PERIODIC REVIEW REPORT
JANUARY 2021 - JULY 2021

ELLENVILLE SCRAP IRON AND METAL
TOWN OF ELLENVILLE, NEW YORK 12428

NYSDEC Site No. 356022
Work Assignment No. D009812-14

Prepared for:

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

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AUGUST 2021

TRC Project No. 425272

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LIST OF ACRONYMS AND ABBREVIATIONS

AMSL	above mean sea level
COCs	Contaminants of Concern
C&D	Construction and Demolition
DER	Department of Environmental Remediation
DTW	Depth to Water
DUSRs	Data Usability Summary Reports
ECs	Engineering Controls
ECL	Environmental Conservation Law
EDD	Electronic Data Deliverable
EE	Environmental Easement
EPA	Environmental Protection Agency
FS	Feasibility Study
ft. bgs	feet below ground surface
HDR	Henningson, Durham and Richardson Architecture and Engineering, P.C.
ICs	Institutional Controls
ID	Identification
MCLs	Maximum Contaminant Levels
ND	Not detected
NYCRR	New York Codes Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
PCBs	Polychlorinated Biphenyls
PDI	Pre-Design Investigation
PFAS	Per- and Polyfluoroalkyl Substances
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RA	Remedial Action
RAOs	Remedial Action Objectives
RAR	Remedial Action Report
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
SCG	Standard, Criteria, and Guidance
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
SMR	Site Management Report
SVOCs	Semi-volatile Organic Compounds
TAL	Target Analyte List
TCL	Target Compound List
TICs	Tentatively Identified Compounds
TRC	TRC Engineers, Inc.
VOCs	Volatile Organic Compounds
WA	Work Assignment
µg/L	micrograms per liter
ηg/L	nanograms per liter

Executive Summary

Category	Summary/Results	
Engineering Controls	• 6 NYCRR Part 360 Composite Cover System and Supporting Features	
Institutional Controls	• ROD (2010) • RA (2011)	• Environmental Easement • Site Management Plan
Site Classification	Class 04	
Site Management Plan	Final SMP dated August 2013 and SMP Modifications dated March 2016	
Certification/Reporting Period	The Certification Period is undefined in the SMP. The SMP indicates that the property owner(s) shall periodically certify that Site use is compliant with the ICs and the ECs are in place and performing to their specifications. SMRs are not required.	
Inspection	**Frequency**	
Site Inspection	Annual	
Monitoring	**Frequency**	
Groundwater	Every 5 quarters	
Prior PRR/SMR Recommendations	The prior PRR for this Site was completed in March 2019. No SMRs were completed for the Site.	
Site Management Activities	One site inspection, one round of groundwater level measurements, and one groundwater/surface water sampling event: • 03/31/2021 – Site inspection • 03/30/2021 – Groundwater level measurements • 03/30/2021 – 03/31/2021: Groundwater samples were collected from 5 of 7 monitoring wells in the monitoring well network. One surface water sample was collected on 3/31/2021. All samples were submitted to Pace Analytical Services for analysis of VOCs, Metals, Cyanide, and PFAS.	
Significant Findings or Concerns	No significant findings or concerns were identified during the site visit.	
Recommendations	1. Continue groundwater and surface water sampling at a frequency of every five quarters. 2. The routine site inspection frequency should be reduced to every 5 quarters to coincide with groundwater/surface water sampling activities. Additionally, Site inspections should be conducted immediately following "10-year storm events" pursuant to the SMP modifications. 3. Collect groundwater samples from downgradient monitoring wells EPA-04, EPA-05, and EPA-06 during the next scheduled monitoring event. 4. Reduce the PRR certification period to every three-years	

	5. Following groundwater and surface water sampling in years where a PRR is not required, TRC recommends the issuance of a brief SMR summarizing the completed activities and results. 6. It is recommended that the SMP QAPP requirement for the collection of groundwater samples via USEPA low-flow methods be made optional to allow the use of no-purge sampling technologies. 7. The August 2013 SMP should be revised to reflect the above changes/modifications, if the changes are acceptable to the NYSDEC.
Cost Evaluation	The total cost of site management activities this reporting period was $27,052. This cost includes engineering and subcontractor costs (e.g., laboratory analytical, equipment, rentals, etc.). It should be noted that this total does not include any direct costs incurred by the NYSDEC in support of the project.

1.0 Introduction

This PRR has been prepared for the Ellenville Scrap Iron and Metal Site (referred to as "the Site") and covers the period, January 1, 2021 through July 31, 2021. This PRR was prepared in accordance with the NYSDEC Notice to Proceed dated December 21, 2020 for WA No. D009812-14, the NYSDEC-approved Scope of Work dated February 16, 2021 and NYSDEC E-10, Technical Guidance for Site Investigation and Remediation. A Site summary and applicable remedial program information are summarized below.

Site Information			
Site Name:	Ellenville Scrap Iron and Metal	**NYSDEC Site No:**	356022
Site Location:	34-36 Cape Avenue, Village of Ellenville, Town of Wawarsing. Ulster County, NY 12428	**Remedial Program:**	State Superfund
Site Type:	Landfill	**Classification:**	04
Parcel Identification(s):	82.4-3-2, Ulster County Tax Maps	**Parcel Acreage:**	± 28
Selected Remedy:	Cover System, Groundwater Monitoring	**Site COC(s):**	• VOCs • Cyanide • Metals • PFAS
Current Remedial Program Phase:	Site Management	**Institutional Controls:**	• Environmental Easement • Site Management Plan
Post-Remediation Monitoring and Sampling Frequency:	Groundwater monitoring – Every five quarters Site inspection - Annual	**Engineering Controls:**	6 NYCRR Part 360 Composite Cover System and Supporting Features
Monitoring Locations:	Onsite monitoring wells (12)	**Required Reporting:**	At a frequency determined by NYSDEC

1.1 Site Location, Ownership, and Description

The Site is located at 34-36 Cape Avenue in the Village of Ellenville, Town of Wawarsing, Ulster County, NY 12428, and is identified as Section 82.4 Block 3 Lot 2 on the Ulster County Tax Map. The Site parcel has an overall property area of approximately ± 28 acres, is bounded to the north by Cape Avenue, to the south by Beer Kill, to the east by residential vacant land, and to the west by rural vacant land. Site location and layout maps are provided on **Figures 1** and **2**, respectively.

1.2 Investigation/Remedial History

The Ellenville Scrap Iron and Metal Site (the Site) was used for recycling automobile batteries and subsequently in late 1997, used as a landfill and tire dump. A New York State Department of Environmental Conservation (NYSDEC) permit was never obtained to operate a solid waste management facility or to store tires at the Site. From 1987 to 1998, the NYSDEC inspected the Site on numerous occasions and directed the owners to remediate

environmental conditions. In March 1987, the Potentially Responsible Party (PRP), Ellenville Scrap Iron and Metal (Ellenville Scrap) proposed a Settlement of Claim with the NYSDEC, which was accepted on January 15, 1988. As part of the Settlement of Claim, Ellenville Scrap agreed to close and cover the area where construction and demolition (C&D) debris had been disposed. Subsequent Consent Orders entered into by Ellenville Scrap and a second PRP, C. Bruno Demolition, with the NYSDEC required an evaluation of Site conditions and removal of all C&D debris from the facility. Two interim removal actions, which included removal of lead contaminated soil and additional cleanup activities, were completed prior to 2006. A Remedial Investigation (RI) was conducted in 2007 and 2008 and a final RI Report was completed in 2009.

A Feasibility Study (FS) for the Site was completed in 2010. A Record of Decision (ROD) for the Site was signed on September 30, 2010 which selected a remedy consisting of excavation and consolidation of contaminated soil and construction of an impermeable cap. A Pre-Design Investigation (PDI) was conducted in October-November 2010 to fill soil data gaps necessary for completion of the Remedial Design (RD). The PDI was also used to establish soil cleanup criteria for use in the Remedial Action (RA). The RA commenced in April 2010 and was completed in September 2011.

After completion of the RA, a Remedial Action Report (RAR) (HDR/O'Brien & Gere Joint Venture, 2012) was prepared, documenting that in accordance with the ROD, contaminated soil would remain at the Site under an impermeable cap. The cap was designed to meet the substantive requirements of 6 NYCRR Part 360 solid waste regulations.

A Site Management Plan (SMP) (HDR/O'Brien & Gere Joint Venture, 2013) was prepared to manage the Site until such time that the Environmental Easement would be extinguished in accordance with Environmental Conservation Law (ECL) Article 71, Title 36. The SMP was prepared in accordance with Environmental Protection Agency (EPA) requirements, NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation (NYSDEC DER-10), and template documents supplied by NYSDEC. Management activities set forth by the SMP consist of the following:

- Assessing achievement of the remedial performance criteria;
- Sampling and analysis of all appropriate media (e.g., groundwater and surface water);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards;
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

Additionally, in March 2016, TRC prepared a Modification of the SMP letter for NYSDEC approval. The Modification of the SMP letter was approved by the NYSDEC in April 2016 and included the following:

- Functional definition for a "10-year storm event" and the conditions triggering additional Site inspection requirements.
- Provided Site specific forms for use during site inspections/groundwater sampling including: Site-Wide Inspection Checklist, Monitoring Well Inspection Form, and Groundwater Sample Collection Form.

A Custodial Record detailing known and available Site reports and the Notification of Demolition and Renovation are included in **Appendix A.**

1.3 Remaining Contamination

Impacted soil excavated from the on-Site areas was placed within the landfill area. The horizontal extent of the landfill area extends from the toe of the slope adjacent to and south of Cape Avenue to the toe of slope of the embankment in the lower plateau area. The remaining contamination at the Site is limited to the approximately two feet inside the landfill liner anchor trench. Soil samples collected from the landfill area contained volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and metals that exceed the NYSDEC Unrestricted Use Soil Cleanup Objectives (SCOs). Residual contamination in groundwater and is being managed under the SMP.

1.4 Regulatory Requirements/Cleanup Goals

A summary of the Remedial Action Objectives (RAOs), as found in the August 2012 RAR, include the following:

Groundwater

- Prevent ingestion of water with contaminant concentrations greater than 10 NYCRR Part 5 maximum contaminant levels (MCLs) and Federal MCLs.
- Restore groundwater contaminant concentrations to less than 6 NYCRR Part 703 Class GA water quality standards.
- Prevent discharge of groundwater with contaminant concentrations greater than 6 NYCRR Part 703 Class GA water quality standards to adjacent surface water, i.e., Beer Kill.

Soils

- Prevent ingestion/direct contact to soils with contaminant concentrations greater than 6 NYCRR Part 375 Residential Use SCOs.
- Prevent inhalation of soil dust with contaminant concentrations greater than 6 NYCRR Part 375 Residential Use SCOs.
- Prevent migration of soils with contaminant concentrations greater than 6 NYCRR Part 375 Residential Use SCOs.

- Prevent or minimize impacts to groundwater and/or surface water resulting from soil contamination with concentrations greater than 6 NYCRR Part 375 Residential Use SCOs.

Solid Wastes

- Prevent ingestion/direct contact with solid wastes with contaminant concentrations greater than 6 NYCRR Part 375 Residential Use SCOs.
- Prevent migration of solid wastes with contaminant concentrations greater than NYCRR Part 375 Residential Use SCOs.
- Prevent or minimize impacts to groundwater and/or surface water resulting from solid wastes with concentrations greater than NYCRR Part 375 Residential Use SCOs.

Leachate

- Prevent ingestion of leachate with contaminant concentrations greater than the 6 NYCRR Part 703 Class GA water quality standards.
- Prevent migration of leachate with contaminant concentrations greater than the 6 NYCRR Part 703 Class GA water quality standards.

Air

- Prevent exposure to or inhalation of volatilized contaminants from the solid wastes.
- Prevent migration of landfill gas generated by the decomposition of solid waste.

2.0 Institutional and Engineering Control Plan Compliance

2.1 Institutional Controls

The Ellenville Scrap Iron and Metal Site's inclusion on the Registry of State Superfund Sites, ROD, EE, and SMP act as the ICs.

The 2013 SMP defines the following for the Site:

- Compliance with the Environmental Easement and the SMP by the Grantor and the Grantor's successors and assigns;
- The landfill cap must be maintained as specified in the SMP;
- The landfill cap must be inspected at a frequency and in a manner defined in the SMP;
- Groundwater monitoring must be performed as defined in the SMP; and,
- Data and information pertinent to Site Management must be reported at the frequency and in a manner defined in the SMP.

ICs may be modified, added, or deleted from this list as warranted by site-specific conditions.

ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The Site has a series of ICs in the form of site restrictions. Adherence to these ICs is required by the Environmental Easement. Restrictions that apply to the Site are:

- The landfill area of the Site cannot be redeveloped for any use. The lower plateau of the Site may be used for restricted residential or higher (commercial) use;
- All future activities on the Site that will disturb the landfill area which contains the 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;
- Vegetable gardens and farming on the landfill area of the Site are prohibited; and,
- Farming on the lower plateau area is prohibited. Gardening is acceptable in this area but raising livestock or producing animal products for human consumption is prohibited in the lower plateau area.

2.2 Engineering Controls

The Site ECs include a soil cap that was constructed over the existing landfill area to prevent exposure to remaining contamination at the Site, a stormwater drainage system around the landfill area, and a composite cover system.

3.0 Monitoring and Sampling Plan Compliance

The 2013 SMP was prepared to manage contamination remaining on the Site and ensure that the remedy remains effective by restricting site use, site development, and soil management. The August 2013 SMP, in addition to TRC's March 2019 PRR recommendations, specifies the following Site monitoring and sampling activities:

Summary Site Monitoring and Sampling Plan			
Site Management Activity	**Frequency**	**Location**	**Laboratory Analysis**
Site Inspection	Annually	Site property and surrounding area	Not Applicable
Groundwater Sampling	Every 5 quarters	• EPA-03B • EPA-07 • EPA-08B • EPA-09 • EPA-10 • EPA-10B • EPA-11	• TCL VOCs + 10 TICs by USEPA Method 8260 • TAL Metals by USEPA Method 6010 • Cyanide by USEPA Method 9010 • PFAS by USEPA Method 537 Modified
Stormwater Sampling	Every 5 quarters	Stormwater basin	• TCL VOCs + 10 TICs by USEPA Method 8260 • TAL Metals by USEPA Method 6010 • Cyanide by USEPA Method 9010 PFAS by USEPA Method 537 Modified
SMR	Not required	Not Applicable	Not Applicable
Site Inspection Report	Following each inspection event	Not Applicable	Not Applicable
PRR	Following site inspection and sampling event at the discretion of NYSDEC	Not Applicable	Not Applicable

3.1 Site Inspection

TRC conducted a site inspection on March 31, 2021, in accordance with the SMP. The site inspection was conducted to document the condition of the Site monitoring wells, overall site conditions, and to collect groundwater samples from the monitoring wells. The following presents a summary of the site-wide inspection results:

- Site entrances and gates were secure and the fence that surrounds the landfill was intact and in good condition.
- Monitoring wells were secure and in good condition. There were no signs of deterioration. All well casings and covers were inspected and appeared to be in good condition. All well locks were in place and functional.
- Vegetation on the landfill cap appeared to be in good condition and contained.
- Site access roads around the perimeter of the Site were in good condition. Slight vegetation appeared on the northern Site access road. No signs of erosion were observed along the Site access roads.
- The landfill cap was in good condition. The cap was dry and the soil stable, meaning no visible erosion, cracks, settlement, or seeps were observed.
- The landfill gas venting system was in good condition. No ground settlement or odors were noted that could impact the gas venting system.
- The drainage channels and stormwater basin appeared to be in good condition and did not contain any water. No areas of erosion were noted.
- Two 55-gallon drums were located in the northwestern corner of the Site. It is unknown as to what is contained within the two drums.

An additional summary of the Site management activities performed by TRC in March 2021 can be found on the table below.

Summary of Site Management Activities March 2021		
Site Management Activity	**Summary of Results**	**Maintenance/Corrective Measure**
Monitoring Well Network	All well casings and covers were inspected and appeared to be in good condition. All well locks were in place and functional. Monitoring wells EPA-04 through EPA-07 could not be located.	No routine maintenance or corrective measures needed at this time.
Groundwater Gauging and Sampling	On March 30, 2021, eight of the Site monitoring wells (EPA-03R, EPA-03B, EPA-08, EPA-08B, EPA-09, EPA-10, EPA-10B, EPA-11) were gauged for depth to water. Monitoring wells EPA-04 through and EPA-07 could not be located and therefore were not gauged. Five of the Site monitoring wells (EPA-03B, EPA-08B, EPA-09, EPA-10, and EPA-10B) were sampled utilizing USEPA low-flow sampling methods. EPA-11 was purged dry during the time of the site visit and therefore could not be sampled. Monitoring well EPA-07 could not be located and was therefore not sampled.	No routine maintenance or corrective measures needed at this time.
Surface Water Sampling	On March 31, 2021, one surface water sample was collected using a bailer just to the south of the landfill cap.	No routine maintenance or corrective measures needed at this time.

Site and monitoring well inspection forms and photographic logs from TRC's activities can be found in **Appendix B**.

3.2 Groundwater Monitoring Summary

3.2.1 Groundwater Gauging

On March 30, 2021, prior to groundwater sample collection, eight of the Site monitoring wells were gauged for depth to groundwater to evaluate groundwater flow direction. Monitoring wells EPA-04, EPA-05, EPA-06, and EPA-07 were not gauged because they could not be located. The groundwater surface elevation contours with an interpretation of groundwater flow direction for the overburden and bedrock wells are presented on **Figures 3** and **4**, respectively. The groundwater gauging and elevation information can be found in **Table 1**. A summary of the hydrogeologic information is presented below:

March 2021 Hydrogeologic Summary			
Number of Wells Gauged	**Hydrogeologic Units**	**Hydrogeologic Strata**	**Monitoring Wells per Unit**
8	2	Overburden and Bedrock	Overburden – 5 Bedrock – 3
Overburden Groundwater Elevation Range			
Highest groundwater elevation: 449.29 feet AMSL (EPA-08) Lowest groundwater elevation: 388.81 feet AMSL (EPA-11)			
Inferred Overburden Groundwater Flow Direction			
South-southeast			
Bedrock Groundwater Elevation Range			
Highest groundwater elevation: 440.36 feet AMSL (EPA-08B) Lowest groundwater elevation: 389.97 feet AMSL (EPA-03B)			
Inferred Bedrock Groundwater Flow Direction			
Southeast			

Notes:
AMSL – Above mean sea level.

3.2.2 Groundwater Sampling

On March 30 and 31, 2021, TRC collected groundwater samples from five of the seven monitoring wells in the monitoring well network utilizing standard low-flow sampling techniques and in accordance with the NYSDEC January 2021 *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*. Groundwater samples were not collected from EPA-07, as it could not be located, and from EPA-11 as it was purged dry during the sampling process and did not recover. Groundwater sampling logs can be found in **Appendix C**. All five groundwater samples in addition to standard quality assurance/quality control (QA/QC) samples, collected at the frequencies specified in TRC's July 2020 Generic Quality Assurance Project Plan (QAPP), were submitted to Pace Analytical Services of Melville, New York (Pace) for the laboratory analyses listed in Section 3.0 above. Laboratory deliverables are in accordance with NYSDEC Analytical Services Protocol (ASP) Category B and were subjected to data validation by Alpha Geoscience of Clifton Park, New York.

A summary of the groundwater sampling information and pertinent monitoring well details from TRC's March 2021 activities is presented below:

Summary of Groundwater Monitoring Well Details and Sampling Activities March 2021							
Well ID	Monitoring Well Details				March 2021 Groundwater Sampling Event		
	Northing*	Easting*	Screen Zone (ft. bgs)	Material Screened	DTW (ft. bgs)	SMP Analytes	Notes
EPA-03B	1052765.18	518283.15	21-51	Bedrock	7.17	VOCs, Metals, PFAS, Cyanide	
EPA-07	1053493.63	517402.71	25-30	Overburden	NA	Not Sampled	Unable to locate
EPA-08B	1053307.22	517786.94	22-32	Bedrock	10.40	VOCs, Metals, PFAS, Cyanide	
EPA-09	1053045.84	517452.94	10-20	Overburden	12.71	VOCs, Metals, PFAS, Cyanide	
EPA-10	1052873.08	517850.93	15.5-30.5	Overburden	12.84	VOCs, Metals, PFAS, Cyanide	
EPA-10B	1052877.07	517853.54	42.5-57.5	Bedrock	10.95	VOCs, Metals, PFAS, Cyanide	
EPA-11	1052908.00	518150.13	NA	Overburden	8.43	Not Sampled	Well purged dry. Insufficient recovery.

Notes:
DTW – Depth to water.
ft. bgs – Feet below ground surface.
* NAD 83 - New York State Plane East in Feet.
NA – Not Available.
PFAS – Per- and Polyfluoroalkyl Substances.
SMP – Site Management Plan.
VOCs – Volatile Organic Compounds.

A summary of the groundwater depth measurements and elevations are are provided in **Table 1**.

3.2.3 Groundwater Analytical Results

An exceedance summary of the March 2021 groundwater analytical results is provided on the following tables:

Exceedance Summary of Groundwater Analytical Results – VOCs March 2021				
Constituent	SCG	Concentration Range (µg/L)	Location with Highest Detection	Frequency Exceeding SCG
VOCs				
Tetrachloroethene	5	ND – 7.9	EPA-10	1/5

Exceedance Summary of Groundwater Analytical Results – Metals March 2021				
Constituent	**SCG**	**Concentration Range (µg/L)**	**Location with Highest Detection**	**Frequency Exceeding SCG**
Metals				
Iron	300	1,640 – 17,900	EPA-10	5/5
Manganese	300	61.5 – 1,170	EPA-10	3/5
Sodium	20,000	14,600 – 313,000	EPA-08B	4/5

Exceedance Summary of Groundwater Analytical Results – PFAS March 2021				
Constituent	**SCG***	**Concentration Range (µg/L)**	**Location with Highest Detection**	**Frequency Exceeding SCG**
Metals				
Perfluorooctanoic acid (PFOA)	10	ND - 15	EPA-10	1/5
Perfluorooctanesulfonic acid (PFOS)	10	ND – 25	EPA-10	1/5

Notes:
µg/L – micrograms per liter.
ηg/L – nanograms per liter.
ND – Non-detect.
PFAS – Per- and Polyfluoroalkyl Substances.
SCG – Standards, Criteria, and Guidance.
VOCs – Volatile Organic Compounds
* - Recommended Guidance Values from the Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Programs, January 2021.

Groundwater analytical data for VOCs, Metals, Cyanide, and PFAS can be found in **Table 2**. The DUSRs can be found in **Appendix D**. Detected compounds exceeding their respective NYSDEC Class GA Values for each well are illustrated on **Figures 3** and **4**.

3.3 Surface Water Monitoring Summary

On March 31, 2021, TRC collected one surface water sample using a bailer and in accordance with the NYSDEC January 2021 *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*. The surface water sample was collected and submitted to Pace for the laboratory analyses listed in Section 3.0 above. It should be noted that a limited amount of water was observed within the on-Site stormwater basin. As such, the surface water sample was collected in an area of pooling water located northwest of the basin. An exceedance summary of the March 2021 surface water sample analytical results is provided below:

Exceedance Summary of Surface Water Analytical Results – March 2021

Constituent	SCG	Concentration Range (µg/L)	Location with Highest Detection	Frequency Exceeding SCG
Sodium	20,000	22,300	ESY-SW	1/1

Notes:
µg/L – micrograms per liter.
SCG – Standards, Criteria, and Guidance.

4.0 Cost Summary

The total estimated cost of the site management activities for 2021 (January 1, 2021 through July 31, 2021) is approximately $27,052. Site management activities included project management/administration, site inspection, sampling of 5 of 7 monitoring wells and 1 surface water location. Analysis of 6 samples for VOCs, Metals, Cyanide, PFAS, and preparation of a PRR. The total includes engineering and subcontractor costs, as well as expenses associated with the project. It should be noted that the total does not include costs incurred by NYSDEC for project support. A summary of the 2021 site management costs is presented below:

Summary of Site Management Costs January 1, 2021 through July 31, 2021		
Cost Item	**Amount Expended (January 1, 2021 through July 31, 2021)**	**Percent of Total Cost**
Engineering Support		
TRC	$21,427	80%
Subcontractors		
Pace Analytical Services	$3,310	12%
Alpha Geoscience	$1,115	4%
Expenses		
TRC	$1,200	4%
Total Cost	**$27,052**	----

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, and reporting (i.e., site inspection report, EDDs and PRR).
- Subcontractors include analytical laboratory and data validation costs associated with the groundwater sampling event.
- Expense costs include travel, equipment, and supplies in support of the site inspection, groundwater sampling event, and routine site maintenance activities.

5.0 Conclusions and Recommendations

5.1 Conclusions

- Based on the groundwater elevations measured during the March 2021 sampling event, groundwater flow in the overburden aquifer appears to be to the south-southeast. This observation is consistent with historical reporting.
- The metals iron, manganese, and sodium were detected at concentrations above their respective Class GA Values in several monitoring wells. While these metals are likely not indicative of Site contaminant migration and are typically regulated for aesthetic purposes such as odor, taste, and clarity in drinking water, they may be indicative of the overall geochemical quality of the groundwater at the Site.
- Site COCs, including VOCs were detected at concentrations exceeding their respective Class GA Values in one groundwater sample collected from the Site. There was one exceedance of tetrachloroethene (PCE) in monitoring well EPA-10. This detection is consistent with historical analytical results.
- PFAS compounds were detected at concentrations exceeding their respective recommended guidance values in groundwater samples collected from the Site. There was an exceedance of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) in monitoring well EPA-10. This well is located hydraulically downgradient on the Site indicating that Site-related groundwater contamination is potentially migrating horizontally. These detections are consistent with historical analytical results.
- Site and groundwater use were consistent with the restrictions set forth in the ROD, the August 2013 SMP and EE. Groundwater monitoring activities were completed in March 2021 for the 2021 certification period. Forms pursuant to the March 2016 Modification to the SMP letter were also completed. The ICs operated as intended during this reporting period.
- The remedy continued to be protective of human health and the environment during this reporting period.

5.2 Recommendations

- The frequency of routine Site inspections should be reduced to every five quarters to coincide with groundwater/surface water monitoring activities. Additionally, severe weather event inspections (and associated reports) should be completed as needed, per the requirements of the approved SMP modifications.
- Groundwater and surface water monitoring should continue at a frequency of every five quarters. Since cyanide has not been detected above laboratory reporting limits from any sample collected during this monitoring period and has not been detected historically, TRC recommends its removal from the Site's routine analysis suite. All future groundwater and surface water samples collected for laboratory analysis should be limited to TCL VOCs, TAL metals, and PFAS.

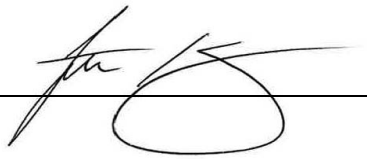
- To determine the presence/absence of downgradient PCE and PFAS, TRC recommends the collection of groundwater samples from EPA-04, EPA-05, and EPA-06 during the next scheduled monitoring event.
- The frequency of PRRs should be reduced to every three years. It is recommended that the certification period for the next PRR covers the reporting period between September 1, 2021 and September 1, 2024.
- During years where groundwater/surface water sampling and Site inspections are completed and a PRR is not required, a brief Site Management Report (SMR) summarizing the monitoring activities and results should be submitted. During years where both a SMR and PRR are required, a SMR will not be submitted.
- It is recommended that the August 2013 SMP QAPP requirement for the collection of groundwater samples by USEPA low-flow methods be made optional to allow for the use of no-purge sampling technologies. Use of no-purge sampling technologies will be evaluated prior to the scheduled groundwater sampling event and implemented pending approval of the NYSDEC Project Manager.
- The August 2013 SMP should be revised to reflect the above changes/modifications, if the changes are acceptable to the NYSDEC.

6.0 Certification of Engineering and Institutional Controls

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

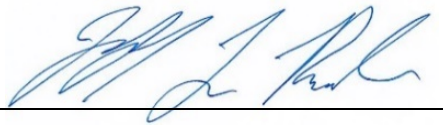
- The institutional and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by DER;
- Nothing has occurred that would impair the ability of such control to protect public health and the environment; and,
- Nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control.

TRC Engineers, Inc.

Prepared By: 

Justin King

Project Manager

Reviewed By: 

Jeffrey W. LaRock, P.G.

Senior Technical Reviewer

7.0 Future Site Activities

Based on the recommendations in **Section 5.0**, the following site management activities will be completed during the next PRR reporting period (September 2021 to September 2024):

- Site Inspections – Every 5 quarters (next scheduled: Q3 2022)
- Severe Weather Event Inspection – As needed
- Groundwater – Every 5 quarters (next scheduled: Q3 2022)
- SMR – Every 5 quarters (next scheduled: Q4 2022)
- PRR – Every 3 years (next scheduled: Q4 2024)

TABLES

Table 1
New York State Department Of Environmental Conservation
Ellenville Scrap Iron and Metal - Site No. 356022
Ellenville, New York
Summary of Depth to Water Measurements and Groundwater Elevations

Well ID	Screened Formation	Elevation (feet AMSL)	Gauge Date	Depth to Water (feet below TOR)	Depth to Bottom (feet below TOR)	Groundwater Elev. (feet AMSL)
EPA-03B	Bedrock	397.14	3/30/2021	7.17	52.11	389.97
EPA-03R	Overburden	399.79	3/30/2021	10.66	14.93	389.13
EPA-08	Overburden	452.52	3/30/2021	3.23	10.38	449.29
EPA-08B	Bedrock	450.76	3/30/2021	10.40	31.98	440.36
EPA-09	Overburden	411.02	3/30/2021	12.71	20.42	398.31
EPA-10	Overburden	404.17	3/30/2021	12.84	30.65	391.33
EPA-10B	Bedrock	404.28	3/30/2021	10.95	59.71	393.33
EPA-11	Overburden	397.24	3/30/2021	8.43	9.00	388.81

Notes
Elev. : Elevation
AMSL : Above Mean Sea Level
ID : Identification
TOR : Top of Riser

Table 2
New York State Department of Environmental Conservation
Ellenville Scrap Iron and Metal - Site No. 356022
Ellenville, New York
Summary of Groundwater and Surface Water Analytical Results - March 2021

		Sample Location:	EPA-03B	EPA-08B	EPA-09	EPA-10	EPA-10	ESY-EPA-10B	ESY-SW
		Sample Name:	ESY-EPA-03B	ESY-EPA-08B	ESY-EPA-09	DUP	ESY-EPA-10	ESY-EPA-10B	ESY-SW
		Lab Sample ID:	70167580001	70167580002	70167580007	70167580006	70167580005	70167580003	70167580004
		Sample Date:	3/30/2021	3/30/2021	3/31/2021	3/31/2021	3/31/2021	3/31/2021	3/31/2021
Analyte	**Unit**	**Class GA Value***	**Results**						
VOCs									
1,1,2-Trichloro- 1,2,2-trifluoroethane (Freon 113)	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	ug/L	NC	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	ug/L	NC	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L	NC	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	ug/L	0.04	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	0.0006	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	ug/L	50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	ug/L	50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	ug/L	NC	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	ug/L	50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	ug/L	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	60	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	ug/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 2
New York State Department of Environmental Conservation
Ellenville Scrap Iron and Metal - Site No. 356022
Ellenville, New York
Summary of Groundwater and Surface Water Analytical Results - March 2021

		Sample Location:	EPA-03B	EPA-08B	EPA-09	EPA-10	EPA-10	ESY-EPA-10B	ESY-SW
		Sample Name:	ESY-EPA-03B	ESY-EPA-08B	ESY-EPA-09	DUP	ESY-EPA-10	ESY-EPA-10B	ESY-SW
		Lab Sample ID:	70167580001	70167580002	70167580007	70167580006	70167580005	70167580003	70167580004
VOCs (cont.)									
Dibromochloromethane	ug/L	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-butyl ether	ug/L	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	**7.7**	**7.9**	1.0 U	1.0 U
Toluene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	2.9	2.8	1.0 U	1.0 U
Trichlorofluoromethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes, total	ug/L	5	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
1,2-Dichlorobenzene	ug/L	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Metals									
Aluminum	ug/L	NC	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Antimony	ug/L	3	60.0 U	60.0 U	60.0 U	60.0 U	60.0 U	60.0 U	60.0 U
Arsenic	ug/L	25	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Barium	ug/L	1,000	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Beryllium	ug/L	3	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cadmium	ug/L	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Calcium	ug/L	NC	102,000 J	79,400 J	24,200 J	83,800 J	79,500 J	21,600 J	11,900 J
Chromium	ug/L	50	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Cobalt	ug/L	NC	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U
Copper	ug/L	200	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Cyanide	ug/L	200	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Iron	ug/L	300	**16,800 J**	**4,730 J**	**1,640 J**	**17,900 J**	**16,500 J**	**4,800 J**	20.0 U
Lead	ug/L	25	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Magnesium	ug/L	35,000	23,700 J	9,210 J	4,330 J	15,800 J	14,900 J	8,800 J	2,420 J
Manganese	ug/L	300	**1,150 J**	295 J	61.5 J	**1,170 J**	**1,100 J**	159 J	10.0 U
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
Nickel	ug/L	100	40.0 U	40.0 U	40.0 U	40.0 U	40.0 U	40.0 U	40.0 U

