate, hexachlorobutadiene, and vinyl acetate were reported from a different analytical run and were associated with a different LCS.
	Hexachlorobutadiene	68.7		
	Vinyl Acetate	135		
Associated samples: MEC-Office-AI-1-20220301 (2-fold), MEC-DUP-1-20220301 (2-fold)				

Laboratory Duplicate Results

A laboratory duplicate was not performed on a sample from this data set.

Field Duplicate Results

Samples MEC-Office-AI-1-20220301 and MEC-DUP-1-20220301 were submitted as the field duplicate pair with this sample set. The following table summarizes the relative percent differences (RPDs) and absolute differences (AbsDs), as applicable, of the detected compounds in the field duplicate pair and the validation actions. The AbsD for isopropanol was outside of the acceptance criteria in the field duplicate pair.

Compound	QLs (µg/m^3)	MEC-Office-AI-1-20220301 (µg/m^3)	MEC-DUP-1-20220301 (µg/m^3)	RPD (%) or AbsD (µg/m^3)	Validation Actions
Acetone	3.3	24	22	RPD = 8.7	None; all criteria were met.
Benzene	0.11	0.71	0.66	RPD = 7.3	
2-Butanone	4.1	2.9 J	2.4 J	AbsD = 0.5	
Carbon Tetrachloride	0.22	0.53	0.54	AbsD = 0.01	
Chloroform	0.17	0.68	0.69	AbsD = 0.01	
Chloromethane	0.14	1.5	1.5	RPD = 0	
Dichlorodifluoromethane	0.17	2.2	2.2	RPD = 0	
Ethanol	7.5	100	94	RPD = 6.2	
Ethyl Acetate	1.3	1.3	0.73 J	AbsD = 0.57	
Ethylbenzene	0.15	0.34	0.32	AbsD = 0.02	
4-Ethyltoluene	0.17	0.11 J	0.17 U	AbsD = 0.06	
Heptane	0.14	0.37	0.32	AbsD = 0.05	
Hexane	4.9	0.87 J	0.84 J	AbsD = 0.03	
Methylene Chloride	1.2	0.67 J	0.86 J	AbsD = 0.19	
4-Methyl-2-Pentanone	0.14	0.47	0.36	AbsD = 0.11	
Naphthalene	0.18	0.13 J	0.18 U	AbsD = 0.05	

Compound	QLs (µg/m^3)	MEC-Office-AI-1-20220301 (µg/m^3)	MEC-DUP-1-20220301 (µg/m^3)	RPD (%) or AbsD (µg/m^3)	Validation Actions
Styrene	0.15	0.21	0.22	AbsD = 0.01	None; all criteria were met.
Toluene	0.13	3.5	3.3	RPD = 5.9	
Trichlorofluoromethane	0.78	1.1	1.1	AbsD = 0	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.1	0.47 J	0.50 J	AbsD = 0.03	
1,2,4-Trimethylbenzene	0.17	0.34	0.29	AbsD = 0.05	
1,3,5-Trimethylbenzene	0.17	0.15 J	0.11 J	AbsD = 0.04	
m,p-Xylene	0.3	1.1	1.1	AbsD = 0	
o-Xylene	0.15	0.52	0.49	AbsD = 0.03	
Isopropanol	3.4	7.8	3.5	AbsD = 4.3	The positive results for isopropanol in samples MEC-Office-AI-1-20220301 and MEC-DUP-1-20220301 were qualified as estimated (J).
Criteria: When both results are ≥ 5x the QL, RPDs must be <30%. When one or both results are < 5x the QL, AbsD must be <QL. NC – Not calculable due to a nondetect result in one of the samples.					

Sample Results and Reported Quantitation Limits

Select results were reported below the lowest calibration standard level and QL. These results were qualified as estimated (J) in the associated samples by the laboratory. Sample calculations were spot-checked; there were no errors noted.

The following table summarizes the dilutions that were required for the VOC analyses; QLs were elevated accordingly.

Sample ID	Dilution	Reason for Dilution
MEC-Office-AI-1-20220301	2-fold	2-fold dilutions were performed due to the concentrations of ethanol which exceeded the calibration range in the undiluted analyses. Results of the undiluted and diluted analyses were combined by the laboratory in order to report all results within calibration range and with the lowest possible QLs.
MEC-DUP-1-20220301	2-fold	

Target Compound Identification

All criteria were met.

QUALIFIED FORM 1s

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ANALYTICAL RESULTS

Project Location: Metal Etching
Date Received: 3/3/2022
Field Sample #: MEC-Office-AI-1-20220301
Sample ID: 22C0276-01
Sample Matrix: Indoor air
Sampled: 3/1/2022 17:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2159
Canister Size: 6 liter
Flow Controller ID: 3558
Sample Type: 8 hr

Work Order: 22C0276
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -9.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	Results	RL	MDL	Flag/Qual	Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	10	1.4	0.84		24	3.3	2.0	0.698	3/15/22 4:42	BRF
Benzene	0.22	0.035	0.026		0.71	0.11	0.084	0.698	3/15/22 4:42	BRF
Benzyl chloride	ND	0.035	0.031		ND	0.18	0.16	0.698	3/15/22 4:42	BRF
Bromodichloromethane	ND	0.035	0.024		ND	0.23	0.16	0.698	3/15/22 4:42	BRF
Bromoform	ND	0.035	0.024		ND	0.36	0.25	0.698	3/15/22 4:42	BRF
Bromomethane	ND	0.035	0.028		ND	0.14	0.11	0.698	3/15/22 4:42	BRF
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/15/22 4:42	BRF
2-Butanone (MEK)	0.99	1.4	0.37	J	2.9	4.1	1.1	0.698	3/15/22 4:42	BRF
Carbon Disulfide	ND	0.35	0.032		ND	1.1	0.10	0.698	3/15/22 4:42	BRF
Carbon Tetrachloride	0.084	0.035	0.028		0.53	0.22	0.17	0.698	3/15/22 4:42	BRF
Chlorobenzene	ND	0.035	0.023		ND	0.16	0.11	0.698	3/15/22 4:42	BRF
Chloroethane	ND	0.035	0.025		ND	0.092	0.067	0.698	3/15/22 4:42	BRF
Chloroform	0.14	0.035	0.033		0.68	0.17	0.16	0.698	3/15/22 4:42	BRF
Chloromethane	0.73	0.070	0.028		1.5	0.14	0.057	0.698	3/15/22 4:42	BRF
Cyclohexane	ND	0.035	0.023		ND	0.12	0.079	0.698	3/15/22 4:42	BRF
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/15/22 4:42	BRF
1,2-Dibromoethane (EDB)	ND	0.035	0.021		ND	0.27	0.16	0.698	3/15/22 4:42	BRF
1,2-Dichlorobenzene	ND	0.035	0.020		ND	0.21	0.12	0.698	3/15/22 4:42	BRF
1,3-Dichlorobenzene	ND	0.035	0.019		ND	0.21	0.12	0.698	3/15/22 4:42	BRF
1,4-Dichlorobenzene	ND	0.035	0.023		ND	0.21	0.14	0.698	3/15/22 4:42	BRF
Dichlorodifluoromethane (Freon 12)	0.44	0.035	0.034		2.2	0.17	0.17	0.698	3/15/22 4:42	BRF
1,1-Dichloroethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/15/22 4:42	BRF
1,2-Dichloroethane	ND	0.035	0.032		ND	0.14	0.13	0.698	3/15/22 4:42	BRF
1,1-Dichloroethylene	ND	0.035	0.027		ND	0.14	0.11	0.698	3/15/22 4:42	BRF
cis-1,2-Dichloroethylene	ND	0.035	0.025		ND	0.14	0.10	0.698	3/15/22 4:42	BRF
trans-1,2-Dichloroethylene	ND	0.035	0.027		ND	0.14	0.11	0.698	3/15/22 4:42	BRF
1,2-Dichloropropane	ND	0.035	0.019		ND	0.16	0.087	0.698	3/15/22 4:42	BRF
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.082	0.698	3/15/22 4:42	BRF
trans-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.081	0.698	3/15/22 4:42	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035	0.034		ND	0.24	0.24	0.698	3/15/22 4:42	BRF
1,4-Dioxane	ND	0.35	0.029		ND	1.3	0.10	0.698	3/15/22 4:42	BRF
Ethanol	53	4.0	1.8	J+ ~~L-05~~	100	7.5	3.3	2	3/15/22 14:40	BRF
Ethyl Acetate	0.36	0.35	0.18	J ~~V-05, V-34~~	1.3	1.3	0.64	0.698	3/15/22 4:42	BRF
Ethylbenzene	0.079	0.035	0.020		0.34	0.15	0.088	0.698	3/15/22 4:42	BRF
4-Ethyltoluene	0.022	0.035	0.021	J	0.11	0.17	0.11	0.698	3/15/22 4:42	BRF
Heptane	0.091	0.035	0.022		0.37	0.14	0.091	0.698	3/15/22 4:42	BRF
Hexachlorobutadiene	ND	0.035	0.029	UJ ~~V-05, L-03~~	ND	0.37	0.31	0.698	3/15/22 4:42	BRF
Hexane	0.25	1.4	0.18	J	0.87	4.9	0.64	0.698	3/15/22 4:42	BRF
2-Hexanone (MBK)	ND	0.070	0.018		ND	0.29	0.072	0.698	3/15/22 4:42	BRF
Isopropanol	3.2	1.4	0.24	J	7.8	3.4	0.59	0.698	3/15/22 4:42	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.027		ND	0.13	0.097	0.698	3/15/22 4:42	BRF
Methylene Chloride	0.19	0.35	0.16	J	0.67	1.2	0.56	0.698	3/15/22 4:42	BRF
4-Methyl-2-pentanone (MIBK)	0.12	0.035	0.018		0.47	0.14	0.073	0.698	3/15/22 4:42	BRF
Naphthalene	0.025	0.035	0.022	J	0.13	0.18	0.12	0.698	3/15/22 4:42	BRF
Propene	ND	1.4	0.31		ND	2.4	0.53	0.698	3/15/22 4:42	BRF
Styrene	0.050	0.035	0.018		0.21	0.15	0.078	0.698	3/15/22 4:42	BRF
1,1,2,2-Tetrachloroethane	ND	0.035	0.019		ND	0.24	0.13	0.698	3/15/22 4:42	BRF