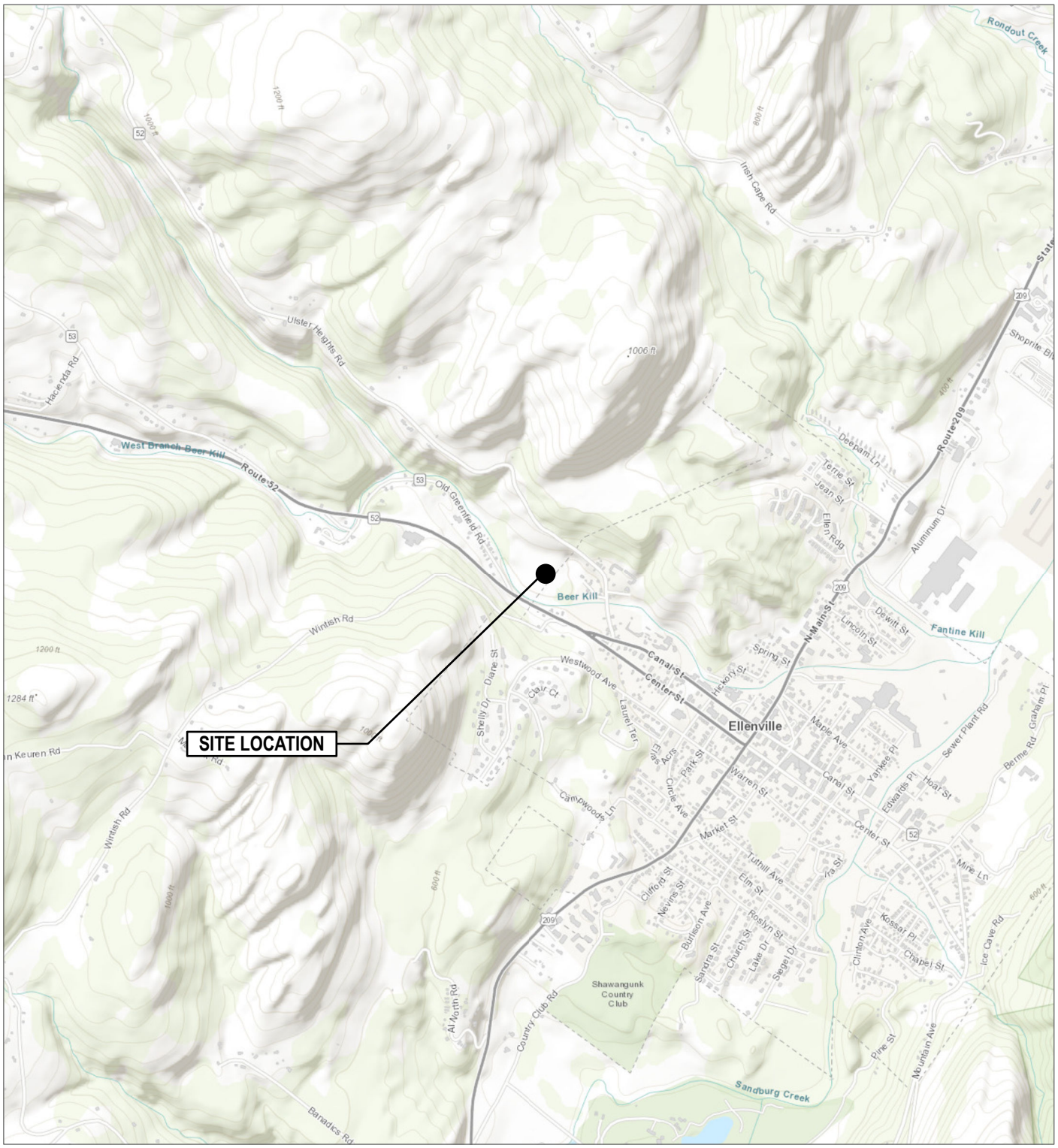
Table 2
New York State Department of Environmental Conservation
Ellenville Scrap Iron and Metal - Site No. 356022
Ellenville, New York
Summary of Groundwater and Surface Water Analytical Results - March 2021

		Sample Location:	EPA-03B	EPA-08B	EPA-09	EPA-10	EPA-10	ESY-EPA-10B	ESY-SW
		Sample Name:	ESY-EPA-03B	ESY-EPA-08B	ESY-EPA-09	DUP	ESY-EPA-10	ESY-EPA-10B	ESY-SW
		Lab Sample ID:	70167580001	70167580002	70167580007	70167580006	70167580005	70167580003	70167580004
Metals (cont.)									
Potassium	ug/L	NC	5,000 U	5,000 U	5,000 U	5,000 U	5,000 U	5,000 U	5,000 U
Selenium	ug/L	10	10.0 U	10.0 U	20.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Silver	ug/L	50	10.0 R	10.0 R	10.0 R	10.0 R	10.0 R	10.0 R	10.0 R
Sodium	ug/L	20,000	**35,600 J**	**313,000 J**	**31,000 J**	**37,200 J**	**35,200 J**	14,600 J	**22,300 J**
Thallium	ug/L	0.5	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	ug/L	2,000	20.0 U	10.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
PFAS									
Perfluorobutanoic acid (PFBA)	ng/L	100**	2.6	2.7	2.0 U	4.0	3.9	1.9 U	2.0 U
Perfluoropentanoic acid (PFPeA)	ng/L	100**	1.9 U	1.9 U	2.0 U	8.4	8.0	1.9 U	2.0 U
Perfluorohexanoic acid (PFHxA)	ng/L	100**	1.9 U	2.0	2.0 IU	5.9	5.9	1.9 U	2.0 IU
Perfluoroheptanoic acid (PFHpA)	ng/L	100**	1.9 U	1.9 U	2.0 U	4.3	4.1	1.9 U	2.0 IU
Perfluorooctanoic acid (PFOA)	ng/L	10**	1.9 U	4.7	2.0 U	**15**	**14**	1.9 U	2.0 U
Perfluorononanoic acid (PFNA)	ng/L	100**	1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.9 IU	2.0 U
Perfluorodecanoic acid (PFDA)	ng/L	100**	1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.9 U	2.0 U
Perfluoroundecanoic acid (PFUnA)	ng/L	100**	1.9 IU	1.9 U	2.0 U	1.9 U	1.9 U	1.9 U	2.0 U
Perfluorododecanoic acid (PFDoA)	ng/L	100**	1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.9 U	2.0 U
Perfluorotridecanoic acid (PFTriA)	ng/L	100**	1.9 U	1.9 U	2.0 U	1.9 IU	1.9 U	1.9 U	2.0 U
Perfluorotetradecanoic acid (PFTeA)	ng/L	100**	1.9 U	1.9 U	2.0 IU	1.9 IU	1.9 U	1.9 IU	2.0 U
Perfluorobutanesulfonic acid (PFBS)	ng/L	100**	2.8	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U
Perfluorohexanesulfonic acid (PFHxS)	ng/L	100**	1.7 U	1.8 U	1.8 U	3.7	3.5	1.7 U	1.8 IU
Perfluoroheptanesulfonic acid (PFHpS)	ng/L	100**	1.8 IU	1.8 IU	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U
Perfluorooctanesulfonic acid (PFOS)	ng/L	10**	3.0	1.8 U	1.8 U	**25**	**24**	1.8 U	1.8 U
Perfluorodecanesulfonic acid (PFDS)	ng/L	100**	1.9 U	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 IU
Perfluorooctane Sulfonamide (PFOSA)	ng/L	100**	1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.9 U	2.0 U
2-(N-methyl perfluorooctanesulfonamido) acetic acid (N-MeFOSAA)	ng/L	100**	1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.9 U	2.0 U
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine (N-EtFOSAA)	ng/L	100**	1.0 U	1.9 U	2.0 U	1.9 U	1.9 U	1.9 U	2.0 U
6:2 Perfluorooctane Sulfonate (6:2 FTS)	ng/L	100**	3.7	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U
8:2 Perfluorodecane Sulfonate (8:2 FTS)	ng/L	100**	1.8 IU	1.9 IU	1.9 U	1.8 U	1.8 U	1.8 IU	1.9 U
Total Detected PFAS	ng/L	500	*12.1*	*9.4*	*BDL*	*66.3*	*63.4*	*BDL*	*BDL*

Notes:

ug/L - micrograms per liter.
ng/L - nanograms per liter.
NC - No NYSDEC standards exist for this analyte.
J - Estimated value.
R - Rejected due to severe QC failure.
U - Analyte was not detected at specified quantitation limit.
UJ - Estimated non-detect.
PFAS - Per- and Polyfluoroalkyl Substances.
VOCs - Volatile Organic Compounds.
Values shown in bold exceed the listed Guidance value.
* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water, June 1998 with the April 2000 Addendum.
** - Guidelines for Sampling and Analysis of PFAS, NYSDEC Part 375 Remedial Programs, January 2021.

FIGURES



LEGEND

- SITE LOCATION

BASE MAP: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.
ELLENVILLE QUAD.
DATA SOURCES: TRC

N

0 1,000 2,000

FEET

1:24,000 1" = 2,000'

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ELLENVILLE SCRAP IRON AND METAL - SITE NO. 356022
34-36 CAPE AVENUE
ELLENVILLE, NEW YORK 12428

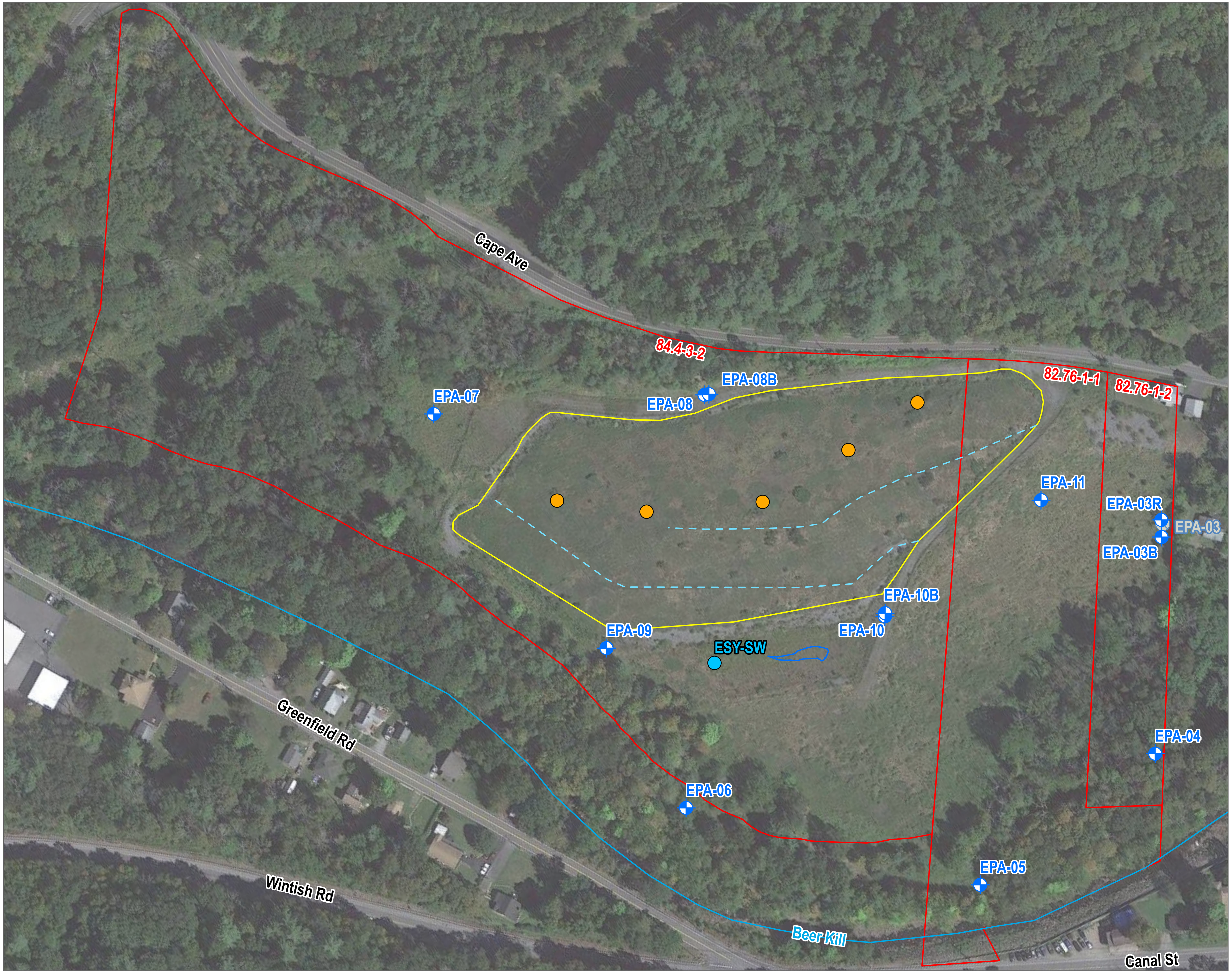
TITLE:

SITE LOCATION MAP

DRAWN BY:	L. LILL	PROJ. NO.:	425272
CHECKED BY:	J. KING		
APPROVED BY:	J. MAGDA		**FIGURE 1**
DATE:	AUGUST 2021		

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190
www.TRCcompanies.com

FILE: SITELOCATION



LEGEND

- TAX PARCEL BOUNDARY
- LANDFILL CAP
- STORMWATER BASIN
- DRAINAGE CHANNELS
- MONITORING WELL
- ABANDONED MONITORING WELL
- SURFACE WATER SAMPLE
- GAS VENT PIPES

NOTES:

1. ALL BOUNDARIES ARE APPROXIMATE.
2. MONITORING WELL EPA-04, EPA-05, EPA-06, AND EPA-07 COULD NOT BE LOCATED.

N

1:1,800
1" = 150'

BASE MAP: GOOGLE EARTH IMAGERY
DATA SOURCES: TRC
SHEET SIZE: 11X17L

0 150 300 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ELLENVILLE SCRAP IRON AND METAL - SITE NO. 356022
34-36 CAPE AVENUE
ELLENVILLE, NEW YORK 12428

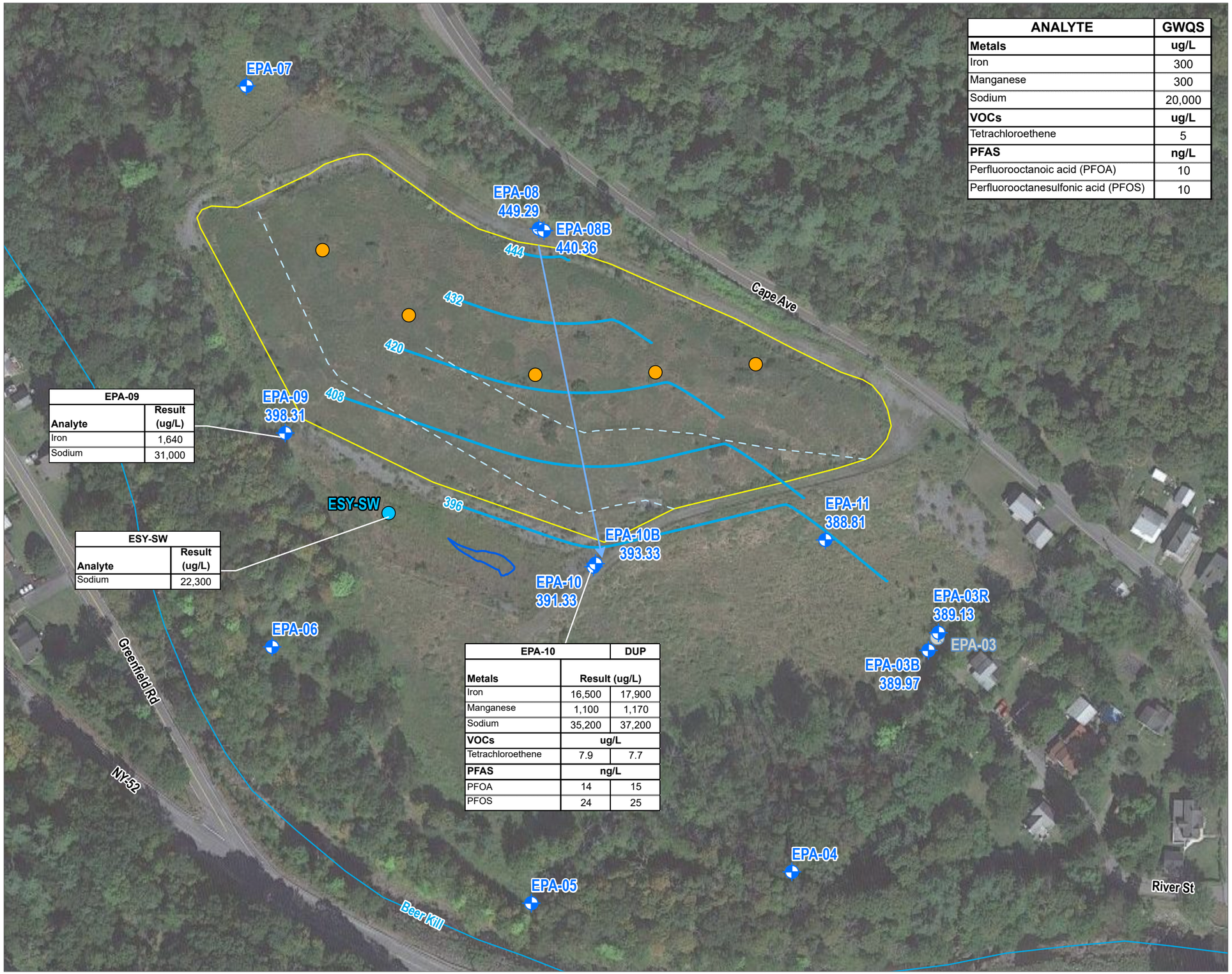
TITLE:
SITE LAYOUT MAP

DRAWN BY:	L. LILL	PROJ. NO.:	425272
CHECKED BY:	J. KING	**FIGURE 2**	
APPROVED BY:	J. MAGDA		
DATE:	AUGUST 2021		

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190
www.TRCcompanies.com

FILE: sitelayout.aprx

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation: -30
-- Saved By: LLILL on 8/6/2021, 15:02:51 PM; File Path: T:\1-PROJECTS\NYSDEC\425272_EllenvilleScrap\2-APRX\sitelayout\sitelayout.aprx; Layout Name: sitelayout



EPA-09	
Analyte	Result (ug/L)
Iron	1,640
Sodium	31,000

ESY-SW	
Analyte	Result (ug/L)
Sodium	22,300

EPA-10		DUP
Metals	Result (ug/L)	
Iron	16,500	17,900
Manganese	1,100	1,170
Sodium	35,200	37,200
VOCs	ug/L	
Tetrachloroethene	7.9	7.7
PFAS	ng/L	
PFOA	14	15
PFOS	24	25

ANALYTE	GWQS
Metals	**ug/L**
Iron	300
Manganese	300
Sodium	20,000
VOCs	**ug/L**
Tetrachloroethene	5
PFAS	**ng/L**
Perfluorooctanoic acid (PFOA)	10
Perfluorooctanesulfonic acid (PFOS)	10

LEGEND

- LANDFILL CAP
- STORMWATER BASIN
- GROUNDWATER FLOW DIRECTION
- GROUNDWATER ELEVATION CONTOUR (12' INTERVALS)
- DRAINAGE CHANNELS
- MONITORING WELL
- ABANDONED MONITORING WELL
- SURFACE WATER SAMPLE
- GAS VENT PIPES

NOTES:

1. POTENTIOMETRIC SURFACE ELEVATIONS WERE COLLECTED ON MARCH 30, 2021.
2. ALL GROUNDWATER AND SURFACE WATER SAMPLES WERE ANALYZED FOR TCL VOCS, TAL METALS, PFAS, AND CYANIDE.
3. PFAS - PER- AND POLYFLUOROALKYL SUBSTANCES.
4. TAL - TARGET ANALYTE LIST.
5. TCL - TARGET COMPOUND LIST.
6. VOCS - VOLATILE ORGANIC COMPOUNDS.
7. UG/L - MICROGRAMS PER LITER.
8. NG/L - NANOGRAMS PER LITER.
9. GWQS - GROUNDWATER WATER QUALITY STANDARD: NYSDEC TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES, CLASS GA, JUNE 1998.

FOR FIGURE CLARITY:

1. CONSTITUENTS AND INDIVIDUAL COMPOUNDS NOT SHOWN WERE EITHER NOT DETECTED OR DID NOT EXCEED THEIR RESPECTIVE GWQS.
2. LABORATORY ANALYTICAL DATA QUALIFIERS HAVE BEEN OMITTED, REFER TO THE SUMMARY DATA TABLES FOR ANALYTICAL DETAILS REGARDING QUALIFIERS.

N

1:1,500
1" = 125'

BASE MAP: GOOGLE EARTH IMAGERY
DATA SOURCES: TRC
SHEET SIZE: 11X17L

0 125 250 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ELLENVILLE SCRAP IRON AND METAL - SITE NO. 356022
34 - 36 CAPE AVENUE
ELLENVILLE, NEW YORK 12428

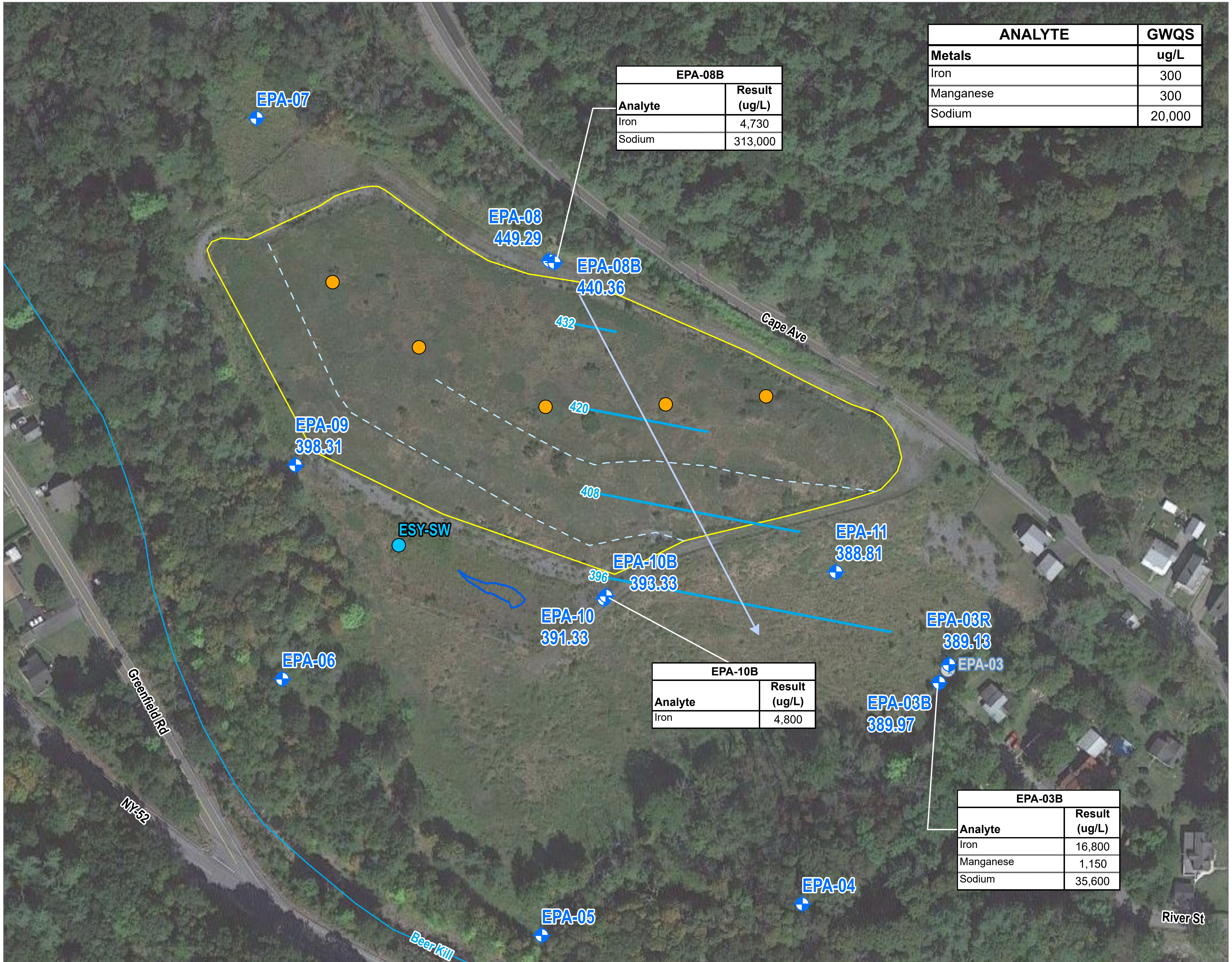
TITLE:
SURFACE WATER AND OVERBURDEN GROUNDWATER MONITORING MAP - MARCH 2021

DRAWN BY:	L. LILL	PROJ. NO.:	425272
CHECKED BY:	J. KING		FIGURE 3
APPROVED BY:	J. MAGDA		
DATE:	AUGUST 2021		

TRC
10 Maxwell Drive
Clifton Park, NY 12065
Phone: 518-348-1190
www.TRCcompanies.com

FILE: gwelevations.aprx

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation: 0
Saved By: LLILL on 8/12/2021 1:08:17:33 AM; File Path: T:_PROJECTS\NYSDEC\425272_EllenvilleScrap\2-AAPRX\gwelevations\gwelevations.aprx; Layout Name: Figure 3 - Ellenville GW Flow and Exceedences



ANALYTE	GWQS
Metals	**ug/L**
Iron	300
Manganese	300
Sodium	20,000

EPA-08B

Analyte	Result (ug/L)
Iron	4,730
Sodium	313,000

EPA-10B

Analyte	Result (ug/L)
Iron	4,800

EPA-03B

Analyte	Result (ug/L)
Iron	16,800
Manganese	1,150
Sodium	35,600

LEGEND

- LANDFILL CAP
- STORMWATER BASIN
- GROUNDWATER FLOW DIRECTION
- GROUNDWATER ELEVATION CONTOUR (12' INTERVALS)
- DRAINAGE CHANNELS
- MONITORING WELL
- ABANDONED MONITORING WELL
- SURFACE WATER SAMPLE
- GAS VENT PIPES

NOTES:

1. POTENTIOMETRIC SURFACE ELEVATIONS WERE COLLECTED ON MARCH 30, 2021.
2. ALL GROUNDWATER SAMPLES WERE ANALYZED FOR TCL VOCS, TAL METALS, PFAS, AND CYANIDE.
3. PFAS - PER- AND POLYFLUOROALKYL SUBSTANCES.
4. TAL - TARGET ANALYTE LIST.
5. TCL - TARGET COMPOUND LIST.
6. VOCS - VOLATILE ORGANIC COMPOUNDS.
7. UG/L - MICROGRAMS PER LITER.
8. GWQS - GROUNDWATER WATER QUALITY STANDARD: NYSDEC TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES, CLASS GA, JUNE 1998.

FOR FIGURE CLARITY:

1. CONSTITUENTS AND INDIVIDUAL COMPOUNDS NOT SHOWN WERE EITHER NOT DETECTED OR DID NOT EXCEEED THEIR RESPECTIVE GWQS.
2. LABORATORY ANALYTICAL DATA QUALIFIERS HAVE BEEN OMITTED, REFER TO THE SUMMARY DATA TABLES FOR ANALYTICAL DETAILS REGARDING QUALIFIERS.

N

1:1,500
1" = 125'

BASE MAP: GOOGLE EARTH IMAGERY
DATA SOURCES: TRC
SHEET SIZE: 11X17L

0 125 250 FEET

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ELLENVILLE SCRAP IRON AND METAL - SITE NO. 356022
34 - 36 CAPE AVENUE
ELLENVILLE, NEW YORK 12428

TITLE:
BEDROCK GROUNDWATER MONITORING MAP - MARCH 2021

DRAWN BY:	L. LILL	PROJ. NO.:	425272
CHECKED BY:	J. KING	**FIGURE 4**	
APPROVED BY:	J. MAGDA		
DATE:	AUGUST 2021		

TRC

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Clifton Park, NY 12065
Phone: 518-348-1190
www.TRCcompanies.com

FILE: gwflow_bedrock.aprx

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation: 0
-- Saved By: LLILL on 8/9/2021, 09:04:28 AM; File Path: T:\1-PROJECTS\NYSDEC\425272_EllenvilleScrap\2-APRX\gwflow_bedrock\gwflow_bedrock.aprx; Layout Name: Figure 4 - Ellenville Scrap Iron and Metal GW Flow Bedrock

APPENDIX A

CUSTODIAL RECORD

PERTINENT SITE DOCUMENTS

ELLENVILE SCRAP IRON AND METAL (356022)

Frimpter, M.H.*: Ground-water resources of Orange and Ulster Counties, New York: U.S. Geological Survey Water-Supply Paper 1985*, 1972.NYSDEC, *Notification to Investigate a Potential Hazardous Waste Disposal Site*, DEC Site No. 356022, Ellenville Scrap Iron Co., April 1993.

EPA*, Hazard Ranking System Documentation Package, Ellenville Scrap Iron and Metal, Ellenville, Ulster County, New York*, CERCLIS ID No.: NYSFN204190, Volume 1 of 2, August 2001.

Weston Solutions, Inc.: *Site Clean-up and Radiation Survey, Ellenville Scrap Iron and Metal Site*, Ellenville, Ulster County, New York, 2006.HDR/O'Brien & Gere Joint Venture, *Remedial Investigation/Feasibility Study Work Plan Ellenville Scrap Metal – RI/FS.* Village of Ellenville, Town of Wawarsing, Ulster County, New Y*ork*, October 2009.

HDR/O'Brien & Gere Joint Venture*, Final Remedial Investigation Report Ellenville Iron and Scrap Metal – RI/FS*. Village of Ellenville, Town of Wawarsing, Ulster County*, New York*, July 2010.

HDR/O'Brien & Gere Joint Venture, *Final Feasibility Study Report Ellenville Iron and Scrap Metal – RI/FS.* Village of Ellenville, Town of Wawarsing, Ulster County, New York, July 2010.

HDR/O'Brien & Gere Joint Venture, *Pre-Design Investigation Report Ellenville Scrap Iron and Metal Superfund Site*, Village of Ellenville, Town of Wawarsing, Ulster County, New York, February 2011.

HDR/O'Brien & Gere Joint Venture, *Design Analysis Report Ellenville Scrap Iron and Metal Superfund Site*, Village of Ellenville, Town of Wawarsing, Ulster County, New York, March 2011.

HDR/O'Brien & Gere Joint Venture, *Final Remedial Action Report*, Village of Ellenville, Town of Wawarsing, Ulster County, New York, August 2012.

HDR/O'Brien & Gere Joint Venture, *Final Site Management Plan*, Ellenville Scrap Iron and Metal Superfund Site, August 2013.

TRC Engineers, Inc., *Modification of the Site Management Plan*, Ellenville Scrap Iron and Metal – Site No. 356022, March 2016.

TRC Engineers, Inc., *Periodic Review Report, Period Ending December 31, 2017*, Ellenville Scrap Iron and Metal Site, March 2018.

TRC Engineers, Inc., *Periodic Review Report, Period Ending December 31, 2018*, Ellenville Scrap Iron and Metal Site, March 2019.

SITE HISTORY

ELLENVILLE SCRAP IRON AND METAL (NYSDEC SITE NO. 356022)

Date	Description
1950 - 1997	The Site was used for recycling automobile batteries.
1987 – 1998	The Site was subsequently leased in late 1997 and used as a landfill and tire dump. A New York State Department of Environmental Conservation (NYSDEC) permit was never obtained to operate a solid waste management facility or to store tires at the Site. From 1987 to 1998, NYSDEC inspected the Site on numerous occasions and directed the owners to remediate conditions at the Site. In March 1987, Ellenville Scrap proposed a Settlement of Claim with NYSDEC, which was accepted on January 15, 1998. As part of the Settlement of Claim, Ellenville Scrap agreed to close and cover the area where construction and demolition debris had been disposed. Additional Consent Orders entered into by Ellenville Scrap Iron and Metal and C. Bruno Demolition with NYSDEC called for an evaluation of Site conditions and the removal of all construction and demolition (C&D) debris at the facility that did not meet exemption criteria of state environmental law (HDR|OBG JV, 2012).
2004	The United States Environmental Protection Agency (USEPA) excavated lead contaminated soil form the side and back yard of the 34 Cape Avenue property to a depth of 12 inches and disposed off-site. The excavated area was backfilled with certified clean fill. The USEPA also demolished buildings located at the Site, and performed waste characterization and disposal for waste oils from above ground storage tanks and hazardous materials from approximately 20 drums on-site (HDR|OBG JV, 2012).
2005	The USEPA Region 2 performed clean-up activities at the Site by removing lead-acid battery casings from the surface of the sloped area (also referred to as the battery wall) behind the 34 Cape Avenue property. The USEPA also excavated and disposed of oil- and lead-contaminated soil from the hydraulic compactor and shear unit located in the area north of the landfill. Two drums containing polychlorinated biphenyl (PCB) oil from the pipe at the former compactor building were shipped for off-site disposal, along with approximately 30 cubic yards of transit asbestos panels and the brush pile, pallet pile, railroad tie pile, debris piles, hydraulic shear, compactor, and tires (HDR|OBG JV, 2012).
2007 – 2008	A Remedial Investigation (RI) was conducted in 2007 and 2008 and based on the RI findings, the following six Areas of Concern (AOCs) were identified for the purpose of conducting the Feasibility Study (FS) for the Site. The six AOCs include the following: AOC 1 – Landfill Area – This AOC was located up-gradient of the Site adjacent to Cape Avenue where a majority of Site operations were conducted. Solid waste (scrap metal, wood, concrete, glass, plastic, and C&D debris) were deposited in this area, at thicknesses exceeding 12 feet. This AOC also included former baler area located approximately 175 feet northwest of the Site entrance, former compactor at the north end of the landfill area, and leachate area located near the bottom of the landfill embankment. The former baler area was identified as a location with spills and impacted soil with elevated levels of PCBs. The former baler building and discharge pipe containing PCB-contaminated oil were demolished and removed from the Site in 2005. The leachate area was observed during the RI near the bottom of the landfill area.

Samples collected from the leachate area during the RI indicated lower concentrations of contaminants of concerns (COCs) than detected during the 1999/2000 sampling events. The apparent reduction in contamination in the leachate may reflect that operations at the Site ceased several years ago and also, influenced by the USEPA cleanup activities when petroleum products and contaminated soil with free petroleum products were removed from the up-gradient former shear unit area in 2005.

AOC 2 & 3 – Debris Pile and Dumpster Staging Area (also referred to as Lower Plateau Area) – These AOCs were adjacent to the southern boundary on the landfill area, on the lower plateau area of the Site. The areas contained several large debris piles (scrap metal, pallets, railroad ties, tires, batteries) and solid waste dumpsters. The debris piles were removed in 2005 by USEPA. The area was characterized by debris mixed into the surface soils and a leachate seep from the landfill area.

AOC 4 – Scattered Debris Area – This AOC was located along the southern boundary of the Site and extends along the Beer Kill and to the north of the landfill area. The area was vegetated with older growth trees, scattered debris, and isolated debris piles (drums, scrap metal, ties). The drums and some of the debris were removed by the USEPA in 2005.

AOC 5 – Battery Disposal Area (also referred to as the battery wall) – This AOC was located adjacent to and east of the landfill area, behind the 34 Cape Avenue property. Battery casings were disposed of on the hillside behind the residence 34 Cape Avenue property. Hand removal of a large portion of the battery casings from the surface of the hillside was completed by the USEPA in 2005.

AOC 6 – Off-Property Residential Area – This AOC was located to the east of the Site. Several residential structures are located on the five residential properties located within the AOC. Based on subsequent soil sample results, Remedial Action (RA) was required at three of the properties (HDR|OBG JV, 2012).

2010 — A Record of Decision (ROD) for the Site was signed on September 30, 2010 selecting a remedy that consisted of an excavation and consolidation of contaminated soil and construction of an impermeable cap. Based on the RI and previous investigation findings, a Pre-Design Investigation (PDI) was conducted from October to November to fill gaps in soil data necessary to complete an effective Remedial Design (RD) as well as providing confirmatory end point sampling (post-excavation sample) results required to complete the construction. During the initial phase of the PDI field investigation, 191 soil borings/test pits were advanced/excavated, and 47 surface soil samples were collected. A total of 630 soil samples were collected from 238 locations for Base Neutral (BN) Semi-Volatile Organic Compounds (SVOCs), metals, and PCBs analyses. Contingency samples were collected at these 238 locations to delineate the extent of soil contamination in a single mobilization. Primary samples were analyzed for SVOCs, mainly polycyclic aromatic hydrocarbons (PAHs), metals, and PCBs, and based on the results; contingency samples were analyzed for only the parameters that exceeded the 6 New York Code of Rules and Regulations (NYCRR) Part 375-6.8(b): Restricted Use Soil Cleanup Objectives for Residential Soils (RSCOs) (HDR|OBG JV, 2012).

February 2011 — A second phase of the PDI was conducted to collect samples from the off-property residential area after securing all the access agreements. To minimize the total number of samples to be collected during the PDI, pre-defined excavation areas of various depths (1, 2, 3, and 4-foot) were identified to develop the conceptual sampling plan. During the

	supplemental PDI investigation, an additional 122 samples were collected from 80 locations in a second mobilization once access agreements to all the residential properties were obtained. A total of 752 samples were collected from 318 locations as part of the PDI (both initial and supplemental). A total of 390 samples were analyzed or approximately 52% of the total samples collected. Soil contamination was detected at concentrations greater than the RSCOs in approximately 28% of the primary sample locations. Analysis of the contingency samples resulted in further delineation to approximately 90% of the sample locations (HDR|OBG JV, 2012).
August 2012	The Final Remedial Action Report (RAR) (HDR|OBG JV, 2012) was prepared to describe remaining contamination at the Site under an impermeable cap. The cap was designed to meet the substantive requirement of 6 NYCRR Part 360 solid waste regulations.
August 2013	The Site Management Plan (SMP) (HDR|OBG JV, 2013) was prepared to manage the remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36 (HDR|OBG JV, 2012).

New York State Department of Environmental Conservation
Ellenville Scrap Iron and Metal - Site No. 356022
Ellenville, 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	
						Top (feet bgs)	Bottom (feet bgs)	Length (feet)	Top of Riser (TOR)	Screen		Northing*	Easting*
										Top	Bottom		
EPA-03**	4/16/2008	2	PVC	18	Overburden	13.0	18.0	5	400.57	387.57	382.57	1052781.72	518294.71
EPA-03B	8/19/2011	4	Steel Casing	49.5	Bedrock - Open borehole	14.5	49.5	30	397.14	N/A	N/A	1052765.18	518283.15
EPA-03R	7/10/2012	2	PVC	16.5	Overburden	6.5	16.5	10	399.79	393.29	383.29	1052788.37	518296.11
EPA-04	4/15/2008	2	PVC Riser / SS Screen	20.5	Overburden	15.5	20.5	5	395.99	380.49	375.49	1052479.48	518106.84
EPA-05	4/16/2008	2	PVC	27	Overburden	22	27	5	402.32	380.32	375.32	1052439.06	517770.62
EPA-06	4/10/2008	2	SS Steel	35	Overburden	30	35	5	410.80	380.80	375.80	1052769.90	517435.94
EPA-07	4/9/2008	2	PVC	27.5	Overburden	25	30	5	457.97	432.97	427.97	1053493.63	517402.71
EPA-08	8/17/2011	2	PVC	8	Overburden	3	8	5	452.52	449.52	444.52	1053309.68	517780.34
EPA-08B	8/19/2011	4	Steel Casing	26.3	Bedrock - Open borehole	6.5	26.3	20	450.76	444.26	424.46	1053307.22	517786.94
EPA-09	9/3/2011	2	PVC	18	Overburden	8	18	10	411.02	403.02	393.02	1053045.84	517452.94
EPA-10	8/31/2011	2	PVC	28	Overburden	13	28	15	404.17	391.17	376.17	1052873.08	517850.93
EPA-10B	8/30/2011	4	Steel Casing	55.5	Bedrock - Open borehole	40.5	55.5	15	404.28	363.78	348.78	1052877.07	517853.54
EPA-11	8/22/2011	2	PVC	7.5	Overburden	3.5	7.5	4	397.24	393.74	389.74	1052908.00	518150.13

Notes

AMSL : above mean sea level
feet bgs : feet below ground surface
PVC : polyvinyl chloride
N/A : not avaliable
Grey : abandoned or destroyed
* Coordinate System - NAD83 New York State Plane Central Feet
**EPA-03 decomissioned on July 10, 2012

APPENDIX B

NYSDEC Ellenville Scrap Iron and Metal Site
Photograph Log
Date: March 31, 2021

Photo 1: Site overview, looking southwest from the northern portion of the Site near the entrance gate.

Photo 2: Looking west. View of the constructed wetland area.

Photo 3: Looking east. View of the northern landfill cap.

Photo 4: Looking west. View of the northern rip rap channel.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
425272.0000 .0000	Andrew Fishman	1 of 3	NYSDEC	Ellenville Scrap Iron and Metal Site, Ellenville, NY	TRC

NYSDEC Ellenville Scrap Iron and Metal Site
Photograph Log
Date: March 31, 2021

Photo 5: Looking southwest. View of the landfill cap and vent piping.

Photo 6: Looking west. View of the western portion of the landfill and western gate.

Photo 7: Looking south. View of the downhill slope of cap.

Photo 8: Looking southeast. View of the stormwater basin and southern cap slope.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
425272.0000 .0000	Andrew Fishman	2 of 3	NYSDEC	Ellenville Scrap Iron and Metal Site, Ellenville, NY	TRC

NYSDEC Ellenville Scrap Iron and Metal Site
Photograph Log
Date: March 31, 2021

Photo 9: View of EPA-09 being sampled.

Photo 10: Looking east. View of the southern drainage channel and stormwater basin.

Photo 11: Looking south. View of small trees growing in the southern drainage channel.

Photo 12: Looking northeast. View of a typical vent.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
425272.0000 .0000	Andrew Fishman	3 of 3	NYSDEC	Ellenville Scrap Iron and Metal Site, Ellenville, NY	TRC

New York State Department of Environmental Conservation
Ellenville Scrap Iron and Metal Site, Site Number: 356022
Ellenville, NY

Site-Wide Inspection Checklist

Type of Inspection: ☒ Semi-annual ☐ Storm-Driven ☐ Other:_____

I. SITE INFORMATION

Site Name: Ellenville Scrap Iron & Metal	**Date of Inspection: March 31, 2021**
Location and Region: Ellenville, NY	**Site ID:** 356022
Agency, office, or company leading the annual review:	**Weather/temperature: Sunny, 55 ° F**

Remedy Includes: (Check all that apply)

☒ Monitored natural attenuation
☒ Access controls
☒ Institutional controls
☐ Groundwater containment
☐ Groundwater pump and treatment
☐ Surface water collection and treatment
☒ Other - Listed below.

Landfill cap and supporting features

Attachments: ☐ Monitoring Well Construction Information X Site map attached

II. INTERVIEWS (Check all that apply)

1. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency: NYSDEC
Contact: Michael Squire (Name) Project Manager (Title) 03/31/2021 (Date) 518-402-9546 (Phone no.)
Problems; suggestions; ☐ Report attached Michael Squire, the NYSDEC Project Manager, was not present on-Site for an interview on March 31, 2021.

Agency _____
Contact _____ (Name) _____ (Title) _____ (Date) _____ (Phone no.)
Problems; suggestions; ☐ Report attached _____

Agency _____
Contact _____ (Name) _____ (Title) _____ (Date) _____ (Phone no.)
Problems; suggestions; ☐ Report attached _____

Agency _____
Contact _____ (Name) _____ (Title) _____ (Date) _____ (Phone no.)
Problems; suggestions; ☐ Report attached _____

Agency _____
Contact _____ (Name) _____ (Title) _____ (Date) _____ (Phone no.)
Problems; suggestions; ☐ Report attached _____

2. **Other interviews** (optional) ☐ Report attached. Not applicable.

III. DOCUMENTS & RECORDS MAINTAINED AT TRC OFFICES VERIFIED (Check all that apply)

(Completed in-office, prior to site visit)

1. **O&M Documents**

X SMP	X Readily available	☐ Up to date	☐ N/A
X As-built drawings	X Readily available	☐ Up to date	☐ N/A
☐ Maintenance logs	☐ Readily available	☐ Up to date	X N/A

Remarks_____

2. **Site-Specific Health and Safety Plan** X Readily available X Up to date ☐ N/A
   ☐ Contingency plan/emergency response plan ☐ Readily available ☐ Up to date ☐ N/A
   Remarks_____

3. **OSHA Training Records**
   Personnel: Name: AF & LL X Readily available X Up to date ☐ N/A
   Remarks_____

4. **Previous Periodic Review Report (PRR)** X Readily available X Up to date ☐ N/A
   Remarks_____

IV. O&M COSTS

1. **O&M Organization**
   ☐ State in-house X Contractor for State
   ☐ PRP in-house ☐ Contractor for PRP
   ☐ Federal Facility in-house ☐ Contractor for Federal Facility
   ☐ Other_____

2. **O&M Cost Records**
   X Readily available X Up to date
   X Funding mechanism/agreement in place

3. **Unanticipated or Unusually High O&M Costs During Review Period**
   Describe costs and reasons: Not applicable_____

4. **Possible Expenditures required to address site deficiencies**
   Not applicable

V. ACCESS AND INSTITUTIONAL CONTROLS

A. Fencing

1. **Fencing damaged** ☐ Location shown on site map ☐ N/A
   Remarks Not applicable

B. Gates

1. **Site Entrance Slide Gate** ☐ Location shown on site map ☐ N/A
   Condition: X Good ☐ Needs maintenance ☐ N/A
   Remarks Not applicable

2. **Basin Swing Gate** ☐ Location shown on site map ☐ N/A
   Condition: X Good ☐ Needs maintenance ☐ N/A
   Remarks Not applicable

3. **Landfill Main Gate** ☐ Location shown on site map ☐ N/A
   Condition: X Good ☐ Needs maintenance ☐ N/A
   Remarks Not applicable

4. **Parking Area Swing Gate** ☐ Location shown on site map ☐ N/A
   Condition: X Good ☐ Needs maintenance ☐ N/A
   Remarks Not applicable

C. Other Access Restrictions

1. **Signs and other security measures** ☐ Location shown on site map X N/A
   Condition: X Good ☐ Needs maintenance ☐ N/A
   Remarks Not applicable

2. **Guardrails** ☐ Location shown on site map ☐ N/A
   Condition: X Good ☐ Needs maintenance ☐ N/A
   Remarks

D. Institutional Controls (ICs) - See Section 2.3 of SMP (Attached)

1. **Implementation and enforcement**

Site conditions imply ICs not properly implemented ☐ Yes X No ☐ N/A

Site conditions Imply ICs not being fully enforced ☐ Yes X No ☐ N/A

Type of monitoring (*e.g.* , self-reporting, drive-by) Self-reporting _____

Frequency Semi-annual _____

Responsible party/agency NYSDEC _____

Contact	Name	Title	Date	Phone no.
	Michael Squire	Project Manager	3/31/2021	518-402-9546

Reporting is up-to-date X Yes ☐ No ☐ N/A

Reports are verified by the lead agency X Yes ☐ No ☐ N/A

Specific requirements in deed or decision document have been met X Yes ☐ No ☐ N/A

Site conditions imply ICs not properly implemented ☐ Yes X No ☐ N/A

Other problems or suggestions: ☐ Report attached

Not applicable _____

2. **Adequacy** X ICs are adequate ☐ ICs are inadequate ☐ N/A

Remarks Not applicable _____

E. General

1. **Vandalism/trespassing** ☐ Location shown on site map X No vandalism evident

Remarks Not applicable _____

2. **Land use changes on-site** X N/A

Remarks Not applicable _____

3. **Land use changes off-site** X N/A

Remarks Not applicable _____

VI. GENERAL SITE CONDITIONS

A. Access Roads X Applicable ☐ N/A

1. **Roads damaged** ☐ Location shown on site map X Roads adequate ☐ N/A

Remarks Slight vegetation appeared on the northern Site access road. _____

B. Other Site Conditions

1. **Litter** ☐ Litter present on Site X No litter present

Remarks Not applicable _____

2. **Heaved areas** ☐ Location shown on site map X No heaving evident

Remarks Not applicable _____

3. **Other**

_____
_____
_____
_____
_____

VII. LANDFILL COVERS

A. Landfill Surface

1. **Settlement** (Low spots) ☐ Location shown on site map X Settlement not evident
   Areal extent_____ Depth_____
   Remarks Not applicable_____
   _____

2. **Cracks** ☐ Location shown on site map X Cracking not evident
   Lengths_____ Widths_____ Depths_____
   Remarks Not applicable_____
   _____

3. **Erosion** ☐ Location shown on site map X Erosion not evident
   Areal extent_____ Depth_____
   Remarks Not applicable_____
   _____

4. **Holes/ Rodent Burrows** ☐ Location shown on site map X Holes not evident
   Areal extent_____ Depth_____
   Remarks Not applicable_____
   _____

5. **Vegetative Restoration** X Grass X Cover properly established X No signs of stress
   ☐ Trees/Shrubs (indicate size and locations on a diagram)
   Remarks Not applicable_____
   _____

6. **Deep Rooted Vegetation** ☐ Location shown on site map X Not evident
   ☐ Trees/Shrubs (indicate size and locations on a diagram) ☐ Roots appear to breach cap
   Remarks_____
   _____

7. **Alternative Cover (armored rock, concrete, etc.)** X N/A
   Remarks Not applicable_____
   _____

8. **Bulges** ☐ Location shown on site map X Bulges not evident
   Areal extent_____ Height_____
   Remarks Not applicable_____
   _____

9. **Wet Areas/Water Damage** X Wet areas/water damage not evident
   - ☐ Wet areas ☐ Location shown on site map Areal extent_____
   - ☐ Ponding ☐ Location shown on site map Areal extent_____
   - ☐ Seeps ☐ Location shown on site map Areal extent_____
   - ☐ Soft subgrade ☐ Location shown on site map Areal extent_____

   Remarks Not applicable_____

10. **Slope Instability** ☐ Slides ☐ Location shown on site map X No evidence of slope instability
    Areal extent_____
    Remarks Not applicable_____

B. Cover Penetrations X Applicable ☐ N/A

1. **Gas Vents** ☐ Active X Passive
   ☐ Properly secured/locked X Functioning ☐ Routinely Sampled X Screen and Riser in Good condition
   ☐ Evidence of leakage at penetration ☐ Needs Maintenance
   ☐ N/A
   Remarks Not applicable_____

2. **Monitoring Wells** (within surface area of landfill)
   X Properly secured/locked X Functioning X Routinely Sampled X Well Caps in Good condition
   ☐ Evidence of leakage at penetration ☐ Needs Maintenance X Concrete Pad Intact ☐ N/A
   Remarks Not applicable_____

C. Cover Drainage Layer X Applicable ☐ N/A

1. **Outlet Pipes Inspected** ☐ Functioning X N/A
   Remarks_____

2. **Outlet Rock Inspected** X Functioning ☐ N/A
   Remarks_____

D. Detention Basin X Applicable ☐ N/A

1. **Siltation** Areal Extent_____ Depth_____ ☐ N/A
   X Siltation not evident
   Remarks Not applicable_____

2. **Erosion** Areal Extent_____ Depth_____
   X Erosion not evident
   Remarks Not applicable_____

3. **Detention Basin Overflow** X Functioning ☐ N/A
Remarks No water noted in detention basin. _____

E. Perimeter Drainage Channels X Applicable ☐ N/A

1. **Siltation** ☐ Location shown on site map X Siltation not evident
Areal extent_____ Depth_____
Remarks No water noted in the drainage channels._____

2. **Vegetative Growth** ☐ Location shown on site map X N/A
X Vegetation does not impede flow
Areal extent_____ Type_____
Remarks Not applicable_____

3. **Erosion** ☐ Location shown on site map X Erosion not evident
Areal extent_____ Depth_____
Remarks Not applicable_____

VIII. GROUNDWATER/SURFACE WATER REMEDIES

A. Construction Wetland

1. **Erosion** ☐ Location shown on site map X Erosion not evident
Areal extent_____ Depth_____
Remarks Not applicable_____

2. **Health of Vegetation** X Vegetation appears healthy ☐ Invasive Species Evident (list below)
Remarks Not applicable_____

B. Monitoring Data

1. Monitoring Data
X Is routinely submitted on time ☐ Is of acceptable quality

2. Monitoring Data Suggests: Not applicable
☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining

C. Monitoring Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)
☒ Properly secured/locked ☒ Functioning ☒ Routinely Sampled ☒ Good condition
☐ All required wells located ☐ Needs maintenance X N/A
Remarks:
Unable to locate monitoring wells EPA-04, EPA-05, EPA-07, and EPA-08.

IX. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emissions, etc.)

The landfill cap and supporting features are intact, in good condition, and are functioning as intended.

The effectiveness, protectiveness, etc. of the remedy will be further evaluated in the Periodic Review Report for the Site.

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

No issues noted.

C. Implementation of the Remedy

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.

No issues noted.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

No issues noted.

New Yor State Department of Environmental Conservation
Ellenville Scrap Iron and Metal Site, Site Number: 356022
Ellenville, NY
Monitoring Well Inspection Form

INSPECTOR: Andrew Fishman & Lexie Lill
DATE/TIME: March 31, 2021 / NA
WELL ID: EPA-03B

	YES	NO
WELL VISIBLE? (If not, provided directions below)	X	
WELL ID VISIBLE?	X	
WELL LOCATTIONS MATCH SITE MAP? (If not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (if cracked, heaved, etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	0.0 PPM
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Stick-up / 1.90
PROTECTIVE CASING MATERIAL TYPE:	Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6 - inches

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?	X	
DID YOU REPLACE THE LOCK?		X
IS THER EVIDENCE THAT THE WELL IS DOUBLE-CASED? (If yes, describe below)	X	
WELL MEASURING POINT VISIBLE?	X	

WELL DEPTH FROM MEASURING POINT (Feet):	52.11
DEPTH OF WATER FROM MEASURING POINT (Feet):.....	7.17
WELL DIAMETER (Inches):	4 inches
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	NA
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
The well is accessible by foot and is located in the eastern portion of the Site.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located inside the pedestrian gate on the eastern edge of the Site.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
None

REMARKS:
None

New Yor State Department of Environmental Conservation
Ellenville Scrap Iron and Metal Site, Site Number: 356022
Ellenville, NY
Monitoring Well Inspection Form

INSPECTOR: Andrew Fishman & Lexie Lill
DATE/TIME: March 31, 2021 / NA
WELL ID: EPA-03R

	YES	NO
WELL VISIBLE? (If not, provided directions below)	X	
WELL ID VISIBLE?	X	
WELL LOCATTIONS MATCH SITE MAP? (If not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (if cracked, heaved, etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	0.0 PPM
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Stick-up / 2.31
PROTECTIVE CASING MATERIAL TYPE:	Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6 - inches

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?	X	
DID YOU REPLACE THE LOCK?		X
IS THER EVIDENCE THAT THE WELL IS DOUBLE-CASED? (If yes, describe below)	X	
WELL MEASURING POINT VISIBLE?	X	

WELL DEPTH FROM MEASURING POINT (Feet):	14.93
DEPTH OF WATER FROM MEASURING POINT (Feet):.....	10.66
WELL DIAMETER (Inches):	2 inches
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	NA
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
The well accessible by foot and is located in the eastern portion of the Site.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located inside the pedestrian gate on the eastern edge of the Site.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
None

REMARKS:
None

New Yor State Department of Environmental Conservation
Ellenville Scrap Iron and Metal Site, Site Number: 356022
Ellenville, NY
Monitoring Well Inspection Form

INSPECTOR: Andrew Fishman & Lexie Lill
DATE/TIME: March 31, 2021 / NA
WELL ID: EPA-08

	YES	NO
WELL VISIBLE? (If not, provided directions below)	X	
WELL ID VISIBLE?	X	
WELL LOCATTIONS MATCH SITE MAP? (If not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (if cracked, heaved, etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	0.0 PPM
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Stick-up / 2.20
PROTECTIVE CASING MATERIAL TYPE:	Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6 - inches

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?	X	
DID YOU REPLACE THE LOCK?		X
IS THER EVIDENCE THAT THE WELL IS DOUBLE-CASED? (If yes, describe below)	X	
WELL MEASURING POINT VISIBLE?	X	

WELL DEPTH FROM MEASURING POINT (Feet):	10.38
DEPTH OF WATER FROM MEASURING POINT (Feet):.....	3.23
WELL DIAMETER (Inches):	2 inches
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	NA
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
The well is located along the northern most Site access road and is easily accessible.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located in the northern portion of the Site along the landfill perimeter fence and northernmost access road.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
None

REMARKS:
None

New Yor State Department of Environmental Conservation
Ellenville Scrap Iron and Metal Site, Site Number: 356022
Ellenville, NY
Monitoring Well Inspection Form

INSPECTOR: Andrew Fishman & Lexie Lill
DATE/TIME: March 31, 2021 / NA
WELL ID: EPA-08B

	YES	NO
WELL VISIBLE? (If not, provided directions below)	X	
WELL ID VISIBLE?	X	
WELL LOCATTIONS MATCH SITE MAP? (If not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (if cracked, heaved, etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	0.1 PPM
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Stick-up / 2.55
PROTECTIVE CASING MATERIAL TYPE:	Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6 - inches

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?	X	
DID YOU REPLACE THE LOCK?		X
IS THER EVIDENCE THAT THE WELL IS DOUBLE-CASED? (If yes, describe below)	X	
WELL MEASURING POINT VISIBLE?	X	

WELL DEPTH FROM MEASURING POINT (Feet):	31.98
DEPTH OF WATER FROM MEASURING POINT (Feet):.....	10.4
WELL DIAMETER (Inches):	4 inches
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	NA
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
The well is located along the northern most Site access road and is easily accessible.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located in the northern portion of the Site along the landfill perimeter fence and northernmost access road.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
None

REMARKS:
None

New Yor State Department of Environmental Conservation
Ellenville Scrap Iron and Metal Site, Site Number: 356022
Ellenville, NY
Monitoring Well Inspection Form

INSPECTOR: Andrew Fishman & Lexie Lill
DATE/TIME: March 31, 2021 / NA
WELL ID: EPA-09

	YES	NO
WELL VISIBLE? (If not, provided directions below)	X	
WELL ID VISIBLE?	X	
WELL LOCATTIONS MATCH SITE MAP? (If not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (if cracked, heaved, etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	0.0 PPM
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Stick-up / 1.78
PROTECTIVE CASING MATERIAL TYPE:	Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6 - inches

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?	X	
DID YOU REPLACE THE LOCK?		X
IS THER EVIDENCE THAT THE WELL IS DOUBLE-CASED? (If yes, describe below)	X	
WELL MEASURING POINT VISIBLE?	X	

WELL DEPTH FROM MEASURING POINT (Feet):	20.42
DEPTH OF WATER FROM MEASURING POINT (Feet):.....	12.71
WELL DIAMETER (Inches):	2 inches
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	NA
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
The well is located inside the perimeter fence and can only be accessed by foot.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located along the landfill perimeter fence in the southwestern poriton of the Site.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
None

REMARKS:
None

New Yor State Department of Environmental Conservation
Ellenville Scrap Iron and Metal Site, Site Number: 356022
Ellenville, NY
Monitoring Well Inspection Form

INSPECTOR: Andrew Fishman & Lexie Lill
DATE/TIME: March 31, 2021 / NA
WELL ID: EPA-10

	YES	NO
WELL VISIBLE? (If not, provided directions below)	X	
WELL ID VISIBLE?	X	
WELL LOCATTIONS MATCH SITE MAP? (If not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (if cracked, heaved, etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	0.3 PPM
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Stick-up / 1.42
PROTECTIVE CASING MATERIAL TYPE:	Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6 - inches

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?	X	
DID YOU REPLACE THE LOCK?		X
IS THER EVIDENCE THAT THE WELL IS DOUBLE-CASED? (If yes, describe below)	X	
WELL MEASURING POINT VISIBLE?	X	

WELL DEPTH FROM MEASURING POINT (Feet):	30.65
DEPTH OF WATER FROM MEASURING POINT (Feet):.....	12.84
WELL DIAMETER (Inches):	2 inches
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	NA
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
The well is located along the eastern Site access road and is easily accessible.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located along the landfill perimeter fence along the eastern Site access road.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
None

REMARKS:
None

New Yor State Department of Environmental Conservation
Ellenville Scrap Iron and Metal Site, Site Number: 356022
Ellenville, NY
Monitoring Well Inspection Form

INSPECTOR: Andrew Fishman & Lexie Lill
DATE/TIME: March 31, 2021 / NA
WELL ID: EPA-10B

	YES	NO
WELL VISIBLE? (If not, provided directions below)	X	
WELL ID VISIBLE?	X	
WELL LOCATTIONS MATCH SITE MAP? (If not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (if cracked, heaved, etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	0.0 PPM
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Stick-up / 1.75
PROTECTIVE CASING MATERIAL TYPE:	Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6 - inches

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?	X	
DID YOU REPLACE THE LOCK?		X
IS THER EVIDENCE THAT THE WELL IS DOUBLE-CASED? (If yes, describe below)	X	
WELL MEASURING POINT VISIBLE?	X	

WELL DEPTH FROM MEASURING POINT (Feet):	59.71
DEPTH OF WATER FROM MEASURING POINT (Feet):.....	10.95
WELL DIAMETER (Inches):	4 inches
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	NA
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
The well is located along the eastern Site access road and is easily accessible.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located along the landfill perimeter fence along the eastern Site access road.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
None

REMARKS:
None

New Yor State Department of Environmental Conservation
Ellenville Scrap Iron and Metal Site, Site Number: 356022
Ellenville, NY
Monitoring Well Inspection Form

INSPECTOR: Andrew Fishman & Lexie Lill
DATE/TIME: March 31, 2021 / NA
WELL ID: EPA-11

	YES	NO
WELL VISIBLE? (If not, provided directions below)	X	
WELL ID VISIBLE?	X	
WELL LOCATTIONS MATCH SITE MAP? (If not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (if cracked, heaved, etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED	0.0 PPM
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Stick-up / 1.75
PROTECTIVE CASING MATERIAL TYPE:	Steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6 - inches

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?	X	
DID YOU REPLACE THE LOCK?		X
IS THER EVIDENCE THAT THE WELL IS DOUBLE-CASED? (If yes, describe below)	X	
WELL MEASURING POINT VISIBLE?	X	

WELL DEPTH FROM MEASURING POINT (Feet):	9.00
DEPTH OF WATER FROM MEASURING POINT (Feet):.....	8.43
WELL DIAMETER (Inches):	2 inches
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	NA
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
The well is located outside the perimeter fence and is only accessible by foot.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located outside the perimeter fence along the eastern Site boundary.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
None

REMARKS:
None

APPENDIX C

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Ellenville Scrap Iron and Metal
PROJECT NUMBER	425272
SAMPLE ID	ESY-EPA-03B
SAMPLE TIME	12:15

LOCATION ID	EPA-03B
DATE	3/30/2021
START TIME	11:35
END TIME	12:25
SITE NAME/NUMBER	356022
PAGE	1 OF 1

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

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

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

WELL INTEGRITY

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

INITIAL DTW (BMP)	7.50 FT	**FINAL DTW (BMP)**	7.75 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	FT
WELL DEPTH (BMP)	52.11 FT	**SCREEN LENGTH**	30 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	44.61 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.16 GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	7.32 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	2.28 GAL	**DRAWDOWN/ TOTAL PURGED**		**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
11:35	**BEGIN PURGING**									
11:45	7.56	250	9.7	0.903	7.50	0.86	30.02	-137.4	45	
11:55	7.66	250	9.5	0.909	7.58	0.73	31.75	-157.8	45	
12:00	7.70	250	9.4	0.911	7.60	0.7	31.77	-163.1	45	
12:05	7.73	250	9.6	0.913	7.63	0.68	30.34	-170.4	45	
12:10	7.75	250	9.7	0.916	7.63	0.67	29.51	-172.7	45	

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

10	**0.916**	**7.6**	**0.7**	**29.5**	**-170**	

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
- [x] WL METER: Heron
- [x] PID: MiniRae3000
- [x] WQ METER: YSI ProDSS
- [x] TURB. METER: YSI ProDSS
- [x] PUMP: Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. ____ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
x	TAL Metals	6010	No	HNO3	25 mL	Yes	No	See COC
x	Cyanide	9010	No	NaOH	250 mL	Yes	No	See COC
x	PFAS	537 mod.	No	Trizma	250 mL	Yes	No	See COC
x	TCL VOCs + 10 TICs	8260	No	HCl	40 mL	Yes	No	See COC

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [x]

NUMBER OF GALLONS GENERATED

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

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

SKETCH/NOTES

Open hole bedrock well

Sampler Signature: Lexie Lill Print Name: Lexie Lill

Checked By: Justin King Date: 7/28/2021

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Ellenville Scrap Iron and Metal	**LOCATION ID**	EPA-08B
PROJECT NUMBER	425272	**DATE**	3/30/2021
SAMPLE ID	ESY-EPA-08B	**START TIME**	12:45
SAMPLE TIME	13:45	**END TIME**	13:55
		SITE NAME/NUMBER	356022
		PAGE	1 OF 1

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

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

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

WELL INTEGRITY

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

INITIAL DTW (BMP)	10.40 FT	**FINAL DTW (BMP)**	10.72 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	FT
WELL DEPTH (BMP)	31.98 FT	**SCREEN LENGTH**	20 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	21.58 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.210 GAL	**PID WELL MOUTH**	0.1 PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	14.17 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	3.58 GAL	**DRAWDOWN/ TOTAL PURGED**		**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
12:45	**BEGIN PURGING**									
12:55	10.78	250	10.8	1.846	6.65	5.16	169.11	84.5	20	
13:00	10.65	250	12.2	1.910	6.59	5.41	108.44	88.2	20	
13:05	10.72	250	11.0	1.950	6.58	5.58	114.89	94.2	20	
13:10	10.68	250	12.1	1.991	6.55	5.87	108.14	98.8	20	
13:20	10.70	250	12.0	2.041	6.54	6.01	86.36	104.9	20	
13:30	10.70	250	12.0	2.133	6.50	6.85	81.98	116.8	20	
13:35	10.70	250	12.0	2.167	6.48	7.16	77.89	124.0	20	
13:40	10.72	250	11.7	2.160	6.49	7.01	71.03	125.9	20	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**12**	**2.16**	**6.5**	**7.0**	**71.0**	**130**		

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
- [x] WL METER Heron
- [x] PID MiniRae3000
- [x] WQ METER YSI ProDSS
- [x] TURB. METER YSI ProDSS
- [x] PUMP Pine Peri Pump
- [ ] OTHER
- [ ] FILTERS NO. TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
x	TAL Metals	6010	No	HNO3	25 mL	Yes	No	See COC
x	Cyanide	9010	No	NaOH	250 mL	Yes	No	See COC
x	PFAS	537 mod.	No	Trizma	250 mL	Yes	No	See COC
x	TCL VOCs + 10 TICs	8260	No	HCl	40 mL	Yes	No	See COC

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [x]

NUMBER OF GALLONS GENERATED

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

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

SKETCH/NOTES

Open hole bedrock well

Sampler Signature: Lexie Lill Print Name: Lexie Lill

Checked By: Justin King Date: 7/28/2021

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Ellenville Scrap Iron and Metal		EPA-09	3/31/2021
PROJECT NUMBER		**START TIME**	**END TIME**
425272		11:20	12:15
SAMPLE ID	**SAMPLE TIME**	**SITE NAME/NUMBER**	**PAGE**
ESY-EPA-09	12:05	356022	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) [x] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	13.20 FT	**FINAL DTW (BMP)**	13.25 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	FT
WELL DEPTH (BMP)	20.42 FT	**SCREEN LENGTH**	10 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	7.22 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.0082 GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.18 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	2.60 GAL	**DRAWDOWN/ TOTAL PURGED**		**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
11:20	**BEGIN PURGING**									
11:35	13.25	250	6.7	0.334	7.02	8.07	29.68	113.8	18	
11:40	13.25	250	6.2	0.328	6.59	7.91	20.16	130.8	18	
11:45	13.25	250	6.2	0.330	6.45	7.95	13.12	151.4	18	
11:50	13.25	250	6.2	0.333	6.42	8.12	13.10	161.0	18	
11:55	13.25	250	6.1	0.333	6.39	8.11	12.91	168.4	18	
12:00	13.25	250	6.2	0.337	6.38	8.19	11.75	170.2	18	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])										**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)
			6	**0.337**	**6.4**	**8.2**	**11.8**	**170**		

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
- [x] WL METER Heron
- [x] PID MiniRae3000
- [x] WQ METER YSI ProDSS
- [x] TURB. METER YSI ProDSS
- [x] PUMP Pine Peri Pump
- [ ] OTHER _____
- [ ] FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
x	TAL Metals	6010	No	HNO3	25 mL	Yes	No	See COC
x	Cyanide	9010	No	NaOH	250 mL	Yes	No	See COC
x	PFAS	537 mod.	No	Trizma	250 mL	Yes	No	See COC
x	TCL VOCs + 10 TICs	8260	No	HCl	40 mL	Yes	No	See COC

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [x]

NUMBER OF GALLONS GENERATED

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

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

SKETCH/NOTES

Sampler Signature: Lexie Lill Print Name: Lexie Lill

Checked By: Justin King Date: 7/28/2021

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Ellenville Scrap Iron and Metal		EPA-10	3/31/2021
PROJECT NUMBER		**START TIME**	**END TIME**
425272		10:00	10:55
SAMPLE ID	**SAMPLE TIME**	**SITE NAME/NUMBER**	**PAGE**
ESY-EPA-10	10:50	356022	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) [x] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

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

INITIAL DTW (BMP)	13.45 FT	**FINAL DTW (BMP)**	13.34 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	FT
WELL DEPTH (BMP)	30.65 FT	**SCREEN LENGTH**	15 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	17.20 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	-0.0180 GAL	**PID WELL MOUTH**	0.3 PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.82 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	2.96 GAL	**DRAWDOWN/ TOTAL PURGED**		**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
10:00	**BEGIN PURGING**									
10:15	13.61	250	9.4	0.732	6.76	0.74	28.51	-67.2		
10:20	13.63	250	9.5	0.732	6.77	0.71	28.20	-69.6		
10:25	13.48	250	9.6	0.731	6.77	0.69	27.91	-72.0		
10:30	13.40	250	9.5	0.730	6.77	0.71	36.49	-72.8		
10:35	13.35	250	9.6	0.732	6.78	0.72	44.41	-72.6		
10:40	13.32	250	9.6	0.730	6.76	0.72	44.64	-72.0		
10:45	13.34	250	9.6	0.731	6.77	0.72	45.72	-72.5		
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**10**	**0.731**	**6.8**	**0.7**	**45.7**	**-73**		

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
- [x] WL METER Heron
- [x] PID MiniRae3000
- [x] WQ METER YSI ProDSS
- [x] TURB. METER YSI ProDSS
- [x] PUMP Pine Peri Pump
- [ ] OTHER _____
- [ ] FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
x	TAL Metals	6010	No	HNO3	25 mL	Yes	Yes	See COC
x	Cyanide	9010	No	NaOH	250 mL	Yes	Yes	See COC
x	PFAS	537 mod.	No	Trizma	250 mL	Yes	Yes	See COC
x	TCL VOCs + 10 TICs	8260	No	HCl	40 mL	Yes	Yes	See COC