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ANALYTICAL RESULTS

Project Location: Metal Etching
Date Received: 3/3/2022
Field Sample #: MEC-Office-AI-1-20220301
Sample ID: 22C0276-01
Sample Matrix: Indoor air
Sampled: 3/1/2022 17:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2159
Canister Size: 6 liter
Flow Controller ID: 3558
Sample Type: 8 hr

Work Order: 22C0276
Initial Vacuum(in Hg): -30
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -9.1
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
Tetrachloroethylene	ND	0.035	0.027		ND	0.24	0.18	0.698	3/15/22 4:42	BRF
Tetrahydrofuran	ND	0.35	0.057		ND	1.0	0.17	0.698	3/15/22 4:42	BRF
Toluene	0.92	0.035	0.020		3.5	0.13	0.075	0.698	3/15/22 4:42	BRF
1,2,4-Trichlorobenzene	ND	0.070	0.024	UJ ~~V-04, V-05~~	ND	0.52	0.18	0.698	3/15/22 4:42	BRF
1,1,1-Trichloroethane	ND	0.035	0.027		ND	0.19	0.15	0.698	3/15/22 4:42	BRF
1,1,2-Trichloroethane	ND	0.035	0.025		ND	0.19	0.13	0.698	3/15/22 4:42	BRF
Trichloroethylene	ND	0.035	0.024		ND	0.19	0.13	0.698	3/15/22 4:42	BRF
Trichlorofluoromethane (Freon 11)	0.20	0.14	0.041		1.1	0.78	0.23	0.698	3/15/22 4:42	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.061	0.14	0.039	J	0.47	1.1	0.30	0.698	3/15/22 4:42	BRF
1,2,4-Trimethylbenzene	0.070	0.035	0.015		0.34	0.17	0.076	0.698	3/15/22 4:42	BRF
1,3,5-Trimethylbenzene	0.030	0.035	0.018	J	0.15	0.17	0.091	0.698	3/15/22 4:42	BRF
Vinyl Acetate	ND	0.70	0.19	UJ	ND	2.5	0.66	0.698	3/15/22 4:42	BRF
Vinyl Chloride	ND	0.035	0.031		ND	0.089	0.080	0.698	3/15/22 4:42	BRF
m&p-Xylene	0.26	0.070	0.039		1.1	0.30	0.17	0.698	3/15/22 4:42	BRF
o-Xylene	0.12	0.035	0.018		0.52	0.15	0.078	0.698	3/15/22 4:42	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	90.5	70-130	3/15/22 14:40
4-Bromofluorobenzene (1)	94.2	70-130	3/15/22 4:42

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ANALYTICAL RESULTS

Project Location: Metal Etching
Date Received: 3/3/2022
Field Sample #: MEC-Office-AO-1-20220301
Sample ID: 22C0276-02
Sample Matrix: Ambient Air
Sampled: 3/1/2022 17:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 1980
Canister Size: 6 liter
Flow Controller ID: 3207
Sample Type: 8 hr