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [x]

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

NUMBER OF GALLONS GENERATED

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

SKETCH/NOTES

Sampler Signature: Lexie Lill Print Name: Lexie Lill

Checked By: Justin King Date: 7/28/2021

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Ellenville Scrap Iron and Metal		EPA-10B	3/31/2021
PROJECT NUMBER		**START TIME**	**END TIME**
425272		9:10	9:55
SAMPLE ID	**SAMPLE TIME**	**SITE NAME/NUMBER**	**PAGE**
ESY-EPA-10B	9:50	356022	1 OF 1

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

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

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

WELL INTEGRITY

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

INITIAL DTW (BMP)	11.20 FT	**FINAL DTW (BMP)**	12.29 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	FT
WELL DEPTH (BMP)	59.71 FT	**SCREEN LENGTH**	15 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	48.51 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.715 GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	31.82 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	2.28 GAL	**DRAWDOWN/ TOTAL PURGED**		**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
9:10	**BEGIN PURGING**									
9:25	11.91	250	9.8	0.234	8.29	0.77	34.16	-201.3	35	
9:30	12.10	250	9.8	0.234	8.31	0.74	36.41	-206.5	35	
9:35	12.19	250	9.8	0.234	8.31	0.73	38.95	-208.9	35	
9:40	12.23	250	9.7	0.233	8.32	0.72	38.99	-211.4	35	
9:45	12.29	250	9.7	0.233	8.32	0.71	37.77	-213.0	35	
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			**10**	**0.233**	**8.3**	**0.7**	**37.8**	**-210**		

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
- [x] WL METER Heron
- [x] PID MiniRae3000
- [x] WQ METER YSI ProDSS
- [x] TURB. METER YSI ProDSS
- [x] PUMP Pine Peri Pump
- [ ] OTHER _____
- [ ] FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
x	TAL Metals	6010	No	HNO3	25 mL	Yes	No	See COC
x	Cyanide	9010	No	NaOH	250 mL	Yes	No	See COC
x	PFAS	537 mod.	No	Trizma	250 mL	Yes	No	See COC
x	TCL VOCs + 10 TICs	8260	No	HCl	40 mL	Yes	No	See COC

PURGE OBSERVATIONS

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

NUMBER OF GALLONS GENERATED

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

SKETCH/NOTES

Open hole bedrock well

Sampler Signature: Lexie Lill Print Name: Lexie Lill

Checked By: Justin King Date: 7/28/2021

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Ellenville Scrap Iron and Metal		EPA-11	3/30/2021
PROJECT NUMBER		**START TIME**	**END TIME**
425272		10:45	11:25
SAMPLE ID	**SAMPLE TIME**	**SITE NAME/NUMBER**	**PAGE**
N/A	N/A	356022	1 OF 1

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

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

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

WELL INTEGRITY

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

INITIAL DTW (BMP)	8.43 FT	**FINAL DTW (BMP)**	9.00 FT	**PROT. CASING STICKUP (AGS)**	FT	**TOC/TOR DIFFERENCE**	FT
WELL DEPTH (BMP)	9.00 FT	**SCREEN LENGTH**	4 FT	**PID AMBIENT AIR**	0.0 PPM	**REFILL TIMER SETTING**	SEC
WATER COLUMN	0.57 FT	**DRAWDOWN VOLUME** (final DTW - initial DTW X well diam. squared X 0.041)	0.935 GAL	**PID WELL MOUTH**	0.0 PPM	**DISCHARGE TIMER SETTING**	SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.93 GAL	**TOTAL VOL. PURGED** (mL per minute X total minutes X 0.00026 gal/mL)	2.60 GAL	**DRAWDOWN/ TOTAL PURGED**		**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
10:45	**BEGIN PURGING**									
11:00	8.80	250	13.0	0.517	6.77	3.05	271.21	212.2	9.00	
11:05	8.97	250	13.6	0.520	6.82	3.70	389.84	211.8	9.00	
11:10	8.96	250	14.4	0.525	6.88	4.32	387.45	213.3	9.00	
11:15	8.96	250	15.1	0.529	6.90	4.55	392.86	215.2	9.00	
11:20	8.96	250	15.8	0.532	6.91	4.54	392.74	216.9	9.00	
11:25	9.00	DRY - COULD NOT COLLECT SAMPLE DUE TO INSUFFICIENT RECOVERY								

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

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
- [x] WL METER Heron
- [x] PID MiniRae3000
- [x] WQ METER YSI ProDSS
- [x] TURB. METER YSI ProDSS
- [x] PUMP Pine Peri Pump
- [ ] OTHER _____
- [ ] FILTERS NO. ____ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
x	TAL Metals	6010	No	HNO3	25 mL	No	No	See COC
x	Cyanide	9010	No	NaOH	250 mL	No	No	See COC
x	PFAS	537 mod.	No	Trizma	250 mL	No	No	See COC
x	TCL VOCs + 10 TICs	8260	No	HCl	40 mL	No	No	See COC

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [ ] NO [x]

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

NUMBER OF GALLONS GENERATED

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

SKETCH/NOTES

Sampler Signature: Lexie Lill Print Name: Lexie Lill

Checked By: Justin King Date: 7/28/2021

APPENDIX D

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

April 22, 2021

Justin King
TRC Solutions
10 Maxwell Drive
Suite 200
Clifton Park, NY 12065

RE: Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Dear Justin King:

Enclosed are the analytical results for sample(s) received by the laboratory on April 01, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicolette Lovari

Nicolette M. Lovari
nicolette.lovari@pacelabs.com
(631)694-3040
Project Manager

Enclosures

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Pace Analytical Services Long Island

Delaware Certification # NY10478
Delaware Certification # NY10478
Virginia Certification # 460302
575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435
Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
70167580001	**ESY-EPA-03B**	EPA 6010C	KM1	21	PACE-MV
		EPA 7470A	KM1	1	PACE-MV
		EPA 8260C/5030C	BBL	51	PACE-MV
		EPA 8260	BBL	1	PACE-MV
		EPA 9014 Total Cyanide	HMH	1	PACE-MV
70167580002	**ESY-EPA-08B**	EPA 6010C	KM1	21	PACE-MV
		EPA 7470A	KM1	1	PACE-MV
		EPA 8260C/5030C	BBL	51	PACE-MV
		EPA 8260	BBL	1	PACE-MV
		EPA 9014 Total Cyanide	HMH	1	PACE-MV
70167580003	**ESY-EPA-10B**	EPA 6010C	KM1	21	PACE-MV
		EPA 7470A	KM1	1	PACE-MV
		EPA 8260C/5030C	BBL	51	PACE-MV
		EPA 8260	BBL	1	PACE-MV
		EPA 9014 Total Cyanide	HMH	1	PACE-MV
70167580004	**ESY-SW**	EPA 6010C	KM1	21	PACE-MV
		EPA 7470A	KM1	1	PACE-MV
		EPA 8260C/5030C	BBL	51	PACE-MV
		EPA 8260	BBL	1	PACE-MV
		EPA 9014 Total Cyanide	HMH	1	PACE-MV
70167580005	**ESY-EPA-10**	EPA 6010C	KM1	21	PACE-MV
		EPA 7470A	KM1	1	PACE-MV
		EPA 8260C/5030C	BBL	51	PACE-MV
		EPA 8260	BBL	1	PACE-MV
		EPA 9014 Total Cyanide	HMH	1	PACE-MV
70167580006	**DUP**	EPA 6010C	KM1	21	PACE-MV
		EPA 7470A	KM1	1	PACE-MV
		EPA 8260C/5030C	BBL	51	PACE-MV
		EPA 8260	BBL	1	PACE-MV
		EPA 9014 Total Cyanide	HMH	1	PACE-MV
70167580007	**ESY-EPA-09**	EPA 6010C	KM1	21	PACE-MV
		EPA 7470A	KM1	1	PACE-MV
		EPA 8260C/5030C	BBL	51	PACE-MV
		EPA 8260	BBL	1	PACE-MV
		EPA 9014 Total Cyanide	HMH	1	PACE-MV
70167580008	**TRIP BLANK**	EPA 8260C/5030C	BBL	51	PACE-MV
		EPA 8260	BBL	1	PACE-MV

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory

PACE-MV = Pace Analytical Services - Melville

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-03B **Lab ID: 70167580001** Collected: 03/30/21 12:15 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:42	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 11:42	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:42	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:42	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 11:42	7440-43-9	
Calcium	**102000**	ug/L	200	1	04/02/21 10:21	04/05/21 11:42	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 11:42	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 11:42	7440-50-8	
Iron	**16800**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:42	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:42	7439-92-1	
Magnesium	**23700**	ug/L	200	1	04/02/21 10:21	04/05/21 11:42	7439-95-4	
Manganese	**1150**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 11:42	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:42	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7440-22-4	
Sodium	**35600**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:42	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:42	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 11:54	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 12:30	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 12:30	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 12:30	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 12:30	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-03B **Lab ID: 70167580001** Collected: 03/30/21 12:15 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 12:30	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 12:30	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 12:30	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 12:30	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 12:30	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 12:30	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 12:30	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	70-123	1		04/07/21 12:30	17060-07-0	
4-Bromofluorobenzene (S)	97	%	66-119	1		04/07/21 12:30	460-00-4	
Toluene-d8 (S)	91	%	82-121	1		04/07/21 12:30	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:01		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 10:25	04/12/21 12:49	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-08B **Lab ID: 70167580002** Collected: 03/30/21 13:45 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:49	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 11:49	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:49	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:49	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 11:49	7440-43-9	
Calcium	**79400**	ug/L	200	1	04/02/21 10:21	04/05/21 11:49	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 11:49	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 11:49	7440-50-8	
Iron	**4730**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:49	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:49	7439-92-1	
Magnesium	**9210**	ug/L	200	1	04/02/21 10:21	04/05/21 11:49	7439-95-4	
Manganese	**295**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 11:49	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:49	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7440-22-4	
Sodium	**313000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:49	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:49	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 11:56	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 12:49	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 12:49	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 12:49	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 12:49	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-08B **Lab ID: 70167580002** Collected: 03/30/21 13:45 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 12:49	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 12:49	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 12:49	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 12:49	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 12:49	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 12:49	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 12:49	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	83	%	70-123	1		04/07/21 12:49	17060-07-0	
4-Bromofluorobenzene (S)	96	%	66-119	1		04/07/21 12:49	460-00-4	
Toluene-d8 (S)	90	%	82-121	1		04/07/21 12:49	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:02		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 10:25	04/12/21 12:49	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-10B **Lab ID: 70167580003** Collected: 03/31/21 09:50 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:51	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 11:51	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:51	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:51	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 11:51	7440-43-9	
Calcium	**21600**	ug/L	200	1	04/02/21 10:21	04/05/21 11:51	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 11:51	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 11:51	7440-50-8	
Iron	**4800**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:51	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:51	7439-92-1	
Magnesium	**8800**	ug/L	200	1	04/02/21 10:21	04/05/21 11:51	7439-95-4	
Manganese	**159**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 11:51	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:51	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7440-22-4	
Sodium	**14600**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:51	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:51	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 11:57	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 13:09	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 13:09	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 13:09	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 13:09	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-10B **Lab ID: 70167580003** Collected: 03/31/21 09:50 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 13:09	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 13:09	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 13:09	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 13:09	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 13:09	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 13:09	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 13:09	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	70-123	1		04/07/21 13:09	17060-07-0	
4-Bromofluorobenzene (S)	96	%	66-119	1		04/07/21 13:09	460-00-4	
Toluene-d8 (S)	91	%	82-121	1		04/07/21 13:09	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:04		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 10:25	04/12/21 12:50	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-SW **Lab ID: 70167580004** Collected: 03/31/21 10:20 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:54	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 11:54	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:54	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:54	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 11:54	7440-43-9	
Calcium	**11900**	ug/L	200	1	04/02/21 10:21	04/05/21 11:54	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 11:54	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 11:54	7440-50-8	
Iron	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:54	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:54	7439-92-1	
Magnesium	**2420**	ug/L	200	1	04/02/21 10:21	04/05/21 11:54	7439-95-4	
Manganese	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 11:54	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:54	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7440-22-4	
Sodium	**22300**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:54	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:54	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 11:58	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 13:29	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 13:29	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 13:29	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 13:29	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-SW **Lab ID: 70167580004** Collected: 03/31/21 10:20 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 13:29	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 13:29	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 13:29	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 13:29	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 13:29	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 13:29	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 13:29	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	70-123	1		04/07/21 13:29	17060-07-0	
4-Bromofluorobenzene (S)	97	%	66-119	1		04/07/21 13:29	460-00-4	
Toluene-d8 (S)	90	%	82-121	1		04/07/21 13:29	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:05		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 10:25	04/12/21 12:50	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-10 **Lab ID: 70167580005** Collected: 03/31/21 10:50 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:56	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 11:56	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:56	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:56	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 11:56	7440-43-9	
Calcium	**79500**	ug/L	200	1	04/02/21 10:21	04/05/21 11:56	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 11:56	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 11:56	7440-50-8	
Iron	**16500**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:56	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:56	7439-92-1	
Magnesium	**14900**	ug/L	200	1	04/02/21 10:21	04/05/21 11:56	7439-95-4	
Manganese	**1100**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 11:56	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:56	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7440-22-4	M1
Sodium	**35200**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:56	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:56	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 12:00	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	79-34-5	M1
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	79-00-5	M1
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 13:49	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	78-87-5	M1
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 13:49	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 13:49	591-78-6	M1
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 13:49	108-10-1	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-10 **Lab ID: 70167580005** Collected: 03/31/21 10:50 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 13:49	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-25-2	M1
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 13:49	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 13:49	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 13:49	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 13:49	79-20-9	L1,M0
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 13:49	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	100-42-5	
Tetrachloroethene	**7.9**	ug/L	1.0	1		04/07/21 13:49	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	108-88-3	M1
Trichloroethene	**2.8**	ug/L	1.0	1		04/07/21 13:49	79-01-6	M1
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 13:49	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	83	%	70-123	1		04/07/21 13:49	17060-07-0	
4-Bromofluorobenzene (S)	97	%	66-119	1		04/07/21 13:49	460-00-4	
Toluene-d8 (S)	90	%	82-121	1		04/07/21 13:49	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:09		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 10:25	04/12/21 12:50	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: DUP **Lab ID: 70167580006** Collected: 03/31/21 11:10 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 12:08	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 12:08	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 12:08	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 12:08	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 12:08	7440-43-9	
Calcium	**83800**	ug/L	200	1	04/02/21 10:21	04/05/21 12:08	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 12:08	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 12:08	7440-50-8	
Iron	**17900**	ug/L	20.0	1	04/02/21 10:21	04/05/21 12:08	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 12:08	7439-92-1	
Magnesium	**15800**	ug/L	200	1	04/02/21 10:21	04/05/21 12:08	7439-95-4	
Manganese	**1170**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 12:08	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 12:08	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7440-22-4	
Sodium	**37200**	ug/L	5000	1	04/02/21 10:21	04/05/21 12:08	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 12:08	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 12:04	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 14:09	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 14:09	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 14:09	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 14:09	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: DUP **Lab ID: 70167580006** Collected: 03/31/21 11:10 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 14:09	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 14:09	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 14:09	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 14:09	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 14:09	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 14:09	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	100-42-5	
Tetrachloroethene	**7.7**	ug/L	1.0	1		04/07/21 14:09	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	108-88-3	
Trichloroethene	**2.9**	ug/L	1.0	1		04/07/21 14:09	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 14:09	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	83	%	70-123	1		04/07/21 14:09	17060-07-0	
4-Bromofluorobenzene (S)	93	%	66-119	1		04/07/21 14:09	460-00-4	
Toluene-d8 (S)	89	%	82-121	1		04/07/21 14:09	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:06		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 11:28	04/12/21 12:51	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-09 **Lab ID: 70167580007** Collected: 03/31/21 12:05 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 12:10	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 12:10	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 12:10	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 12:10	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 12:10	7440-43-9	
Calcium	**24200**	ug/L	200	1	04/02/21 10:21	04/05/21 12:10	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 12:10	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 12:10	7440-50-8	
Iron	**1640**	ug/L	20.0	1	04/02/21 10:21	04/05/21 12:10	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 12:10	7439-92-1	
Magnesium	**4330**	ug/L	200	1	04/02/21 10:21	04/05/21 12:10	7439-95-4	
Manganese	**61.5**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 12:10	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 12:10	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7782-49-2	
Silver	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7440-22-4	
Sodium	**31000**	ug/L	5000	1	04/02/21 10:21	04/05/21 12:10	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 12:10	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 12:08	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 14:29	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 14:29	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 14:29	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 14:29	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-09 **Lab ID: 70167580007** Collected: 03/31/21 12:05 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 14:29	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 14:29	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 14:29	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 14:29	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 14:29	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 14:29	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 14:29	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	70-123	1		04/07/21 14:29	17060-07-0	
4-Bromofluorobenzene (S)	97	%	66-119	1		04/07/21 14:29	460-00-4	
Toluene-d8 (S)	90	%	82-121	1		04/07/21 14:29	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:07		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/14/21 10:57	04/14/21 17:59	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: TRIP BLANK **Lab ID: 70167580008** Collected: 03/31/21 12:05 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 12:10	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 12:10	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 12:10	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 12:10	108-10-1	
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 12:10	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 12:10	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 12:10	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 12:10	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 12:10	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 12:10	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 12:10	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	10061-01-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: TRIP BLANK **Lab ID: 70167580008** Collected: 03/31/21 12:05 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	83	%	70-123	1		04/07/21 12:10	17060-07-0	
4-Bromofluorobenzene (S)	96	%	66-119	1		04/07/21 12:10	460-00-4	
Toluene-d8 (S)	89	%	82-121	1		04/07/21 12:10	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

QC Batch: 202905 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70167580001, 70167580002, 70167580003, 70167580004, 70167580005, 70167580006, 70167580007

METHOD BLANK: 999758 Matrix: Water
Associated Lab Samples: 70167580001, 70167580002, 70167580003, 70167580004, 70167580005, 70167580006, 70167580007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.20	0.20	04/07/21 11:44	

LABORATORY CONTROL SAMPLE: 999759

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.0	101	80-120	

MATRIX SPIKE SAMPLE: 999760

Parameter	Units	70167580005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	0.94	93	75-125	

SAMPLE DUPLICATE: 999761

Parameter	Units	70167580005 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

QC Batch: 202561
QC Batch Method: EPA 3005A
Analysis Method: EPA 6010C
Analysis Description: 6010 MET Water
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70167580001, 70167580002, 70167580003, 70167580004, 70167580005, 70167580006, 70167580007

METHOD BLANK: 997767 Matrix: Water
Associated Lab Samples: 70167580001, 70167580002, 70167580003, 70167580004, 70167580005, 70167580006, 70167580007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<200	200	04/05/21 11:37	
Antimony	ug/L	<60.0	60.0	04/05/21 11:37	
Arsenic	ug/L	<10.0	10.0	04/05/21 11:37	
Barium	ug/L	<200	200	04/05/21 11:37	
Beryllium	ug/L	<5.0	5.0	04/05/21 11:37	
Cadmium	ug/L	<2.5	2.5	04/05/21 11:37	
Calcium	ug/L	<200	200	04/05/21 11:37	
Chromium	ug/L	<10.0	10.0	04/05/21 11:37	
Cobalt	ug/L	<50.0	50.0	04/05/21 11:37	
Copper	ug/L	<25.0	25.0	04/05/21 11:37	
Iron	ug/L	<20.0	20.0	04/05/21 11:37	
Lead	ug/L	<5.0	5.0	04/05/21 11:37	
Magnesium	ug/L	<200	200	04/05/21 11:37	
Manganese	ug/L	<10.0	10.0	04/05/21 11:37	
Nickel	ug/L	<40.0	40.0	04/05/21 11:37	
Potassium	ug/L	<5000	5000	04/05/21 11:37	
Selenium	ug/L	<10.0	10.0	04/05/21 11:37	
Silver	ug/L	<10.0	10.0	04/05/21 11:37	
Sodium	ug/L	<5000	5000	04/05/21 11:37	
Thallium	ug/L	<10.0	10.0	04/05/21 11:37	
Zinc	ug/L	<20.0	20.0	04/05/21 11:37	

LABORATORY CONTROL SAMPLE: 997768

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	5130	103	80-120	
Antimony	ug/L	750	798	106	80-120	
Arsenic	ug/L	500	493	99	80-120	
Barium	ug/L	500	500	100	80-120	
Beryllium	ug/L	50	51.7	103	80-120	
Cadmium	ug/L	50	48.8	98	80-120	
Calcium	ug/L	25000	25300	101	80-120	
Chromium	ug/L	250	248	99	80-120	
Cobalt	ug/L	500	494	99	80-120	
Copper	ug/L	250	254	102	80-120	
Iron	ug/L	2000	2050	103	80-120	
Lead	ug/L	500	516	103	80-120	
Magnesium	ug/L	25000	25000	100	80-120	
Manganese	ug/L	250	250	100	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

LABORATORY CONTROL SAMPLE: 997768

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nickel	ug/L	250	255	102	80-120	
Potassium	ug/L	50000	50500	101	80-120	
Selenium	ug/L	750	744	99	80-120	
Silver	ug/L	250	255	102	80-120	
Sodium	ug/L	50000	51100	102	80-120	
Thallium	ug/L	750	743	99	80-120	
Zinc	ug/L	1000	1010	101	80-120	

MATRIX SPIKE SAMPLE: 997770

Parameter	Units	70167580005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<200	5000	4940	99	75-125	
Antimony	ug/L	<60.0	750	779	104	75-125	
Arsenic	ug/L	<10.0	500	498	98	75-125	
Barium	ug/L	<200	500	586	98	75-125	
Beryllium	ug/L	<5.0	50	49.8	100	75-125	
Cadmium	ug/L	<2.5	50	48.0	96	75-125	
Calcium	ug/L	79500	25000	104000	98	75-125	
Chromium	ug/L	<10.0	250	246	98	75-125	
Cobalt	ug/L	<50.0	500	487	97	75-125	
Copper	ug/L	<25.0	250	254	101	75-125	
Iron	ug/L	16500	2000	18900	116	75-125	
Lead	ug/L	<5.0	500	497	99	75-125	
Magnesium	ug/L	14900	25000	39300	98	75-125	
Manganese	ug/L	1100	250	1340	96	75-125	
Nickel	ug/L	<40.0	250	256	99	75-125	
Potassium	ug/L	<5000	50000	54600	105	75-125	
Selenium	ug/L	<10.0	750	745	99	75-125	
Silver	ug/L	<10.0	250	66.4	26	75-125	M1
Sodium	ug/L	35200	50000	86000	102	75-125	
Thallium	ug/L	<10.0	750	708	94	75-125	
Zinc	ug/L	<20.0	1000	983	98	75-125	

SAMPLE DUPLICATE: 997769

Parameter	Units	70167580005 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<200	<200		
Antimony	ug/L	<60.0	<60.0		
Arsenic	ug/L	<10.0	<10.0		
Barium	ug/L	<200	<200		
Beryllium	ug/L	<5.0	<5.0		
Cadmium	ug/L	<2.5	<2.5		
Calcium	ug/L	79500	80800	2	
Chromium	ug/L	<10.0	<10.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

SAMPLE DUPLICATE: 997769

Parameter	Units	70167580005 Result	Dup Result	RPD	Qualifiers
Cobalt	ug/L	<50.0	<50.0		
Copper	ug/L	<25.0	<25.0		
Iron	ug/L	16500	16900	2	
Lead	ug/L	<5.0	<5.0		
Magnesium	ug/L	14900	15300	3	
Manganese	ug/L	1100	1130	3	
Nickel	ug/L	<40.0	<40.0		
Potassium	ug/L	<5000	<5000		
Selenium	ug/L	<10.0	<10.0		
Silver	ug/L	<10.0	<10.0		
Sodium	ug/L	35200	36100	3	
Thallium	ug/L	<10.0	<10.0		
Zinc	ug/L	<20.0	<20.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

QC Batch: 203100
QC Batch Method: EPA 8260C/5030C
Analysis Method: EPA 8260C/5030C
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70167580001, 70167580002, 70167580003, 70167580004, 70167580005, 70167580006, 70167580007, 70167580008

METHOD BLANK: 1000841
Matrix: Water
Associated Lab Samples: 70167580001, 70167580002, 70167580003, 70167580004, 70167580005, 70167580006, 70167580007, 70167580008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<1.0	1.0	04/07/21 09:29	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	04/07/21 09:29	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	04/07/21 09:29	
1,1,2-Trichlorotrifluoroethane	ug/L	<1.0	1.0	04/07/21 09:29	
1,1-Dichloroethane	ug/L	<1.0	1.0	04/07/21 09:29	
1,1-Dichloroethene	ug/L	<1.0	1.0	04/07/21 09:29	v3
1,2,4-Trichlorobenzene	ug/L	<1.0	1.0	04/07/21 09:29	
1,2-Dibromo-3-chloropropane	ug/L	<1.0	1.0	04/07/21 09:29	v3
1,2-Dibromoethane (EDB)	ug/L	<1.0	1.0	04/07/21 09:29	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	04/07/21 09:29	
1,2-Dichloroethane	ug/L	<1.0	1.0	04/07/21 09:29	
1,2-Dichloropropane	ug/L	<1.0	1.0	04/07/21 09:29	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	04/07/21 09:29	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	04/07/21 09:29	
2-Butanone (MEK)	ug/L	<5.0	5.0	04/07/21 09:29	IL,v3
2-Hexanone	ug/L	<5.0	5.0	04/07/21 09:29	
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	5.0	04/07/21 09:29	
Acetone	ug/L	<5.0	5.0	04/07/21 09:29	IC
Benzene	ug/L	<1.0	1.0	04/07/21 09:29	
Bromodichloromethane	ug/L	<1.0	1.0	04/07/21 09:29	
Bromoform	ug/L	<1.0	1.0	04/07/21 09:29	
Bromomethane	ug/L	<1.0	1.0	04/07/21 09:29	
Carbon disulfide	ug/L	<1.0	1.0	04/07/21 09:29	
Carbon tetrachloride	ug/L	<1.0	1.0	04/07/21 09:29	
Chlorobenzene	ug/L	<1.0	1.0	04/07/21 09:29	
Chloroethane	ug/L	<1.0	1.0	04/07/21 09:29	
Chloroform	ug/L	<1.0	1.0	04/07/21 09:29	
Chloromethane	ug/L	<1.0	1.0	04/07/21 09:29	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	04/07/21 09:29	
cis-1,3-Dichloropropene	ug/L	<1.0	1.0	04/07/21 09:29	
Cyclohexane	ug/L	<1.0	1.0	04/07/21 09:29	
Dibromochloromethane	ug/L	<1.0	1.0	04/07/21 09:29	
Dichlorodifluoromethane	ug/L	<1.0	1.0	04/07/21 09:29	
Ethylbenzene	ug/L	<1.0	1.0	04/07/21 09:29	
Isopropylbenzene (Cumene)	ug/L	<1.0	1.0	04/07/21 09:29	
Methyl acetate	ug/L	<1.0	1.0	04/07/21 09:29	
Methyl-tert-butyl ether	ug/L	<1.0	1.0	04/07/21 09:29	
Methylcyclohexane	ug/L	<1.0	1.0	04/07/21 09:29	
Methylene Chloride	ug/L	<1.0	1.0	04/07/21 09:29	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

METHOD BLANK: 1000841 Matrix: Water
Associated Lab Samples: 70167580001, 70167580002, 70167580003, 70167580004, 70167580005, 70167580006, 70167580007, 70167580008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Styrene	ug/L	<1.0	1.0	04/07/21 09:29	
Tetrachloroethene	ug/L	<1.0	1.0	04/07/21 09:29	
Toluene	ug/L	<1.0	1.0	04/07/21 09:29	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	04/07/21 09:29	
trans-1,3-Dichloropropene	ug/L	<1.0	1.0	04/07/21 09:29	
Trichloroethene	ug/L	<1.0	1.0	04/07/21 09:29	
Trichlorofluoromethane	ug/L	<1.0	1.0	04/07/21 09:29	
Vinyl chloride	ug/L	<1.0	1.0	04/07/21 09:29	
Xylene (Total)	ug/L	<3.0	3.0	04/07/21 09:29	
1,2-Dichloroethane-d4 (S)	%	82	70-123	04/07/21 09:29	
4-Bromofluorobenzene (S)	%	96	66-119	04/07/21 09:29	
Toluene-d8 (S)	%	89	82-121	04/07/21 09:29	

LABORATORY CONTROL SAMPLE: 1000842

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	41.6	83	62-121	
1,1,2,2-Tetrachloroethane	ug/L	50	48.0	96	75-122	
1,1,2-Trichloroethane	ug/L	50	51.7	103	80-122	
1,1,2-Trichlorotrifluoroethane	ug/L	50	39.0	78	60-127	
1,1-Dichloroethane	ug/L	50	47.9	96	68-127	
1,1-Dichloroethene	ug/L	50	35.0	70	65-123	v3
1,2,4-Trichlorobenzene	ug/L	50	45.7	91	60-124	
1,2-Dibromo-3-chloropropane	ug/L	50	39.4	79	52-126	v3
1,2-Dibromoethane (EDB)	ug/L	50	50.9	102	74-125	
1,2-Dichlorobenzene	ug/L	50	45.3	91	76-117	
1,2-Dichloroethane	ug/L	50	43.7	87	73-128	
1,2-Dichloropropane	ug/L	50	52.0	104	79-117	
1,3-Dichlorobenzene	ug/L	50	45.8	92	73-120	
1,4-Dichlorobenzene	ug/L	50	44.9	90	73-119	
2-Butanone (MEK)	ug/L	50	31.4	63	28-169	IL,v3
2-Hexanone	ug/L	50	50.7	101	59-138	
4-Methyl-2-pentanone (MIBK)	ug/L	50	56.3	113	70-129	
Acetone	ug/L	50	53.8	108	10-225	IC,v1
Benzene	ug/L	50	51.1	102	73-121	
Bromodichloromethane	ug/L	50	47.0	94	74-127	
Bromoform	ug/L	50	57.5	115	55-128	
Bromomethane	ug/L	50	59.5	119	12-176	IH
Carbon disulfide	ug/L	50	44.4	89	57-129	
Carbon tetrachloride	ug/L	50	47.2	94	64-122	
Chlorobenzene	ug/L	50	47.3	95	76-117	
Chloroethane	ug/L	50	38.4	77	60-129	
Chloroform	ug/L	50	44.9	90	74-129	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

LABORATORY CONTROL SAMPLE: 1000842

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloromethane	ug/L	50	49.4	99	43-126	
cis-1,2-Dichloroethene	ug/L	50	47.4	95	72-127	
cis-1,3-Dichloropropene	ug/L	50	46.7	93	65-134	
Cyclohexane	ug/L	50	49.2	98	61-126	
Dibromochloromethane	ug/L	50	48.2	96	71-130	
Dichlorodifluoromethane	ug/L	50	38.2	76	14-130	
Ethylbenzene	ug/L	50	45.4	91	70-120	
Isopropylbenzene (Cumene)	ug/L	50	41.1	82	70-116	
Methyl acetate	ug/L	50	103	206	44-179	IH,L1,v1
Methyl-tert-butyl ether	ug/L	50	45.2	90	73-124	
Methylcyclohexane	ug/L	50	47.4	95	66-123	
Methylene Chloride	ug/L	50	48.3	97	69-126	
Styrene	ug/L	50	47.2	94	80-121	
Tetrachloroethene	ug/L	50	48.3	97	65-120	
Toluene	ug/L	50	50.5	101	77-120	
trans-1,2-Dichloroethene	ug/L	50	46.1	92	71-125	
trans-1,3-Dichloropropene	ug/L	50	42.6	85	54-139	
Trichloroethene	ug/L	50	48.1	96	73-116	
Trichlorofluoromethane	ug/L	50	38.3	77	59-134	
Vinyl chloride	ug/L	50	50.9	102	50-130	IH
Xylene (Total)	ug/L	150	139	93	73-120	
1,2-Dichloroethane-d4 (S)	%			84	70-123	
4-Bromofluorobenzene (S)	%			96	66-119	
Toluene-d8 (S)	%			89	82-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1000843 1000844

Parameter	Units	70167580005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1-Trichloroethane	ug/L	<1.0	50	50	46.9	52.9	94	106	60-127	12	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	50	50	54.9	61.4	110	123	74-118	11	M1
1,1,2-Trichloroethane	ug/L	<1.0	50	50	57.9	63.4	116	127	80-120	9	M1
1,1,2-Trichlorotrifluoroethane	ug/L	<1.0	50	50	42.9	48.4	86	97	62-133	12	
1,1-Dichloroethane	ug/L	<1.0	50	50	51.5	58.1	103	116	69-131	12	
1,1-Dichloroethene	ug/L	<1.0	50	50	37.4	43.1	75	86	70-129	14	v3
1,2,4-Trichlorobenzene	ug/L	<1.0	50	50	54.8	63.3	110	127	54-129	14	
1,2-Dibromo-3-chloropropane	ug/L	<1.0	50	50	50.6	55.7	101	111	42-123	10	v3
1,2-Dibromoethane (EDB)	ug/L	<1.0	50	50	55.4	63.3	111	127	67-128	13	
1,2-Dichlorobenzene	ug/L	<1.0	50	50	50.3	56.9	101	114	73-117	12	
1,2-Dichloroethane	ug/L	<1.0	50	50	47.7	53.1	95	106	70-129	11	
1,2-Dichloropropane	ug/L	<1.0	50	50	56.0	62.9	112	126	77-118	12	M1
1,3-Dichlorobenzene	ug/L	<1.0	50	50	50.0	55.5	100	111	72-121	10	
1,4-Dichlorobenzene	ug/L	<1.0	50	50	48.9	55.5	98	111	70-120	13	
2-Butanone (MEK)	ug/L	<5.0	50	50	38.2	43.5	76	87	15-159	13	IL,v3
2-Hexanone	ug/L	<5.0	50	50	67.1	75.6	134	151	60-127	12	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1000843 1000844