Work Order: 22C0276
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	Results	RL	MDL	Flag/Qual	Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	5.1	1.4	0.84		12	3.3	2.0	0.698	3/15/22 5:13	BRF
Benzene	0.18	0.035	0.026		0.58	0.11	0.084	0.698	3/15/22 5:13	BRF
Benzyl chloride	ND	0.035	0.031		ND	0.18	0.16	0.698	3/15/22 5:13	BRF
Bromodichloromethane	ND	0.035	0.024		ND	0.23	0.16	0.698	3/15/22 5:13	BRF
Bromoform	ND	0.035	0.024		ND	0.36	0.25	0.698	3/15/22 5:13	BRF
Bromomethane	ND	0.035	0.028		ND	0.14	0.11	0.698	3/15/22 5:13	BRF
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/15/22 5:13	BRF
2-Butanone (MEK)	0.53	1.4	0.37	J	1.5	4.1	1.1	0.698	3/15/22 5:13	BRF
Carbon Disulfide	ND	0.35	0.032		ND	1.1	0.10	0.698	3/15/22 5:13	BRF
Carbon Tetrachloride	0.061	0.035	0.028		0.38	0.22	0.17	0.698	3/15/22 5:13	BRF
Chlorobenzene	ND	0.035	0.023		ND	0.16	0.11	0.698	3/15/22 5:13	BRF
Chloroethane	ND	0.035	0.025		ND	0.092	0.067	0.698	3/15/22 5:13	BRF
Chloroform	ND	0.035	0.033		ND	0.17	0.16	0.698	3/15/22 5:13	BRF
Chloromethane	0.56	0.070	0.028		1.1	0.14	0.057	0.698	3/15/22 5:13	BRF
Cyclohexane	ND	0.035	0.023		ND	0.12	0.079	0.698	3/15/22 5:13	BRF
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/15/22 5:13	BRF
1,2-Dibromoethane (EDB)	ND	0.035	0.021		ND	0.27	0.16	0.698	3/15/22 5:13	BRF
1,2-Dichlorobenzene	ND	0.035	0.020		ND	0.21	0.12	0.698	3/15/22 5:13	BRF
1,3-Dichlorobenzene	ND	0.035	0.019		ND	0.21	0.12	0.698	3/15/22 5:13	BRF
1,4-Dichlorobenzene	ND	0.035	0.023		ND	0.21	0.14	0.698	3/15/22 5:13	BRF
Dichlorodifluoromethane (Freon 12)	0.44	0.035	0.034		2.2	0.17	0.17	0.698	3/15/22 5:13	BRF
1,1-Dichloroethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/15/22 5:13	BRF
1,2-Dichloroethane	ND	0.035	0.032		ND	0.14	0.13	0.698	3/15/22 5:13	BRF
1,1-Dichloroethylene	ND	0.035	0.027		ND	0.14	0.11	0.698	3/15/22 5:13	BRF
cis-1,2-Dichloroethylene	ND	0.035	0.025		ND	0.14	0.10	0.698	3/15/22 5:13	BRF
trans-1,2-Dichloroethylene	ND	0.035	0.027		ND	0.14	0.11	0.698	3/15/22 5:13	BRF
1,2-Dichloropropane	ND	0.035	0.019		ND	0.16	0.087	0.698	3/15/22 5:13	BRF
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.082	0.698	3/15/22 5:13	BRF
trans-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.081	0.698	3/15/22 5:13	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035	0.034		ND	0.24	0.24	0.698	3/15/22 5:13	BRF
1,4-Dioxane	ND	0.35	0.029		ND	1.3	0.10	0.698	3/15/22 5:13	BRF
Ethanol	4.6	1.4	0.62	J+ ~~L-05~~ ---	8.6	2.6	1.2	0.698	3/15/22 5:13	BRF
Ethyl Acetate	ND	0.35	0.18	UJ ~~V-05, V-34~~ -	ND	1.3	0.64	0.698	3/15/22 5:13	BRF
Ethylbenzene	0.35	0.035	0.020		1.5	0.15	0.088	0.698	3/15/22 5:13	BRF
4-Ethyltoluene	0.12	0.035	0.021		0.57	0.17	0.11	0.698	3/15/22 5:13	BRF
Heptane	0.062	0.035	0.022		0.25	0.14	0.091	0.698	3/15/22 5:13	BRF
Hexachlorobutadiene	ND	0.035	0.029	UJ ~~L-03, V-05~~ --	ND	0.37	0.31	0.698	3/15/22 5:13	BRF
Hexane	0.30	1.4	0.18	J	1.0	4.9	0.64	0.698	3/15/22 5:13	BRF
2-Hexanone (MBK)	ND	0.070	0.018		ND	0.29	0.072	0.698	3/15/22 5:13	BRF
Isopropanol	0.55	1.4	0.24	J	1.4	3.4	0.59	0.698	3/15/22 5:13	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.027		ND	0.13	0.097	0.698	3/15/22 5:13	BRF
Methylene Chloride	0.25	0.35	0.16	J	0.86	1.2	0.56	0.698	3/15/22 5:13	BRF
4-Methyl-2-pentanone (MIBK)	0.56	0.035	0.018		2.3	0.14	0.073	0.698	3/15/22 5:13	BRF
Naphthalene	ND	0.035	0.022		ND	0.18	0.12	0.698	3/15/22 5:13	BRF
Propene	ND	1.4	0.31		ND	2.4	0.53	0.698	3/15/22 5:13	BRF
Styrene	ND	0.035	0.018		ND	0.15	0.078	0.698	3/15/22 5:13	BRF
1,1,2,2-Tetrachloroethane	ND	0.035	0.019		ND	0.24	0.13	0.698	3/15/22 5:13	BRF

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ANALYTICAL RESULTS

Project Location: Metal Etching
Date Received: 3/3/2022
Field Sample #: MEC-Office-AO-1-20220301
Sample ID: 22C0276-02
Sample Matrix: Ambient Air
Sampled: 3/1/2022 17:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 1980
Canister Size: 6 liter
Flow Controller ID: 3207
Sample Type: 8 hr

Work Order: 22C0276
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -8
Receipt Vacuum(in Hg): -7.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
Tetrachloroethylene	ND	0.035	0.027		ND	0.24	0.18	0.698	3/15/22 5:13	BRF
Tetrahydrofuran	ND	0.35	0.057		ND	1.0	0.17	0.698	3/15/22 5:13	BRF
Toluene	0.21	0.035	0.020		0.79	0.13	0.075	0.698	3/15/22 5:13	BRF
1,2,4-Trichlorobenzene	ND	0.070	0.024	UJ V-04, V-05	ND	0.52	0.18	0.698	3/15/22 5:13	BRF
1,1,1-Trichloroethane	ND	0.035	0.027		ND	0.19	0.15	0.698	3/15/22 5:13	BRF
1,1,2-Trichloroethane	ND	0.035	0.025		ND	0.19	0.13	0.698	3/15/22 5:13	BRF
Trichloroethylene	ND	0.035	0.024		ND	0.19	0.13	0.698	3/15/22 5:13	BRF
Trichlorofluoromethane (Freon 11)	0.21	0.14	0.041		1.2	0.78	0.23	0.698	3/15/22 5:13	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.074	0.14	0.039	J	0.57	1.1	0.30	0.698	3/15/22 5:13	BRF
1,2,4-Trimethylbenzene	0.22	0.035	0.015		1.1	0.17	0.076	0.698	3/15/22 5:13	BRF
1,3,5-Trimethylbenzene	0.096	0.035	0.018		0.47	0.17	0.091	0.698	3/15/22 5:13	BRF
Vinyl Acetate	ND	0.70	0.19	UJ	ND	2.5	0.66	0.698	3/15/22 5:13	BRF
Vinyl Chloride	ND	0.035	0.031		ND	0.089	0.080	0.698	3/15/22 5:13	BRF
m&p-Xylene	1.5	0.070	0.039		6.4	0.30	0.17	0.698	3/15/22 5:13	BRF
o-Xylene	0.71	0.035	0.018		3.1	0.15	0.078	0.698	3/15/22 5:13	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	92.6	70-130	3/15/22 5:13

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ANALYTICAL RESULTS

Project Location: Metal Etching
Date Received: 3/3/2022
Field Sample #: MEC-DUP-1-20220301
Sample ID: 22C0276-03
Sample Matrix: Air
Sampled: 3/1/2022 17:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2022
Canister Size: 6 liter
Flow Controller ID: 3367
Sample Type: 8 hr