Parameter	Units	70167580005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	50	50	74.0	82.2	148	164	66-129	11	M1
Acetone	ug/L	<5.0	50	50	58.4	60.2	117	120	10-189	3	IC,v1
Benzene	ug/L	<1.0	50	50	56.2	61.9	112	124	74-126	10	
Bromodichloromethane	ug/L	<1.0	50	50	51.2	56.4	102	113	71-125	10	
Bromoform	ug/L	<1.0	50	50	66.6	72.7	133	145	40-128	9	M1
Bromomethane	ug/L	<1.0	50	50	47.9	57.9	96	116	10-179	19	IH
Carbon disulfide	ug/L	<1.0	50	50	49.4	54.8	99	110	60-131	10	
Carbon tetrachloride	ug/L	<1.0	50	50	53.2	58.6	106	117	64-125	10	
Chlorobenzene	ug/L	<1.0	50	50	51.9	58.0	104	116	72-121	11	
Chloroethane	ug/L	<1.0	50	50	40.0	45.2	80	90	54-137	12	
Chloroform	ug/L	<1.0	50	50	48.7	54.8	97	110	73-128	12	
Chloromethane	ug/L	<1.0	50	50	46.9	54.5	94	109	45-123	15	
cis-1,2-Dichloroethene	ug/L	<1.0	50	50	52.1	58.4	104	117	72-129	11	
cis-1,3-Dichloropropene	ug/L	<1.0	50	50	48.8	54.7	98	109	57-130	12	
Cyclohexane	ug/L	<1.0	50	50	58.7	66.5	117	133	30-137	12	
Dibromochloromethane	ug/L	<1.0	50	50	52.8	58.6	106	117	59-132	10	
Dichlorodifluoromethane	ug/L	<1.0	50	50	31.5	35.5	63	71	10-131	12	
Ethylbenzene	ug/L	<1.0	50	50	51.3	57.5	103	115	67-126	11	
Isopropylbenzene (Cumene)	ug/L	<1.0	50	50	46.0	51.9	92	104	66-120	12	
Methyl acetate	ug/L	<1.0	50	50	117	131	233	261	10-217	11	IH,M0,v1
Methyl-tert-butyl ether	ug/L	<1.0	50	50	49.9	56.6	100	113	60-127	13	
Methylcyclohexane	ug/L	<1.0	50	50	58.8	64.2	118	128	70-129	9	
Methylene Chloride	ug/L	<1.0	50	50	50.9	58.3	102	117	65-129	13	
Styrene	ug/L	<1.0	50	50	51.5	56.5	103	113	74-121	9	
Tetrachloroethene	ug/L	7.9	50	50	63.2	69.2	111	123	59-131	9	
Toluene	ug/L	<1.0	50	50	55.3	62.8	111	126	76-124	13	M1
trans-1,2-Dichloroethene	ug/L	<1.0	50	50	52.6	57.6	105	115	74-129	9	
trans-1,3-Dichloropropene	ug/L	<1.0	50	50	44.4	51.0	89	102	42-140	14	
Trichloroethene	ug/L	2.8	50	50	56.8	63.0	108	120	78-119	10	M1
Trichlorofluoromethane	ug/L	<1.0	50	50	43.2	47.2	86	94	59-136	9	
Vinyl chloride	ug/L	<1.0	50	50	55.5	62.3	111	125	45-141	12	IH
Xylene (Total)	ug/L	<3.0	150	150	155	170	103	113	69-125	9	
1,2-Dichloroethane-d4 (S)	%						85	84	70-123		
4-Bromofluorobenzene (S)	%						98	96	66-119		
Toluene-d8 (S)	%						91	90	82-121		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

QC Batch: 203613 | Analysis Method: EPA 9014 Total Cyanide
QC Batch Method: EPA 9010C | Analysis Description: 9014 Cyanide, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70167580001, 70167580002, 70167580003, 70167580004, 70167580005, 70167580006

METHOD BLANK: 1004644 Matrix: Water
Associated Lab Samples: 70167580001, 70167580002, 70167580003, 70167580004, 70167580005, 70167580006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	<10.0	10.0	04/12/21 12:48	

LABORATORY CONTROL SAMPLE: 1004645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	72.9	97	85-115	

MATRIX SPIKE SAMPLE: 1004646

Parameter	Units	70167580005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	<10.0	100	88.6	88	75-125	

SAMPLE DUPLICATE: 1004647

Parameter	Units	70167580005 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	<10.0	<10.0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

QC Batch: 203987
QC Batch Method: EPA 9010C
Analysis Method: EPA 9014 Total Cyanide
Analysis Description: 9014 Cyanide, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70167580007

METHOD BLANK: 1006937 Matrix: Water
Associated Lab Samples: 70167580007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	<10.0	10.0	04/14/21 17:58	

LABORATORY CONTROL SAMPLE: 1006938

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	65.6	88	85-115	

MATRIX SPIKE SAMPLE: 1006939

Parameter	Units	70167580007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	<10.0	100	107	106	75-125	

SAMPLE DUPLICATE: 1006940

Parameter	Units	70167580007 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	<10.0	<10.0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALIFIERS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

IC	The initial calibration for this compound was outside of method control limits. The result is estimated.
IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
IL	This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70167580001	**ESY-EPA-03B**	EPA 3005A	202561	EPA 6010C	202603
70167580002	**ESY-EPA-08B**	EPA 3005A	202561	EPA 6010C	202603
70167580003	**ESY-EPA-10B**	EPA 3005A	202561	EPA 6010C	202603
70167580004	**ESY-SW**	EPA 3005A	202561	EPA 6010C	202603
70167580005	**ESY-EPA-10**	EPA 3005A	202561	EPA 6010C	202603
70167580006	**DUP**	EPA 3005A	202561	EPA 6010C	202603
70167580007	**ESY-EPA-09**	EPA 3005A	202561	EPA 6010C	202603
70167580001	**ESY-EPA-03B**	EPA 7470A	202905	EPA 7470A	202908
70167580002	**ESY-EPA-08B**	EPA 7470A	202905	EPA 7470A	202908
70167580003	**ESY-EPA-10B**	EPA 7470A	202905	EPA 7470A	202908
70167580004	**ESY-SW**	EPA 7470A	202905	EPA 7470A	202908
70167580005	**ESY-EPA-10**	EPA 7470A	202905	EPA 7470A	202908
70167580006	**DUP**	EPA 7470A	202905	EPA 7470A	202908
70167580007	**ESY-EPA-09**	EPA 7470A	202905	EPA 7470A	202908
70167580001	**ESY-EPA-03B**	EPA 8260C/5030C	203100		
70167580002	**ESY-EPA-08B**	EPA 8260C/5030C	203100		
70167580003	**ESY-EPA-10B**	EPA 8260C/5030C	203100		
70167580004	**ESY-SW**	EPA 8260C/5030C	203100		
70167580005	**ESY-EPA-10**	EPA 8260C/5030C	203100		
70167580006	**DUP**	EPA 8260C/5030C	203100		
70167580007	**ESY-EPA-09**	EPA 8260C/5030C	203100		
70167580008	**TRIP BLANK**	EPA 8260C/5030C	203100		
70167580001	**ESY-EPA-03B**	EPA 8260			
70167580002	**ESY-EPA-08B**	EPA 8260			
70167580003	**ESY-EPA-10B**	EPA 8260			
70167580004	**ESY-SW**	EPA 8260			
70167580005	**ESY-EPA-10**	EPA 8260			
70167580006	**DUP**	EPA 8260			
70167580007	**ESY-EPA-09**	EPA 8260			
70167580008	**TRIP BLANK**	EPA 8260			
70167580001	**ESY-EPA-03B**	EPA 9010C	203613	EPA 9014 Total Cyanide	203680
70167580002	**ESY-EPA-08B**	EPA 9010C	203613	EPA 9014 Total Cyanide	203680
70167580003	**ESY-EPA-10B**	EPA 9010C	203613	EPA 9014 Total Cyanide	203680
70167580004	**ESY-SW**	EPA 9010C	203613	EPA 9014 Total Cyanide	203680
70167580005	**ESY-EPA-10**	EPA 9010C	203613	EPA 9014 Total Cyanide	203680
70167580006	**DUP**	EPA 9010C	203613	EPA 9014 Total Cyanide	203680
70167580007	**ESY-EPA-09**	EPA 9010C	203987	EPA 9014 Total Cyanide	204102

Pace Analytical
WWW.PACELABS.COM

CHAIN-OF-CUSTODY / Analytical Request Do

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must

WO# : 70167580

70167580

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: TRC	Report To: Justin King	Attention:	
Address: 10 Maxwell Drive	Copy To:	Company Name:	Regulatory Agency
Suite 200, Clifton Park , NY 12065		Address:	
Email: JKing@trccompanies.com	Purchase Order #:	Pace Quote:	State / Location
Phone: (518)348-1192 Fax:	Project Name: Ellenville Scrap Iron and Metal	Pace Project Manager: jennifer.aracri@pacelabs.com,	NY
Requested Due Date:	Project #:	Pace Profile #:	

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TCL VOCs + 10 TICs by 826	TAL Metals by 6010	Cyanide by 9010	PFAS by 537 mod	Residual Chlorine (Y/N)	
1	ESY-EPA-03B	WT	G	3/30/21	12:15	3/30/21	12:15		7			X	X	X			X		X	X	X	X		
2	ESY-EPA-08B			3/30/21	13:45	3/30/21	13:45		7			X	X	X			X		X	X	X	X		
3	ESY-EPA-10B			3/31/21	9:50	3/31/21	9:50		7			X	X	X			X		X	X	X	X		
4	ESY-SW			3/31/21	10:20	3/31/21	10:20		7			X	X	X			X		X	X	X	X		
5	ESY-EPA-10			3/31/21	10:50	3/31/21	10:50		21			X	X	X			X		X	X	X	X		MS/MSD
6	DUP			3/31/21	11:10	3/31/21	11:10		7			X	X	X			X		X	X	X	X		
7	ESY-EPA-09			3/31/21	12:05	3/31/21	12:05		7			X	X	X			X		X	X	X	X		
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Lexie Gill / TRC	3/31/21	3:10pm	[signature] PACE	3/31/21	15:10	
	[signature] PACE	3/31/21	1600	[signature]	3/31/21	10:20	4.1 Y Y N Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lexie Gill

SIGNATURE of SAMPLER: [signature] DATE Signed: 3/31/21

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
4.1	Y	N	Y

Sample Condition Upon Receipt

Pace Analytical®

WO#: 70167580
PM: NML Due Date: 04/23/21
CLIENT: TRCSOL

Client Name: Proj

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 9099 9901 5244

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Thermometer Used: (TH08) Correction Factor: +0.0

Cooler Temperature(°C): 4.1 Cooler Temperature Corrected(°C): 4.1

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample)

Temperature Blank Present: ☐ Yes ☑ No

Type of Ice: (Wet) Blue None

☐ Samples on ice, cooling process has begun

Date/Time 5035A kits placed in freezer

Date and Initials of person examining contents: CH 4/1/21

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples orignate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☐Yes	☐No		1.
Chain of Custody Filled Out:	☐Yes	☐No		2.
Chain of Custody Relinquished:	☐Yes	☐No		3.
Sampler Name & Signature on COC:	☐Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☐Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No		6.
Rush Turn Around Time Requested:	☐Yes	☑No		7.
Sufficient Volume: (Triple volume provided for	☑Yes	☐No		8.
Correct Containers Used:	☐Yes	☐No		9.
-Pace Containers Used:	☑Yes	☐No		
Containers Intact:	☐Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☐N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☐Yes	☐No		12.
-Includes date/time/ID, Matrix: SL (WT) OIL				
All containers needing preservation have been checked?	☐Yes	☐No	☐N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # HC 904495				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☐Yes	☐No	☐N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Per Method, VOA pH is checked after analysis				
Samples checked for dechlorination:	☐Yes	☐No	☐N/A	14.
KI starch test strips Lot # 14-860				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	☐Yes	☐No	☐N/A	15.
Lead Acetate Strips Lot # 560125				
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	16.
Trip Blank Present:	☐Yes	☐No	☐N/A	17. Trip Blank not on COC
Trip Blank Custody Seals Present	☐Yes	☑No	☐N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

www.pacelabs.com

Report Prepared for:

Jennifer Aracri
PASI Long Island
575 Broad Hollow Road
Melville NY 11747

REPORT OF LABORATORY ANALYSIS FOR PFAAs

Report Information:

Pace Project #: 10553624
Sample Receipt Date: 04/03/2021
Client Project #: 70167580 TRC Solutions
Client Sub PO #: N/A
State Cert #: N/A

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PFAA Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Ashley Williams, your Pace Project Manager.

This report has been reviewed by:

April 22, 2021

Ashley Williams, Project Manager
(612) 346-8158
(612) 607-6444 (fax)
ashley.williams@pacelabs.com

Report Prepared Date:
April 22, 2021

Report of Laboratory Analysis

DISCUSSION

This report presents the results from the analyses performed on seven samples, a matrix spike and a matrix spike duplicate submitted by a representative of Pace Long Island. The samples were analyzed for twenty-one perfluorinated compounds using DOD QSM 5.3 for PFAS. Reporting limits were set to the quantitation limits.

A laboratory method blank was prepared and analyzed with each sample batch as part of our routine quality control procedures. The results show the blank was free of the target perfluorinated compounds at the reporting limits. This indicates that the sample processing procedures did not significantly contribute to the analyte content determined for the sample material.

A Laboratory spike sample and matrix spike samples were also prepared with the sample batch using clean reference matrix or sample material that had been fortified with native standards. The recovery results were within the method limits. The RPDs (relative percent differences) between one designated spike and its duplicate were within the method limits. These spikes indicate that extraction performed as expected.

The four injection internal standards (13C4_PFOA, 13C4_PFOS, 13C2_PFDA, and 13C2_PFHxA) pass for each analysis in the batch.

It should be noted that Pace Analytical has not yet completed the certification process for all analytes in this method. Therefore, the results have been marked "N2" as qualified.

Concentrations below the calibration range were flagged "J" and should be regarded as estimates.

Values were flagged "I" where incorrect isotope ratios were obtained.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
		Missouri	10100
A2LA	2926.01	Montana	CERT0092
Alabama	40770	Nebraska	NE-OS-18-06
Alaska-DW	MN00064	Nevada	MN00064
Alaska-UST	17-009	New Hampshire	2081
Arizona	AZ0014	New Jersey	MN002
Arkansas - WW	88-0680	New York	11647
Arkansas-DW	MN00064	North Carolina-	27700
California	2929	North Carolina-	530
Colorado	MN00064	North Dakota	R-036
Connecticut	PH-0256	Ohio-DW	41244
Florida	E87605	Ohio-VAP (170	CL101
Georgia	959	Ohio-VAP (180	CL110
Hawaii	MN00064	Oklahoma	9507
Idaho	MN00064	Oregon- rimary	MN300001
Illinois	200011	Oregon-Second	MN200001
Indiana	C-MN-01	Pennsylvania	68-00563
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003
Kentucky-DW	90062	Tennessee	TN02818
Kentucky-WW	90062	Texas	T104704192
Louisiana-DEQ	AI-84596	Utah	MN00064
Louisiana-DW	MN00064	Vermont	VT-027053137
Maine	MN00064	Virginia	460163
Maryland	322	Washington	C486
Michigan	9909	West Virginia-D	382
Minnesota	027-053-137	West Virginia-D	9952C
Minnesota-Ag	via MN 027-053	Wisconsin	999407970
Minnesota-Petr	1240	Wyoming-UST	via A2LA 2926.
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

Appendix A

Sample Management

Internal Transfer Chain of Custody

Pace Analytical®
www.pacelabs.com

☐ Samples Pre-Logged into eCOC.

State Of Origin: NY
Cert. Needed: ☐ Yes ☐ No

Workorder: 70167580 **Workorder Name:** ELLENVILLE SCRAP IRON & METAL **Owner Received Date:** 4/1/2021 **Results Requested By:** 4/23/2021

Report To	Subcontract To
Nicolette M. Lovari Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040	Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: NA2S2O3	Requested Analysis: PFAS NY 21 List	LAB USE ONLY
1	ESY-EPA-03B	PS	3/30/2021 12:15	70167580001	Water	1	X	01
2	ESY-EPA-08B	PS	3/30/2021 13:45	70167580002	Water	1	X	02
3	ESY-EPA-10B	PS	3/31/2021 09:50	70167580003	Water	1	X	03
4	ESY-SW	PS	3/31/2021 10:20	70167580004	Water	1	X	04
5	ESY-EPA-10	RQS	3/31/2021 10:50	70167580005	Water	1	X	05
6	DUP	PS	3/31/2021 11:10	70167580006	Water	1	X	06
7	ESY-EPA-09	PS	3/31/2021 12:05	70167580007	Water	1	X	07

Transfers	Released By	Date/Time	Received By	Date/Time
1	MarianneSaager NY	4.2.21 1800	Carl Murray	04/02/21 0810:00
2				
3				

Comments

Cooler Temperature on Receipt 2.2 °C | **Custody Seal** Y or (N) | **Received on Ice** (Y) or N | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

WO# : 10553624

10553624

Pace Analytical®	Document Name: **Sample Condition Upon Receipt (SCUR) - MN**	Document Revised: 12Aug2020 **Page 1 of 1**
	Document No.: **ENV-FRM-MIN4-0150 Rev.01**	Pace Analytical Services - **Minneapolis**

Sample Condition Upon Receipt

Client Name: Pace Melville

Project #: **WO#: 10553624**

PM: AW1 Due Date: 05/04/21
CLIENT: PASI-LINY

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 9921 5616 8537 See Exceptions ☐ ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No **Biological Tissue Frozen?** ☐ Yes ☐ No ☑ N/A

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other: _____ **Temp Blank?** ☐ Yes ☑ No

Thermometer: ☑ T1(0461) ☐ T2(1336) ☐ T3(0459) ☐ T4(0254) ☐ T5(0489) **Type of Ice:** ☑ Wet ☐ Blue ☐ None ☐ Dry ☐ Melted

Did Samples Originate in West Virginia? ☐ Yes ☐ No **Were All Container Temps Taken?** ☐ Yes ☐ No ☐ N/A

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** _____ °C **Average Corrected Temp (no temp blank only):** 2.2 °C ☐ See Exceptions ENV-FRM-MIN4-0142 ☐ 1 Container

Correction Factor: -0.2 **Cooler Temp Corrected w/temp blank:** _____ °C

USDA Regulated Soil: (☑ N/A, water sample/Other: _____)
Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☐ No

Date/Initials of Person Examining Contents: LA 04/03/21
Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☑ Yes	☐ No		1.
Chain of Custody Relinquished?	☑ Yes	☐ No		2.
Sampler Name and/or Signature on COC?	☐ Yes	☐ No	☑ N/A	3.
Samples Arrived within Hold Time?	☑ Yes	☐ No		4.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No		5. ☐ Fecal Coliform ☐ HPC ☐ Total Coliform/E coli ☐ BOD/cBOD ☐ Hex Chrome ☐ Turbidity ☐ Nitrate ☐ Nitrite ☐ Orthophos ☐ Other _____
Rush Turn Around Time Requested?	☐ Yes	☑ No		6.
Sufficient Volume?	☑ Yes	☐ No		7.
Correct Containers Used? -Pace Containers Used?	☑ Yes ☑ Yes	☐ No ☐ No		8.
Containers Intact?	☑ Yes	☐ No		9.
Field Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☑ N/A	10. Is sediment visible in the dissolved container? ☐ Yes ☐ No
Is sufficient information available to reconcile the samples to the COC? Matrix: ☐ Water ☐ Soil ☐ Oil ☐ Other _____	☑ Yes	☐ No		11. **If no, write ID/ Date/Time on Container Below:** 2 Containers per Sample, Sample 5 has MS/MSD **See Exception** ☐ ENV-FRM-MIN4-0142
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☑ N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☐ Yes	☐ No	☑ N/A	☐ NaOH ☐ HNO_3 ☐ H_2SO_4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☑ Yes	☐ No	☐ N/A	Positive for Res. Chlorine? ☐ Yes ☐ No **pH Paper Lot#** **See Exception** ☐ ENV-FRM-MIN4-0142
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	☐ Yes	☐ No	☑ N/A	13. **See Exception** ☐ ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)?	☐ Yes	☐ No	☑ N/A	
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	14.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	Pace Trip Blank Lot # (if purchased): _____

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: Ashley Williams **Date:** 4/5/21

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

SCUR Exceptions:

Workorder #:

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank		
Read Temp	Corrected Temp	Average Temp
2.3	2.1	2.2
1.7	1.5	
3.6	3.4	
1.8	1.6	

Tracking Number/Temperature	

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Comments:

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CHAIN-OF-CUSTODY / Analytical Request Do

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must

WO# : 70167580

70167580

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	TRC	Report To:	Justin King	Attention:	
Address:	10 Maxwell Drive	Copy To:		Company Name:	
Suite 200, Clifton Park , NY 12065				Address:	Regulatory Agency
Email:	JKing@trccompanies.com	Purchase Order #:		Pace Quote:	
Phone:	(518)348-1192 Fax:	Project Name:	Ellenville Scrap Iron and Metal	Pace Project Manager:	jennifer.aracri@pacelabs.com, State / Location
Requested Due Date:		Project #:		Pace Profile #:	NY

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TCL VOCs + 10 TICs by 826	TAL Metals by 6010	Cyanide by 9010	PFAS by 537 mod	Residual Chlorine (Y/N)	
1	ESY-EPA-03B	WT	G	3/30/21	12:15	3/30/21	12:15		7			X	X	X			X		X	X	X	X		
2	ESY-EPA-08B			3/30/21	13:45	3/30/21	13:45		7			X	X	X			X		X	X	X	X		
3	ESY-EPA-10B			3/31/21	9:50	3/31/21	9:50		7			X	X	X			X		X	X	X	X		
4	ESY-SW			3/31/21	10:20	3/31/21	10:20		7			X	X	X			X		X	X	X	X		
5	ESY-EPA-10			3/31/21	10:50	3/31/21	10:50		21			X	X	X			X		X	X	X	X		MS/MSD
6	DUP			3/31/21	11:10	3/31/21	11:10		7			X	X	X			X		X	X	X	X		
7	ESY-EPA-09			3/31/21	12:05	3/31/21	12:05		7			X	X	X			X		X	X	X	X		
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Lexie Gill TRC	3/31/21	3:10pm	FEDEX	3/31/21	15:10				
	FEDEX	3/31/21	16:00		3/31/21	10:20	4.1	Y	N	Y

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Lexie Gill
SIGNATURE of SAMPLER:	Lexie Gill
DATE Signed:	3/31/21

Sample Condition Upon Receipt

Pace Analytical®

WO#: 70167580
PM: NML Due Date: 04/23/21
CLIENT: TRCSOL

Client Name: Proj

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 9099 9901 5244

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Thermometer Used: (TH08) Correction Factor: +0.0

Cooler Temperature(°C): 4.1 Cooler Temperature Corrected(°C): 4.1

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample)

Temperature Blank Present: ☐ Yes ☑ No

Type of Ice: (Wet) Blue None

☐ Samples on ice, cooling process has begun

Date/Time 5035A kits placed in freezer

Date and Initials of person examining contents: CH 4/1/21

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples orignate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☐ Yes	☑ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☑ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☑ Yes	☐ No		12.
-Includes date/time/ID, Matrix: SL WT OIL				
All containers needing preservation have been checked?	☑ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # HC 904495				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☑ Yes	☐ No	☐ N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination:	☑ Yes	☐ No	☐ N/A	14.
KI starch test strips Lot # 14-860				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	☑ Yes	☐ No	☐ N/A	15.
Lead Acetate Strips Lot # 560125				
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Present:	☑ Yes	☐ No	☐ N/A	17. Trip Blank not on COC
Trip Blank Custody Seals Present	☐ Yes	☑ No	☐ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise (EDL)

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

Appendix B

Sample Analysis Summary

Pace Analytical Services, LLC
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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-03B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580001	Total Amount Extracted	260mL
Lab File ID	A210420B_017	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:15	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	2.6	1.9	1.9	0.39	1	375-22-4	N2
PFPeA	ND	1.9	1.9	0.22	1	2706-90-3	N2
PFBS	2.8	1.7	1.7	0.41	1	375-73-5	N2
PFHxA	ND	1.9	1.9	0.31	1	307-24-4	N2
PFHpA	ND	1.9	1.9	0.55	1	375-85-9	N2
PFHxS	ND	1.7	1.7	0.53	1	355-46-4	N2
PFOA	ND	1.9	1.9	0.55	1	335-67-1	N2
6:2 FTS	3.7	1.8	1.8	0.64	1	27619-97-2	N2
PFHpS	ND	1.8	1.8	0.27	1	375-92-8	N2
PFNA	ND	1.9	1.9	0.41	1	375-95-1	N2
PFOSAm	ND	1.9	1.9	0.83	1	754-91-6	N2
PFOS	3.0	1.8	1.8	0.41	1	1763-23-1	N2
PFDA	ND	1.9	1.9	0.67	1	335-76-2	N2
8:2 FTS	ND	1.8	1.8	0.55	1	39108-34-4	N2
PFUnDA	ND	1.9	1.9	0.31	1	2058-94-8	N2
NMeFOSAA	ND	1.9	1.9	0.41	1	2355-31-9	N2
NEtFOSAA	ND	1.9	1.9	0.60	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.50	1	335-77-3	N2
PFDOA	ND	1.9	1.9	0.56	1	307-55-1	N2
PFTrDA	ND	1.9	1.9	0.50	1	72629-94-8	N2
PFTDA	ND	1.9	1.9	0.49	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	20	102	50-150	
13C4_PFOA	19	22	113	50-150	
13C2_PFDA	19	20	105	50-150	
13C4_PFOS	18	20	110	50-150	

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414
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Fax: 612.607.6444
www.pacelabs.com

Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-03B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580001	Total Amount Extracted	260mL
Lab File ID	A210420B_017	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:15	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	21	110	50-150	
13C5_PFPeA	19	21	110	50-150	
13C3_PFBS	18	21	115	50-150	
13C5_PFHxA	19	21	110	50-150	
13C4_PFHpA	19	21	112	50-150	
13C3_PFHxS	18	20	109	50-150	
13C2_6:2FTS	18	22	121	50-150	
13C8_PFOA	19	21	111	50-150	
13C9_PFNA	19	21	110	50-150	
13C8_PFOS	18	20	111	50-150	
13C2_8:2FTS	18	20	106	50-150	
13C6_PFDA	19	20	107	50-150	
d3-MeFOSAA	19	22	113	50-150	
13C8_PFOSA	19	19	98	50-150	
d5-EtFOSAA	19	20	104	50-150	
13C7_PFUdA	19	20	105	50-150	
13C2_PFDoA	19	22	113	50-150	
13C2_PFTeDA	19	22	114	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.26	7.30	

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-03B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580001	Total Amount Extracted	260mL
Lab File ID	A210420B_017	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:15	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.58	3.59	
13C5_PFPeA	N/A	N/A	4.42	4.44	
13C3_PFBS	N/A	N/A	5.22	5.25	
13C5_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFHpA	N/A	N/A	5.55	5.57	
13C3_PFHxS	N/A	N/A	6.32	6.35	
13C2_6:2FTS	N/A	N/A	5.79	5.81	
13C8_PFOA	N/A	N/A	6.03	6.05	
13C9_PFNA	N/A	N/A	6.49	6.52	
13C8_PFOS	N/A	N/A	7.27	7.30	
13C2_8:2FTS	N/A	N/A	6.68	6.71	
13C6_PFDA	N/A	N/A	6.94	6.97	
d3-MeFOSAA	N/A	N/A	6.87	6.90	
13C8_PFOSA	N/A	N/A	8.76	8.75	
d5-EtFOSAA	N/A	N/A	7.08	7.11	
13C7_PFUdA	N/A	N/A	7.39	7.42	
13C2_PFDoA	N/A	N/A	7.83	7.88	
13C2_PFTeDA	N/A	N/A	8.70	8.74	

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-03B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580001	Total Amount Extracted	260mL
Lab File ID	A210420B_017	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:15	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.58	3.59	
PFPeA	N/A	N/A	4.43	4.44	
PFBS	0.350	0.340	5.23	5.25	
PFHxA	0.070	0.0630	5.04	5.05	
PFHpA	0.320	0.290	5.56	5.58	
PFHxS	0.310	0.270	6.33	6.35	
PFOA	0.320	0.370	6.03	6.06	
6:2 FTS	0.590	0.540	5.79	5.81	
PFHpS	0.000	0.240	6.81	6.84	
PFNA	0.200	0.190	6.49	6.52	
PFOSAm	N/A	N/A	8.77	8.76	
PFOS	0.240	0.230	7.27	7.31	
PFDA	0.088	0.0810	6.94	6.98	
8:2 FTS	0.000	0.670	6.68	6.72	
PFUnDA	0.000	0.0900	7.39	7.43	
NMeFOSAA	0.000	0.610	0.00	6.90	
NEtFOSAA	0.000	0.540	0.00	7.12	
PFDS	0.000	0.240	0.00	8.20	
PFDOA	0.000	0.130	0.00	7.88	
PFTrDA	0.000	0.180	0.00	8.32	
PFTDA	0.097	0.180	8.69	8.74	

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-08B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580002	Total Amount Extracted	258mL
Lab File ID	A210420B_018	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 13:45	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	2.7	1.9	1.9	0.39	1	375-22-4	N2
PFPeA	ND	1.9	1.9	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.41	1	375-73-5	N2
PFHxA	2.0	1.9	1.9	0.31	1	307-24-4	N2
PFHpA	ND	1.9	1.9	0.56	1	375-85-9	N2
PFHxS	ND	1.8	1.8	0.54	1	355-46-4	N2
PFOA	4.7	1.9	1.9	0.56	1	335-67-1	N2
6:2 FTS	ND	1.8	1.8	0.65	1	27619-97-2	N2
PFHpS	ND	1.8	1.8	0.27	1	375-92-8	N2
PFNA	ND	1.9	1.9	0.41	1	375-95-1	N2
PFOSAm	ND	1.9	1.9	0.84	1	754-91-6	N2
PFOS	ND	1.8	1.8	0.41	1	1763-23-1	N2
PFDA	ND	1.9	1.9	0.67	1	335-76-2	N2
8:2 FTS	ND	1.9	1.9	0.56	1	39108-34-4	N2
PFUnDA	ND	1.9	1.9	0.31	1	2058-94-8	N2
NMeFOSAA	ND	1.9	1.9	0.41	1	2355-31-9	N2
NEtFOSAA	ND	1.9	1.9	0.60	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.50	1	335-77-3	N2
PFDOA	ND	1.9	1.9	0.56	1	307-55-1	N2
PFTrDA	ND	1.9	1.9	0.51	1	72629-94-8	N2
PFTDA	ND	1.9	1.9	0.49	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	21	109	50-150	
13C4_PFOA	19	22	113	50-150	
13C2_PFDA	19	21	107	50-150	
13C4_PFOS	19	21	112	50-150	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-08B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580002	Total Amount Extracted	258mL
Lab File ID	A210420B_018	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 13:45	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	22	114	50-150	
13C5_PFPeA	19	23	116	50-150	
13C3_PFBS	18	21	118	50-150	
13C5_PFHxA	19	23	116	50-150	
13C4_PFHpA	19	23	117	50-150	
13C3_PFHxS	18	21	113	50-150	
13C2_6:2FTS	18	26	140	50-150	
13C8_PFOA	19	22	113	50-150	
13C9_PFNA	19	21	109	50-150	
13C8_PFOS	19	21	114	50-150	
13C2_8:2FTS	19	21	111	50-150	
13C6_PFDA	19	21	110	50-150	
d3-MeFOSAA	19	21	108	50-150	
13C8_PFOSA	19	18	93	50-150	
d5-EtFOSAA	19	22	113	50-150	
13C7_PFUdA	19	21	110	50-150	
13C2_PFDoA	19	23	117	50-150	
13C2_PFTeDA	19	21	109	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.26	7.30	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-08B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580002	Total Amount Extracted	258mL
Lab File ID	A210420B_018	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 13:45	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.58	3.59	
13C5_PFPeA	N/A	N/A	4.42	4.44	
13C3_PFBS	N/A	N/A	5.22	5.25	
13C5_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFHpA	N/A	N/A	5.55	5.57	
13C3_PFHxS	N/A	N/A	6.32	6.35	
13C2_6:2FTS	N/A	N/A	5.78	5.81	
13C8_PFOA	N/A	N/A	6.03	6.05	
13C9_PFNA	N/A	N/A	6.49	6.52	
13C8_PFOS	N/A	N/A	7.26	7.30	
13C2_8:2FTS	N/A	N/A	6.68	6.71	
13C6_PFDA	N/A	N/A	6.94	6.97	
d3-MeFOSAA	N/A	N/A	6.87	6.90	
13C8_PFOSA	N/A	N/A	8.76	8.75	
d5-EtFOSAA	N/A	N/A	7.08	7.11	
13C7_PFUdA	N/A	N/A	7.39	7.42	
13C2_PFDoA	N/A	N/A	7.83	7.88	
13C2_PFTeDA	N/A	N/A	8.69	8.74	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-08B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580002	Total Amount Extracted	258mL
Lab File ID	A210420B_018	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 13:45	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.58	3.59	
PFPeA	N/A	N/A	4.43	4.44	
PFBS	0.350	0.340	5.23	5.25	
PFHxA	0.062	0.0630	5.04	5.05	
PFHpA	0.300	0.290	5.56	5.58	
PFHxS	0.210	0.270	6.33	6.35	
PFOA	0.380	0.370	6.03	6.06	
6:2 FTS	0.680	0.540	5.79	5.81	
PFHpS	0.000	0.240	6.81	6.84	
PFNA	0.210	0.190	6.49	6.52	
PFOSAm	N/A	N/A	8.76	8.76	
PFOS	0.180	0.230	7.27	7.31	
PFDA	0.120	0.0810	6.95	6.98	
8:2 FTS	0.000	0.670	6.51	6.72	
PFUnDA	0.000	0.0900	0.00	7.43	
NMeFOSAA	0.000	0.610	0.00	6.90	
NEtFOSAA	0.000	0.540	0.00	7.12	
PFDS	0.000	0.240	0.00	8.20	
PFDOA	0.000	0.130	0.00	7.88	
PFTrDA	0.000	0.180	0.00	8.32	
PFTDA	0.000	0.180	0.00	8.74	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580003	Total Amount Extracted	260mL
Lab File ID	A210420B_019	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 09:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	ND	1.9	1.9	0.39	1	375-22-4	N2
PFPeA	ND	1.9	1.9	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.41	1	375-73-5	N2
PFHxA	ND	1.9	1.9	0.31	1	307-24-4	N2
PFHpA	ND	1.9	1.9	0.55	1	375-85-9	N2
PFHxS	ND	1.7	1.7	0.53	1	355-46-4	N2
PFOA	ND	1.9	1.9	0.55	1	335-67-1	N2
6:2 FTS	ND	1.8	1.8	0.64	1	27619-97-2	N2
PFHpS	ND	1.8	1.8	0.27	1	375-92-8	N2
PFNA	ND	1.9	1.9	0.41	1	375-95-1	N2
PFOSAm	ND	1.9	1.9	0.83	1	754-91-6	N2
PFOS	ND	1.8	1.8	0.41	1	1763-23-1	N2
PFDA	ND	1.9	1.9	0.67	1	335-76-2	N2
8:2 FTS	ND	1.8	1.8	0.55	1	39108-34-4	N2
PFUnDA	ND	1.9	1.9	0.31	1	2058-94-8	N2
NMeFOSAA	ND	1.9	1.9	0.41	1	2355-31-9	N2
NEtFOSAA	ND	1.9	1.9	0.60	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.50	1	335-77-3	N2
PFDOA	ND	1.9	1.9	0.56	1	307-55-1	N2
PFTrDA	ND	1.9	1.9	0.50	1	72629-94-8	N2
PFTDA	ND	1.9	1.9	0.49	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	20	102	50-150	
13C4_PFOA	19	20	106	50-150	
13C2_PFDA	19	19	98	50-150	
13C4_PFOS	18	19	105	50-150	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580003	Total Amount Extracted	260mL
Lab File ID	A210420B_019	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 09:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	20	106	50-150	
13C5_PFPeA	19	20	103	50-150	
13C3_PFBS	18	21	115	50-150	
13C5_PFHxA	19	21	108	50-150	
13C4_PFHpA	19	21	107	50-150	
13C3_PFHxS	18	20	112	50-150	
13C2_6:2FTS	18	21	115	50-150	
13C8_PFOA	19	20	103	50-150	
13C9_PFNA	19	20	104	50-150	
13C8_PFOS	18	20	110	50-150	
13C2_8:2FTS	18	18	98	50-150	
13C6_PFDA	19	19	98	50-150	
d3-MeFOSAA	19	18	94	50-150	
13C8_PFOSA	19	17	87	50-150	
d5-EtFOSAA	19	19	100	50-150	
13C7_PFUdA	19	20	104	50-150	
13C2_PFDoA	19	21	109	50-150	
13C2_PFTeDA	19	21	108	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.26	7.30	