Work Order: 22C0276
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	Results	RL	MDL	Flag/Qual	Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	9.2	1.4	0.84		22	3.3	2.0	0.698	3/15/22 5:45	BRF
Benzene	0.21	0.035	0.026		0.66	0.11	0.084	0.698	3/15/22 5:45	BRF
Benzyl chloride	ND	0.035	0.031		ND	0.18	0.16	0.698	3/15/22 5:45	BRF
Bromodichloromethane	ND	0.035	0.024		ND	0.23	0.16	0.698	3/15/22 5:45	BRF
Bromoform	ND	0.035	0.024		ND	0.36	0.25	0.698	3/15/22 5:45	BRF
Bromomethane	ND	0.035	0.028		ND	0.14	0.11	0.698	3/15/22 5:45	BRF
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/15/22 5:45	BRF
2-Butanone (MEK)	0.83	1.4	0.37	J	2.4	4.1	1.1	0.698	3/15/22 5:45	BRF
Carbon Disulfide	ND	0.35	0.032		ND	1.1	0.10	0.698	3/15/22 5:45	BRF
Carbon Tetrachloride	0.085	0.035	0.028		0.54	0.22	0.17	0.698	3/15/22 5:45	BRF
Chlorobenzene	ND	0.035	0.023		ND	0.16	0.11	0.698	3/15/22 5:45	BRF
Chloroethane	ND	0.035	0.025		ND	0.092	0.067	0.698	3/15/22 5:45	BRF
Chloroform	0.14	0.035	0.033		0.69	0.17	0.16	0.698	3/15/22 5:45	BRF
Chloromethane	0.73	0.070	0.028		1.5	0.14	0.057	0.698	3/15/22 5:45	BRF
Cyclohexane	ND	0.035	0.023		ND	0.12	0.079	0.698	3/15/22 5:45	BRF
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/15/22 5:45	BRF
1,2-Dibromoethane (EDB)	ND	0.035	0.021		ND	0.27	0.16	0.698	3/15/22 5:45	BRF
1,2-Dichlorobenzene	ND	0.035	0.020		ND	0.21	0.12	0.698	3/15/22 5:45	BRF
1,3-Dichlorobenzene	ND	0.035	0.019		ND	0.21	0.12	0.698	3/15/22 5:45	BRF
1,4-Dichlorobenzene	ND	0.035	0.023		ND	0.21	0.14	0.698	3/15/22 5:45	BRF
Dichlorodifluoromethane (Freon 12)	0.44	0.035	0.034		2.2	0.17	0.17	0.698	3/15/22 5:45	BRF
1,1-Dichloroethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/15/22 5:45	BRF
1,2-Dichloroethane	ND	0.035	0.032		ND	0.14	0.13	0.698	3/15/22 5:45	BRF
1,1-Dichloroethylene	ND	0.035	0.027		ND	0.14	0.11	0.698	3/15/22 5:45	BRF
cis-1,2-Dichloroethylene	ND	0.035	0.025		ND	0.14	0.10	0.698	3/15/22 5:45	BRF
trans-1,2-Dichloroethylene	ND	0.035	0.027		ND	0.14	0.11	0.698	3/15/22 5:45	BRF
1,2-Dichloropropane	ND	0.035	0.019		ND	0.16	0.087	0.698	3/15/22 5:45	BRF
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.082	0.698	3/15/22 5:45	BRF
trans-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.081	0.698	3/15/22 5:45	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035	0.034		ND	0.24	0.24	0.698	3/15/22 5:45	BRF
1,4-Dioxane	ND	0.35	0.029		ND	1.3	0.10	0.698	3/15/22 5:45	BRF
Ethanol	50	4.0	1.8	J+ ~~L-05~~	94	7.5	3.3	2	3/15/22 15:06	BRF
Ethyl Acetate	0.20	0.35	0.18	J, ~~V-05, V-34~~	0.73	1.3	0.64	0.698	3/15/22 5:45	BRF
Ethylbenzene	0.073	0.035	0.020		0.32	0.15	0.088	0.698	3/15/22 5:45	BRF
4-Ethyltoluene	ND	0.035	0.021		ND	0.17	0.11	0.698	3/15/22 5:45	BRF
Heptane	0.077	0.035	0.022		0.32	0.14	0.091	0.698	3/15/22 5:45	BRF
Hexachlorobutadiene	ND	0.035	0.029	UJ ~~L-03, V-05~~	ND	0.37	0.31	0.698	3/15/22 5:45	BRF
Hexane	0.24	1.4	0.18	J	0.84	4.9	0.64	0.698	3/15/22 5:45	BRF
2-Hexanone (MBK)	ND	0.070	0.018		ND	0.29	0.072	0.698	3/15/22 5:45	BRF
Isopropanol	1.4	1.4	0.24	J	3.5	3.4	0.59	0.698	3/15/22 5:45	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.027		ND	0.13	0.097	0.698	3/15/22 5:45	BRF
Methylene Chloride	0.25	0.35	0.16	J	0.86	1.2	0.56	0.698	3/15/22 5:45	BRF
4-Methyl-2-pentanone (MIBK)	0.087	0.035	0.018		0.36	0.14	0.073	0.698	3/15/22 5:45	BRF
Naphthalene	ND	0.035	0.022		ND	0.18	0.12	0.698	3/15/22 5:45	BRF
Propene	ND	1.4	0.31		ND	2.4	0.53	0.698	3/15/22 5:45	BRF
Styrene	0.051	0.035	0.018		0.22	0.15	0.078	0.698	3/15/22 5:45	BRF
1,1,2,2-Tetrachloroethane	ND	0.035	0.019		ND	0.24	0.13	0.698	3/15/22 5:45	BRF

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

ANALYTICAL RESULTS

Project Location: Metal Etching
Date Received: 3/3/2022
Field Sample #: MEC-DUP-1-20220301
Sample ID: 22C0276-03
Sample Matrix: Air
Sampled: 3/1/2022 17:00

Sample Description/Location:
Sub Description/Location:
Canister ID: 2022
Canister Size: 6 liter
Flow Controller ID: 3367
Sample Type: 8 hr

Work Order: 22C0276
Initial Vacuum(in Hg): -29.5
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -9
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

	ppbv				ug/m3				Date/Time	
Analyte	**Results**	**RL**	**MDL**	**Flag/Qual**	**Results**	**RL**	**MDL**	**Dilution**	**Analyzed**	**Analyst**
Tetrachloroethylene	ND	0.035	0.027		ND	0.24	0.18	0.698	3/15/22 5:45	BRF
Tetrahydrofuran	ND	0.35	0.057		ND	1.0	0.17	0.698	3/15/22 5:45	BRF
Toluene	0.87	0.035	0.020		3.3	0.13	0.075	0.698	3/15/22 5:45	BRF
1,2,4-Trichlorobenzene	ND	0.070	0.024	UJ ~~V-04, V-05~~ --	ND	0.52	0.18	0.698	3/15/22 5:45	BRF
1,1,1-Trichloroethane	ND	0.035	0.027		ND	0.19	0.15	0.698	3/15/22 5:45	BRF
1,1,2-Trichloroethane	ND	0.035	0.025		ND	0.19	0.13	0.698	3/15/22 5:45	BRF
Trichloroethylene	ND	0.035	0.024		ND	0.19	0.13	0.698	3/15/22 5:45	BRF
Trichlorofluoromethane (Freon 11)	0.20	0.14	0.041		1.1	0.78	0.23	0.698	3/15/22 5:45	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.066	0.14	0.039	J	0.50	1.1	0.30	0.698	3/15/22 5:45	BRF
1,2,4-Trimethylbenzene	0.059	0.035	0.015		0.29	0.17	0.076	0.698	3/15/22 5:45	BRF
1,3,5-Trimethylbenzene	0.022	0.035	0.018	J	0.11	0.17	0.091	0.698	3/15/22 5:45	BRF
Vinyl Acetate	ND	0.70	0.19	UJ	ND	2.5	0.66	0.698	3/15/22 5:45	BRF
Vinyl Chloride	ND	0.035	0.031		ND	0.089	0.080	0.698	3/15/22 5:45	BRF
m&p-Xylene	0.26	0.070	0.039		1.1	0.30	0.17	0.698	3/15/22 5:45	BRF
o-Xylene	0.11	0.035	0.018		0.49	0.15	0.078	0.698	3/15/22 5:45	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	90.5	70-130	3/15/22 15:06
4-Bromofluorobenzene (1)	93.2	70-130	3/15/22 5:45

QC NONCONFORMANCE DOCUMENTATION

6 - FORM VI
INITIAL CALIBRATION DATA SHEET (Continued)

EPA TO-15

Laboratory:	Con-Test, a Pace Analytical Laboratory	Work Order:	22C0276
Client:	NYDEC_TRC Engineers, Inc. - New York, NY	Project:	Metal Etching - CO SMPB0001
Calibration:	2100342	Instrument:	SYSJ
		Calibration Date:	8/20/2021 12:00:13AM

COMPOUND	Mean RF	RF RSD	Linear r^2	Quad COD	LIMIT	Q
1,4-Dioxane	0.1348394	11.4			30	
Ethanol	0.1363511	9.4			30	
Ethyl Acetate	0.2996362	21.8			30	
Ethylbenzene	1.068394	3.9			30	
4-Ethyltoluene	1.191921	8.0			30	
Heptane	0.1598388	9.8			30	
Hexachlorobutadiene	1.05506	18.6			30	
Hexane	0.7820405	15.6	1.000		0.99	
2-Hexanone (MBK)	0.3105363	23.7			30	
Isopropanol	1.087458	13.4			30	
Methyl tert-Butyl Ether (MTBE)	2.400388	7.7			30	
Methylene Chloride	0.6720844	7.5			30	
Methyl methacrylate	0.1927052	9.3			30	
4-Methyl-2-pentanone (MIBK)	0.141787	15.3			30	
Naphthalene	1.049522	27.0			30	
Propene	0.4575591	8.5			30	
Styrene	0.6387272	7.1			30	
1,1,2,2-Tetrachloroethane	0.5691929	4.2			30	
Tetrachloroethylene	0.5934671	8.4			30	
Tetrahydrofuran	0.811293	15.8			30	
Toluene	0.8381161	7.3			30	
1,2,4-Trichlorobenzene	0.5285083	39.6			30	*
1,1,1-Trichloroethane	0.4533588	4.6			30	
1,1,2-Trichloroethane	0.2953724	8.8			30	
Trichloroethylene	0.2950588	9.8			30	
Trichlorofluoromethane (Freon 11)	2.216429	5.4			30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 1	1.637043	6.5			30	
1,2,4-Trimethylbenzene	1.051818	5.9			30	
1,3,5-Trimethylbenzene	1.056033	5.6			30	
Vinyl Acetate	1.072956	15.1			30	
Vinyl Chloride	0.6636142	8.1			30	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S069208-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	4.26	1.013483	0.863272		-14.8	30
Benzene	A	5.00	5.89	0.5773346	0.6803638		17.8	30
Benzyl chloride	A	5.00	5.72	0.5662092	0.6471783		14.3	30
Bromodichloromethane	A	5.00	4.98	0.4493554	0.4474372		-0.4	30
Bromoform	A	5.00	4.73	0.6972692	0.6590346		-5.5	30
Bromomethane	A	5.00	4.67	0.795872	0.7437273		-6.6	30
1,3-Butadiene	A	5.00	4.99	0.4907101	0.4895171		-0.2	30
2-Butanone (MEK)	A	5.00	4.29	1.40087	1.200917		-14.3	30
Carbon Disulfide	A	5.00	4.13	1.998984	1.652663		-17.3	30
Carbon Tetrachloride	A	5.00	4.65	0.5188025	0.482099		-7.1	30
Chlorobenzene	A	5.00	5.08	0.7193	0.7308084		1.6	30
Chloroethane	A	5.00	5.03	0.3795632	0.3816821		0.6	30
Chloroform	A	5.00	4.47	1.888134	1.68887		-10.6	30
Chloromethane	A	5.00	4.78	0.5417118	0.5175584		-4.5	30
Cyclohexane	A	5.00	5.19	0.265344	0.2753528		3.8	30
Dibromochloromethane	A	5.00	4.90	0.6098379	0.5977998		-2.0	30
1,2-Dibromoethane (EDB)	A	5.00	5.08	0.4553549	0.463077		1.7	30
1,2-Dichlorobenzene	A	5.00	4.58	0.757862	0.6933937		-8.5	30
1,3-Dichlorobenzene	A	5.00	4.84	0.7367625	0.7126593		-3.3	30
1,4-Dichlorobenzene	A	5.00	4.44	0.7493582	0.665019		-11.3	30
Dichlorodifluoromethane (Freon 12)	A	5.00	4.46	2.185662	1.948144		-10.9	30
1,1-Dichloroethane	A	5.00	4.64	1.41636	1.315159		-7.1	30
1,2-Dichloroethane	A	5.00	4.18	1.131436	0.9466094		-16.3	30
1,1-Dichloroethylene	A	5.00	4.48	1.038306	0.9293852		-10.5	30
cis-1,2-Dichloroethylene	A	5.00	4.71	1.058854	0.9982822		-5.7	30
trans-1,2-Dichloroethylene	A	5.00	4.63	1.144971	1.05957		-7.5	30
1,2-Dichloropropane	A	5.00	5.27	0.2035658	0.2147158		5.5	30
cis-1,3-Dichloropropene	A	5.00	5.65	0.3153762	0.3563921		13.0	30
trans-1,3-Dichloropropene	A	5.00	5.58	0.2855395	0.3189558		11.7	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 1	A	5.00	4.76	2.0897	1.987594		-4.9	30
1,4-Dioxane	A	5.00	5.36	0.1348394	0.1445891		7.2	30
Ethanol	A	5.00	6.42	0.1363511	0.1750529		28.4	30
Ethyl Acetate	A	5.00	3.34	0.2996362	0.2000188		-33.2	30 *
Ethylbenzene	A	5.00	5.31	1.068394	1.133966		6.1	30
4-Ethyltoluene	A	5.00	5.36	1.191921	1.277142		7.1	30
Heptane	A	5.00	5.47	0.1598388	0.1749065		9.4	30
Hexachlorobutadiene	A	5.00	3.02	1.05506	0.6362425		-39.7	30 *
Hexane	L	5.00	4.84	0.7820405	0.6951919		-3.1	30

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CONTINUING CALIBRATION CHECK

EPA TO-15

S069208-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	6.47	0.3105363	0.4019521		29.4	30
Isopropanol	A	5.00	4.71	1.087458	1.025113		-5.7	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	4.58	2.400388	2.19912		-8.4	30
Methylene Chloride	A	5.00	4.28	0.6720844	0.5747193		-14.5	30
4-Methyl-2-pentanone (MIBK)	A	5.00	6.43	0.141787	0.1823925		28.6	30
Naphthalene	A	5.00	3.62	1.049522	0.7604049		-27.5	30
Propene	A	5.00	5.13	0.4575591	0.4691997		2.5	30
Styrene	A	5.00	5.48	0.6387272	0.700081		9.6	30
1,1,2,2-Tetrachloroethane	A	5.00	5.25	0.5691929	0.597642		5.0	30
Tetrachloroethylene	A	5.00	4.50	0.5934671	0.5345328		-9.9	30
Tetrahydrofuran	A	5.00	4.48	0.811293	0.7267859		-10.4	30
Toluene	A	5.00	5.26	0.8381161	0.8816695		5.2	30
1,2,4-Trichlorobenzene	A	5.00	2.96	0.5285083	0.3130957		-40.8	30 *
1,1,1-Trichloroethane	A	5.00	4.75	0.4533588	0.4310596		-4.9	30
1,1,2-Trichloroethane	A	5.00	5.11	0.2953724	0.3016267		2.1	30
Trichloroethylene	A	5.00	4.97	0.2950588	0.2935463		-0.5	30
Trichlorofluoromethane (Freon 11)	A	5.00	4.21	2.216429	1.867387		-15.7	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113	A	5.00	4.15	1.637043	1.359797		-16.9	30
1,2,4-Trimethylbenzene	A	5.00	5.00	1.051818	1.051034		-0.07	30
1,3,5-Trimethylbenzene	A	5.00	5.06	1.056033	1.068004		1.1	30
Vinyl Acetate	A	5.00	7.38	1.072956	1.583094		47.5	30 *
Vinyl Chloride	A	5.00	5.18	0.6636142	0.6879451		3.7	30
m&p-Xylene	A	10.0	10.6	0.8662275	0.9206621		6.3	30
o-Xylene	A	5.00	5.17	0.8477905	0.8760773		3.3	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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