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PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580003	Total Amount Extracted	260mL
Lab File ID	A210420B_019	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 09:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.58	3.59	
13C5_PFPeA	N/A	N/A	4.43	4.44	
13C3_PFBS	N/A	N/A	5.23	5.25	
13C5_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFHpA	N/A	N/A	5.55	5.57	
13C3_PFHxS	N/A	N/A	6.32	6.35	
13C2_6:2FTS	N/A	N/A	5.79	5.81	
13C8_PFOA	N/A	N/A	6.03	6.05	
13C9_PFNA	N/A	N/A	6.49	6.52	
13C8_PFOS	N/A	N/A	7.27	7.30	
13C2_8:2FTS	N/A	N/A	6.68	6.71	
13C6_PFDA	N/A	N/A	6.94	6.97	
d3-MeFOSAA	N/A	N/A	6.87	6.90	
13C8_PFOSA	N/A	N/A	8.76	8.75	
d5-EtFOSAA	N/A	N/A	7.08	7.11	
13C7_PFUdA	N/A	N/A	7.39	7.42	
13C2_PFDoA	N/A	N/A	7.83	7.88	
13C2_PFTeDA	N/A	N/A	8.70	8.74	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580003	Total Amount Extracted	260mL
Lab File ID	A210420B_019	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 09:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.59	3.59	
PFPeA	N/A	N/A	4.43	4.44	
PFBS	0.250	0.340	5.23	5.25	
PFHxA	0.069	0.0630	5.04	5.05	
PFHpA	0.210	0.290	5.56	5.58	
PFHxS	0.000	0.270	0.00	6.35	
PFOA	0.260	0.370	6.04	6.06	
6:2 FTS	0.490	0.540	5.79	5.81	
PFHpS	0.000	0.240	0.00	6.84	
PFNA	0.000	0.190	6.50	6.52	
PFOSAm	N/A	N/A	8.77	8.76	
PFOS	0.180	0.230	7.27	7.31	
PFDA	0.110	0.0810	6.94	6.98	
8:2 FTS	0.000	0.670	6.29	6.72	
PFUnDA	0.000	0.0900	0.00	7.43	
NMeFOSAA	0.000	0.610	0.00	6.90	
NEtFOSAA	0.000	0.540	0.00	7.12	
PFDS	0.000	0.240	0.00	8.20	
PFDOA	0.000	0.130	0.00	7.88	
PFTrDA	0.000	0.180	0.00	8.32	
PFTDA	0.000	0.180	8.70	8.74	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-SW	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580004	Total Amount Extracted	252mL
Lab File ID	A210420B_020	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:20	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	ND	2.0	2.0	0.40	1	375-22-4	N2
PFPeA	ND	2.0	2.0	0.22	1	2706-90-3	N2
PFBS	ND	1.8	1.8	0.42	1	375-73-5	N2
PFHxA	ND	2.0	2.0	0.32	1	307-24-4	N2
PFHpA	ND	2.0	2.0	0.57	1	375-85-9	N2
PFHxS	ND	1.8	1.8	0.55	1	355-46-4	N2
PFOA	ND	2.0	2.0	0.57	1	335-67-1	N2
6:2 FTS	ND	1.9	1.9	0.66	1	27619-97-2	N2
PFHpS	ND	1.9	1.9	0.28	1	375-92-8	N2
PFNA	ND	2.0	2.0	0.42	1	375-95-1	N2
PFOSAm	ND	2.0	2.0	0.86	1	754-91-6	N2
PFOS	ND	1.8	1.8	0.42	1	1763-23-1	N2
PFDA	ND	2.0	2.0	0.69	1	335-76-2	N2
8:2 FTS	ND	1.9	1.9	0.57	1	39108-34-4	N2
PFUnDA	ND	2.0	2.0	0.32	1	2058-94-8	N2
NMeFOSAA	ND	2.0	2.0	0.42	1	2355-31-9	N2
NEtFOSAA	ND	2.0	2.0	0.62	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.51	1	335-77-3	N2
PFDOA	ND	2.0	2.0	0.57	1	307-55-1	N2
PFTrDA	ND	2.0	2.0	0.52	1	72629-94-8	N2
PFTDA	ND	2.0	2.0	0.50	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	20	19	97	50-150	
13C4_PFOA	20	20	103	50-150	
13C2_PFDA	20	20	98	50-150	
13C4_PFOS	19	19	102	50-150	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-SW	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580004	Total Amount Extracted	252mL
Lab File ID	A210420B_020	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:20	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	20	21	107	50-150	
13C5_PFPeA	20	21	107	50-150	
13C3_PFBS	18	21	113	50-150	
13C5_PFHxA	20	21	107	50-150	
13C4_PFHpA	20	22	109	50-150	
13C3_PFHxS	19	20	109	50-150	
13C2_6:2FTS	19	22	119	50-150	
13C8_PFOA	20	21	105	50-150	
13C9_PFNA	20	21	105	50-150	
13C8_PFOS	19	21	109	50-150	
13C2_8:2FTS	19	20	104	50-150	
13C6_PFDA	20	21	105	50-150	
d3-MeFOSAA	20	21	104	50-150	
13C8_PFOSA	20	18	89	50-150	
d5-EtFOSAA	20	20	102	50-150	
13C7_PFUdA	20	21	105	50-150	
13C2_PFDoA	20	21	107	50-150	
13C2_PFTeDA	20	20	101	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.27	7.30	

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Client Sample ID	ESY-SW	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580004	Total Amount Extracted	252mL
Lab File ID	A210420B_020	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:20	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.58	3.59	
13C5_PFPeA	N/A	N/A	4.43	4.44	
13C3_PFBS	N/A	N/A	5.23	5.25	
13C5_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFHpA	N/A	N/A	5.56	5.57	
13C3_PFHxS	N/A	N/A	6.33	6.35	
13C2_6:2FTS	N/A	N/A	5.79	5.81	
13C8_PFOA	N/A	N/A	6.03	6.05	
13C9_PFNA	N/A	N/A	6.49	6.52	
13C8_PFOS	N/A	N/A	7.27	7.30	
13C2_8:2FTS	N/A	N/A	6.69	6.71	
13C6_PFDA	N/A	N/A	6.94	6.97	
d3-MeFOSAA	N/A	N/A	6.87	6.90	
13C8_PFOSA	N/A	N/A	8.77	8.75	
d5-EtFOSAA	N/A	N/A	7.08	7.11	
13C7_PFUdA	N/A	N/A	7.39	7.42	
13C2_PFDoA	N/A	N/A	7.84	7.88	
13C2_PFTeDA	N/A	N/A	8.70	8.74	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-SW	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580004	Total Amount Extracted	252mL
Lab File ID	A210420B_020	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:20	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.59	3.59	
PFPeA	N/A	N/A	4.43	4.44	
PFBS	0.300	0.340	5.23	5.25	
PFHxA	0.095	0.0630	5.05	5.05	
PFHpA	0.000	0.290	5.57	5.58	
PFHxS	0.000	0.270	6.33	6.35	
PFOA	0.230	0.370	6.04	6.06	
6:2 FTS	0.530	0.540	5.80	5.81	
PFHpS	0.000	0.240	0.00	6.84	
PFNA	0.240	0.190	6.49	6.52	
PFOSAm	N/A	N/A	8.77	8.76	
PFOS	0.210	0.230	7.28	7.31	
PFDA	0.000	0.0810	0.00	6.98	
8:2 FTS	0.000	0.670	0.00	6.72	
PFUnDA	0.000	0.0900	0.00	7.43	
NMeFOSAA	0.000	0.610	0.00	6.90	
NEtFOSAA	0.000	0.540	0.00	7.12	
PFDS	0.000	0.240	8.16	8.20	
PFDOA	0.000	0.130	0.00	7.88	
PFTrDA	0.000	0.180	0.00	8.32	
PFTDA	0.000	0.180	0.00	8.74	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580005	Total Amount Extracted	262mL
Lab File ID	A210420B_021	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	3.9	1.9	1.9	0.39	1	375-22-4	N2
PFPeA	8.0	1.9	1.9	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.40	1	375-73-5	N2
PFHxA	5.9	1.9	1.9	0.31	1	307-24-4	N2
PFHpA	4.1	1.9	1.9	0.55	1	375-85-9	N2
PFHxS	3.5	1.7	1.7	0.53	1	355-46-4	N2
PFOA	14	1.9	1.9	0.55	1	335-67-1	N2
6:2 FTS	ND	1.8	1.8	0.64	1	27619-97-2	N2
PFHpS	ND	1.8	1.8	0.27	1	375-92-8	N2
PFNA	ND	1.9	1.9	0.40	1	375-95-1	N2
PFOSAm	ND	1.9	1.9	0.83	1	754-91-6	N2
PFOS	24	1.8	1.8	0.41	1	1763-23-1	N2
PFDA	ND	1.9	1.9	0.67	1	335-76-2	N2
8:2 FTS	ND	1.8	1.8	0.55	1	39108-34-4	N2
PFUnDA	ND	1.9	1.9	0.31	1	2058-94-8	N2
NMeFOSAA	ND	1.9	1.9	0.40	1	2355-31-9	N2
NEtFOSAA	ND	1.9	1.9	0.59	1	2991-50-6	N2
PFDS	ND	1.8	1.8	0.49	1	335-77-3	N2
PFDOA	ND	1.9	1.9	0.55	1	307-55-1	N2
PFTrDA	ND	1.9	1.9	0.50	1	72629-94-8	N2
PFTDA	ND	1.9	1.9	0.48	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	20	103	50-150	
13C4_PFOA	19	20	104	50-150	
13C2_PFDA	19	19	101	50-150	
13C4_PFOS	18	20	108	50-150	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580005	Total Amount Extracted	262mL
Lab File ID	A210420B_021	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	22	113	50-150	
13C5_PFPeA	19	21	111	50-150	
13C3_PFBS	18	21	116	50-150	
13C5_PFHxA	19	21	107	50-150	
13C4_PFHpA	19	21	109	50-150	
13C3_PFHxS	18	20	109	50-150	
13C2_6:2FTS	18	23	125	50-150	
13C8_PFOA	19	20	106	50-150	
13C9_PFNA	19	19	102	50-150	
13C8_PFOS	18	21	114	50-150	
13C2_8:2FTS	18	21	116	50-150	
13C6_PFDA	19	20	106	50-150	
d3-MeFOSAA	19	19	101	50-150	
13C8_PFOSA	19	18	94	50-150	
d5-EtFOSAA	19	20	103	50-150	
13C7_PFUdA	19	20	107	50-150	
13C2_PFDoA	19	22	114	50-150	
13C2_PFTeDA	19	21	108	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.27	7.30	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580005	Total Amount Extracted	262mL
Lab File ID	A210420B_021	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.58	3.59	
13C5_PFPeA	N/A	N/A	4.43	4.44	
13C3_PFBS	N/A	N/A	5.23	5.25	
13C5_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFHpA	N/A	N/A	5.56	5.57	
13C3_PFHxS	N/A	N/A	6.33	6.35	
13C2_6:2FTS	N/A	N/A	5.80	5.81	
13C8_PFOA	N/A	N/A	6.03	6.05	
13C9_PFNA	N/A	N/A	6.49	6.52	
13C8_PFOS	N/A	N/A	7.27	7.30	
13C2_8:2FTS	N/A	N/A	6.69	6.71	
13C6_PFDA	N/A	N/A	6.94	6.97	
d3-MeFOSAA	N/A	N/A	6.87	6.90	
13C8_PFOSA	N/A	N/A	8.77	8.75	
d5-EtFOSAA	N/A	N/A	7.08	7.11	
13C7_PFUdA	N/A	N/A	7.39	7.42	
13C2_PFDoA	N/A	N/A	7.84	7.88	
13C2_PFTeDA	N/A	N/A	8.70	8.74	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580005	Total Amount Extracted	262mL
Lab File ID	A210420B_021	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.59	3.59	
PFPeA	N/A	N/A	4.44	4.44	
PFBS	0.350	0.340	5.24	5.25	
PFHxA	0.061	0.0630	5.05	5.05	
PFHpA	0.270	0.290	5.56	5.58	
PFHxS	0.270	0.270	6.34	6.35	
PFOA	0.380	0.370	6.04	6.06	
6:2 FTS	0.600	0.540	5.80	5.81	
PFHpS	0.230	0.240	6.81	6.84	
PFNA	0.160	0.190	6.50	6.52	
PFOSAm	N/A	N/A	8.77	8.76	
PFOS	0.190	0.230	7.28	7.31	
PFDA	0.042	0.0810	6.95	6.98	
8:2 FTS	0.000	0.670	0.00	6.72	
PFUnDA	0.000	0.0900	0.00	7.43	
NMeFOSAA	0.000	0.610	0.00	6.90	
NEtFOSAA	0.000	0.540	0.00	7.12	
PFDS	0.000	0.240	0.00	8.20	
PFDOA	0.000	0.130	0.00	7.88	
PFTrDA	0.000	0.180	0.00	8.32	
PFTDA	0.000	0.180	0.00	8.74	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	DUP	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580006	Total Amount Extracted	262mL
Lab File ID	A210420B_022	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 11:10	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	4.0	1.9	1.9	0.39	1	375-22-4	N2
PFPeA	8.4	1.9	1.9	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.40	1	375-73-5	N2
PFHxA	5.9	1.9	1.9	0.30	1	307-24-4	N2
PFHpA	4.3	1.9	1.9	0.55	1	375-85-9	N2
PFHxS	3.7	1.7	1.7	0.53	1	355-46-4	N2
PFOA	15	1.9	1.9	0.55	1	335-67-1	N2
6:2 FTS	ND	1.8	1.8	0.64	1	27619-97-2	N2
PFHpS	ND	1.8	1.8	0.26	1	375-92-8	N2
PFNA	ND	1.9	1.9	0.40	1	375-95-1	N2
PFOSAm	ND	1.9	1.9	0.82	1	754-91-6	N2
PFOS	25	1.8	1.8	0.40	1	1763-23-1	N2
PFDA	ND	1.9	1.9	0.66	1	335-76-2	N2
8:2 FTS	ND	1.8	1.8	0.55	1	39108-34-4	N2
PFUnDA	ND	1.9	1.9	0.30	1	2058-94-8	N2
NMeFOSAA	ND	1.9	1.9	0.40	1	2355-31-9	N2
NEtFOSAA	ND	1.9	1.9	0.59	1	2991-50-6	N2
PFDS	ND	1.8	1.8	0.49	1	335-77-3	N2
PFDOA	ND	1.9	1.9	0.55	1	307-55-1	N2
PFTrDA	ND	1.9	1.9	0.50	1	72629-94-8	N2
PFTDA	ND	1.9	1.9	0.48	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	20	107	50-150	
13C4_PFOA	19	22	113	50-150	
13C2_PFDA	19	20	104	50-150	
13C4_PFOS	18	21	113	50-150	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	DUP	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580006	Total Amount Extracted	262mL
Lab File ID	A210420B_022	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 11:10	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	20	105	50-150	
13C5_PFPeA	19	20	105	50-150	
13C3_PFBS	18	20	113	50-150	
13C5_PFHxA	19	20	105	50-150	
13C4_PFHpA	19	20	105	50-150	
13C3_PFHxS	18	20	110	50-150	
13C2_6:2FTS	18	23	125	50-150	
13C8_PFOA	19	20	104	50-150	
13C9_PFNA	19	19	100	50-150	
13C8_PFOS	18	20	110	50-150	
13C2_8:2FTS	18	19	102	50-150	
13C6_PFDA	19	19	102	50-150	
d3-MeFOSAA	19	18	96	50-150	
13C8_PFOSA	19	16	86	50-150	
d5-EtFOSAA	19	18	96	50-150	
13C7_PFUdA	19	20	103	50-150	
13C2_PFDoA	19	21	111	50-150	
13C2_PFTeDA	19	19	102	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.27	7.30	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	DUP	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580006	Total Amount Extracted	262mL
Lab File ID	A210420B_022	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 11:10	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.58	3.59	
13C5_PFPeA	N/A	N/A	4.43	4.44	
13C3_PFBS	N/A	N/A	5.23	5.25	
13C5_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFHpA	N/A	N/A	5.56	5.57	
13C3_PFHxS	N/A	N/A	6.33	6.35	
13C2_6:2FTS	N/A	N/A	5.79	5.81	
13C8_PFOA	N/A	N/A	6.03	6.05	
13C9_PFNA	N/A	N/A	6.49	6.52	
13C8_PFOS	N/A	N/A	7.27	7.30	
13C2_8:2FTS	N/A	N/A	6.69	6.71	
13C6_PFDA	N/A	N/A	6.95	6.97	
d3-MeFOSAA	N/A	N/A	6.88	6.90	
13C8_PFOSA	N/A	N/A	8.77	8.75	
d5-EtFOSAA	N/A	N/A	7.09	7.11	
13C7_PFUdA	N/A	N/A	7.39	7.42	
13C2_PFDoA	N/A	N/A	7.84	7.88	
13C2_PFTeDA	N/A	N/A	8.70	8.74	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	DUP	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580006	Total Amount Extracted	262mL
Lab File ID	A210420B_022	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 11:10	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.59	3.59	
PFPeA	N/A	N/A	4.43	4.44	
PFBS	0.350	0.340	5.24	5.25	
PFHxA	0.062	0.0630	5.05	5.05	
PFHpA	0.300	0.290	5.56	5.58	
PFHxS	0.260	0.270	6.34	6.35	
PFOA	0.380	0.370	6.04	6.06	
6:2 FTS	0.560	0.540	5.80	5.81	
PFHpS	0.220	0.240	6.82	6.84	
PFNA	0.190	0.190	6.50	6.52	
PFOSAm	N/A	N/A	8.78	8.76	
PFOS	0.180	0.230	7.28	7.31	
PFDA	0.110	0.0810	6.95	6.98	
8:2 FTS	0.000	0.670	0.00	6.72	
PFUnDA	0.000	0.0900	0.00	7.43	
NMeFOSAA	0.000	0.610	0.00	6.90	
NEtFOSAA	0.000	0.540	0.00	7.12	
PFDS	0.000	0.240	0.00	8.20	
PFDOA	0.000	0.130	0.00	7.88	
PFTrDA	0.000	0.180	8.28	8.32	
PFTDA	0.000	0.180	8.71	8.74	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-09	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580007	Total Amount Extracted	255mL
Lab File ID	A210420B_023	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:05	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	ND	2.0	2.0	0.40	1	375-22-4	N2
PFPeA	ND	2.0	2.0	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.41	1	375-73-5	N2
PFHxA	ND	2.0	2.0	0.31	1	307-24-4	N2
PFHpA	ND	2.0	2.0	0.56	1	375-85-9	N2
PFHxS	ND	1.8	1.8	0.54	1	355-46-4	N2
PFOA	ND	2.0	2.0	0.56	1	335-67-1	N2
6:2 FTS	ND	1.9	1.9	0.65	1	27619-97-2	N2
PFHpS	ND	1.9	1.9	0.27	1	375-92-8	N2
PFNA	ND	2.0	2.0	0.41	1	375-95-1	N2
PFOSAm	ND	2.0	2.0	0.85	1	754-91-6	N2
PFOS	ND	1.8	1.8	0.41	1	1763-23-1	N2
PFDA	ND	2.0	2.0	0.68	1	335-76-2	N2
8:2 FTS	ND	1.9	1.9	0.56	1	39108-34-4	N2
PFUnDA	ND	2.0	2.0	0.31	1	2058-94-8	N2
NMeFOSAA	ND	2.0	2.0	0.41	1	2355-31-9	N2
NEtFOSAA	ND	2.0	2.0	0.61	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.51	1	335-77-3	N2
PFDOA	ND	2.0	2.0	0.57	1	307-55-1	N2
PFTrDA	ND	2.0	2.0	0.51	1	72629-94-8	N2
PFTDA	ND	2.0	2.0	0.49	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	20	20	102	50-150	
13C4_PFOA	20	20	102	50-150	
13C2_PFDA	20	19	97	50-150	
13C4_PFOS	19	21	110	50-150	

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-09	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580007	Total Amount Extracted	255mL
Lab File ID	A210420B_023	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:05	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	20	22	111	50-150	
13C5_PFPeA	20	21	109	50-150	
13C3_PFBS	18	21	114	50-150	
13C5_PFHxA	20	21	106	50-150	
13C4_PFHpA	20	22	111	50-150	
13C3_PFHxS	19	21	114	50-150	
13C2_6:2FTS	19	25	133	50-150	
13C8_PFOA	20	20	104	50-150	
13C9_PFNA	20	20	102	50-150	
13C8_PFOS	19	21	114	50-150	
13C2_8:2FTS	19	20	105	50-150	
13C6_PFDA	20	21	107	50-150	
d3-MeFOSAA	20	21	105	50-150	
13C8_PFOSA	20	18	90	50-150	
d5-EtFOSAA	20	20	101	50-150	
13C7_PFUdA	20	22	110	50-150	
13C2_PFDoA	20	23	117	50-150	
13C2_PFTeDA	20	22	113	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.26	7.30	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-09	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580007	Total Amount Extracted	255mL
Lab File ID	A210420B_023	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:05	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.58	3.59	
13C5_PFPeA	N/A	N/A	4.42	4.44	
13C3_PFBS	N/A	N/A	5.23	5.25	
13C5_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFHpA	N/A	N/A	5.55	5.57	
13C3_PFHxS	N/A	N/A	6.32	6.35	
13C2_6:2FTS	N/A	N/A	5.79	5.81	
13C8_PFOA	N/A	N/A	6.03	6.05	
13C9_PFNA	N/A	N/A	6.49	6.52	
13C8_PFOS	N/A	N/A	7.26	7.30	
13C2_8:2FTS	N/A	N/A	6.68	6.71	
13C6_PFDA	N/A	N/A	6.94	6.97	
d3-MeFOSAA	N/A	N/A	6.87	6.90	
13C8_PFOSA	N/A	N/A	8.76	8.75	
d5-EtFOSAA	N/A	N/A	7.08	7.11	
13C7_PFUdA	N/A	N/A	7.38	7.42	
13C2_PFDoA	N/A	N/A	7.83	7.88	
13C2_PFTeDA	N/A	N/A	8.69	8.74	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-09	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580007	Total Amount Extracted	255mL
Lab File ID	A210420B_023	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:05	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.59	3.59	
PFPeA	N/A	N/A	4.43	4.44	
PFBS	0.330	0.340	5.23	5.25	
PFHxA	0.100	0.0630	5.04	5.05	
PFHpA	0.420	0.290	5.55	5.58	
PFHxS	0.360	0.270	6.33	6.35	
PFOA	0.390	0.370	6.03	6.06	
6:2 FTS	0.540	0.540	5.79	5.81	
PFHpS	0.000	0.240	0.00	6.84	
PFNA	0.260	0.190	6.49	6.52	
PFOSAm	N/A	N/A	8.77	8.76	
PFOS	0.180	0.230	7.27	7.31	
PFDA	0.000	0.0810	0.00	6.98	
8:2 FTS	0.000	0.670	0.00	6.72	
PFUnDA	0.000	0.0900	0.00	7.43	
NMeFOSAA	0.000	0.610	0.00	6.90	
NEtFOSAA	0.000	0.540	0.00	7.12	
PFDS	0.000	0.240	0.00	8.20	
PFDOA	0.000	0.130	0.00	7.88	
PFTrDA	0.000	0.180	0.00	8.32	
PFTDA	0.000	0.180	8.69	8.74	

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKGD	Extraction Date	04/16/2021 18:52
Lab Sample ID	BLANK-88791	Total Amount Extracted	254mL
Lab File ID	A210420B_007	Ical ID	210419A03
Matrix	Water	CCal File	A210420B_005
Collected	04/07/2021 08:44	Ending CCal File	A210420B_016
Received	04/07/2021 08:44	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	ND	2.0	2.0	0.40	1	375-22-4	N2
PFPeA	ND	2.0	2.0	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.42	1	375-73-5	N2
PFHxA	ND	2.0	2.0	0.32	1	307-24-4	N2
PFHpA	ND	2.0	2.0	0.57	1	375-85-9	N2
PFHxS	ND	1.8	1.8	0.55	1	355-46-4	N2
PFOA	ND	2.0	2.0	0.57	1	335-67-1	N2
6:2 FTS	ND	1.9	1.9	0.66	1	27619-97-2	N2
PFHpS	ND	1.9	1.9	0.27	1	375-92-8	N2
PFNA	ND	2.0	2.0	0.42	1	375-95-1	N2
PFOSAm	ND	2.0	2.0	0.85	1	754-91-6	N2
PFOS	ND	1.8	1.8	0.42	1	1763-23-1	N2
PFDA	ND	2.0	2.0	0.69	1	335-76-2	N2
8:2 FTS	ND	1.9	1.9	0.57	1	39108-34-4	N2
PFUnDA	ND	2.0	2.0	0.32	1	2058-94-8	N2
NMeFOSAA	ND	2.0	2.0	0.42	1	2355-31-9	N2
NEtFOSAA	ND	2.0	2.0	0.61	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.51	1	335-77-3	N2
PFDOA	ND	2.0	2.0	0.57	1	307-55-1	N2
PFTrDA	ND	2.0	2.0	0.52	1	72629-94-8	N2
PFTDA	ND	2.0	2.0	0.50	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	20	21	106	50-150	
13C4_PFOA	20	23	114	50-150	
13C2_PFDA	20	20	104	50-150	
13C4_PFOS	19	20	105	50-150	

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKGD	Extraction Date	04/16/2021 18:52
Lab Sample ID	BLANK-88791	Total Amount Extracted	254mL
Lab File ID	A210420B_007	Ical ID	210419A03
Matrix	Water	CCal File	A210420B_005
Collected	04/07/2021 08:44	Ending CCal File	A210420B_016
Received	04/07/2021 08:44	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	20	23	116	50-150	
13C5_PFPeA	20	23	115	50-150	
13C3_PFBS	18	20	111	50-150	
13C5_PFHxA	20	23	115	50-150	
13C4_PFHpA	20	22	113	50-150	
13C3_PFHxS	19	21	114	50-150	
13C2_6:2FTS	19	22	117	50-150	
13C8_PFOA	20	23	118	50-150	
13C9_PFNA	20	22	111	50-150	
13C8_PFOS	19	21	109	50-150	
13C2_8:2FTS	19	20	103	50-150	
13C6_PFDA	20	23	117	50-150	
d3-MeFOSAA	20	19	97	50-150	
13C8_PFOSA	20	18	91	50-150	
d5-EtFOSAA	20	18	90	50-150	
13C7_PFUdA	20	22	112	50-150	
13C2_PFDoA	20	22	110	50-150	
13C2_PFTeDA	20	22	110	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFOA	N/A	N/A	6.04	6.05	
13C2_PFDA	N/A	N/A	6.96	6.97	
13C4_PFOS	N/A	N/A	7.28	7.30	

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKGD	Extraction Date	04/16/2021 18:52
Lab Sample ID	BLANK-88791	Total Amount Extracted	254mL
Lab File ID	A210420B_007	Ical ID	210419A03
Matrix	Water	CCal File	A210420B_005
Collected	04/07/2021 08:44	Ending CCal File	A210420B_016
Received	04/07/2021 08:44	Blank File	A210420B_007

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.59	3.59	
13C5_PFPeA	N/A	N/A	4.44	4.44	
13C3_PFBS	N/A	N/A	5.24	5.25	
13C5_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFHpA	N/A	N/A	5.57	5.57	
13C3_PFHxS	N/A	N/A	6.34	6.35	
13C2_6:2FTS	N/A	N/A	5.80	5.81	
13C8_PFOA	N/A	N/A	6.04	6.05	
13C9_PFNA	N/A	N/A	6.50	6.52	
13C8_PFOS	N/A	N/A	7.29	7.30	
13C2_8:2FTS	N/A	N/A	6.70	6.71	
13C6_PFDA	N/A	N/A	6.96	6.97	
d3-MeFOSAA	N/A	N/A	6.89	6.90	
13C8_PFOSA	N/A	N/A	8.77	8.75	
d5-EtFOSAA	N/A	N/A	7.10	7.11	
13C7_PFUdA	N/A	N/A	7.41	7.42	
13C2_PFDoA	N/A	N/A	7.86	7.88	
13C2_PFTeDA	N/A	N/A	8.72	8.74	

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKGD	Extraction Date	04/16/2021 18:52
Lab Sample ID	BLANK-88791	Total Amount Extracted	254mL
Lab File ID	A210420B_007	Ical ID	210419A03
Matrix	Water	CCal File	A210420B_005
Collected	04/07/2021 08:44	Ending CCal File	A210420B_016
Received	04/07/2021 08:44	Blank File	A210420B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.59	3.59	
PFPeA	N/A	N/A	4.44	4.44	
PFBS	0.290	0.330	5.25	5.25	
PFHxA	0.000	0.0690	5.06	5.05	
PFHpA	0.000	0.270	0.00	5.58	
PFHxS	0.000	0.280	0.00	6.35	
PFOA	0.370	0.400	6.05	6.06	
6:2 FTS	0.000	0.610	5.80	5.81	
PFHpS	0.000	0.190	0.00	6.84	
PFNA	0.000	0.200	0.00	6.52	
PFOSAm	N/A	N/A	8.78	8.76	
PFOS	0.110	0.250	7.30	7.31	
PFDA	0.000	0.0890	0.00	6.98	
8:2 FTS	0.000	0.720	6.67	6.72	
PFUnDA	0.000	0.0990	0.00	7.43	
NMeFOSAA	0.000	0.630	0.00	6.90	
NEtFOSAA	0.000	0.560	0.00	7.12	
PFDS	0.000	0.230	0.00	8.20	
PFDOA	0.000	0.180	0.00	7.88	
PFTrDA	0.000	0.170	0.00	8.32	
PFTDA	0.000	0.170	0.00	8.74	

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-88792	Instrument ID	10LCMS03
Run File Name	A210420B_008	Column ID	112EB00094
Analyzed	04/20/2021 16:23	Ical ID	210419A03
Injected By	PY1	Level	L

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	20	20	100	50-150	
13C4_PFOA	20	22	112	50-150	
13C2_PFDA	20	22	109	50-150	
13C4_PFOS	19	20	107	50-150	

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	20	22	111	50-150	
13C5_PFPeA	20	21	106	50-150	
13C3_PFBS	18	20	109	50-150	
13C5_PFHxA	20	21	104	50-150	
13C4_PFHpA	20	21	107	50-150	
13C3_PFHxS	19	20	108	50-150	
13C2_6:2FTS	19	21	111	50-150	
13C8_PFOA	20	22	111	50-150	
13C9_PFNA	20	21	105	50-150	
13C8_PFOS	19	19	102	50-150	
13C2_8:2FTS	19	19	101	50-150	
13C6_PFDA	20	22	112	50-150	
d3-MeFOSAA	20	17	86	50-150	
13C8_PFOSA	20	17	87	50-150	
d5-EtFOSAA	20	17	88	50-150	
13C7_PFUdA	20	20	102	50-150	
13C2_PFDoA	20	21	104	50-150	
13C2_PFTeDA	20	21	107	50-150	

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-88792	Instrument ID	10LCMS03
Run File Name	A210420B_008	Column ID	112EB00094
Analyzed	04/20/2021 16:23	Ical ID	210419A03
Injected By	PY1	Level	L

Native Analytes

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	CAS No.
PFBA	4.0	3.5	87	73-129		375-22-4
PFPeA	4.0	3.7	93	72-129		2706-90-3
PFBS	3.5	3.1	88	72-130		375-73-5
PFHxA	4.0	3.9	99	72-129		307-24-4
PFHpA	4.0	3.8	95	72-130		375-85-9
PFHxS	3.6	3.4	94	68-131		355-46-4
PFOA	4.0	3.4	86	71-133		335-67-1
6:2 FTS	3.8	3.7	98	64-140		27619-97-2
PFHpS	3.8	3.6	95	69-134		375-92-8
PFNA	4.0	3.5	89	69-130		375-95-1
PFOSAm	4.0	3.5	89	67-137		754-91-6
PFOS	3.7	3.4	92	65-140		1763-23-1
PFDA	4.0	3.4	86	71-129		335-76-2
8:2 FTS	3.8	2.7	72	67-138		39108-34-4
PFUnDA	4.0	3.4	87	69-133		2058-94-8
NMeFOSAA	4.0	3.3	83	65-136		2355-31-9
NEtFOSAA	4.0	3.6	90	61-135		2991-50-6
PFDS	3.8	3.3	86	53-142		335-77-3
PFDOA	4.0	3.5	87	72-134		307-55-1
PFTrDA	4.0	3.5	89	65-144		72629-94-8
PFTDA	4.0	3.3	83	71-132		376-06-7

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFOA	N/A	N/A	6.04	6.05	
13C2_PFDA	N/A	N/A	6.95	6.97	
13C4_PFOS	N/A	N/A	7.28	7.30	

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-88792	Instrument ID	10LCMS03
Run File Name	A210420B_008	Column ID	112EB00094
Analyzed	04/20/2021 16:23	Ical ID	210419A03
Injected By	PY1	Level	L

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.59	3.59	
13C5_PFPeA	N/A	N/A	4.43	4.44	
13C3_PFBS	N/A	N/A	5.24	5.25	
13C5_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFHpA	N/A	N/A	5.57	5.57	
13C3_PFHxS	N/A	N/A	6.34	6.35	
13C2_6:2FTS	N/A	N/A	5.80	5.81	
13C8_PFOA	N/A	N/A	6.04	6.05	
13C9_PFNA	N/A	N/A	6.50	6.52	
13C8_PFOS	N/A	N/A	7.28	7.30	
13C2_8:2FTS	N/A	N/A	6.70	6.71	
13C6_PFDA	N/A	N/A	6.95	6.97	
d3-MeFOSAA	N/A	N/A	6.88	6.90	
13C8_PFOSA	N/A	N/A	8.77	8.75	
d5-EtFOSAA	N/A	N/A	7.10	7.11	
13C7_PFUdA	N/A	N/A	7.41	7.42	
13C2_PFDoA	N/A	N/A	7.85	7.88	
13C2_PFTeDA	N/A	N/A	8.72	8.74	