CONTINUING CALIBRATION CHECK

EPA TO-15

S069241-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT		
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
Acetone	A	5.00	4.16	1.013483	0.843974		-16.7	30	
Benzene	A	5.00	5.59	0.5773346	0.6455909		11.8	30	
Benzyl chloride	A	5.00	4.80	0.5662092	0.5440831		-3.9	30	
Bromodichloromethane	A	5.00	4.76	0.4493554	0.4281745		-4.7	30	
Bromoform	A	5.00	4.56	0.6972692	0.6356934		-8.8	30	
Bromomethane	A	5.00	4.71	0.795872	0.7502104		-5.7	30	
1,3-Butadiene	A	5.00	4.98	0.4907101	0.4889682		-0.4	30	
2-Butanone (MEK)	A	5.00	4.44	1.40087	1.24485		-11.1	30	
Carbon Disulfide	A	5.00	4.46	1.998984	1.785002		-10.7	30	
Carbon Tetrachloride	A	5.00	4.46	0.5188025	0.4623801		-10.9	30	
Chlorobenzene	A	5.00	4.91	0.7193	0.7059533		-1.9	30	
Chloroethane	A	5.00	4.91	0.3795632	0.3726736		-1.8	30	
Chloroform	A	5.00	4.45	1.888134	1.679437		-11.1	30	
Chloromethane	A	5.00	4.78	0.5417118	0.5180717		-4.4	30	
Cyclohexane	A	5.00	5.04	0.265344	0.2677011		0.9	30	
Dibromochloromethane	A	5.00	4.73	0.6098379	0.5767966		-5.4	30	
1,2-Dibromoethane (EDB)	A	5.00	4.99	0.4553549	0.4548412		-0.1	30	
1,2-Dichlorobenzene	A	5.00	4.45	0.757862	0.6747617		-11.0	30	
1,3-Dichlorobenzene	A	5.00	4.73	0.7367625	0.6973322		-5.4	30	
1,4-Dichlorobenzene	A	5.00	4.43	0.7493582	0.6637254		-11.4	30	
Dichlorodifluoromethane (Freon 12)	A	5.00	4.50	2.185662	1.965421		-10.1	30	
1,1-Dichloroethane	A	5.00	4.59	1.41636	1.300319		-8.2	30	
1,2-Dichloroethane	A	5.00	4.13	1.131436	0.9349828		-17.4	30	
1,1-Dichloroethylene	A	5.00	4.70	1.038306	0.9752838		-6.1	30	
cis-1,2-Dichloroethylene	A	5.00	4.60	1.058854	0.974476		-8.0	30	
trans-1,2-Dichloroethylene	A	5.00	4.58	1.144971	1.049245		-8.4	30	
1,2-Dichloropropane	A	5.00	5.05	0.2035658	0.2056051		1.0	30	
cis-1,3-Dichloropropene	A	5.00	5.34	0.3153762	0.3367648		6.8	30	
trans-1,3-Dichloropropene	A	5.00	5.24	0.2855395	0.2990262		4.7	30	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 1	A	5.00	4.80	2.0897	2.007184		-3.9	30	
1,4-Dioxane	A	5.00	5.02	0.1348394	0.1352367		0.3	30	
Ethanol	A	5.00	6.00	0.1363511	0.1635421		19.9	30	
Ethyl Acetate	A	5.00	3.01	0.2996362	0.1805212		-39.8	30	*
Ethylbenzene	A	5.00	5.05	1.068394	1.078538		0.9	30	
4-Ethyltoluene	A	5.00	5.14	1.191921	1.22484		2.8	30	
Heptane	A	5.00	5.19	0.1598388	0.1658712		3.8	30	
Hexachlorobutadiene	A	5.00	2.92	1.05506	0.6169714		-41.5	30	*
Hexane	L	5.00	4.52	0.7820405	0.6503592		-9.5	30	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S069241-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	5.45	0.3105363	0.3382519		8.9	30
Isopropanol	A	5.00	4.70	1.087458	1.023177		-5.9	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	4.48	2.400388	2.148204		-10.5	30
Methylene Chloride	A	5.00	4.46	0.6720844	0.5994559		-10.8	30
4-Methyl-2-pentanone (MIBK)	A	5.00	5.93	0.141787	0.1682619		18.7	30
Naphthalene	A	5.00	3.46	1.049522	0.7257707		-30.8	30 *
Propene	A	5.00	4.72	0.4575591	0.4316796		-5.7	30
Styrene	A	5.00	5.18	0.6387272	0.6623256		3.7	30
1,1,2,2-Tetrachloroethane	A	5.00	5.08	0.5691929	0.5787719		1.7	30
Tetrachloroethylene	A	5.00	4.45	0.5934671	0.5277029		-11.1	30
Tetrahydrofuran	A	5.00	4.29	0.811293	0.6957956		-14.2	30
Toluene	A	5.00	5.04	0.8381161	0.8450086		0.8	30
1,2,4-Trichlorobenzene	A	5.00	2.81	0.5285083	0.2965661		-43.9	30 *
1,1,1-Trichloroethane	A	5.00	4.45	0.4533588	0.4037849		-10.9	30
1,1,2-Trichloroethane	A	5.00	4.91	0.2953724	0.2898315		-1.9	30
Trichloroethylene	A	5.00	4.77	0.2950588	0.2816704		-4.5	30
Trichlorofluoromethane (Freon 11)	A	5.00	4.38	2.216429	1.940747		-12.4	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113	A	5.00	4.54	1.637043	1.486826		-9.2	30
1,2,4-Trimethylbenzene	A	5.00	4.72	1.051818	0.9922852		-5.7	30
1,3,5-Trimethylbenzene	A	5.00	4.82	1.056033	1.01786		-3.6	30
Vinyl Acetate	A	5.00	6.70	1.072956	1.437444		34.0	30 *
Vinyl Chloride	A	5.00	5.20	0.6636142	0.6898695		4.0	30
m&p-Xylene	A	10.0	10.2	0.8662275	0.8876587		2.5	30
o-Xylene	A	5.00	4.96	0.8477905	0.8401915		-0.9	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC		%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B303248 - TO-15 Prep												
LCS (B303248-BS1)					Prepared & Analyzed: 03/14/22							
trans-1,2-Dichloroethylene	4.82				5.00		96.5		70-130			
1,2-Dichloropropane	5.40				5.00		108		70-130			
cis-1,3-Dichloropropene	5.80				5.00		116		70-130			
trans-1,3-Dichloropropene	5.86				5.00		117		70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.66				5.00		93.1		70-130			
1,4-Dioxane	5.82				5.00		116		70-130			
Ethanol	7.23				5.00		**145**	*	70-130			L-05
Ethyl Acetate	3.51				5.00		70.2		70-130			V-05, V-34
Ethylbenzene	5.56				5.00		111		70-130			
4-Ethyltoluene	5.75				5.00		115		70-130			
Heptane	5.61				5.00		112		70-130			
Hexachlorobutadiene	3.48				5.00		**69.7**	*	70-130			L-03, V-05
Hexane	5.06				5.00		101		70-130			
2-Hexanone (MBK)	6.71				5.00		**134**	*	70-130			L-05
Isopropanol	4.25				5.00		85.0		70-130			
Methyl tert-Butyl Ether (MTBE)	4.78				5.00		95.6		70-130			
Methylene Chloride	4.53				5.00		90.6		70-130			
4-Methyl-2-pentanone (MIBK)	6.48				5.00		130		70-130			
Naphthalene	4.88				5.00		97.5		70-130			
Propene	5.22				5.00		104		70-130			
Styrene	5.66				5.00		113		70-130			
1,1,2,2-Tetrachloroethane	5.62				5.00		112		70-130			
Tetrachloroethylene	4.67				5.00		93.4		70-130			
Tetrahydrofuran	4.65				5.00		93.1		70-130			
Toluene	5.47				5.00		109		70-130			
1,2,4-Trichlorobenzene	3.72				5.00		74.3		70-130			V-04, V-05
1,1,1-Trichloroethane	4.68				5.00		93.7		70-130			
1,1,2-Trichloroethane	5.25				5.00		105		70-130			
Trichloroethylene	5.03				5.00		101		70-130			
Trichlorofluoromethane (Freon 11)	4.48				5.00		89.6		70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.38				5.00		87.6		70-130			
1,2,4-Trimethylbenzene	5.31				5.00		106		70-130			
1,3,5-Trimethylbenzene	5.43				5.00		109		70-130			
Vinyl Acetate	7.16				5.00		**143**	*	70-130			L-01, V-20,
Vinyl Chloride	5.27				5.00		105		70-130			
m&p-Xylene	11.1				10.0		111		70-130			
o-Xylene	5.44				5.00		109		70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.63*				*8.00*		*95.3*		*70-130*			