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-88792	Instrument ID	10LCMS03
Run File Name	A210420B_008	Column ID	112EB00094
Analyzed	04/20/2021 16:23	Ical ID	210419A03
Injected By	PY1	Level	L

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.59	3.59	
PFPeA	N/A	N/A	4.44	4.44	
PFBS	0.33	0.33	5.24	5.25	
PFHxA	0.05	0.06	5.05	5.05	
PFHpA	0.27	0.27	5.57	5.58	
PFHxS	0.24	0.28	6.34	6.35	
PFOA	0.37	0.40	6.05	6.06	
6:2 FTS	0.57	0.61	5.80	5.81	
PFHpS	0.21	0.19	6.83	6.84	
PFNA	0.19	0.20	6.51	6.52	
PFOSAm	N/A	N/A	8.78	8.76	
PFOS	0.24	0.25	7.29	7.31	
PFDA	0.10	0.08	6.96	6.98	
8:2 FTS	0.83	0.72	6.70	6.72	
PFUnDA	0.10	0.09	7.41	7.43	
NMeFOSAA	0.55	0.63	6.89	6.90	
NEtFOSAA	0.54	0.56	7.11	7.12	
PFDS	0.25	0.23	8.17	8.20	
PFDOA	0.15	0.18	7.86	7.88	
PFTrDA	0.18	0.17	8.30	8.32	
PFTDA	0.18	0.17	8.72	8.74	

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MS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	70167580005-MS	Instrument ID	10LCMS03
Run File Name	A210420B_010	Column ID	112EB00094
Analyzed	04/20/2021 16:54	Ical ID	210419A03
Injected By	PY1	Level	

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	19	98	50-150	
13C4_PFOA	19	20	103	50-150	
13C2_PFDA	19	20	102	50-150	
13C4_PFOS	19	19	104	50-150	

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	20	105	50-150	
13C5_PFPeA	19	20	104	50-150	
13C3_PFBS	18	21	114	50-150	
13C5_PFHxA	19	20	101	50-150	
13C4_PFHpA	19	21	108	50-150	
13C3_PFHxS	18	20	111	50-150	
13C2_6:2FTS	18	20	106	50-150	
13C8_PFOA	19	21	106	50-150	
13C9_PFNA	19	20	104	50-150	
13C8_PFOS	19	19	102	50-150	
13C2_8:2FTS	19	17	93	50-150	
13C6_PFDA	19	21	109	50-150	
d3-MeFOSAA	19	18	93	50-150	
13C8_PFOSA	19	17	90	25-150	
d5-EtFOSAA	19	19	95	50-150	
13C7_PFUdA	19	20	102	50-150	
13C2_PFDoA	19	20	105	50-150	
13C2_PFTeDA	19	20	101	50-150	

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MS Analysis Summary

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Lab Sample ID	70167580005-MS	Instrument ID	10LCMS03
Run File Name	A210420B_010	Column ID	112EB00094
Analyzed	04/20/2021 16:54	Ical ID	210419A03
Injected By	PY1	Level	

Native Analytes

Compound	Sample Conc.	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	CAS No.
PFBA	3.9	3.9	7.6	91	70-130		375-22-4
PFPeA	8.0	3.9	12	102	70-130		2706-90-3
PFBS	0.00	3.5	4.5	87	70-140		375-73-5
PFHxA	5.9	3.9	10	107	70-140		307-24-4
PFHpA	4.1	3.9	7.8	93	70-140		375-85-9
PFHxS	3.5	3.5	6.8	91	70-140		355-46-4
PFOA	14	3.9	18	101	70-140		335-67-1
6:2 FTS	0.00	3.7	4.3	105	70-140		27619-97-2
PFHpS	0.00	3.7	4.1	96	70-140		375-92-8
PFNA	0.00	3.9	4.7	92	70-140		375-95-1
PFOSAm	0.00	3.9	4.0	98	70-140		754-91-6
PFOS	24	3.6	29	104	70-140		1763-23-1
PFDA	0.00	3.9	3.9	94	70-140		335-76-2
8:2 FTS	0.00	3.7	3.3	87	70-140		39108-34-4
PFUnDA	0.00	3.9	3.9	101	70-140		2058-94-8
NMeFOSAA	0.00	3.9	3.6	94	70-140		2355-31-9
NEtFOSAA	0.00	3.9	3.4	87	70-140		2991-50-6
PFDS	0.00	3.8	3.4	92	70-140		335-77-3
PFDOA	0.00	3.9	3.8	97	70-140		307-55-1
PFTrDA	0.00	3.9	3.7	95	70-140		72629-94-8
PFTDA	0.00	3.9	3.8	96	70-140		376-06-7

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.27	7.30	

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MS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	70167580005-MS	Instrument ID	10LCMS03
Run File Name	A210420B_010	Column ID	112EB00094
Analyzed	04/20/2021 16:54	Ical ID	210419A03
Injected By	PY1	Level	

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.58	3.59	
13C5_PFPeA	N/A	N/A	4.43	4.44	
13C3_PFBS	N/A	N/A	5.23	5.25	
13C5_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFHpA	N/A	N/A	5.56	5.57	
13C3_PFHxS	N/A	N/A	6.33	6.35	
13C2_6:2FTS	N/A	N/A	5.79	5.81	
13C8_PFOA	N/A	N/A	6.03	6.05	
13C9_PFNA	N/A	N/A	6.49	6.52	
13C8_PFOS	N/A	N/A	7.27	7.30	
13C2_8:2FTS	N/A	N/A	6.69	6.71	
13C6_PFDA	N/A	N/A	6.94	6.97	
d3-MeFOSAA	N/A	N/A	6.88	6.90	
13C8_PFOSA	N/A	N/A	8.76	8.75	
d5-EtFOSAA	N/A	N/A	7.09	7.11	
13C7_PFUdA	N/A	N/A	7.40	7.42	
13C2_PFDoA	N/A	N/A	7.84	7.88	
13C2_PFTeDA	N/A	N/A	8.71	8.74	

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MS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	70167580005-MS	Instrument ID	10LCMS03
Run File Name	A210420B_010	Column ID	112EB00094
Analyzed	04/20/2021 16:54	Ical ID	210419A03
Injected By	PY1	Level	

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.59	3.59	
PFPeA	N/A	N/A	4.43	4.44	
PFBS	0.34	0.33	5.24	5.25	
PFHxA	0.06	0.06	5.04	5.05	
PFHpA	0.30	0.27	5.56	5.58	
PFHxS	0.26	0.28	6.34	6.35	
PFOA	0.38	0.40	6.04	6.06	
6:2 FTS	0.56	0.61	5.79	5.81	
PFHpS	0.25	0.19	6.82	6.84	
PFNA	0.20	0.20	6.50	6.52	
PFOSAm	N/A	N/A	8.77	8.76	
PFOS	0.19	0.25	7.28	7.31	
PFDA	0.07	0.08	6.95	6.98	
8:2 FTS	0.93	0.72	6.69	6.72	
PFUnDA	0.09	0.09	7.40	7.43	
NMeFOSAA	0.50	0.63	6.88	6.90	
NEtFOSAA	0.61	0.56	7.09	7.12	
PFDS	0.24	0.23	8.16	8.20	
PFDOA	0.15	0.18	7.85	7.88	
PFTrDA	0.16	0.17	8.28	8.32	
PFTDA	0.17	0.17	8.71	8.74	

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MSD Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	70167580005-MSD	Instrument ID	10LCMS03
Run File Name	A210420B_011	Column ID	112EB00094
Analyzed	04/20/2021 17:10	Ical ID	210419A03
Injected By	PY1	Level	

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	RPD	Qualifiers
13C2_PFHxA	20	20	102	50-150	4.3	
13C4_PFOA	20	21	108	50-150	5.1	
13C2_PFDA	20	21	105	50-150	2.8	
13C4_PFOS	19	20	108	50-150	3.7	

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	RPD	Qualifiers
13C4_PFBA	20	21	105	50-150	0.2	
13C5_PFPeA	20	21	108	50-150	3.7	
13C3_PFBS	18	20	109	50-150	5.0	
13C5_PFHxA	20	21	108	50-150	6.4	
13C4_PFHpA	20	21	110	50-150	2.2	
13C3_PFHxS	18	21	114	50-150	2.8	
13C2_6:2FTS	19	21	112	50-150	5.6	
13C8_PFOA	20	22	112	50-150	5.6	
13C9_PFNA	20	22	110	50-150	5.8	
13C8_PFOS	19	19	103	50-150	0.8	
13C2_8:2FTS	19	19	100	50-150	7.1	
13C6_PFDA	20	22	111	50-150	1.8	
d3-MeFOSAA	20	20	104	50-150	10.7	
13C8_PFOSA	20	18	94	25-150	5.1	
d5-EtFOSAA	20	18	94	50-150	1.4	
13C7_PFUdA	20	21	108	50-150	6.0	
13C2_PFDoA	20	21	108	50-150	3.5	
13C2_PFTeDA	20	21	108	50-150	6.8	

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MSD Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	70167580005-MSD	Instrument ID	10LCMS03
Run File Name	A210420B_011	Column ID	112EB00094
Analyzed	04/20/2021 17:10	Ical ID	210419A03
Injected By	PY1	Level	

Native Analytes

Compound	Sample Conc.	Known Conc.	Conc. Found	%Recovery	Recovery Limits	RPD	Qualifiers	CAS No.
PFBA	3.9	3.9	7.7	95	70-130	4.0		375-22-4
PFPeA	8.0	3.9	12	101	70-130	0.7		2706-90-3
PFBS	0.00	3.5	4.6	90	70-140	3.9		375-73-5
PFHxA	5.9	3.9	9.7	94	70-140	12.9		307-24-4
PFHpA	4.1	3.9	8.1	101	70-140	8.0		375-85-9
PFHxS	3.5	3.5	6.8	91	70-140	0.2		355-46-4
PFOA	14	3.9	18	84	70-140	18.8		335-67-1
6:2 FTS	0.00	3.7	3.9	96	70-140	9.0		27619-97-2
PFHpS	0.00	3.7	4.3	100	70-140	3.6		375-92-8
PFNA	0.00	3.9	4.7	91	70-140	0.8		375-95-1
PFOSAm	0.00	3.9	4.0	98	70-140	0.4		754-91-6
PFOS	24	3.6	29	111	70-140	6.2		1763-23-1
PFDA	0.00	3.9	3.9	93	70-140	0.7		335-76-2
8:2 FTS	0.00	3.8	4.0	106	70-140	19.3		39108-34-4
PFUnDA	0.00	3.9	3.4	88	70-140	14.1		2058-94-8
NMeFOSAA	0.00	3.9	3.3	86	70-140	8.9		2355-31-9
NEtFOSAA	0.00	3.9	3.8	97	70-140	11.4		2991-50-6
PFDS	0.00	3.8	3.4	90	70-140	1.7		335-77-3
PFDOA	0.00	3.9	3.5	90	70-140	7.2		307-55-1
PFTrDA	0.00	3.9	3.7	94	70-140	1.4		72629-94-8
PFTDA	0.00	3.9	3.6	92	70-140	4.3		376-06-7

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFOA	N/A	N/A	6.04	6.05	
13C2_PFDA	N/A	N/A	6.95	6.97	
13C4_PFOS	N/A	N/A	7.28	7.30	

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MSD Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	70167580005-MSD	Instrument ID	10LCMS03
Run File Name	A210420B_011	Column ID	112EB00094
Analyzed	04/20/2021 17:10	Ical ID	210419A03
Injected By	PY1	Level	

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C4_PFBA	N/A	N/A	3.58	3.59	
13C5_PFPeA	N/A	N/A	4.43	4.44	
13C3_PFBS	N/A	N/A	5.23	5.25	
13C5_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFHpA	N/A	N/A	5.56	5.57	
13C3_PFHxS	N/A	N/A	6.33	6.35	
13C2_6:2FTS	N/A	N/A	5.80	5.81	
13C8_PFOA	N/A	N/A	6.04	6.05	
13C9_PFNA	N/A	N/A	6.50	6.52	
13C8_PFOS	N/A	N/A	7.28	7.30	
13C2_8:2FTS	N/A	N/A	6.69	6.71	
13C6_PFDA	N/A	N/A	6.95	6.97	
d3-MeFOSAA	N/A	N/A	6.88	6.90	
13C8_PFOSA	N/A	N/A	8.77	8.75	
d5-EtFOSAA	N/A	N/A	7.09	7.11	
13C7_PFUdA	N/A	N/A	7.40	7.42	
13C2_PFDoA	N/A	N/A	7.85	7.88	
13C2_PFTeDA	N/A	N/A	8.71	8.74	

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MSD Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	70167580005-MSD	Instrument ID	10LCMS03
Run File Name	A210420B_011	Column ID	112EB00094
Analyzed	04/20/2021 17:10	Ical ID	210419A03
Injected By	PY1	Level	

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
PFBA	N/A	N/A	3.59	3.59	
PFPeA	N/A	N/A	4.44	4.44	
PFBS	0.31	0.33	5.24	5.25	
PFHxA	0.06	0.06	5.05	5.05	
PFHpA	0.29	0.27	5.57	5.58	
PFHxS	0.26	0.28	6.34	6.35	
PFOA	0.38	0.40	6.04	6.06	
6:2 FTS	0.52	0.61	5.80	5.81	
PFHpS	0.23	0.19	6.82	6.84	
PFNA	0.21	0.20	6.50	6.52	
PFOSAm	N/A	N/A	8.77	8.76	
PFOS	0.19	0.25	7.28	7.31	
PFDA	0.08	0.08	6.96	6.98	
8:2 FTS	0.60	0.72	6.70	6.72	
PFUnDA	0.11	0.09	7.41	7.43	
NMeFOSAA	0.57	0.63	6.89	6.90	
NEtFOSAA	0.58	0.56	7.10	7.12	
PFDS	0.26	0.23	8.17	8.20	
PFDOA	0.16	0.18	7.85	7.88	
PFTrDA	0.16	0.17	8.29	8.32	
PFTDA	0.17	0.17	8.71	8.74	

REPORT OF LABORATORY ANALYSIS

APPENDIX E

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

Data Usability Summary Report for
Pace Analytical, SDG: 70167580

6 Ground Water Samples, 1 Field Duplicate,
and 1 Trip Blank
Collected March 30-31, 2021

Prepared by: Donald Anné
May 19, 2021

The data package contains the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appears legible and complete. The data pack contains the results of volatile analyses for 6 ground water samples, 1 field duplicate, and 1 trip blank, and the results of PFAS, TAL metals, and cyanide analyses for 6 ground water samples and 1 field duplicate.

The overall performances of the analyses are acceptable. Pace Analytical did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The positive metal results for calcium, magnesium, and sodium were qualified as estimated (J) in all 6 ground water samples and the field duplicate because the %Ds for calcium, magnesium, and sodium were above the allowable maximum in the associated aqueous serial dilution sample and the results were above the RLs.

- The positive metal results for manganese and iron were qualified as estimated (J) in the following samples because the %Ds for manganese and iron were above the allowable maximum in the associated aqueous serial dilution sample and the results were above the RLs.

ESY-EPA-03B	ESY-EPA-08B	ESY-EPA-10B
ESY-EPA-10	DUP	ESY-EPA-09

679 Plank Road ● Clifton Park, New York 12065 ● (518) 348-6995 ● Fax (518) 348-6966
www.alphageoscience.com

- The “not detected” metal results for silver were qualified as “rejected, unusable” (R) in all 6 ground water samples and the field duplicate because the percent recovery for silver was below control limits and below 30% in the associated aqueous spike sample.

All data that are not qualified rejected (R) are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

Qualified Data Section

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Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-03B **Lab ID: 70167580001** Collected: 03/30/21 12:15 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:42	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 11:42	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:42	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:42	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 11:42	7440-43-9	
Calcium	**102000** J	ug/L	200	1	04/02/21 10:21	04/05/21 11:42	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 11:42	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 11:42	7440-50-8	
Iron	**16800** J	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:42	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:42	7439-92-1	
Magnesium	**23700** J	ug/L	200	1	04/02/21 10:21	04/05/21 11:42	7439-95-4	
Manganese	**1150** J	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 11:42	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:42	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7782-49-2	
Silver	**<10.0** R	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7440-22-4	
Sodium	**35600** J	ug/L	5000	1	04/02/21 10:21	04/05/21 11:42	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:42	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:42	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 11:54	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 12:30	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 12:30	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 12:30	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 12:30	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-03B **Lab ID: 70167580001** Collected: 03/30/21 12:15 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 12:30	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 12:30	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 12:30	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 12:30	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 12:30	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 12:30	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:30	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 12:30	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:30	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	70-123	1		04/07/21 12:30	17060-07-0	
4-Bromofluorobenzene (S)	97	%	66-119	1		04/07/21 12:30	460-00-4	
Toluene-d8 (S)	91	%	82-121	1		04/07/21 12:30	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:01		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 10:25	04/12/21 12:49	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-08B **Lab ID: 70167580002** Collected: 03/30/21 13:45 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:49	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 11:49	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:49	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:49	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 11:49	7440-43-9	
Calcium	**79400** J	ug/L	200	1	04/02/21 10:21	04/05/21 11:49	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 11:49	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 11:49	7440-50-8	
Iron	**4730** J	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:49	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:49	7439-92-1	
Magnesium	**9210** J	ug/L	200	1	04/02/21 10:21	04/05/21 11:49	7439-95-4	
Manganese	**295** J	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 11:49	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:49	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7782-49-2	
Silver	**<10.0** R	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7440-22-4	
Sodium	**313000** J	ug/L	5000	1	04/02/21 10:21	04/05/21 11:49	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:49	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:49	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 11:56	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 12:49	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 12:49	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 12:49	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 12:49	108-10-1	

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-08B **Lab ID: 70167580002** Collected: 03/30/21 13:45 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 12:49	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 12:49	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 12:49	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 12:49	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 12:49	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 12:49	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:49	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 12:49	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:49	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	83	%	70-123	1		04/07/21 12:49	17060-07-0	
4-Bromofluorobenzene (S)	96	%	66-119	1		04/07/21 12:49	460-00-4	
Toluene-d8 (S)	90	%	82-121	1		04/07/21 12:49	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:02		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 10:25	04/12/21 12:49	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-10B **Lab ID: 70167580003** Collected: 03/31/21 09:50 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:51	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 11:51	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:51	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:51	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 11:51	7440-43-9	
Calcium	**21600** J	ug/L	200	1	04/02/21 10:21	04/05/21 11:51	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 11:51	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 11:51	7440-50-8	
Iron	**4800** J	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:51	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:51	7439-92-1	
Magnesium	**8800** J	ug/L	200	1	04/02/21 10:21	04/05/21 11:51	7439-95-4	
Manganese	**159** J	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 11:51	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:51	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7782-49-2	
Silver	**<10.0** R	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7440-22-4	
Sodium	**14600** J	ug/L	5000	1	04/02/21 10:21	04/05/21 11:51	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:51	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:51	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 11:57	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 13:09	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 13:09	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 13:09	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 13:09	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-10B **Lab ID: 70167580003** Collected: 03/31/21 09:50 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 13:09	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 13:09	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 13:09	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 13:09	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 13:09	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 13:09	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:09	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 13:09	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:09	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	70-123	1		04/07/21 13:09	17060-07-0	
4-Bromofluorobenzene (S)	96	%	66-119	1		04/07/21 13:09	460-00-4	
Toluene-d8 (S)	91	%	82-121	1		04/07/21 13:09	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:04		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 10:25	04/12/21 12:50	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-SW **Lab ID: 70167580004** Collected: 03/31/21 10:20 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:54	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 11:54	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:54	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:54	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 11:54	7440-43-9	
Calcium	**11900** J	ug/L	200	1	04/02/21 10:21	04/05/21 11:54	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 11:54	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 11:54	7440-50-8	
Iron	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:54	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:54	7439-92-1	
Magnesium	**2420** J	ug/L	200	1	04/02/21 10:21	04/05/21 11:54	7439-95-4	
Manganese	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 11:54	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:54	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7782-49-2	
Silver	**<10.0** R	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7440-22-4	
Sodium	**22300** J	ug/L	5000	1	04/02/21 10:21	04/05/21 11:54	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:54	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:54	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 11:58	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 13:29	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 13:29	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 13:29	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 13:29	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-SW **Lab ID: 70167580004** Collected: 03/31/21 10:20 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 13:29	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 13:29	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 13:29	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 13:29	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 13:29	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 13:29	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:29	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 13:29	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:29	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	70-123	1		04/07/21 13:29	17060-07-0	
4-Bromofluorobenzene (S)	97	%	66-119	1		04/07/21 13:29	460-00-4	
Toluene-d8 (S)	90	%	82-121	1		04/07/21 13:29	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:05		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 10:25	04/12/21 12:50	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-10 **Lab ID: 70167580005** Collected: 03/31/21 10:50 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:56	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 11:56	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 11:56	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:56	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 11:56	7440-43-9	
Calcium	**79500** J	ug/L	200	1	04/02/21 10:21	04/05/21 11:56	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 11:56	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 11:56	7440-50-8	
Iron	**16500** J	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:56	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 11:56	7439-92-1	
Magnesium	**14900** J	ug/L	200	1	04/02/21 10:21	04/05/21 11:56	7439-95-4	
Manganese	**1100** J	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 11:56	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 11:56	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7782-49-2	
Silver	**<10.0** R	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7440-22-4	M1
Sodium	**35200** J	ug/L	5000	1	04/02/21 10:21	04/05/21 11:56	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 11:56	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 11:56	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 12:00	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	79-34-5	M1
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	79-00-5	M1
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 13:49	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	78-87-5	M1
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 13:49	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 13:49	591-78-6	M1
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 13:49	108-10-1	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-10 **Lab ID: 70167580005** Collected: 03/31/21 10:50 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 13:49	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-25-2	M1
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 13:49	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 13:49	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 13:49	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 13:49	79-20-9	L1,M0
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 13:49	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	100-42-5	
Tetrachloroethene	**7.9**	ug/L	1.0	1		04/07/21 13:49	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	108-88-3	M1
Trichloroethene	**2.8**	ug/L	1.0	1		04/07/21 13:49	79-01-6	M1
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 13:49	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 13:49	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 13:49	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	83	%	70-123	1		04/07/21 13:49	17060-07-0	
4-Bromofluorobenzene (S)	97	%	66-119	1		04/07/21 13:49	460-00-4	
Toluene-d8 (S)	90	%	82-121	1		04/07/21 13:49	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:09		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 10:25	04/12/21 12:50	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: DUP **Lab ID: 70167580006** Collected: 03/31/21 11:10 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 12:08	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 12:08	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 12:08	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 12:08	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 12:08	7440-43-9	
Calcium	**83800** J	ug/L	200	1	04/02/21 10:21	04/05/21 12:08	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 12:08	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 12:08	7440-50-8	
Iron	**17900** J	ug/L	20.0	1	04/02/21 10:21	04/05/21 12:08	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 12:08	7439-92-1	
Magnesium	**15800** J	ug/L	200	1	04/02/21 10:21	04/05/21 12:08	7439-95-4	
Manganese	**1170** J	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 12:08	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 12:08	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7782-49-2	
Silver	**<10.0** R	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7440-22-4	
Sodium	**37200** J	ug/L	5000	1	04/02/21 10:21	04/05/21 12:08	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:08	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 12:08	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 12:04	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 14:09	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 14:09	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 14:09	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 14:09	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: DUP **Lab ID: 70167580006** Collected: 03/31/21 11:10 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 14:09	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 14:09	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 14:09	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 14:09	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 14:09	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 14:09	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	100-42-5	
Tetrachloroethene	**7.7**	ug/L	1.0	1		04/07/21 14:09	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	108-88-3	
Trichloroethene	**2.9**	ug/L	1.0	1		04/07/21 14:09	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 14:09	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 14:09	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 14:09	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	83	%	70-123	1		04/07/21 14:09	17060-07-0	
4-Bromofluorobenzene (S)	93	%	66-119	1		04/07/21 14:09	460-00-4	
Toluene-d8 (S)	89	%	82-121	1		04/07/21 14:09	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:06		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/12/21 11:28	04/12/21 12:51	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-09 **Lab ID: 70167580007** Collected: 03/31/21 12:05 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010C Preparation Method: EPA 3005A Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 12:10	7429-90-5	
Antimony	**<60.0**	ug/L	60.0	1	04/02/21 10:21	04/05/21 12:10	7440-36-0	
Arsenic	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7440-38-2	
Barium	**<200**	ug/L	200	1	04/02/21 10:21	04/05/21 12:10	7440-39-3	
Beryllium	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 12:10	7440-41-7	
Cadmium	**<2.5**	ug/L	2.5	1	04/02/21 10:21	04/05/21 12:10	7440-43-9	
Calcium	**24200** J	ug/L	200	1	04/02/21 10:21	04/05/21 12:10	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7440-47-3	
Cobalt	**<50.0**	ug/L	50.0	1	04/02/21 10:21	04/05/21 12:10	7440-48-4	
Copper	**<25.0**	ug/L	25.0	1	04/02/21 10:21	04/05/21 12:10	7440-50-8	
Iron	**1640** J	ug/L	20.0	1	04/02/21 10:21	04/05/21 12:10	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	04/02/21 10:21	04/05/21 12:10	7439-92-1	
Magnesium	**4330** J	ug/L	200	1	04/02/21 10:21	04/05/21 12:10	7439-95-4	
Manganese	**61.5** J	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	04/02/21 10:21	04/05/21 12:10	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	04/02/21 10:21	04/05/21 12:10	7440-09-7	
Selenium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7782-49-2	
Silver	**<10.0** R	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7440-22-4	
Sodium	**31000** J	ug/L	5000	1	04/02/21 10:21	04/05/21 12:10	7440-23-5	
Thallium	**<10.0**	ug/L	10.0	1	04/02/21 10:21	04/05/21 12:10	7440-28-0	
Zinc	**<20.0**	ug/L	20.0	1	04/02/21 10:21	04/05/21 12:10	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	04/06/21 11:58	04/07/21 12:08	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 14:29	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 14:29	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 14:29	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 14:29	108-10-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: ESY-EPA-09 **Lab ID: 70167580007** Collected: 03/31/21 12:05 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 14:29	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 14:29	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 14:29	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 14:29	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 14:29	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 14:29	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 14:29	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 14:29	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	10061-01-5	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 14:29	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	84	%	70-123	1		04/07/21 14:29	17060-07-0	
4-Bromofluorobenzene (S)	97	%	66-119	1		04/07/21 14:29	460-00-4	
Toluene-d8 (S)	90	%	82-121	1		04/07/21 14:29	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:07		
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	04/14/21 10:57	04/14/21 17:59	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: TRIP BLANK **Lab ID: 70167580008** Collected: 03/31/21 12:05 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	71-55-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	79-34-5	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	79-00-5	
1,1,2-Trichlorotrifluoroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	76-13-1	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-34-3	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-35-4	v3
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	120-82-1	
1,2-Dibromo-3-chloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	96-12-8	v3
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		04/07/21 12:10	106-93-4	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	95-50-1	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	107-06-2	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	78-87-5	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	106-46-7	
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		04/07/21 12:10	78-93-3	IL,v3
2-Hexanone	**<5.0**	ug/L	5.0	1		04/07/21 12:10	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		04/07/21 12:10	108-10-1	
Acetone	**<5.0**	ug/L	5.0	1		04/07/21 12:10	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	74-83-9	
Carbon disulfide	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		04/07/21 12:10	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		04/07/21 12:10	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	74-87-3	
Cyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	110-82-7	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	124-48-1	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-71-8	
Ethylbenzene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		04/07/21 12:10	98-82-8	
Methyl acetate	**<1.0**	ug/L	1.0	1		04/07/21 12:10	79-20-9	L1
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		04/07/21 12:10	1634-04-4	
Methylcyclohexane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	108-87-2	
Methylene Chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-09-2	
Styrene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	100-42-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	108-88-3	
Trichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-69-4	
Vinyl chloride	**<1.0**	ug/L	1.0	1		04/07/21 12:10	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		04/07/21 12:10	1330-20-7	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	156-59-2	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	10061-01-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: ELLENVILLE SCRAP IRON & METAL
Pace Project No.: 70167580

Sample: TRIP BLANK **Lab ID: 70167580008** Collected: 03/31/21 12:05 Received: 04/01/21 10:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	156-60-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		04/07/21 12:10	10061-02-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	83	%	70-123	1		04/07/21 12:10	17060-07-0	
4-Bromofluorobenzene (S)	96	%	66-119	1		04/07/21 12:10	460-00-4	
Toluene-d8 (S)	89	%	82-121	1		04/07/21 12:10	2037-26-5	
TIC MSV Water	Analytical Method: EPA 8260 Pace Analytical Services - Melville							
TIC Search	**No TIC's Found**			1		04/08/21 20:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Phone: 612.607.1700
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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-03B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580001	Total Amount Extracted	260mL
Lab File ID	A210420B_017	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:15	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	2.6	1.9	1.9	0.39	1	375-22-4	N2
PFPeA	ND	1.9	1.9	0.22	1	2706-90-3	N2
PFBS	2.8	1.7	1.7	0.41	1	375-73-5	N2
PFHxA	ND	1.9	1.9	0.31	1	307-24-4	N2
PFHpA	ND	1.9	1.9	0.55	1	375-85-9	N2
PFHxS	ND	1.7	1.7	0.53	1	355-46-4	N2
PFOA	ND	1.9	1.9	0.55	1	335-67-1	N2
6:2 FTS	3.7	1.8	1.8	0.64	1	27619-97-2	N2
PFHpS	ND	1.8	1.8	0.27	1	375-92-8	N2
PFNA	ND	1.9	1.9	0.41	1	375-95-1	N2
PFOSAm	ND	1.9	1.9	0.83	1	754-91-6	N2
PFOS	3.0	1.8	1.8	0.41	1	1763-23-1	N2
PFDA	ND	1.9	1.9	0.67	1	335-76-2	N2
8:2 FTS	ND	1.8	1.8	0.55	1	39108-34-4	N2
PFUnDA	ND	1.9	1.9	0.31	1	2058-94-8	N2
NMeFOSAA	ND	1.9	1.9	0.41	1	2355-31-9	N2
NEtFOSAA	ND	1.9	1.9	0.60	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.50	1	335-77-3	N2
PFDOA	ND	1.9	1.9	0.56	1	307-55-1	N2
PFTrDA	ND	1.9	1.9	0.50	1	72629-94-8	N2
PFTDA	ND	1.9	1.9	0.49	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	20	102	50-150	
13C4_PFOA	19	22	113	50-150	
13C2_PFDA	19	20	105	50-150	
13C4_PFOS	18	20	110	50-150	

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-03B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580001	Total Amount Extracted	260mL
Lab File ID	A210420B_017	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:15	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	21	110	50-150	
13C5_PFPeA	19	21	110	50-150	
13C3_PFBS	18	21	115	50-150	
13C5_PFHxA	19	21	110	50-150	
13C4_PFHpA	19	21	112	50-150	
13C3_PFHxS	18	20	109	50-150	
13C2_6:2FTS	18	22	121	50-150	
13C8_PFOA	19	21	111	50-150	
13C9_PFNA	19	21	110	50-150	
13C8_PFOS	18	20	111	50-150	
13C2_8:2FTS	18	20	106	50-150	
13C6_PFDA	19	20	107	50-150	
d3-MeFOSAA	19	22	113	50-150	
13C8_PFOSA	19	19	98	50-150	
d5-EtFOSAA	19	20	104	50-150	
13C7_PFUdA	19	20	105	50-150	
13C2_PFDoA	19	22	113	50-150	
13C2_PFTeDA	19	22	114	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.26	7.30	

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-08B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580002	Total Amount Extracted	258mL
Lab File ID	A210420B_018	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 13:45	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	2.7	1.9	1.9	0.39	1	375-22-4	N2
PFPeA	ND	1.9	1.9	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.41	1	375-73-5	N2
PFHxA	2.0	1.9	1.9	0.31	1	307-24-4	N2
PFHpA	ND	1.9	1.9	0.56	1	375-85-9	N2
PFHxS	ND	1.8	1.8	0.54	1	355-46-4	N2
PFOA	4.7	1.9	1.9	0.56	1	335-67-1	N2
6:2 FTS	ND	1.8	1.8	0.65	1	27619-97-2	N2
PFHpS	ND	1.8	1.8	0.27	1	375-92-8	N2
PFNA	ND	1.9	1.9	0.41	1	375-95-1	N2
PFOSAm	ND	1.9	1.9	0.84	1	754-91-6	N2
PFOS	ND	1.8	1.8	0.41	1	1763-23-1	N2
PFDA	ND	1.9	1.9	0.67	1	335-76-2	N2
8:2 FTS	ND	1.9	1.9	0.56	1	39108-34-4	N2
PFUnDA	ND	1.9	1.9	0.31	1	2058-94-8	N2
NMeFOSAA	ND	1.9	1.9	0.41	1	2355-31-9	N2
NEtFOSAA	ND	1.9	1.9	0.60	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.50	1	335-77-3	N2
PFDOA	ND	1.9	1.9	0.56	1	307-55-1	N2
PFTrDA	ND	1.9	1.9	0.51	1	72629-94-8	N2
PFTDA	ND	1.9	1.9	0.49	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	21	109	50-150	
13C4_PFOA	19	22	113	50-150	
13C2_PFDA	19	21	107	50-150	
13C4_PFOS	19	21	112	50-150	

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-08B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580002	Total Amount Extracted	258mL
Lab File ID	A210420B_018	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 13:45	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	22	114	50-150	
13C5_PFPeA	19	23	116	50-150	
13C3_PFBS	18	21	118	50-150	
13C5_PFHxA	19	23	116	50-150	
13C4_PFHpA	19	23	117	50-150	
13C3_PFHxS	18	21	113	50-150	
13C2_6:2FTS	18	26	140	50-150	
13C8_PFOA	19	22	113	50-150	
13C9_PFNA	19	21	109	50-150	
13C8_PFOS	19	21	114	50-150	
13C2_8:2FTS	19	21	111	50-150	
13C6_PFDA	19	21	110	50-150	
d3-MeFOSAA	19	21	108	50-150	
13C8_PFOSA	19	18	93	50-150	
d5-EtFOSAA	19	22	113	50-150	
13C7_PFUdA	19	21	110	50-150	
13C2_PFDoA	19	23	117	50-150	
13C2_PFTeDA	19	21	109	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.26	7.30	