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QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	ppbv RL	ug/m3 Results	ug/m3 RL	Spike Level ppbv	Source Result	%REC		%REC Limits	RPD	RPD Limit	Flag/Qual
Batch B303345 - TO-15 Prep												
LCS (B303345-BS1)					Prepared & Analyzed: 03/15/22							
trans-1,2-Dichloroethylene	4.72				5.00		94.4		70-130			
1,2-Dichloropropane	5.26				5.00		105		70-130			
cis-1,3-Dichloropropene	5.51				5.00		110		70-130			
trans-1,3-Dichloropropene	5.68				5.00		114		70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.67				5.00		93.5		70-130			
1,4-Dioxane	5.64				5.00		113		70-130			
Ethanol	6.63				5.00		**133**	*	70-130			L-05
Ethyl Acetate	3.31				5.00		**66.3**	*	70-130			L-03, V-05,
Ethylbenzene	5.34				5.00		107		70-130			
4-Ethyltoluene	5.58				5.00		112		70-130			
Heptane	5.51				5.00		110		70-130			
Hexachlorobutadiene	3.43				5.00		**68.7**	*	70-130			L-03, V-05
Hexane	4.76				5.00		95.2		70-130			
2-Hexanone (MBK)	6.25				5.00		125		70-130			
Isopropanol	4.14				5.00		82.7		70-130			
Methyl tert-Butyl Ether (MTBE)	4.59				5.00		91.7		70-130			
Methylene Chloride	4.64				5.00		92.7		70-130			
4-Methyl-2-pentanone (MIBK)	6.21				5.00		124		70-130			
Naphthalene	4.82				5.00		96.3		70-130			V-05
Propene	4.81				5.00		96.2		70-130			
Styrene	5.49				5.00		110		70-130			
1,1,2,2-Tetrachloroethane	5.59				5.00		112		70-130			
Tetrachloroethylene	4.66				5.00		93.1		70-130			
Tetrahydrofuran	4.51				5.00		90.3		70-130			
Toluene	5.35				5.00		107		70-130			
1,2,4-Trichlorobenzene	3.73				5.00		74.6		70-130			V-04, V-05
1,1,1-Trichloroethane	4.54				5.00		90.8		70-130			
1,1,2-Trichloroethane	5.18				5.00		104		70-130			
Trichloroethylene	4.99				5.00		99.8		70-130			
Trichlorofluoromethane (Freon 11)	4.63				5.00		92.6		70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.68				5.00		93.7		70-130			
1,2,4-Trimethylbenzene	5.13				5.00		103		70-130			
1,3,5-Trimethylbenzene	5.19				5.00		104		70-130			
Vinyl Acetate	6.73				5.00		**135**	*	70-130			L-01, V-36
Vinyl Chloride	5.39				5.00		108		70-130			
m&p-Xylene	10.7				10.0		107		70-130			
o-Xylene	5.24				5.00		105		70-130			
Surrogate: 4-Bromofluorobenzene (1)	*7.63*				*8.00*		*95.3*		*70-130*			

Appendix F

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Jordan Bochner Date/Time Prepared 3/01/22 - 0900

Preparer's Affiliation TRC Engineers Inc. Phone No. (516)-523-3289

Purpose of Investigation Indoor Air Sampling - OFFICE

1. OCCUPANT:

Interviewed: (Y) / N

Last Name: _____ First Name: Monica - Daughter of property owner (Dante) and employee of Marina.

Address: _____

County: _____

Home Phone: _____ Office Phone: (516)-567-2747

Number of Occupants/persons at this location ~3-4 Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: (Y) / N

Last Name: _____ First Name: Dante

Address: _____

County: _____

Home Phone: _____ Office Phone: (576)-225-6901

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	(Commercial) / Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response) N/A

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Boat Dealer/Ship Yard

Does it include residences (i.e., multi-use)? Y / (N) If yes, how many? _____

Other characteristics:

Number of floors 1 Building age_____

Is the building insulated? (Y) / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

N/A

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	(wood frame)	concrete	stone	brick
b. Basement type: N/A	full	crawlspace	slab	other _____
c. Basement floor: N/A	concrete	dirt	stone	other _____
d. Basement floor: N/A	uncovered	covered	covered with _____	
e. Concrete floor: Covered by carpet	unsealed	sealed	sealed with _____	
f. Foundation walls: N/A ; slab	poured	block	stone	other _____
g. Foundation walls: N/A ; slab	unsealed	sealed	sealed with _____	
h. The basement is: N/A	wet	damp	dry	moldy
i. The basement is: N/A	finished	unfinished	partially finished	
j. Sump present?	Y / (N)			
k. Water in sump?	Y / N / (not applicable)			

Basement/Lowest level depth below grade: _____(feet) N/A

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

None

_____

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

(Natural Gas)	Fuel Oil	Kerosene	
Electric	Propane	Solar	
Wood	Coal		

Domestic hot water tank fueled by: _____

Boiler/furnace located in: Basement Outdoors Main Floor Other_____

Air conditioning: (Central Air) Window units Open Windows None

Are there air distribution ducts present? (Y) / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Ductwork looks to be in good condition. NO obvious areas for air to escape.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never N/A

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	N/A
1st Floor	Office Use
2nd Floor	N/A
3rd Floor	N/A
4th Floor	N/A

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify_____

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type?_____

g. Is there smoking in the building? Y / (N) How frequently?_____

h. Have cleaning products been used recently? Y / (N) When & Type?_____

i. Have cosmetic products been used recently? Y / (N) When & Type?_____

j. Has painting

k. Is there

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / (N) If yes, where vented? _____

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / (N) When & Type? _____

Are there odors in the building? Y / (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N) Date of Installation: _____
Is the system active or passive? Active/Passive N/A

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

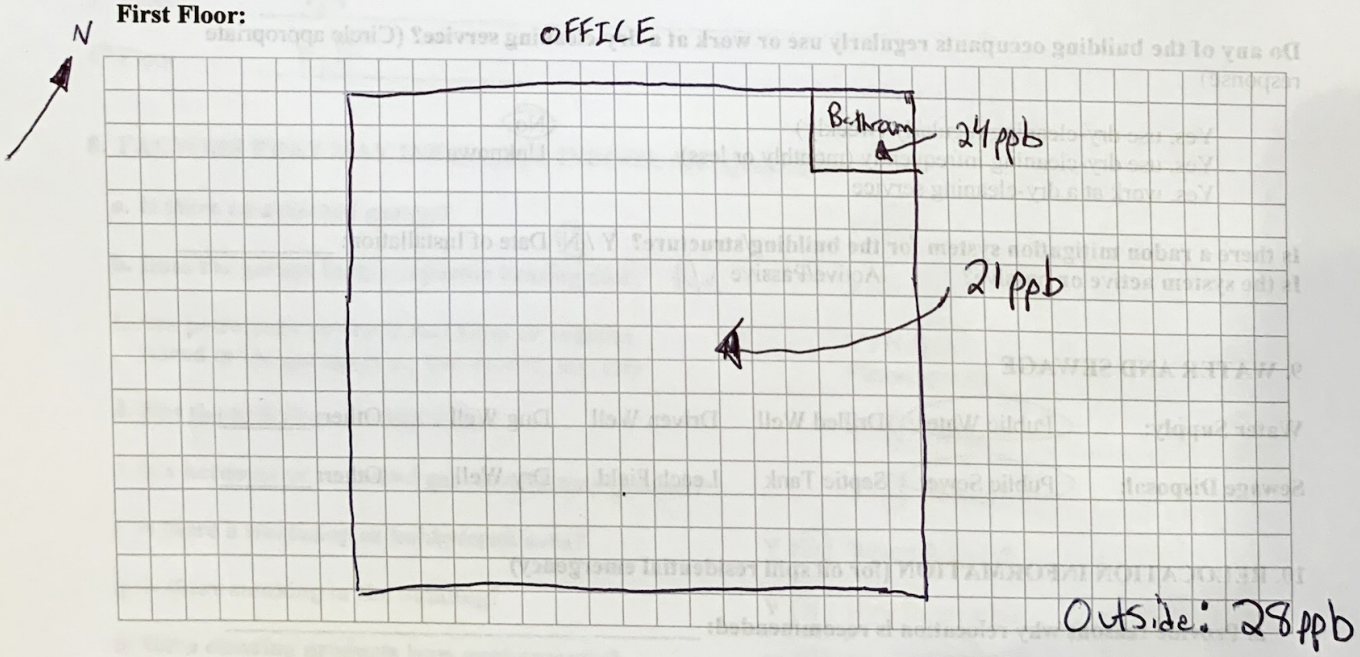
d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement: N/A

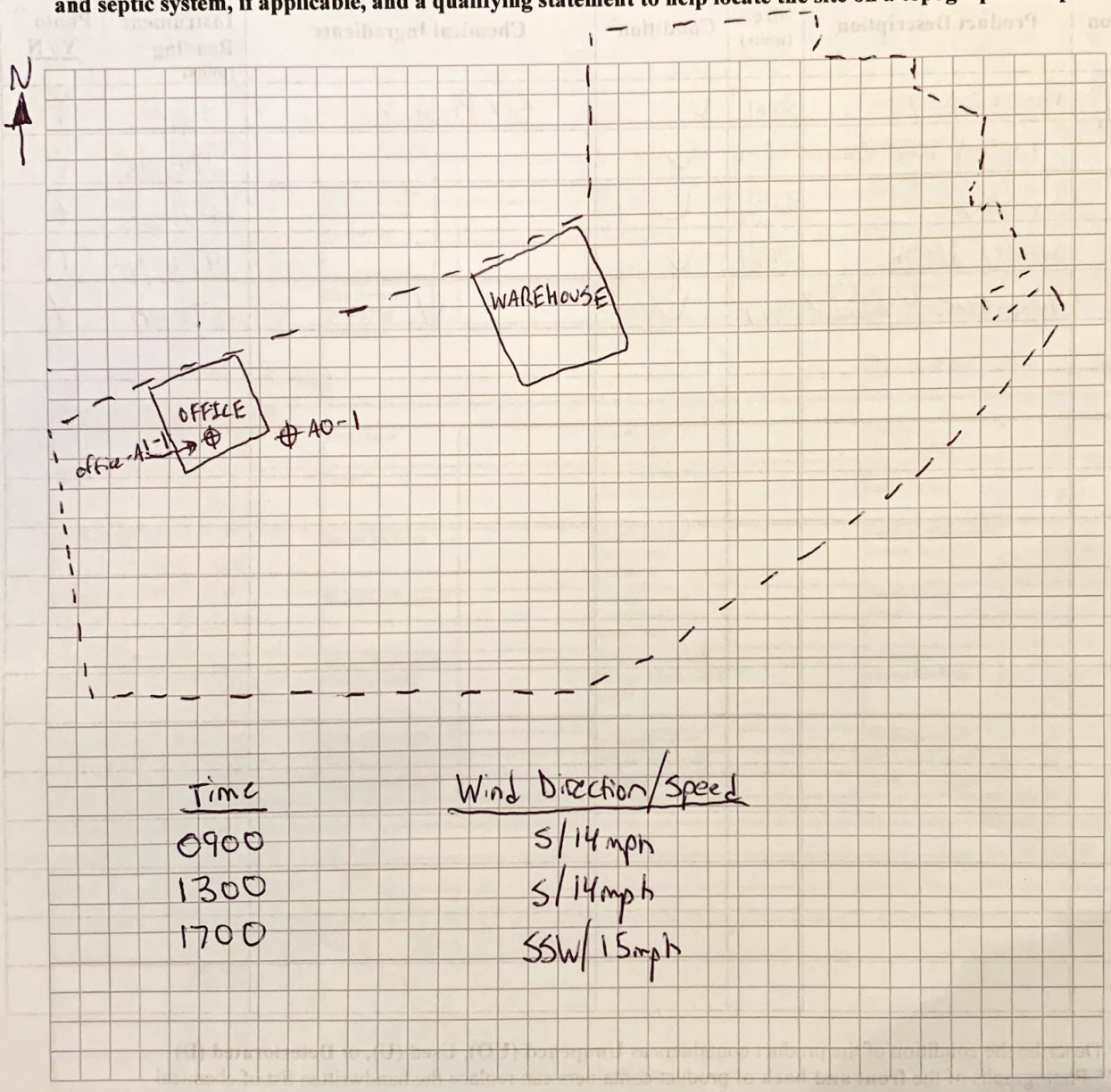
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Time	Wind Direction/Speed
0900	S/14 mph
1300	S/14 mph
1700	SSW/15 mph

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE 3000

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
Bathroom vanity	Febreze Spray	300mL	U	See Photos	47ppb	Y
↓	Lysol Toilet Cleaner	710mL	U	↓	286ppb	Y
	Windex	32 Fl oz	U		6071ppb	Y
	Windex Fresh	24 Fl oz	U		147.6ppm	Y
↓	Vision Clear Glass Spray Cleaner	19oz	U	↓	3086ppb	Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

FIELD AIR SAMPLING FORM

Consultant: TRC Engineers Inc.
Address: 1430 Broadway 10th Floor
Location: New York, NY 10018

Project #: 386554 Task 9
Project Name: Site Management Portfolio B
Location: Metal Etching - 435 S Main St, Freeport NY
Project Manager: Anthony Raposo.

Sample Location Information:

Site ID Number:				Sampler(s):	Jordan Bochner
PID Meter Used: (Model, Serial #)	ppbRAE 3000 SN: 594-902606			Building I.D. No.:	

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT N/A		SUBSLAB SOIL GAS N/A		OUTDOOR AIR	
Flow Regulator No.:	3558	Flow Regulator No.:		Flow Regulator No.:		Flow Regulator No.:	3207
Canister Serial No.:	2159	Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	1980
Start Date/Time:	3/1/22 / 0900	Start Date/Time:		Start Date/Time:		Start Date/Time:	3/1/22 / 0900
Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-28.5
Stop Date/Time:	3/1/22 / 1700	Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	3/1/22 / 1700
Stop Pressure: (inches Hg)	-9.0	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-8.0
Sample ID:	MEC-OFFICE-AI-1-20220301	Sample ID:		Sample ID:		Sample ID:	MEC-OFFICE-AO-1-20220301

Other Sampling Information:

Story/Level	1	Story/Level		Basement or Crawl Space?		Direction from Building	SE
Room	Main	Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	~1 ft
Indoor Air Temp (°F)	N/M	Indoor Air Temp		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	~3 ft
Barometric Pressure?	N/M	Barometric Pressure?		Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	No
Intake Height Above Floor Level (ft.)	~3ft	Intake Height Above Floor Level (ft.)		If slab, intake Depth If Crawl Space, intake height		Distance to nearest Roadway	~25 ft
Noticeable Odor?	NO	Noticeable Odor?		Noticeable Odor?		Noticeable Odor?	NO
PID Reading (ppb)	21	PID Reading (ppb)		PID Reading (ppb)		PID Reading (ppb)	28
Duplicate Sample?	NO	Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	NO

Comments:

DUP: Can ID: 2022
Flow Reg: 3367
Start/Stop Time: 0900 / 1700
Start/Stop Pressure: -29.5 / -9.0
PID Reading: 21ppb

Sampler Signature: [signature] 3/01/22