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580003	Total Amount Extracted	260mL
Lab File ID	A210420B_019	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 09:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	ND	1.9	1.9	0.39	1	375-22-4	N2
PFPeA	ND	1.9	1.9	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.41	1	375-73-5	N2
PFHxA	ND	1.9	1.9	0.31	1	307-24-4	N2
PFHpA	ND	1.9	1.9	0.55	1	375-85-9	N2
PFHxS	ND	1.7	1.7	0.53	1	355-46-4	N2
PFOA	ND	1.9	1.9	0.55	1	335-67-1	N2
6:2 FTS	ND	1.8	1.8	0.64	1	27619-97-2	N2
PFHpS	ND	1.8	1.8	0.27	1	375-92-8	N2
PFNA	ND	1.9	1.9	0.41	1	375-95-1	N2
PFOSAm	ND	1.9	1.9	0.83	1	754-91-6	N2
PFOS	ND	1.8	1.8	0.41	1	1763-23-1	N2
PFDA	ND	1.9	1.9	0.67	1	335-76-2	N2
8:2 FTS	ND	1.8	1.8	0.55	1	39108-34-4	N2
PFUnDA	ND	1.9	1.9	0.31	1	2058-94-8	N2
NMeFOSAA	ND	1.9	1.9	0.41	1	2355-31-9	N2
NEtFOSAA	ND	1.9	1.9	0.60	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.50	1	335-77-3	N2
PFDOA	ND	1.9	1.9	0.56	1	307-55-1	N2
PFTrDA	ND	1.9	1.9	0.50	1	72629-94-8	N2
PFTDA	ND	1.9	1.9	0.49	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	20	102	50-150	
13C4_PFOA	19	20	106	50-150	
13C2_PFDA	19	19	98	50-150	
13C4_PFOS	18	19	105	50-150	

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10B	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580003	Total Amount Extracted	260mL
Lab File ID	A210420B_019	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 09:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	20	106	50-150	
13C5_PFPeA	19	20	103	50-150	
13C3_PFBS	18	21	115	50-150	
13C5_PFHxA	19	21	108	50-150	
13C4_PFHpA	19	21	107	50-150	
13C3_PFHxS	18	20	112	50-150	
13C2_6:2FTS	18	21	115	50-150	
13C8_PFOA	19	20	103	50-150	
13C9_PFNA	19	20	104	50-150	
13C8_PFOS	18	20	110	50-150	
13C2_8:2FTS	18	18	98	50-150	
13C6_PFDA	19	19	98	50-150	
d3-MeFOSAA	19	18	94	50-150	
13C8_PFOSA	19	17	87	50-150	
d5-EtFOSAA	19	19	100	50-150	
13C7_PFUdA	19	20	104	50-150	
13C2_PFDoA	19	21	109	50-150	
13C2_PFTeDA	19	21	108	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.26	7.30	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-SW	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580004	Total Amount Extracted	252mL
Lab File ID	A210420B_020	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:20	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	ND	2.0	2.0	0.40	1	375-22-4	N2
PFPeA	ND	2.0	2.0	0.22	1	2706-90-3	N2
PFBS	ND	1.8	1.8	0.42	1	375-73-5	N2
PFHxA	ND	2.0	2.0	0.32	1	307-24-4	N2
PFHpA	ND	2.0	2.0	0.57	1	375-85-9	N2
PFHxS	ND	1.8	1.8	0.55	1	355-46-4	N2
PFOA	ND	2.0	2.0	0.57	1	335-67-1	N2
6:2 FTS	ND	1.9	1.9	0.66	1	27619-97-2	N2
PFHpS	ND	1.9	1.9	0.28	1	375-92-8	N2
PFNA	ND	2.0	2.0	0.42	1	375-95-1	N2
PFOSAm	ND	2.0	2.0	0.86	1	754-91-6	N2
PFOS	ND	1.8	1.8	0.42	1	1763-23-1	N2
PFDA	ND	2.0	2.0	0.69	1	335-76-2	N2
8:2 FTS	ND	1.9	1.9	0.57	1	39108-34-4	N2
PFUnDA	ND	2.0	2.0	0.32	1	2058-94-8	N2
NMeFOSAA	ND	2.0	2.0	0.42	1	2355-31-9	N2
NEtFOSAA	ND	2.0	2.0	0.62	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.51	1	335-77-3	N2
PFDOA	ND	2.0	2.0	0.57	1	307-55-1	N2
PFTrDA	ND	2.0	2.0	0.52	1	72629-94-8	N2
PFTDA	ND	2.0	2.0	0.50	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	20	19	97	50-150	
13C4_PFOA	20	20	103	50-150	
13C2_PFDA	20	20	98	50-150	
13C4_PFOS	19	19	102	50-150	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-SW	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580004	Total Amount Extracted	252mL
Lab File ID	A210420B_020	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:20	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	20	21	107	50-150	
13C5_PFPeA	20	21	107	50-150	
13C3_PFBS	18	21	113	50-150	
13C5_PFHxA	20	21	107	50-150	
13C4_PFHpA	20	22	109	50-150	
13C3_PFHxS	19	20	109	50-150	
13C2_6:2FTS	19	22	119	50-150	
13C8_PFOA	20	21	105	50-150	
13C9_PFNA	20	21	105	50-150	
13C8_PFOS	19	21	109	50-150	
13C2_8:2FTS	19	20	104	50-150	
13C6_PFDA	20	21	105	50-150	
d3-MeFOSAA	20	21	104	50-150	
13C8_PFOSA	20	18	89	50-150	
d5-EtFOSAA	20	20	102	50-150	
13C7_PFUdA	20	21	105	50-150	
13C2_PFDoA	20	21	107	50-150	
13C2_PFTeDA	20	20	101	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.27	7.30	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580005	Total Amount Extracted	262mL
Lab File ID	A210420B_021	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	3.9	1.9	1.9	0.39	1	375-22-4	N2
PFPeA	8.0	1.9	1.9	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.40	1	375-73-5	N2
PFHxA	5.9	1.9	1.9	0.31	1	307-24-4	N2
PFHpA	4.1	1.9	1.9	0.55	1	375-85-9	N2
PFHxS	3.5	1.7	1.7	0.53	1	355-46-4	N2
PFOA	14	1.9	1.9	0.55	1	335-67-1	N2
6:2 FTS	ND	1.8	1.8	0.64	1	27619-97-2	N2
PFHpS	ND	1.8	1.8	0.27	1	375-92-8	N2
PFNA	ND	1.9	1.9	0.40	1	375-95-1	N2
PFOSAm	ND	1.9	1.9	0.83	1	754-91-6	N2
PFOS	24	1.8	1.8	0.41	1	1763-23-1	N2
PFDA	ND	1.9	1.9	0.67	1	335-76-2	N2
8:2 FTS	ND	1.8	1.8	0.55	1	39108-34-4	N2
PFUnDA	ND	1.9	1.9	0.31	1	2058-94-8	N2
NMeFOSAA	ND	1.9	1.9	0.40	1	2355-31-9	N2
NEtFOSAA	ND	1.9	1.9	0.59	1	2991-50-6	N2
PFDS	ND	1.8	1.8	0.49	1	335-77-3	N2
PFDOA	ND	1.9	1.9	0.55	1	307-55-1	N2
PFTrDA	ND	1.9	1.9	0.50	1	72629-94-8	N2
PFTDA	ND	1.9	1.9	0.48	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	20	103	50-150	
13C4_PFOA	19	20	104	50-150	
13C2_PFDA	19	19	101	50-150	
13C4_PFOS	18	20	108	50-150	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-10	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580005	Total Amount Extracted	262mL
Lab File ID	A210420B_021	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 10:50	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	22	113	50-150	
13C5_PFPeA	19	21	111	50-150	
13C3_PFBS	18	21	116	50-150	
13C5_PFHxA	19	21	107	50-150	
13C4_PFHpA	19	21	109	50-150	
13C3_PFHxS	18	20	109	50-150	
13C2_6:2FTS	18	23	125	50-150	
13C8_PFOA	19	20	106	50-150	
13C9_PFNA	19	19	102	50-150	
13C8_PFOS	18	21	114	50-150	
13C2_8:2FTS	18	21	116	50-150	
13C6_PFDA	19	20	106	50-150	
d3-MeFOSAA	19	19	101	50-150	
13C8_PFOSA	19	18	94	50-150	
d5-EtFOSAA	19	20	103	50-150	
13C7_PFUdA	19	20	107	50-150	
13C2_PFDoA	19	22	114	50-150	
13C2_PFTeDA	19	21	108	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.27	7.30	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	DUP	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580006	Total Amount Extracted	262mL
Lab File ID	A210420B_022	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 11:10	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	4.0	1.9	1.9	0.39	1	375-22-4	N2
PFPeA	8.4	1.9	1.9	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.40	1	375-73-5	N2
PFHxA	5.9	1.9	1.9	0.30	1	307-24-4	N2
PFHpA	4.3	1.9	1.9	0.55	1	375-85-9	N2
PFHxS	3.7	1.7	1.7	0.53	1	355-46-4	N2
PFOA	15	1.9	1.9	0.55	1	335-67-1	N2
6:2 FTS	ND	1.8	1.8	0.64	1	27619-97-2	N2
PFHpS	ND	1.8	1.8	0.26	1	375-92-8	N2
PFNA	ND	1.9	1.9	0.40	1	375-95-1	N2
PFOSAm	ND	1.9	1.9	0.82	1	754-91-6	N2
PFOS	25	1.8	1.8	0.40	1	1763-23-1	N2
PFDA	ND	1.9	1.9	0.66	1	335-76-2	N2
8:2 FTS	ND	1.8	1.8	0.55	1	39108-34-4	N2
PFUnDA	ND	1.9	1.9	0.30	1	2058-94-8	N2
NMeFOSAA	ND	1.9	1.9	0.40	1	2355-31-9	N2
NEtFOSAA	ND	1.9	1.9	0.59	1	2991-50-6	N2
PFDS	ND	1.8	1.8	0.49	1	335-77-3	N2
PFDOA	ND	1.9	1.9	0.55	1	307-55-1	N2
PFTrDA	ND	1.9	1.9	0.50	1	72629-94-8	N2
PFTDA	ND	1.9	1.9	0.48	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	20	107	50-150	
13C4_PFOA	19	22	113	50-150	
13C2_PFDA	19	20	104	50-150	
13C4_PFOS	18	21	113	50-150	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	DUP	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580006	Total Amount Extracted	262mL
Lab File ID	A210420B_022	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 11:10	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	20	105	50-150	
13C5_PFPeA	19	20	105	50-150	
13C3_PFBS	18	20	113	50-150	
13C5_PFHxA	19	20	105	50-150	
13C4_PFHpA	19	20	105	50-150	
13C3_PFHxS	18	20	110	50-150	
13C2_6:2FTS	18	23	125	50-150	
13C8_PFOA	19	20	104	50-150	
13C9_PFNA	19	19	100	50-150	
13C8_PFOS	18	20	110	50-150	
13C2_8:2FTS	18	19	102	50-150	
13C6_PFDA	19	19	102	50-150	
d3-MeFOSAA	19	18	96	50-150	
13C8_PFOSA	19	16	86	50-150	
d5-EtFOSAA	19	18	96	50-150	
13C7_PFUdA	19	20	103	50-150	
13C2_PFDoA	19	21	111	50-150	
13C2_PFTeDA	19	19	102	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.04	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.27	7.30	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-09	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580007	Total Amount Extracted	255mL
Lab File ID	A210420B_023	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:05	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	DL (ng/L)	Dil.	CAS No.	Qual.
PFBA	ND	2.0	2.0	0.40	1	375-22-4	N2
PFPeA	ND	2.0	2.0	0.22	1	2706-90-3	N2
PFBS	ND	1.7	1.7	0.41	1	375-73-5	N2
PFHxA	ND	2.0	2.0	0.31	1	307-24-4	N2
PFHpA	ND	2.0	2.0	0.56	1	375-85-9	N2
PFHxS	ND	1.8	1.8	0.54	1	355-46-4	N2
PFOA	ND	2.0	2.0	0.56	1	335-67-1	N2
6:2 FTS	ND	1.9	1.9	0.65	1	27619-97-2	N2
PFHpS	ND	1.9	1.9	0.27	1	375-92-8	N2
PFNA	ND	2.0	2.0	0.41	1	375-95-1	N2
PFOSAm	ND	2.0	2.0	0.85	1	754-91-6	N2
PFOS	ND	1.8	1.8	0.41	1	1763-23-1	N2
PFDA	ND	2.0	2.0	0.68	1	335-76-2	N2
8:2 FTS	ND	1.9	1.9	0.56	1	39108-34-4	N2
PFUnDA	ND	2.0	2.0	0.31	1	2058-94-8	N2
NMeFOSAA	ND	2.0	2.0	0.41	1	2355-31-9	N2
NEtFOSAA	ND	2.0	2.0	0.61	1	2991-50-6	N2
PFDS	ND	1.9	1.9	0.51	1	335-77-3	N2
PFDOA	ND	2.0	2.0	0.57	1	307-55-1	N2
PFTrDA	ND	2.0	2.0	0.51	1	72629-94-8	N2
PFTDA	ND	2.0	2.0	0.49	1	376-06-7	N2

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	20	20	102	50-150	
13C4_PFOA	20	20	102	50-150	
13C2_PFDA	20	19	97	50-150	
13C4_PFOS	19	21	110	50-150	

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	ESY-EPA-09	Extraction Date	04/16/2021 18:52
Lab Sample ID	70167580007	Total Amount Extracted	255mL
Lab File ID	A210420B_023	Ical ID	210419A03
Matrix	Non_Potable_Water	CCal File	A210420B_016
Collected	03/30/2021 12:05	Ending CCal File	A210420B_027
Received	04/03/2021 10:00	Blank File	A210420B_007

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	20	22	111	50-150	
13C5_PFPeA	20	21	109	50-150	
13C3_PFBS	18	21	114	50-150	
13C5_PFHxA	20	21	106	50-150	
13C4_PFHpA	20	22	111	50-150	
13C3_PFHxS	19	21	114	50-150	
13C2_6:2FTS	19	25	133	50-150	
13C8_PFOA	20	20	104	50-150	
13C9_PFNA	20	20	102	50-150	
13C8_PFOS	19	21	114	50-150	
13C2_8:2FTS	19	20	105	50-150	
13C6_PFDA	20	21	107	50-150	
d3-MeFOSAA	20	21	105	50-150	
13C8_PFOSA	20	18	90	50-150	
d5-EtFOSAA	20	20	101	50-150	
13C7_PFUdA	20	22	110	50-150	
13C2_PFDoA	20	23	117	50-150	
13C2_PFTeDA	20	22	113	50-150	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Qualifiers
13C2_PFHxA	N/A	N/A	5.03	5.05	
13C4_PFOA	N/A	N/A	6.03	6.05	
13C2_PFDA	N/A	N/A	6.94	6.97	
13C4_PFOS	N/A	N/A	7.26	7.30	

REPORT OF LABORATORY ANALYSIS

VOC Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8260C Volatiles Data
for Pace Analytical, SDG: 70167580

6 Ground Water Sample, 1 Field Duplicate,
and 1 Trip Blank
Collected March 30-31, 2021

Prepared by: Donald Anné
May 19, 2021

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for acetone and bromomethane were below the method minimum, but not below 0.010 for 70MSV8 on 07-07-20. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for applicable compounds were above the method minimums, as required. The %Ds for acetone, 2-butanone, 1,2-dibromo-3-chloropropane, 1,1-dichloroethene, and methyl acetate were above the method maximum on 04-07-21 (040721.B/P30149.D). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

The associated RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for acetone, 2-butanone, 1,2-dibromo-3-chloropropane, 1,1-dichloroethene, and methyl acetate were above the allowable maximum (20%) on 04-07-21 (040721.B/P30149.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analysis of the method and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

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Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximum and the percent recoveries were within QC limits for aqueous MS/MSD sample ESY-EPA-10.

Laboratory Control Sample: The percent recoveries for target compounds were within QC limits for aqueous sample LCS lot no. 109113.

Field Duplicates: The relative percent differences for tetrachloroethene and trichloroethene were below the allowable maximum (20%) for aqueous field duplicate pair ESY-EPA-10/DUP (attached table), as required.

Compound ID: Checked compound and surrogate results were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

MSV - FORM VI VOA-5
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV8 GC Column: Col 1 SDG No.: 70167580

Calibration Date(s): 07/07/2020 07/07/2020 Calibration Time(s): 16:50 19:31

LAB FILE ID

CAL1 = 070720.B\P24780.D CAL2 = 070720.B\P24781.D CAL3 = 070720.B\P24782.D
CAL4 = 070720.B\P24783.D CAL5 = 070720.B\P24784.D CAL6 = 070720.B\P24785.D
CAL7 = 070720.B\P24786.D CAL8 = 070720.B\P24787.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Linear		0.99960	0.00657777	0.07365	
Benzene	Averaged	4.02286			0.89538	
Bromodichloromethane	Averaged	2.53521			0.31976	
Bromoform	Averaged	8.80216			0.21606	
Bromomethane	Quadratic		0.99987	0.00242152	0.02522	0.01923
2-Butanone (MEK)	Averaged	3.38370			0.37335	
Carbon disulfide	Averaged	6.78890			1.00493	
Carbon tetrachloride	Averaged	16.04634			0.34991	
Chlorobenzene	Averaged	2.68455			1.29120	
Chloroethane	Averaged	4.05713			0.23622	
Chloroform	Averaged	1.68273			0.71365	
Chloromethane	Averaged	8.18936			0.25826	
Cyclohexane	Averaged	4.47145			0.72545	
1,2-Dibromo-3-chloropropane	Averaged	13.03766			0.09056	
Dibromochloromethane	Averaged	5.97518			0.41244	
1,2-Dibromoethane (EDB)	Averaged	2.25684			0.19697	
1,2-Dichlorobenzene	Averaged	4.02319			1.06679	
1,3-Dichlorobenzene	Averaged	5.38414			1.14867	
1,4-Dichlorobenzene	Averaged	3.78973			1.17502	
Dichlorodifluoromethane	Averaged	2.94761			0.38352	
1,1-Dichloroethane	Averaged	1.57608			0.68681	
1,2-Dichloroethane	Averaged	1.80838			0.55661	
1,1-Dichloroethene	Averaged	19.83214			0.33058	
cis-1,2-Dichloroethene	Averaged	3.34852			0.44205	
trans-1,2-Dichloroethene	Averaged	2.44400			0.37241	
1,2-Dichloropropane	Averaged	2.33624			0.22808	
cis-1,3-Dichloropropene	Averaged	2.63898			0.37945	
trans-1,3-Dichloropropene	Averaged	5.91959			0.34546	
Ethylbenzene	Averaged	3.03920			0.76596	
2-Hexanone	Averaged	5.04698			0.22405	
Isopropylbenzene (Cumene)	Averaged	2.92306			2.83606	
Methyl acetate	Averaged	6.19997			0.24182	
Methylcyclohexane	Averaged	2.77339			0.46549	
Methylene Chloride	Averaged	3.98718			0.38029	
4-Methyl-2-pentanone (MIBK)	Averaged	3.56016			0.16307	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-6
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV8 GC Column: Col 1 SDG No.: 70167580

Calibration Date(s): 07/07/2020 07/07/2020 Calibration Time(s): 16:50 19:31

LAB FILE ID

CAL1 = 070720.B\P24780.D CAL2 = 070720.B\P24781.D CAL3 = 070720.B\P24782.D

CAL4 = 070720.B\P24783.D CAL5 = 070720.B\P24784.D CAL6 = 070720.B\P24785.D

CAL7 = 070720.B\P24786.D CAL8 = 070720.B\P24787.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Methyl-tert-butyl ether	Averaged	1.94347			1.15883	
Styrene	Averaged	4.43974			1.49775	
1,1,2,2-Tetrachloroethane	Averaged	2.12889			0.53654	
Tetrachloroethene	Averaged	3.37655			0.46063	
Toluene	Averaged	2.25944			1.05417	
1,2,4-Trichlorobenzene	Averaged	9.06602			0.54615	
1,1,1-Trichloroethane	Averaged	3.63262			0.37574	
1,1,2-Trichloroethane	Averaged	4.28291			0.17538	
Trichloroethene	Averaged	1.93091			0.25222	
Trichlorofluoromethane	Averaged	5.58386			0.55146	
1,1,2-Trichlorotrifluoroethane	Averaged	3.23460			0.35024	
Vinyl chloride	Averaged	7.02078			0.29405	
m&p-Xylene	Averaged	3.19769			0.92736	
o-Xylene	Averaged	3.03611			0.89534	
4-Bromofluorobenzene (S)	Averaged	0.49600			0.96427	
1,2-Dichloroethane-d4 (S)	Averaged	1.27718			0.37735	
Toluene-d8 (S)	Averaged	1.02220			2.48361	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

14788131CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 04/07/2021 Time: 08:43

Instrument ID: 70MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/07/2020 07/07/2020

Lab File ID: 040721.B\P30149.D Init. Calib. Time(s): 16:50 19:31

SDG No.: 70167580

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Linear	50	68.20326	0.1000	36.4065*	20.0000
Benzene	Averaged	0.89538	0.94571	0.5000	5.6211	20.0000
Bromodichloromethane	Averaged	0.31976	0.30508	0.2000	-4.5895	20.0000
Bromoform	Averaged	0.21606	0.24663	0.1000	14.1471	20.0000
Bromomethane	Quadratic	50	50.72983	0.1000	1.4597	20.0000
2-Butanone (MEK)	Averaged	0.37335	0.23753	0.1000	-36.3798	20.0000
Carbon disulfide	Averaged	1.00493	0.94680	0.1000	-5.7846	20.0000
Carbon tetrachloride	Averaged	0.34991	0.31258	0.1000	-10.6677	20.0000
Chlorobenzene	Averaged	1.29120	1.24981	0.5000	-3.2059	20.0000
Chloroethane	Averaged	0.23622	0.19709	0.1000	-16.5667	20.0000
Chloroform	Averaged	0.71365	0.67169	0.2000	-5.8804	20.0000
Chloromethane	Averaged	0.25826	0.27189	0.1000	5.2760	20.0000
Cyclohexane	Averaged	0.72545	0.77356	0.1000	6.6314	20.0000
1,2-Dibromo-3-chloropropane	Averaged	0.09056	0.06974	0.0500	-22.9856	20.0000
Dibromochloromethane	Averaged	0.41244	0.41424	0.1000	0.4364	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.19697	0.20207	0.1000	2.5879	20.0000
1,2-Dichlorobenzene	Averaged	1.06679	0.98426	0.4000	-7.7364	20.0000
1,3-Dichlorobenzene	Averaged	1.14867	1.07959	0.6000	-6.0136	20.0000
1,4-Dichlorobenzene	Averaged	1.17502	1.11183	0.5000	-5.3779	20.0000
Dichlorodifluoromethane	Averaged	0.38352	0.31355	0.1000	-18.2430	20.0000
1,1-Dichloroethane	Averaged	0.68681	0.68822	0.2000	0.2056	20.0000
1,2-Dichloroethane	Averaged	0.55661	0.49323	0.1000	-11.3876	20.0000
1,1-Dichloroethene	Averaged	0.33058	0.24855	0.1000	-24.8139	20.0000
cis-1,2-Dichloroethene	Averaged	0.44205	0.44046	0.1000	-0.3609	20.0000
trans-1,2-Dichloroethene	Averaged	0.37241	0.37033	0.1000	-0.5600	20.0000
1,2-Dichloropropane	Averaged	0.22808	0.24249	0.1000	6.3149	20.0000
cis-1,3-Dichloropropene	Averaged	0.37945	0.35688	0.2000	-5.9489	20.0000
trans-1,3-Dichloropropene	Averaged	0.34546	0.29764	0.1000	-13.8436	20.0000
Ethylbenzene	Averaged	0.76596	0.71374	0.1000	-6.8176	20.0000
2-Hexanone	Averaged	0.22405	0.22314	0.1000	-0.4032	20.0000
Isopropylbenzene (Cumene)	Averaged	2.83606	2.43041	0.1000	-14.3035	20.0000
Methyl acetate	Averaged	0.24182	0.51508	0.1000	113.0006	20.0000
Methylcyclohexane	Averaged	0.46549	0.45499	0.1000	-2.2559	20.0000
Methylene Chloride	Averaged	0.38029	0.38483	0.1000	1.1943	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.16307	0.17570	0.1000	7.7414	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

14788131CCV

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 04/07/2021 Time: 08:43

Instrument ID: 70MSV8 GC Column: Col 1 Init. Calib. Date(s): 07/07/2020 07/07/2020

Lab File ID: 040721.B\P30149.D Init. Calib. Time(s): 16:50 19:31

SDG No.: 70167580

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Methyl-tert-butyl ether	Averaged	1.15883	1.06503	0.1000	-8.0940	20.0000
Styrene	Averaged	1.49775	1.46086	0.3000	-2.4630	20.0000
1,1,2,2-Tetrachloroethane	Averaged	0.53654	0.49525	0.3000	-7.6964	20.0000
Tetrachloroethene	Averaged	0.46063	0.44795	0.2000	-2.7507	20.0000
Toluene	Averaged	1.05417	1.08511	0.4000	2.9346	20.0000
1,2,4-Trichlorobenzene	Averaged	0.54615	0.51099	0.2000	-6.4391	20.0000
1,1,1-Trichloroethane	Averaged	0.37574	0.32313	0.1000	-14.0008	20.0000
1,1,2-Trichloroethane	Averaged	0.17538	0.18142	0.1000	3.4429	20.0000
Trichloroethene	Averaged	0.25222	0.25007	0.2000	-0.8532	20.0000
Trichlorofluoromethane	Averaged	0.55146	0.46969	0.1000	-14.8271	20.0000
1,1,2-Trichlorotrifluoroethane	Averaged	0.35024	0.30555	0.1000	-12.7589	20.0000
Vinyl chloride	Averaged	0.29405	0.33497	0.1000	13.9165	20.0000
m&p-Xylene	Averaged	0.92736	0.88874	0.1000	-4.1652	20.0000
o-Xylene	Averaged	0.89534	0.86151	0.3000	-3.7792	20.0000
4-Bromofluorobenzene (S)	Averaged	0.96427	0.92752	0.0100	-3.8109	20.0000
1,2-Dichloroethane-d4 (S)	Averaged	0.37735	0.31195	0.0100	-17.3314	20.0000
Toluene-d8 (S)	Averaged	2.48361	2.21072	0.0100	-10.9878	20.0000

* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

PFAS

Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 537 (Modified) PFAS
Data for Pace Analytical, SDG: 70167580

6 Ground Water Samples and 1 Field Duplicate
Collected March 30-31, 2021

Prepared by: Donald Anné
May 19, 2021

Holding Times: Samples were analyzed within USEPA holding times.

Initial Calibration: The %RSDs for applicable PFAS compounds were below the method maximums, as required.

Continuing Calibration: The %Ds for applicable PFAS compounds were below the allowable maximums, as required

Blanks: The analysis of the method blank reported target PFAS as not detected.

Extracted Internal Standard Recovery: The extracted internal standard recoveries were within QC limits for the ground water samples.

Injected Internal Standard Recovery: The injected internal standard recoveries were within QC limits for the ground water samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target PFAS were below the allowable maximum and the percent recoveries were within QC limits for aqueous MS/MSD sample ESY-EPA-10.

Laboratory Control Sample: The percent recoveries target PFAS were within QC limits for aqueous sample LCS-88792.

Field Duplicates: The relative percent differences for applicable PFAS were below the allowable maximum (20%) for aqueous field duplicate pair ESY-EPA-10/DUP (attached table), as required.

Compound ID: Checked compounds and surrogates were within LC quantitation limits.

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Metals Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of TAL Metals Data for
Pace Analytical, SDG: 70167580

4 Ground Water Samples and 1 Field Duplicate
Collected March 30-31, 2021

Prepared by: Donald Anné
May 19, 2021

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

CRDL Standard: The percent recoveries for target metals were within QC limits (70-130%) for CRDL standard.

Blanks: The analyses of initial and continuing calibration, and method blanks reported target metals as below the reporting limits or not detected, as required.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%).

Spike Sample Recovery: The percent recovery for silver was below control limits (75-125%) and below 30% for aqueous spike sample ESY-EPA-10. Positive results for silver should be considered estimated, biased low (J-) and "not detected" results rejected, unusable (R) in associated aqueous samples.

Laboratory Duplicates: The relative percent differences for applicable metals were below the allowable maximum (20%) for aqueous duplicate sample ESY-EPA-10, as required.

Field Duplicates: The relative percent difference for applicable metals were below the allowable maximum (20%) for aqueous field duplicate pair ESY-EPA-10/DUP (attached table), as required.

Laboratory Control Sample: The percent recoveries for target metals were within control limits for aqueous laboratory control samples 997768LCS and 999759LCS.

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ICP Serial Dilution: The %Ds for calcium, iron, magnesium, manganese, and sodium were above the allowable maximum (10%) for aqueous serial dilution sample ESY-EPA-10. Positive results for calcium, iron, magnesium, manganese, and sodium that are above the reporting limits should be considered estimated (J) in associated aqueous samples.

Instrument Detection Limits: The IDLs were at or below the MRLs, as required.

SAMPLE NO.

997770MS

FORM V INORGANIC-1
MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - New York SDG No. : 70167580 Contract: ELLENVILLE SCRAP IRON &

Matrix: Water Basis: Wet Parent Sample ID: ESY-EPA-10

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Aluminum	ug/L	75-125	4940	<200	5000	99
Antimony	ug/L	75-125	779	<60.0	750	104
Arsenic	ug/L	75-125	498	<10.0	500	98
Barium	ug/L	75-125	586	<200	500	98
Beryllium	ug/L	75-125	49.8	<5.0	50.0	100
Cadmium	ug/L	75-125	48.0	<2.5	50.0	96
Calcium	ug/L	75-125	104000	79500	25000	98
Chromium	ug/L	75-125	246	<10.0	250	98
Cobalt	ug/L	75-125	487	<50.0	500	97
Copper	ug/L	75-125	254	<25.0	250	101
Iron	ug/L	75-125	18900	16500	2000	116
Lead	ug/L	75-125	497	<5.0	500	99
Magnesium	ug/L	75-125	39300	14900	25000	98
Manganese	ug/L	75-125	1340	1100	250	96
Nickel	ug/L	75-125	256	<40.0	250	99
Potassium	ug/L	75-125	54600	<5000	50000	105
Selenium	ug/L	75-125	745	<10.0	750	99
Silver	ug/L	75-125	66.4	<10.0	250	26*
Sodium	ug/L	75-125	86000	35200	50000	102
Thallium	ug/L	75-125	708	<10.0	750	94
Zinc	ug/L	75-125	983	<20.0	1000	98

* Spike Recovery outside QC Limits

SAMPLE NO.

998090SD

FORM VIII INORGANIC-1
SERIAL DILUTIONS

Lab Name: Pace Analytical - New York SDG No. : 70167580 Contract: ELLENVILLE SCRAP IRON & METAL

Matrix: Water Parent Sample ID: ESY-EPA-10

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Aluminum	ug/L	31.5U	157U		10
Antimony	ug/L	20.8U	104U		10
Arsenic	ug/L	8.9J	26.4U		10
Barium	ug/L	95.9J	120J	25.7* NA	10
Beryllium	ug/L	0.33U	1.7U		10
Cadmium	ug/L	0.31U	1.5U		10
Calcium	ug/L	79500	102000	28.9*	10
Chromium	ug/L	1.1U	5.6U		10
Cobalt	ug/L	4.0U	19.9U		10
Copper	ug/L	3.7U	18.4U		10
Iron	ug/L	16500	20900	26.3*	10
Lead	ug/L	2.2U	11.2U		10
Magnesium	ug/L	14900	19000	27.5*	10
Manganese	ug/L	1100	1400	26.8*	10
Nickel	ug/L	7.8J	22.1U		10
Potassium	ug/L	2310J	5090U		10
Selenium	ug/L	7.1U	35.3U		10
Silver	ug/L	1.2U	6.2U		10
Sodium	ug/L	35200	43400	23.3*	10
Thallium	ug/L	5.3U	26.4U		10
Zinc	ug/L	8.6U	43.1U		10

NA - Both results are below the lowest standard; therefore, the % difference is not applicable.

* Indicates that the % Difference exceeds the control limit.
No difference is calculated if either result is a non-detect.

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General Chemistry
Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Cyanide Data for
Pace Analytical, SDG: 70167580

6 Ground Water Samples and 1 Field Duplicate
Collected March 30-31, 2021

Prepared by: Donald Anné
May 19, 2021

Holding Times: Samples were analyzed within NJDEP holding times.

Initial and Continuing Calibration Verification: The percent recoveries for cyanide were within control limits (85-115%).

CRDL Standard: The percent recoveries for cyanide were within QC limits (70-130%) for CRDL standards.

Blanks: The analyses of initial calibration and continuing calibration blanks reported cyanide as not detected.

Spike Sample Recovery: The percent recoveries for cyanide were within laboratory QC limits (75-125%) for aqueous spike sample ESY-EPA-09 and ESY-EPA-10.

Laboratory Duplicates: The analyses of aqueous batch duplicate samples 1004647DUP and 1006940DUP were acceptable.

Field Duplicates: The analyses of aqueous field duplicate pair ESY-EPA-10/DUP reported cyanide as not detected; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

Laboratory Control Sample: The percent recoveries for total cyanide were within QC limits (85-115%) for aqueous samples 100645LCS and 1006938LCS.

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Field Duplicate Calculation Section

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 70167580

S1= ESY-EPA-10 **S2=** DUP

Analyte	S1	S2	RPD (%)
Tetrachloroethene	7.9	7.7	3%
Trichloroethene	2.8	2.9	4%

* RPD is above the allowable maximum 20%.

Results are in units of ug/L.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

EPA Method 537 PFC

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 70167580

S1= ESY-EPA-10 **S2=** DUP

Analyte	S1	S2	RPD (%)
PFBA	3.9	4	3%
PFPeA	8.0	8.4	5%
PFHxA	5.9	5.9	0%
PFHpA	4.1	4.3	5%
PFHxS	3.5	3.7	6%
PFOA	14	15	7%
PFOS	24	25	4%

* RPD is above the allowable maximum (20%).

All results are in ug/L.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 70167580

S1= ESY-EPA-10 **S2=** DUP

Analyte	S1	S2	RPD (%)
aluminum	ND	ND	NC
antimony	ND	ND	NC
arsenic	ND	ND	NC
barium	ND	ND	NC
beryllium	ND	ND	NC
cadmium	ND	ND	NC
calcium	79500	83800	5%
chromium	ND	ND	NC
cobalt	ND	ND	NC
copper	ND	ND	NC
iron	16500	17900	8%
lead	ND	ND	NC
magnesium	14900	15800	6%
manganese	1100	1170	6%
mercury	ND	ND	NC
nickel	ND	ND	NC
potassium	ND	ND	NC
selenium	ND	ND	NC
silver	ND	ND	NC
sodium	35200	37200	6%
thallium	ND	ND	NC
vanadium	ND	ND	NC
zinc	ND	ND	NC

* RPD is above the allowable maximum 20%.

Results are in units of ug/L.

Bold numbers were values that are below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Alpha Geoscience: Acronyms and Definitions

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high andassociated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTrDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate